



# Wednesday 23rd July 2008

## IA-014: Psychological research on traffic safety in China

**Helmut Jungermann (Chair)**

**Zhang, Kan** Beijing, People's Republic of China

Car accident killed about 100,000 people every year in China with the dramatic increase of number of cars in China. Traffic safety has drew attention of psychologists for more than 10 years. Some research results suggested approached of reducing traffic accident by psychological methods focusing on training of naïve drivers were done in the past years, but with on clear benefits. A new view focused on licensee was proposed and a series of studies either in lab or by simulations, including tests of licensees' personality, awareness of safety, cognitive features, skills of driving, was done to form a systematic testing approach. The validity of the test was studied.

## IA-037: Psychology and human rights in MENA Arab countries: Yemen Psychological Association (YPA) experiences

**Jan Strelau (Chair)**

**Kassim Khan, Hassan** Dept. of Psychology, University of Aden, Aden, Yemen

In recent years Psychologist and their Professional Organizations in MENA Arab countries became more involved in a number long-short term researches and actions projects on human rights and gender equality. The Objectives of the presentation is demonstrate and discuss roles played by Psychologists in Arab Region Countries on this major issues. Highlighting their contributions in promoting psychological science knowledge in raising public awareness and attaining positive behavioral changes towards human rights issues in general with more focus on women and child rights movements. Based on the accumulated experiences gained and documented by Yemen Psychological Association (1991-2006), the speaker tries retrospectively to present and discuss roles played by Psychologists in the field, pointing out achievements and also and problems to overcome, concluding his presentation with a list of recommendations for future activities and effective collaborations between National -International Psychological Organizations and UN -International Organizations of concerns with human rights and welfare.

## IA-038: Development of self and competence across cultures: A challenge to psychology

**Marcus Hasselhorn (Chair)**

**Kagitcibasi, Cigdem** Dept. of Psychology, KOC University, Istanbul, Turkey

Psychological theories of human development reflect (Western) individualistic ethos. Cross-cultural developmental research provides us with insights into possible common paths in the development of children and adolescents. Autonomy and relatedness, as basic human needs, need to be considered. Though not recognized sufficiently by traditional psychological theorizing, the 'Autonomous-Related Self' emerges as a healthy model of universal relevance, since it integrates these two basic needs.

Regarding the development of Competence, global urbanization and converging life styles render the development of cognitive and school like skills increasingly adaptive. Psychology of the 21st Century has to rise to the challenge of becoming more relevant globally.

## IA-039: Typical and atypical development: A commentary on the role of genes

**Grigorenko, Elena L.** Child Study Center, Yale University, New Haven, USA

In this presentation, Dr. Grigorenko will discuss a number of concepts from the genomic sciences with regard to their role in understanding typical and atypical development. Developmental illustrations will be drawn from both cognitive (e.g., reading and specific reading disability) and social-emotional (e.g., self-regulation and conduct disorder) domains of maturation and functioning.

## IA-040: Doing a psychology of the Chinese people: Discoveries while exploring aboard the Emperor's treasure ships

**Joachim Funke (Chair)**

**Bond, Michael Harris** Dept. of Psychology, Chinese Univer. of Hong Kong, Hong Kong, China, People's Republic of : Hong Kong SAR

I have spent my last 34 years, researching in Hong Kong, an outpost of the Dragon's Court. My hope has been to bring Chinese culture and its manifestations into international psychological discourse. During this cultural collaboration, my Chinese colleagues and I have explored at least four constructs that might otherwise have remained uncharted: ethnic affirmation, the value dimension of morality versus reputation, relationship harmony and maintenance, and the five dimensions constituting social axioms. In so doing, my theorizing about social behavior has been broadened to include culture, and I have been personally transformed, perhaps Sinicized. This presentation describes how.

## IA-041: Psychological well-being of gay men and lesbian women

**Hospers, Harm J.** Experimental Psychology, University of Maastricht, Maastricht, Netherlands

Objectives: To provide an overview of research on psychological well-being of gay men and lesbian women. Methods: Review of available literature. Furthermore, data from our qualitative (N=29) and quantitative cohort (N=185) of young gay men who had their coming-out in the preceding year will be presented. Results: Research on gay men and lesbian women shows elevated risks for mental health problems. This was also found in our cohort of young gay men. Conclusions: These results warrant more research in the factors underlying mental health problems among gay men and lesbian women. Opportunities for interventions are discussed.

## IA-042: Global developments in psychology and applied psychology

**Carola Brücher-Albers (Chair)**

**Knowles, Michael** Caulfield, Australia

This paper examines the nature and origins of psychological thought, the development of its scholarly and scientific traditions, the establishment of psychology as a profession, and the rise of applied psychology to meet the needs of the kinds of problems facing contemporary society. It examines, too, the roles that various international, regional and national associations and societies of psychology play in fostering the development of psychology as a science and a profession. Some of the critical challenges facing psychology in its three major forms are also discussed.

## IA-043: Cracking the orthographic code

**Arthur Jacobs (Chair)**

**Grainger, Jonathan** Laboratoire de Psychologie, Université d'Aix-Marseille I, Marseille, France

I will present a theory of orthographic processing that makes a key distinction between a coarse-grained and a fine-grained orthographic code. The coarse-grained code provides a fast-track to semantics by optimizing use of limited visual information to constrain lexical identity. The fine-grained code provides accurate information about letter sequences that is used to generate a prelexical phonological code. The theory accounts for why it is easy to read words with letters that have been jumbled, inserted, or removed, and explains why such effects arise early in the process of word identification relative to effects of phonology.

## IA-044: The Lucifer effect and the psychology of evil

**Wolfgang Schönplugg (Chair)**

**Zimbardo, Philip G.** Dept. of Psychology, Stanford University, Stanford, USA

Why do good people do evil? How does a social psychological analysis add to our understanding of such human transformations? This slide-based presentation explores such questions on a foundation of classic research, including my Stanford Prison Study, and via a virtual visit to the dungeon at Iraq's Abu Ghraib Prison. In expanding the usual limited dispositional analysis to include the power of situations and of the systems that create and maintain them, we come to appreciate the transformative power of the Nazis over German citizens. Heroism is the antidote to evil, and I propose a new Hero Project to enlist ordinary people into becoming heroes-in-waiting.

## IA-045: The new goal psychology: 'This ain't your grandpa's 'motivation'

**Hannelore Weber (Chair)**

**Kruglanski, Arie** Dept. of Psychology, University of Maryland, College Park, USA

This address describes a new paradigm in the study of human motivation based on a cognitive approach on goal driven phenomena. Whereas in

prior work motivation and cognition were often juxtaposed to one another. I will describe a new scientific movement in social psychology that explores the cognitive aspects of motivation. Exciting new studies demonstrate that goals be primed outside of individuals' awareness, and that they can exert powerful, albeit unconscious, effects on individuals' choices, thoughts and feelings. The new paradigm addresses the continuous motivational changes that people experience as they move through their environments and react to them.

#### IA-046: The price of 'privilege': Risks among children of affluence

Robert J. Sternberg (Chair)

Luthar, Suniya New York, USA

Growing up in the culture of affluence can connote various psychosocial risks. Family wealth does not automatically confer either wisdom in parenting or equanimity of spirit; whereas children rendered atypical by virtue of parents' education or wealth are privileged in many respects, there is also, clearly, the potential for some non-trivial threats to their well-being. Dr. Luthar will present empirical evidence from her programmatic research showing that upper-middle class children manifest elevated disturbance in several areas – notably substance use, rule-breaking, and anxiety – and will discuss possible reasons for this; she will also present recent data suggesting parallel adjustment problems among mothers in these communities (i.e., among mothers with advanced educational degrees).

#### IA-047: Perceptual consequences of threat and prejudice: Misperceiving weapons and other dangerous objects

Peter M. Gollwitzer (Chair)

Larsen, Randy Dept. of Psychology, Washington University, St. Louis, USA Bono, Timothy Psychology, Washington University, Washington, USA Racial priming effects are interpreted as being due to automatic activation of stereotype-consistent associations (e.g., Black Americans associated with guns). Evaluative priming may also play a role, in that racial primes can 1) influence response compatibility, e.g., pre-activate evaluatively congruent response codes, and 2) influence target encoding, e.g., facilitate encoding of evaluatively congruent targets even in non-evaluative tasks. Across three experiments, results show that racial priming paradigms contain elements of evaluative priming (both target encoding and response compatibility). Theories of stereotype activation need to account for the ubiquitous role of affect in biasing responses to racial out-groups.

#### IA-048: Early language development as related to the acquisition of reading

Lundberg, Ingvar Dept. of Psychology, Göteborg University, Göteborg, Sweden

Early in development infants start to discover statistical patterns in the surrounding language, and the speech sounds are categorized as phonemic segments. Shared intention, gradually expressed as gaze coordination and declarative pointing pave the way for understanding the meaning of words. Later on, language games, and nursery rhymes facilitate the young child's growing awareness of the phonological structure of language, reaching a critical point in the first stage of reading acquisition. I will review some of my longitudinal and training studies indicating the causal direction of the relationship between phonological awareness and success in learning to read.

#### IA-049: Visual-spatial working memory in the healthy and damaged brain

Lars-Göran Nilsson (Chair)

Logie, Robert Dept. of Psychology, University of Edinburgh, Edinburgh, United Kingdom

Behavioural studies of healthy and brain damaged adults have indicated that separate, domain-specific resources support temporary memory and on-line manipulation of visual appearance, location, and movement sequences. Studies of temporary memory for feature bindings indicate that working memory representations are integrated, not fragmented across separate systems. Other researchers have argued that working memory comprises temporary activation of long-term memory modulated by focused attention. From behavioural studies of intact and impaired VSWM function, including one study with 90,000 participants, I will argue that integrated temporary representations arise from strategic operation of modality specific systems operating largely independently of long-term stored knowledge.

#### IA-050: Dissecting the skill of speaking

Christiane Spiel (Chair)

Levelt, Willem for Psycholinguistic, Max Planck Institute, Nijmegen, Netherlands

Speaking is our most complex cognitive-motor skill. I will sketch a 'blueprint' of the speaker, consisting of five basic operations. In conceptual preparation speakers select and order conceptual information, whose expression will reveal their communicative intentions. In grammatical encoding speakers retrieve words and fixed expressions which, in appropriate syntactic combinations, encode the prepared conceptual information grammatically. In phonological encoding speakers retrieve for subsequent words the phonological form codes; these are used to incrementally compute the syllabification and prosody of the utterance. In phonetic encoding and ultimate articulation, stored articulatory gestures are retrieved and executed for each successive syllable, a highly context-sensitive process. Finally, speakers monitor the process and self-repair if deemed necessary.

#### IA-051: An electrophysiological view on using context or not

Gerd Lüer (Chair)

Kutas, Marta Dept. of Cognitive Science, University of California, La Jolla, USA

Psycholinguistic research over the past two few decades has revealed that language comprehension is incremental in nature – each word incorporated into an ongoing representation of a sentence (or discourse) as soon as it is encountered. In fact, we present electrophysiological evidence not just for rapid incremental interpretation of language input but for active prediction. We further explore the incremental interpretation by examining the online processing consequences of quantifiers (few, most), negation (not) and verb aspect (was –ing, was –ed). Our findings militate against the idea that all possible information from a word is fully and completely activated and incorporated.

#### IA-052: Cerebral asymmetries: The view from the inside

Anke Ehlers (Chair)

Güntürkün, Onur Ruhr-Universität Bochum, Bochum, Germany

Cerebral asymmetry research has long been pursued with the false premise that lateralization is a uniquely human attribute, associated with language. Therefore, asymmetry research is presently

characterized by a detailed functional understanding but a limited knowledge of its neural basis. Meanwhile time is ripe to focus on animal models for insights into the neuronal processes governing lateralized function. I will show in the asymmetrically organized visual system of birds how minute left-right stimulation differences during ontogeny create functional asymmetries of the developing brain. I then will present evidence for minor physiological left-right-differences that result in major asymmetries of cognitive function.

#### IA-053: Groups as adaptive devices: Free-rider problems, the wisdom of crowds, and evolutionary games

Peter M. Gollwitzer (Chair)

Kameda, Tatsuya Sapporo, Japan

The behavioral ecology literature has shown that adaptive benefits accrued from group life include the reduction of predation risk, increased efficiency in the acquisition of food and other vital resources, opportunities for social learning, etc. These findings suggest that, despite inherent conflicts of interest among members, groups consequentially serve as adaptive devices for individual survival in natural environments. Although psychological research on small groups has addressed conceptually parallel issues including the efficiency of group performance, the linkage to behavioral ecology has never been explicit. This talk explores the applicability of behavioral ecological theory in the study of human group behavior.

#### IA-054: Process models for implicit measures of attitudes

James Georgas (Chair)

Klauser, Karl Christoph Freiburg, Germany

Diffusion models are applied to implicit measures of attitudes, in particular to the so-called Implicit Association Test (IAT). Three process components are thereby disentangled: 1) Ease and speed of information accumulation, 2) speed-accuracy settings, and 3) nondecision components of processing. In several studies, method variance in the IAT is shown to map on individual differences in speed-accuracy trade-offs, whereas construct-specific variance (i.e., the variance that is to be measured) is mapped on the ease and speed of information accumulation. Implications of these dissociations for process theories of the IAT and for applications are discussed.

#### IA-055: Social interactions: Conceptual reflections and experimental approach

Ribes Inesta, Emilio Centro de Estudios, Universidad de Guadalajara, Guadalajara, Mexico

Contrary to current trends in evolutionary psychology, I assume that social behavior is exclusive of humans. Truly social behavior necessarily involves labor division as well as postponed exchange of labor outcomes, possible because of language. Three functional dimensions frame social behavior interactions: power, exchange, and sanction. A theoretical model is proposed to analyze social behavior in terms of interactions framed by different institutional contingencies. An experimental preparation has been designed to evaluate different variables which influence the occurrence of social interactions. Experimental data are shown to support this approach, including some extensions modeling social systems.



## IA-056: Motor cognition: What actions tell the self

Frank Rösler (Chair)

Jeannerod, Marc Lyon, France

Self-recognition is far from trivial: It depends upon specific signals, from sensory as well as from central origin. Experiments where self-recognition becomes ambiguous will be used. Two levels of self-recognition, an automatic action identification, and a conscious sense of agency, which both rely on the congruence of the action-related signals, will be identified. The automatic level controls and adapts actions to their goal, whereas the conscious level provides information about the author's intentions. These levels are dissociated in schizophrenic patients. Their automatic self-identification is functional, whereas their sense of agency is impaired: the symptoms of the disease testify to the inability of schizophrenic patients to attribute their own thoughts and actions to themselves.

## IUPsyS-007: History of applied psychology in different countries

Helio Carpintero, Bernardo Colorado-Luna (chair)

Applied psychology in the 20th century has had an extraordinary growth, employing new techniques and concepts in order to face an endless variety of social and personal problems. Contributions to this symposium will give an insight of such richness and variety of technical research works, both in European and Latin-American countries, as an example of the complexity of the history of this psychological field.

## Psychology facing terrorist attack at Madrid (Spain) the 11-04-2007

Carpintero, Helio Psicol. Basica II, Universidad Complutense, Madrid, Spain

A terrorist attack took place on the 11-M- 2004 in Madrid (Spain). Many people were killed and injured, when bombs exploded in three local trains early in the morning in Madrid. Psychological attention was immediately offered by psychologists, and a vast plan of help was carried out, giving support to victims, families and people suffering from panic and anxiety attacks. Many post-hoc studies have proved the variety of psychopathological effects that followed the catastrophe, and the efficacy of interventions. This had a social echo and positive evaluation of the psychologists' work. Applied psychology, in such cases, add large value to the social acknowledgment attributed to their professionals.

## Promoting school achievement and the renewal of teaching methods and educational policies: Recent developments in Portuguese educational psychology

Paixão, Maria Paula Dept. of Psychology, University of Coimbra, Coimbra, Portugal

Contributing to the eradication of school underachievement continues to be one of the most important themes in Educational Psychology, both at a theoretical and at a practical level. Several research and intervention programmes were thus developed in Portugal during the second half of the 20th century, namely those funded by the Foundation for Science and Technology that were carried out under our supervision at the University of Coimbra. In line with our main results, promoting strategies of learning motivation, the renewal of teaching methods and, mainly, new directions for educational policies are the main roots proposed for the required developments in this area.

## Studies on fatigue: Contributions to psychotechnology in Argentina

Klappenbach, Hugo Facultad de Ciencias Humanas, Universidad Nacional, San Luis, Argentina

The paper analyzes the reception in Argentina of fatigue's research, produced both in Europe and United States (Dockery, 1920; Strong, 1913, 1914, Seashore, 1904; Squire, 1903; Thorndike, 1900a, 1900b, 1912; Viteles, 1926; Whiting & English, 1923; Yoakum, 1909). Then, original research on fatigue in Argentina are examined, specially the contributions of Alfredo Palacios and Horacio Rimoldi. Those works are analyzed in the context of the development of psychotechnics, which strongly increased in the whole country and which reached its majors contributions in the decade of 1940.

## Applied psychology: Who was and is supposed to apply it?

Gundlach, Horst Instit. Gesch. der Psychologie, Universität Passau, Passau, Germany

Today, it is understood worldwide, that psychology is applied by psychologists. This concept is, however, hardly one hundred years old, and the beginnings of applied psychology are definitively older. When the concept of an applied psychology originated, it was understood that psychology be applied by members of many different occupations, by judges, by physicians, by teachers, and by others whose main professional training was not in psychology. This concept of applied psychology still exists today, although it is overshadowed by the concept of the professional psychologist. This paper inspects the roots of this relatively new and at first surprising concept.

## Reception and development of the psychotechnic applied to the education in the post-revolutionary Mexico (1920-1928) (Part I)

Sanchez Sosa, Juan Jose Dept. of Psychology, UNAM Nat. Auton. University, Mexico City, Mexico

Valderrama, Pablo Escuela de Psicología, Universidad Latinoamericana, Mexico City, Mexico Colorado-Luna, Bernardo Dept. de Psicología, UNAM Univ. Nat. Autónoma, Mexico City, Mexico

Applied psychology in Mexico has a long past but a relatively recent history. Historical accounts point out that, professional applied psychology originated in academic settings such as universities and teaching health institutions, but quickly spread to service settings. Early services included "psychotechnicians" who usually did assessment in schools, work environments, correctional facilities and judiciary cabinets. After the early sixties nearly every sphere of human functioning showed the influence of service-providing psychologists whose training is closer to the researcher-practitioner tradition. The fastest growing areas of applications in this context include health service settings and large scale social assessment of programs.

## Reception and development of the psychotechnic applied to the education in the post revolutionary Mexico (1920 - 1928) (Part II)

Valderrama, Pablo Escuela de Psicología, Universidad Latinoamericana, Mexico City, Mexico

Some landmarks of the origin of the psychotechnic are described in the decade of the 20th: the adaptation of the test of intelligence of Binet; the formation of the first specialists in the National University; the collaboration with the University of California to define the Mexican boy's intelligence; the knowledge of the Mexican native's mentality, to determine their capacity of adaptation to the modern nation "mestiza"; the application of psychological tests to diagnose students again entrance to institutions of superior education and the description of the actors, national and foreign that participated in this movement of educational renovation

## IUPsyS-009: Human spatial cognition: New avenues of research

Michel Denis (chair)

The cognitive processes underlying navigation and wayfinding are at the core of an increasing number of research programs. Models of spatial cognition have to accommodate the variety of forms of spatial knowledge, as well as the variety of their modes of acquisition and modes of communication. The symposium provides up-to-date information on several important issues of this domain, as currently investigated by cognitive psychology and neuroscience.

## Human spatial memory for object location

Janzen, Gabriele for Cognitive Neuroimaging, F.C. Donders Centre, Nijmegen, Netherlands

People spend a great deal of their time navigating through their environment. To be able to find our way home, we need to retrieve spatial information from memory. With different functional Magnetic Resonance Imaging studies, we showed that the human brain automatically organises spatial information by dissociating between places carrying information necessary for wayfinding, and others. Objects occurring at navigationally relevant locations are stored in the parahippocampal gyrus, a region involved in coding object-place associations. The selective neural marking for navigationally relevant objects is rapidly induced and long lasting. This automatic neural mechanism can provide the basis for successful wayfinding.

## Sensorimotor interference in spatial reasoning

Avraamides, Marios Dept. of Psychology, University of Cyprus, Nicosia, Cyprus Kelly, Jonathan W.

Spatial cognition studies often require participants to localize objects from different imagined perspectives within a remembered spatial scene. In a series of studies using this paradigm, we found evidence for the presence of sensorimotor interference during the test phase. Our experiments have investigated the conditions under which such interference occurs. Among others, we have contrasted reasoning about immediate vs. remote scenes, and we have examined the effect of verbal instructions and the encoding modality (visual perception vs. language). Our findings will be discussed in the context of a spatial cognition model accounting for sensorimotor interference.

## Space and language: How spatial are spatial descriptions?

Pazzaglia, Francesca General Psychology, University of Padua, Padova, Italy

Are visuo-spatial working memory (VSWM) and spatial skills involved in the comprehension and memorisation of spatial descriptions and route directions? The first part of the paper reviews the main results of a series of experiments where a dual-task paradigm is used to investigate the role of VSWM in the encoding and/or retrieval of spatial descriptions. The second part examines the role played by individual differences in VSWM: reading comprehension; and mental visualisation in the memorisation of route and survey descriptions. The results are discussed with reference to theories on spatial text processing, spatial language, and working memory.

## Individual differences in object versus spatial mental imagery: The neural mechanisms and applications

Kozhevnikov, Maria Department of Psychology, George Mason University, Fairfax, VA, USA

The visual system processes appearance properties (such as shape and color) and spatial properties (such as location and spatial relations) via separate

subsystems. Using behavioral and neuroimaging data, I will present evidence that such dissociation also exists in individual differences in imagery. That is, some individuals are adept at constructing vivid images of objects but have difficulty representing spatial relations (object visualizers), whereas others are adept at representing spatial relations but have difficulty constructing vivid images (spatial visualizers). Additionally, I will present data showing that such individual differences in object versus spatial imagery affect more complex activities, such as learning and problem solving in science and artistic performance.

#### **Blind people can construct spatial mental models from complex spatial descriptions**

**Noordzij, Matthijs** F.C. Donders Centre, Radboud University Nijmegen, Nijmegen, Netherlands

There is now substantial evidence that visual experience is not an essential feature in the development of spatial representations. However, it remains an open question whether blind people can construct a spatial model from complex spatial descriptions. In our experiments, early blind, late blind and sighted individuals listened to realistic spatial descriptions. We found evidence that both sighted and blind people formed spatial models on the basis of these descriptions. Interestingly, blind people actually performed better than sighted people when the spatial description had a local, route perspective, whereas sighted people performed better when the spatial description had a global, survey perspective.

#### **IS-079: Health behavior change interventions: How do they work?**

**Aleksandra Luszczynska** (chair)

The symposium presents examples of effective health behaviour change interventions. Next, interventions based on a health behaviour change theory (Health Belief Model) are discussed, followed by a comparison of interventions based on different theoretical approaches and a review aimed at evaluating the effects of behaviour change techniques. Finally, formal characteristics of effective obesity treatment programs are discussed.

#### **Promoting a low-fat diet in overweight individuals: Does cognitive functioning moderate the effects of a planning intervention?**

**Scholz, Urte** Inst. für Psychologie, Universität Zürich, Zürich, Switzerland **Kiegel, Matthias** Psychology, Technical University Dresden, Dresden, Germany  
Objective: Cognitive functioning is negatively associated with overweight. Planning interventions have been shown to promote health behaviour change. This study examines whether planning interventions are effective independent of individuals' cognitive functioning. Method: At baseline cognitive functioning and nutrition were assessed of 60 controls and 60 planning group participants (sample mean BMI = 31.49; SD = 4.49), nutrition was assessed again four and six months later. Results: The effects of a planning intervention on low-fat diet were not moderated by cognitive functioning. Conclusions: Planning interventions provide an effective means for changing even complex health behaviours independent of cognitive functioning of individuals.

#### **Does the health belief model provide a good theoretical basis for effective behaviour change interventions?**

**Abraham, Charles** Dept. of Psychology, University of Sussex, Brighton, United Kingdom **Sibley, Elissa** Dept. of Psychology, University of Sussex, Brighton, United Kingdom

Objectives: To assess the effectiveness of behaviour change interventions based on the health belief model (HBM). Methods: A systematic review and meta analysis were conducted. Results: Of 441

retrieved abstracts, 36 studies met the inclusion criteria. After removal of outliers,  $d$  values ranged from .41 – 1.33 with an overall average, weighted small-to-medium effect size of  $d=.42$ . Sources of heterogeneity were explored, including the extent to which interventions were HBM-based. Conclusion: HBM-based interventions have proved to be effective but there is considerable variation in the extent to which interventions reflect the theory.

#### **Are interventions based on theory more effective than those that are not? Development of a method and a synthesis of evidence**

**Michie, Susan** Dept. of Psychology, University College London, London, United Kingdom **Prestwich, Andrew** Psychological Sciences, University of Leeds, London, United Kingdom

Objectives To investigate the associations between theories informing behaviour change interventions, intervention content and impact. Methods Reliable coding frames were developed to assess intervention content and extent of theory application in a systematic review of self-regulation interventions to increase physical activity and/or healthy eating. Results Of the 77% theory-based interventions, there was no association between theory type and intervention content (techniques used). Only 46% studies measured theory-relevant constructs, 42% discussed results in relation to theory and 7% adequately linked intervention techniques to theory. Conclusions Progress in applying theory to intervention development and evaluation is vital for improving behaviour change interventions.

#### **Does changing attitudes, norms, or self-efficacy cause health behaviour change?**

**Sheeran, Paschal** Dept. of Psychology, University of Sheffield, Sheffield, United Kingdom **Armitage, Christopher** Department of Psychology, University of Sheffield, Sheffield, United Kingdom **Mann, Eleanor** Department of Psychology, King's College London, London, United Kingdom **Abraham, Charles** Department of Psychology, University of Sussex, Sheffield, United Kingdom

Health behaviour theories assume that changing attitudes, norms, self-efficacy or intentions will cause changes in health behaviour. The present research tests this assumption by meta-analysing experimental studies that (a) randomly assigned participants to conditions, (b) changed respective cognitions, and (c) assessed changes in subsequent behaviour. Literature searches obtained 214 studies that met the inclusion criteria for the review. Findings indicated that changing attitude, norms, and self-efficacy had effects of approximately medium magnitude on behaviour change. Behaviour change techniques, but not the theoretical basis of the intervention, made an important difference to the effect sizes obtained for behaviour.

#### **Formal characteristics of effective interventions: A systematic review of obesity treatment programs for adults**

**Luszczynska, Aleksandra** Dept. of Psychology, Warsaw School Soc. Psychology, Warsaw, Poland  
Objectives: The study tests if the effects of weight loss intervention depend on participants features (e.g., age), intervention features (e.g., duration, number of session, number of targets, individual/group format), and design features (e.g., recruitment method). Methods: The review incorporated trials testing the effectiveness of psychosocial interventions reporting body weight as the main outcome. Results: Larger effects were observed for programs that solely targeted weight control versus other health behaviours, programs evaluated in pilot trials, and programs wherein participants must have self-selected into the intervention. Conclusions: Besides the presence of any theoretical background, the effectiveness of obesity treatment depends on formal characteristics.

#### **IS-080: The design and results of "anti-stress programme" implemented within the cardiovascular disease (CVD) preventive activities (2004-2007)**

**Miloslav Solc** (chair)

The "anti-stress programme" was designed and implemented within the framework of CVD preventive activities. About 60 - 70 individuals were examined every year using a set of psychological (type of behaviour, life events in the past 12 months, daily events in the past month, level of resilience - hardiness), physiological (heart rate variability) and biochemical (total cholesterol, HDL and LDL cholesterol, triacylglycerides, glycemia) variables, as well as using basic demographic data and data from working processes. The same sets of data were used also for intervention. The study was implemented within the project funded by the Grant Agency of the Czech Republic Nr. 406/06/0747.

#### **IS-081: The representation of abstract words**

**Manuel Carreiras** (chair)

The goal of the symposium is to understand how we represent abstract words (e.g., liberty, justice, idea). The five talks will cover different aspects of this uniquely human faculty: a) how abstract words can be learnt and represented from a computational perspective; b) how abstract words can be grounded in perception and action; c) the neural substrate of abstractness; d) evidence from patients and experimental evidence showing dissociations on the representation of concrete and abstract words. A discussion covering the five talks will follow.

#### **The joint contribution of experience and language in shaping meaning representations**

**Andrews, Mark** Dept. of Psychology, University College of London, London, United Kingdom  
Evidence suggests that concrete meanings are grounded into our experience (embodiment). However, abstract meanings may be different, as these words may be learnt via language. To test the contribution of experience and language to semantics, we developed Bayesian models that extract statistical patterns from experience-only; language-only or both sources of data combined and we found that the combined model provides best fit to semantic effects. We further developed norms concerning "mode of acquisition" (MoA) tapping into whether words are learnt primarily via experience or language and we found that this variable has good predictive power.

#### **Language processing modulates the activity of the motor system**

**Buccino, Giovanni** Dipt. di Neuroscienze, Università deg. Studi di Parma, Parma, Italy  
According to the "embodied language" approach, language processing is mediated by the same neural substrates involved in perception and action. Recent data coming from behavioural, neuroimaging and neurophysiological experiments show that during listening to or reading sentences expressing actions done with the hand, the mouth or the foot, the activity of different sectors of the motor system, overlapping those involved during the actual execution of those same actions, is modulated. Interestingly it has been recently shown that this modulation also occurs during processing language material related to abstract content, thus supporting the idea that even abstract concepts are grounded.



### Negation in the brain: Modulating concrete and abstract semantic representations

**Cappa, Stefano** Dept. of Neurology, Vita-Salute San Raffaele, Milano, Italy **Moro, Andrea** Dept. of Neuroscience, Vita-Salute San Raffaele, Milano, Italy **Marco, Tettamanti** Dept. of Neuroscience, Vita-Salute San Raffaele, Milano, Italy

Sentential negation is a universal feature of languages. In Tettamanti et al (2005) action sentences activated the same action representation as real actions, whereas abstract sentences were associated with posterior cingulate cortex activation. In this fMRI experiment, participants heard sentences of different polarity (affirmative/negation) and concreteness (action-related/abstract). Negation was associated with deactivation of pallidum-cortical areas. Negative action-related sentences led to reduction of activations and connection strength within left-hemispheric fronto-parieto-temporal areas. For negative abstract sentences, there was deactivation of posterior cingulate cortex. Negation appears to offer a new perspective on the link between human language and our representation of the world.

### Contrasting effects of semantic association and similarity in processing

**Crutch, Sebastian** Dementia Research Centre, University College of London, London, United Kingdom **Warrington, Elizabeth** Dementia Research Centre, University College of London, London, United Kingdom

A series of experiments are reported which investigate the abstract and concrete word processing abilities of healthy individuals and patients with refractory access dysphasia, deep-phonological dyslexia or deep dyslexia. It is demonstrated that concrete word processing is affected more by semantic similarity than semantic association, whereas abstract word processing is affected more by semantic association than semantic similarity. These contrasting effects of semantic similarity and association are observed in comprehension, reading and odd-one-out judgement tasks. The data provide converging evidence supporting the hypothesis that concrete and abstract concepts are supported by qualitatively different representational frameworks.

### Associative and semantic priming: Different findings for abstract and concrete words

**Müller, Oliver** Psicología Cognitiva, Facultad de Psicología, La Laguna, Spain **Avilés, Alberto** Psicología Cognitiva, University of La Laguna, Tenerife, Spain **Duñabeitia, Jon Andoni** Psicología Cognitiva, University of La Laguna, Tenerife, Spain **Carreiras, Manuel** Psicología Cognitiva, University of La Laguna, Tenerife, Spain

We assessed the semantic organization of abstract and concrete words in a series of priming experiments, contrasting associative with semantic relatedness and varying stimulus-onset asynchrony (SOA). Lexical decision times for abstract words showed only associative priming, starting at SOA 50. Concrete words displayed associative and semantic priming, starting at SOA 100 and 250, respectively. In an event-related potentials experiment (ERP), with associative primes and an SOA of 50, concrete and abstract words both showed an ERP relatedness effect, but with a different scalp distribution. This indicates that associative and semantic relations play a different role for abstract and concrete words.

### IS-082: Empirical tests of contemporary utility theories

**Anthony A.J. Marley** (chair)

A revolution occurred in the 1990s in the development and testing of utility theories, which lead to work that went beyond classic representations such as subjective expected utility. The new work

included rank- and sign-dependent utility theories, with cumulative prospect theory an important special case. This symposium presents contemporary work that builds on that framework, including: learning under uncertainty; tests of critical properties of models; probabilistic extensions; the timing of the resolution of uncertainty; and fitting the data of individual decision makers.

### "Decisions from Experience" versus "Decisions from Description" under prospect theory: An experimental investigation

**Abdellaoui, Mohammed** Laboratoire GRID, UMR CNRS-ENSAM, Cachan, France

According to Prospect Theory, decision makers confronted with "description-based" choices under risk overweight low probabilities and underweight middle and high probabilities. Hertwig, Barron, Weber and Erev (2004) report however qualitative experimental results suggesting that this subjective treatment of uncertainty does not hold for "experience-based" decisions, in which decision makers must learn probability distributions from sampling. Our paper reports experimental results based on individual elicitation of Prospect Theory for gains and losses from "description-based" and "experience-based" choice. Despite a few significant discrepancies detected between "description-based" and "experience-based" contexts, our results do not confirm the apparent reversals claimed by Hertwig et al.

### Testing critical properties that distinguish descriptive models

**Birnbaum, Michael** Dept. of Psychology, California State University, Fullerton, USA

Critical properties are theorems that can be deduced from at least one descriptive theory but which do not follow from all of the theories to be compared. If the consequences of the theorem can be falsified, theories that imply those consequences are falsified. In order to design tests, it is helpful to fit a rival theory to previous data to predict where to find new violations of a given theory. This research tactic is illustrated with tests between cumulative prospect theory and Birnbaum's transfer of attention exchange (TAX) model, and with tests between the priority heuristic and the TAX model.

### Models of stochastic choice and decision theories: Why both are important for analyzing decisions

**Blavatskyy, Pavlo** Inst. for Empirical Research, Universität Zürich, Zürich, Switzerland

This paper compares different combinations of decision theories and models of stochastic choice. We select seven popular decision theories and embed each theory in five models of stochastic choice including tremble, Fechner and random utility models. We find that the estimated parameters of decision theories differ significantly when theories are combined with different models. Depending on the selected model of stochastic choice we obtain different rankings of decision theories with regard to their goodness of fit to the data. The fit of all analyzed decision theories improves significantly when they are embedded in a Fechner model of heteroscedastic truncated errors.

### Measuring the impact of uncertainty resolution

**Diecidue, Enrico** Dept. of Decision Sciences, INSEAD, Fontainebleau Cedex, France

In most real decisions a considerable time between choice and resolution of uncertainty may occur. Individuals may have preferences between gambles that have the same probability distribution over outcomes if they differ in the timing of resolution of uncertainty. These preferences have received relatively little attention in utility theory and decision

under uncertainty. We propose an individual elicitation of utility and probability weighting function to understand and measure the impact of delayed resolution of uncertainty. We observed significant differences in probability weighting functions for immediate and delayed resolution of uncertainty.

### Data selection for fitting utility theories: Laying the foundations for the cognitive psychometrics of risk

**Stott, Henry** Dept. of Psychology, University College London, London, United Kingdom

Model fitting in psychology needs to be at the level of individual participants' data in order to avoid misleading single-agent assumptions. This limitation places additional emphasis on experimental data quality. Against this backdrop, the presentation explores methods for optimal stimuli selection in the risky choice paradigm. This is achieved by adopting a parameter space perspective of the stimuli. Fitting Cumulative Prospect Theory to the resultant data shows how this method can be used to decrease modeling errors by, for example, reducing parameter interactions. Various extensions to the technique and the possibility of testing Utility Theories for criterion validity are discussed.

### Empirical tests of contemporary utility theories

**Marley, Anthony A.J.** Dept. of Psychology, University of Victoria, Victoria, Canada

A revolution occurred in the 1990s in the development and testing of utility theories, which lead to work that went beyond classic representations such as subjective expected utility. The new work included rank- and sign-dependent utility theories, with cumulative prospect theory an important special case. This symposium presents contemporary work that builds on that framework, including: learning under uncertainty; tests of critical properties of models; probabilistic extensions; the timing of the resolution of uncertainty; and fitting the data of individual decision makers.

### IS-083: From conflict monitoring to control inertia

**Pio Tudela** (chair)

The view of a unitary and general cognitive control system has been under scrutiny in recent years. In particular, assumptions related to the unity and generality of the system have been seriously challenged. In the present symposium a sample of the current research will be offered. The first three speakers will present experimental evidence suggesting a modular architecture of cognitive control where separate control processes operate and some of them are recruited in a context-sensitive manner. The neural mechanisms associated to particular processes of control will be approached by the last two speakers.

### When item specific control bypasses the need for a global control mechanism

**Blais, Chris H.** Wills Neuroscience Institute, University of California, Berkeley, USA

How control is exerted over the myriad of cognitive operations we have at our disposal and the implementation of that control in the brain has become a major focus for researchers. A popular index of this form of cognitive control is the proportion congruent effect in the Stroop task where the magnitude of the Stroop effect increases as the proportion of congruent trials increases. We provide evidence this effect is driven by an item specific mechanism, not by a global "attend to the word when it helps" mechanism. The implications of this result on the conflict monitoring hypothesis are discussed.



# **Dissociating between sustained, transient and stimulus driven cognitive control**

**Funes, Maria Jesús** Dept. Experimental Psychology, University of Granada, Granada, Spain **Lupiáñez, Juan** Dept. Experimental Psychology, University of Granada, Granada, Spain **Humphreys, Glyn** Behavioural Brain Sciences, University of Birmingham, Birmingham, United Kingdom

We present relevant dissociations between Gratton and Proportion Congruent effects regarding their ability to generalize across variations in conflict type. We used a combined-conflict paradigm and manipulated the proportion of congruent-to-incongruent trials for one conflict type but not the other. We found that conflict adaptation was highly specific to the type of conflict solved on the previous trial. By contrast, the effect of conflict context generalized across conflict types. This finding suggests the existence of two separate control systems, one transient and responsible of online regulation, and the other sustained and responsible of conflict context effects

## **Context-sensitive control over attentional orienting**

**Milliken, Bruce** Dept. of Psychology, McMaster University, Hamilton, ON, Canada **Crump, Matthew** Dept. of Psychology, Vanderbilt University, Nashville, USA

Cognitive control is widely conceived as guided by intentional processes engaged in the service of goal-directed behavior. By this view, cognitive control processes can serve a monitoring function over automatic, context-sensitive memory retrieval processes. Here, we suggest that cognitive control itself can be imparted through memory retrieval. Our research strategy introduces a contingency between a task-irrelevant contextual dimension (e.g., spatial location) and the need for cognitive control (e.g., high versus low proportion congruent in a filtering task). Results suggest that distraction from irrelevant stimulus dimensions can indeed vary as a function of context-sensitive retrieval processes cued by the stimulus itself.

## **Fractionating executive control: Anticipating and reacting to conflict modulates event-related potentials linked to cognitive control differently**

**Correa, Angel** Dept. Experimental Psychology, University of Granada, Granada, Spain **Rao, Anling** Dept. Experimental Psychology, University of Oxford, Oxford, United Kingdom **Nobre, Anna** Dept. Experimental Psychology, University of Oxford, Oxford, United Kingdom

Does our brain comprise a single executive control mechanism, which is commonly triggered when anticipating conflict (proactive control) and reacting to conflict (reactive control)? Event-related potentials associated with conflict detection (N2) were measured during a cued flanker task, and compared for both proactive and reactive control. Proactive control involved anticipating conflict through predictive cues. Reactive control involved experiencing conflict in previous trials (sequential effects). The results showed that proactive control reduced the N2 latency, whereas reactive control attenuated the N2 amplitude over right frontal electrodes. These findings suggest that proactive and reactive control involve partly dissociable neural mechanisms.

## **Top-down task pre-configuration**

**Ruz, Maria** Dept. Experimental Psychology, University of Oxford, Oxford, United Kingdom **Nobre, Anna C.** Dept. Experimental Psychology, University of Oxford, Oxford, United Kingdom

We investigated the neural mechanisms that prepare for future task requirements. Participants were cued to perform different tasks with words. EEG results showed that cues generated top-down activations that were dissociable across conditions.

Such preparatory states were different depending of whether they required or not a switch from the previous task. fMRI data showed that cues engaged brain areas which were also activated during specific task performance. All this suggests that predictive information settles the brain into highly specific preparatory states, which seems to be mediated by the pre-activation of brain regions that will support subsequent task performance.

## **IS-084: Computational models of decision making**

**David Shanks, Peter Juslin** (chair)

Although much is known about the psychology of decision making, the development of precise computational models of decision behaviour has only recently begun to make a significant impact in the field. This symposium brings together internationally-renowned researchers with a common interest in developing such models.

## **A cognitive theory of how people learn to select strategies**

**Rieskamp, Jörg** Max-Planck-Institut, Berlin, Germany

It has been widely assumed that people possess a strategy repertoire for inferences. The strategy selection learning theory specifies how people select strategies from this repertoire (Rieskamp, 2006, JEP:LMC, 32). The theory holds that individuals select strategies proportional to their subjective expectations of how well the strategies solve particular problems and the expectations are updated by reinforcement learning. The theory is compared to a connectionist network, whose weights are modified by error correction learning. Both theories were tested against each other experimentally and the strategy selection learning theory was best in describing the observed learning processes.

## **Decisions in a changing environment**

**Speekenbrink, Maarten** Dept. of Psychology, University College London, London, United Kingdom **Shanks, David** London, United Kingdom

When learning to make decisions, we must infer how the outcome of our actions depends on the state of the environment. Typically, research investigating decision learning has used stationary environments, in which this dependence is invariant over time. However, as many decision environments are subject to continuous change, learning may be geared towards non-stationarity. We present research which shows participants quickly adapt to changes in the environmental structure, and discuss formal models of how they might do so.

## **When a learning theory predicts the wrong response: Error of the model or error of the learner?**

**Meeter, Maarten** Dept. of Psychology, University of Amsterdam, Amsterdam, Netherlands

In probabilistic categorization tasks various cues are probabilistically (but not perfectly) predictive of class membership. There are two alternative conceptualizations of learning in such tasks: as rule-based learning, or as incremental learning. Analysis methods based on these conceptualizations can be used to predict responses of categorizers from their responses on preceding trials. They predict responses about equally well, but both suggest that on many trials the response of the categorizer is a toss-up. Here, we investigate whether categorizers on such trials really produce essentially random responses, or whether there are regularities that are not yet captured by learning theories.

## **Optimal decision making in the cortico-basal-ganglia circuit**

**Bogacz, Rafal** Dept. of Computer Science, University of Bristol, Bristol, United Kingdom

Almost a half century ago, it has been proposed that during simple choice between two alternatives the brain performs a statistically optimal test. This theory, currently known as the diffusion model, describes very well reaction times and accuracies in two alternative choice tasks. It has been recently proposed that the circuit involving the cortex and the basal ganglia performs statistically optimal choice between multiple alternatives. This model helps understand current data and generates experimental predictions concerning both neurobiology and behaviour. Furthermore, it supplies a bridge between the two disciplines, as it offers a possible neural implementation for the diffusion model.

## **Sequential and capacity constrained: Taking the constraints on controlled thought seriously**

**Juslin, Peter** Dept. of Psychology, Uppsala University, Uppsala, Sweden

A well-known distinction in cognitive psychology refers to controlled versus automatic cognitive processes. While the capacity constraints of controlled cognitive processing has served as a general rationale for several influential research programs on simplifying heuristics in research on judgment and decision making, detailed explorations of the consequences of these capacity constraints remain rather unusual. In this presentation, I will discuss the consequences of these capacity constraints on controlled cognitive processing for the division of labor between different sorts of knowledge in multiple-cue judgment tasks, but I also illustrate how they provide alternative explanations of several classical phenomena in the heuristics and biases literature, like the conjunction fallacy and base-rate neglect.

## **IS-085: Psychological approaches to political conflicts**

**Janusz Reykowski** (chair)

The papers in this symposium present empirical research concerning the socio-psychological factors that might contribute to the increase or decrease the destructive political conflicts. Kossowska et al. describe the role of personality factors (RWA and SDO) and their interaction with emotional processes (fear, anger, sadness). Golec et al. discuss the impact of religious orientations and cultural ethnocentrism while Peaz et al. the role of apology for wrong doings. Reykowski describes the socio-psychological mechanisms facilitating the processes of seeking agreements in groups in spite of major conflict of interests or values.

## **Physiological antecedents of intergroup conflict: Impact of submissive vs. dominant orientation and emotions on outgroup attitudes**

**Kossowska, Malgorzata** Inst. of Psychology, Jagiellonian University, Kraków, Poland **Bukowski, Marcin** Inst. of Psychology, Jagiellonian University, Kraków, Poland **Van Hiel, Alain** Department of Psychology, Ghent University, Ghent, Belgium

Perception of outgroup members is usually seen as important determinants of conflict development and conflict escalation. In the present study we particularly focus on role of negative emotions in the RWA and SDO based prejudice. It is assumed that these emotions should interact with RWA and SDO in different ways and therefore should have different effects on the level of prejudice. In line with recent work, we also expected that these interaction effects would depend on the perceived status of the outgroups. The results of the research will be discussed due to possible ways of conflict reduction.



### Religion, ethnocentrism and intergroup hostility intimates of existential threat

**Golec de Zavala, Agnieszka** Middlesex University, Middlesex, United Kingdom **Cichocka, Aleksandra** Faculty of Psychology, Warsaw University, Warsaw, Poland

In a number of studies, conducted in different countries (Poland, the U.S. and Iran), we examine the effects of mortality salience on support for international aggression in the context of terrorist threat, with the moderating effects of ethnocentrism and individual religiosity. The belief in the superiority of the European culture is shown to strengthened the inter-group negativity in the context of the Western-Arab world conflict. In mortality salience conditions, people with ethnocentric beliefs support war on terrorism and the Arab world. Moreover, the quest religiosity (Batson, et al, 1986) is shown to mitigate the inter-group negativity in mortality salience conditions.

### Apologies as repentance rituals, forgiveness and reconciliation in the case of countries with internal collective violence

**Paez, Dario** Dept. of Social Psychology, University of Basque Country, San Sebastian, Spain

Societal data was analyzed on the effects of Truth and Reconciliation Commissions on indexes of social and emotional climate. A two (presence of apologies versus absence) between subjects design of independent measures was used. We tested the hypothesis that the salience of apologies, when compared to the absence of them, reinforced national identification, agreement with new reparatory behaviours, higher acceptance of in-group participation in past negative behaviours, agreement with forgiveness as well as decreasing of minimization of frequency of collective violence, reframing of misdeeds and acceptance of the typicality of members involved in collective violence. Also, salience of apologies was supposed to reinforce universal values, social cohesion and a better emotional climate as well as collective guilt and shame. Collective and experimental findings are discussed in relation to the role of rituals of expiation, repentance and collective guilt on the political processes of reconciliation.

### Can deliberative procedures suppress antagonistic tendencies in groups?

**Reykowski, Janusz** Inst. of Psychology, Polish Academy of Science, Warsaw, Poland

According to some normative theories of democracy, the existing discrepancies in interests, values, and action programs should be resolved not merely by power struggle but by rational analysis of differences in debates based on equality and mutual respect of the participants, that is by deliberative procedures. However, it is well known that group discussions take very often an adversarial course - instead of fostering an agreement they lead to escalation of conflicts or to domination of one particular perspective. The question arises under what conditions political debate can meet the deliberative criteria? Theories and research in group behavior suggest that interpretation of the meaning of situation, social identity and group norms are critical factors. The paper will present some specific hypotheses derived from social psychological research and will describe the results of an empirical study where groups of ordinary citizens as well as groups of politicians were trying to solve some ideological differences or conflict of interests existing between them. It was found that in most of the cases it was possible to reach satisfactory agreements in groups. The results of the experiment have some bearing on the problem of reducing antagonistic tendencies in groups.

### IS-086: Cross-cultural validation of various measures of emotional intelligence

**Vladimir Taksic** (chair)

The aim of the Symposium is to discuss about cross-cultural validation of trait and ability approaches in measuring of emotional intelligence (EI). A majority of the communications are about cross-cultural comparison on Emotional Skills and Competence Questionnaire (ESCQ). It consists of 45 items divided in three subscales: a) perception and understanding emotion, b) expression and labeling emotion, and c) managing and regulating emotion. Originally it is developed in Croatian settings using theoretical model of EI established by Mayer & Salovey (1997). At first, it was translated in English, and after that in several languages all over the World.

### Adaptation and validation studies of the ESCQ in the Portuguese context

**Faria, Luisa** Fac. of Psychology and Educat., University of Porto, Porto, Portugal **Lima Santos,**

**Nelson** Human and Social Sciences, Fernando Pessoa University, Porto, Portugal

This study presents the adaptation and validation of the ESCQ (Taksic, 2001) in the Portuguese context, using confirmatory factor analysis, with a sample of 730 students, 381 high school 10th and 12th graders, and 349 university 1st and 2nd graders. The ESCQ includes 45 items and 3 dimensions: "ability to perceive and understand emotion" (15 items), "ability to express and label emotion" (14 items), and "ability to manage and regulate emotion" (16 items). The results revealed that the best fitted model has two correlated factors (.55; perception and expression), and integrates only 11 items from the original scale ( $R^2 > .30$ ).

### Developmental differences in the effects of EI on academic performance in Japanese students

**Toyota, Hiroshi** Dept. of Psychology, Nara University of Education, Nara, Japan

Developmental differences in the effects of emotional intelligence on academic performance were examined and compared with three habits: life, social, and study habits. Participants were 1,087 Japanese students. Each of them completed a questionnaire that has six revised items in the shortened version of J-ESCQ (Toyota, Morita, & Taksic, 2007) and additional 18 items examined the other three habits. Higher correlations of emotional intelligence scores with academic performances were observed in the third, the fourth, and the fifth graders. The results were interpreted as showing the importance of emotional control in learning setting in elementary school.

### Cross-cultural validation of emotional skills and competence questionnaire: Assessing structural equivalence of adapted ESCQ for Argentina

**Mikulic, Isabel Maria** Faculty of Psychology, University of Buenos Aires, Buenos Aires, Argentina

This study aims to discuss the cross-cultural validation of the Emotional Skills and Competence Questionnaire, consisting of 45 items divided into three subscales: perceiving and understanding emotion, expressing and labeling emotion, and managing and regulating emotion. Classified as a "trait emotional intelligence" or "perceived emotional intelligence" measure, ESCQ has been developed by V. Taksic from Croatian settings using theoretical framework from the emotional intelligence model (Mayer & Salovey, 1997). However, it has been already translated into many languages. Psychometric qualities, structural equivalence and relations with several relevant constructs of translation and adaptation of the ESCQ for Argentina context is analyzed.

### Analysis of item bias in the emotional skills and competence questionnaire: A cross-cultural comparison

**Holmstrom, Stefan** Dept. of Psychology, Umeå University, Umeå, Sweden **Molander, Bo** Dept. of Psychology, Umeå University, Umeå, Sweden **Taksic, Vladimir** Dept. of Psychology, University of Rijeka, Rijeka, Croatia

**Objectives:** To evaluate the Swedish and Croatian versions of the ESCQ instrument (Taksic, 2005) with respect to item bias. **Method:** ESCQ scores were examined by analyses of differential item functioning (DIF; Zumbo, 1999) in samples of Swedish and Croatian university students. **Results:** Although DIF-values were low in national comparisons of sex, cross-cultural comparisons revealed a number of items in all scales with values higher than the commonly accepted level ( $> .035$ ). **Conclusions:** There is considerable item bias in the present Swedish and Croatian versions when cross-cultural comparisons are performed. Several reasons for this discrepancy are discussed.

### Validation of the emotion skills and competence questionnaire in Chinese setting

**Xu, Qinmei** Inst. for Psychology, Zhejiang University, Hangzhou, People's Republic of China

The Emotion Skills and Competence Questionnaire (Taksic) was translated into Chinese. 1133 Chinese adolescents were asked to complete the Chinese version. Results showed the internal consistency of the scale is 0.91 and the internal consistency of 3 subscales of Perceive & Understand, Express & Label, and Manage & Regulate were 0.74, 0.80, and 0.88, respectively. Item analysis indicated discrimination of each item was good. A three-factor structure of Perceive & Understand, Express & Label, and Manage & Regulate was validated. But there were crossover between Perceive and Express. Sufficient reliability and validity for the ESCQ in Chinese setting were found.

### Cross-cultural comparison on ESCQ

**Taksic, Vladimir** Dept. of Psychology, University of Rijeka, Rijeka, Croatia **Mohoric, Tamara** Dept. of Psychology, University of Rijeka, Rijeka, Croatia **Faria, Luisa** Faculty of Psychology and Educ, University of Porto/Portugal, Porto, Portugal **Räty, Hannu** Dept. of Psychology, University of Joensuu, Joensuu, Finland **Avsec, Andreja** Dept. of Psychology, University of Ljubljana, Ljubljana, Slovenia **Molander, Bo** Dept. of Psychology, Umeå University, Umeå, Sweden

**Extremera, Natalio** Dept. of Psychology, University of Málaga, Málaga, Spain **Toyota, Hiroshi** Dept. of Psychology, Nara University of Education, Nara, Japan **Rashid, Tabassum** Dept. of Psychology, Effat College, Jeddah, Saudi Arabia

The Emotional Skills and Competences Questionnaire was developed in Croatian settings, and then translated to Slovene, Spanish, Swedish, Finnish, Portuguese and Japanese. The scale is a measure of trait emotional intelligence and includes three subscales. Sufficient reliability for the total ESCQ score and subscales in all seven countries were found. Results showed significant differences in total scores of ESCQ and scores on all three subscales. The major difference was found in between scores in all European samples on one side, and Japanese sample on the other. Gender differences emerged in Perceive and Understand emotions and Express and Label emotions subscales.

### Psychometric properties of Vocabulary of Emotion Test (VET)

**Mohoric, Tamara** Dept. of Psychology, University of Rijeka, Rijeka, Croatia **Taksic, Vladimir** Dept. of Psychology, University of Rijeka, Rijeka, Croatia Emotional intelligence is usually defined as a four-level set of abilities (Mayer & Salovey, 1997). Among these, ability to understand emotions is one



that can be best measured with ability test. Vocabulary Emotion Test (VET) was constructed consists of 102 adjectives (short version has 35 items) describing emotional states and mood, and has correct answer, based on a solution from Croatian dictionary (Anić, 1994). Both versions have satisfactory psychometric properties, with reliability coefficient  $\alpha=0.91$ . Convergent-divergent validity was assessed compared TRE with several traditional intelligence tests showing it has 44% of unique variance. VET was translated in English and Swedish.

### IS-087: Work and organizational climate in international perspectives

**Andrew A. Mogaji** (chair)

Work plays an important role in the lives of people. It is true that apart from providing for the economic and social needs of the individual, work provides some personal values and psychological needs of many workers. Unfortunately, the socio-psychological, economic and the political realities of our work environment have made the satisfaction of these needs to be almost unascertainable. Therefore, in this symposium, there will be an open discussion of the nature of work and how the characteristics of the work environment, often called organizational climate, have impacted on the commitment, involvement, motivation and satisfaction of workers from different nations.

### The influence of personal and organisational factors on organisational climate in a large university

**Baguma, Peter** Inst. of Psychology, Makerere University, Kampala, Uganda

The objective of the study was to assess the influence of personal and organisational factors on organisational climate in a large university setting. Data were collected from 120 randomly selected staff of a large university in Uganda to assess role clarity, respect, communication, reward system, career development, planning and decision making, innovation, relationships, team work and support, quality of service, conflict management, commitment and morale, learning and training and direction. Data were analysed using t-test, ANOVA and correlation analysis. Results indicated that sex had no effect on all organisational climate variables. Age, position and organisational tenure had significant effects on some of the variables.

### Organizational creativity and innovation and psychological well-being among Swedish high-tech workers

**Rasulzada, Farida** Dept. of Psychology, Lund University, Lund, Sweden

The aims of this paper were to investigate the relationships between organizational factors and organizational creativity and innovation, and between organizational creativity and innovation and psychological well-being of 95 employees working in a high-tech field of industry. The two relationships were tested in a LISREL model that was confirmed. Organizational climate, team climate, gardener leadership, work resources and workload were together related to organizational creativity and innovation, and organizational creativity and innovation was related to the well-being of the employees. One important conclusion was the establishment of the relationship between psychological well-being and organizational creativity and innovation.

### Work and organizational climate in the Nigerian manufacturing industries

**Mogaji, Andrew A.** Dept. of Psychology, University of Lagos, Lagos, Nigeria

This study was aimed at investigating the effects of organizational climate on employees' commitment, involvement, motivation and satisfaction in some Nigerian manufacturing industries. Data were collected from 600 workers randomly selected from some food, shoes and textile industries in Lagos, Nigeria. The test-retest administration of the measures over a 72-day period shows that the organizational climate of the three industries was stable and remained favourable during the time interval between test and retest. The multiple regression analysis shows support for the hypotheses tested about the interaction among interpersonal, intergroup and organizational climate factors facilitating commitment, involvement, motivation and satisfaction among workers.

### Organizational safety climate and perceived organizational support in Ghana

**Gyekye, Seth** Dept. of Social Psychology, University of Helsinki, Helsinki, Finland

The study investigated the link between organisational safety climate and perceived organizational support (POS) among 320 Ghanaian industrial workers. Additionally, it examined the relationship with job satisfaction, compliance with safety management policies, and accident frequency. Perceptions of safety were measured with the 50-item workplace safety (WSS) developed by Hayes et al. (1998). POS was measured with the short version of Eisenberger et al.'s (1990) survey. The responses on the POS items were calculated and a median split was performed to segregate the sample into two groups: participants with high perspective regarding organizational support ( $n = 166$ ), and participants with low supportive perspectives ( $n = 154$ ). The linear regression analysis indicated WSS to be a very good predictor of POS. Workers with positive perspectives regarding supportive perceptions equally had positive perceptions on the safety climate scale. Additionally, they expressed greater job satisfaction, were more compliant with safety management policies, and registered lower accident rates. The perceived level of support provided in an organization, apparently, is closely associated with workplace safety perception and other organizational and social factors which are important for safety.

### IS-088: Dorsal anterior cingulate cortex: Perspectives on its role in behavior and cognition

**Matthew Botvinick** (chair)

The dorsal anterior cingulate cortex is widely agreed to play a critical role in decision-making and executive control. Understanding its specific functions is an ongoing challenge. This symposium will bring together a group of cognitive neuroscientists whose work has focused on the cingulate, to review current theories of the area's contribution to cognition and behavior. Among the proposals to be discussed are the idea that the cingulate monitors for error-likelihood or conflict, and the idea that it codes for action outcomes, supporting optimal decision-making. The relations among perspectives will be considered, as will fruitful directions for future research.

### Neural systems for error monitoring: Recent findings and theoretical perspectives

**Gehring, William** Dept. of Psychology, University of Michigan, Ann Arbor, MI, USA **Liu, Yanni** Dept. of Psychology, University of Michigan, Ann Arbor, MI, USA **Orr, Joseph** Dept. of Psychology, University of Michigan, Ann Arbor, MI, USA **Carp, Joshua** Dept. of

Psychology, University of Michigan, Ann Arbor, MI, USA

Current theories of the error-related negativity (ERN or Ne), such as the conflict-monitoring and reinforcement-learning theories, propose that the ERN represents a strategic control process that contributes to detecting errors or conflict and adjusting subsequent performance. Largely neglected is the possibility originally proposed by Falkenstein, Coles and others that the ERN is involved in online control-detecting, adjusting or correcting the erroneous action. We review evidence from our laboratory and others that a reformulation of the classic error-detection theory in terms of modern concepts of forward models in motor control is a viable candidate to explain the ERN.

### Noticing when things go wrong: Monitoring for conflicts and errors

**Yeung, Nick** Dept. Experimental Psychology, Oxford University, Oxford, United Kingdom

Activity within medial frontal cortex (MFC) has consistently been observed in two situations: with incorrect responses, and with competition between responses. Conflict-monitoring and error-likelihood theories of MFC function provide contrasting accounts of these findings. According to the former, the MFC functions to monitor for conflict, and shows error-related activity because incorrect responses involve conflict. The error-likelihood theory proposes that the MFC encodes the probability of errors in given situations, and this results in conflict-related activity because errors are likely in situations of conflict. I will describe experimental work that contrasts predictions made by the conflict-monitoring and error-likelihood theories.

### Individual differences in medial prefrontal cortex, conflict, error likelihood prediction and risk aversion

**Brown, Joshua** Psychological & Brain Sciences, Indiana University, Bloomington, USA **Braver, Todd** Psychology, Washington University, St. Louis, MO, USA

The error-likelihood hypothesis suggests that anterior cingulate cortex (ACC) activates in proportion to the perceived likelihood of an error. The same computational model that generated this hypothesis predicts that ACC will also be sensitive to the magnitude of the consequences should an error occur, thus effectively encoding "expected risk." Subsequent fMRI results have confirmed this prediction and further suggest that ACC activity varies with individual differences in risk aversion. We examined whether such differences could be captured in the original error-likelihood computational model. Results strengthen the original theory, showing how it can provide a unified account of multiple individual-difference effects.

### The anterior cingulate cortex in learning and reward-guided decision making

**Rushworth, Matthew** Experimental Psychology, Oxford University, Oxford, United Kingdom **Behrens, Tim** FMRIB Centre, Oxford University, Oxford, United Kingdom **Walton, Mark** Experimental Psychology, Oxford University, Oxford, United Kingdom

When signal changes are recorded in the human anterior cingulate cortex (ACC) during choice behavior, their size varies with the degree to which the choice is unconstrained and with the importance of the outcome. A recent fMRI study suggests that ACC activity changes with the length of the reward history needed to determine the next choice. Such information is critical for setting the rate at which learning occurs. Following ACC lesions, macaques show normal sensitivity to a decrement in reinforcement but the influence of the extended reward history on choice is diminished.



### Conflict monitoring and decision making

**Botvinick, Matthew** *Inst. of Neuroscience, Princeton University, Princeton, NJ, USA*

According to one influential account, the anterior cingulate cortex (ACC) serves to monitor for conflicts in information processing. According to another influential account, the ACC monitors action outcomes and guides decision-making. A current challenge is to discover how these perspectives might fit together within a larger account. I'll discuss the prospects for such a reconciliation. Juxtaposing the decision-making and conflict-monitoring accounts suggests an extension of the latter, by which conflict would act as a teaching signal driving a form of avoidance learning. The effect of this mechanism would be to bias behavioral decision making toward cognitively efficient tasks and strategies.

### Calculating the cost of acting in frontal cortex

**Walton, Mark** *Dept. of Psychology, Oxford University, Oxford, United Kingdom*

Whether to persist with a course of action or switch to an alternative is a decision that foraging animals regularly face. Using discrete lesions in animals, we have demonstrated that the anterior cingulate cortex (ACC) may be one crucial component for the cost-benefit calculations guiding such decisions. Rats with ACC lesions show a bias away from persisting in effortful courses of action. Monkeys with ACC lesions update their behaviour in stimulus- or response-switching tasks, but often fail to persist with the correct response. These results will be considered in the light of human neuroimaging studies concerning persistence and flexible decision-making.

### IS-089: Research and applications in cultural psychology

**Ajit Mohanty, Minati Panda** (chair)

Cultural psychological research has examined the processes of the social or cultural construction of the person including thoughts, emotions, motivation, development, identity, and other psychological constructs and for restructuring cultural processes that lead to better psychological functioning both at individual and collective levels. This symposium aims at discussing some empirical research, from different cultural settings and using a variety of theoretical and methodological perspectives, to explore the relationship between culture and human functioning and to demonstrate applications of cultural psychology in education and human development while critically examining theoretical bases of this approach to suggest some shift in emphasis.

### Macro cultural psychology: A framework for understanding the relation between culture and psychology

**Ratner, Carl** *Dept. of Psychology, Institute for Cultural Research, Trinidad, USA*

This paper develops macro cultural psychology as a parsimonious, coherent theoretical framework that explains the cultural origins, characteristics, and function of psychological phenomena. It uniquely defines culture as primarily consisting of social institutions, cultural concepts, and artifacts. I show how these macro cultural factors constitute the primary social origins, characteristics, and function of psychology. I explain how macro cultural psychology leads to reforming social institutions, artifacts, and cultural concepts. The scientific and political utility of the theory complement each other. The paper briefly compares macro cultural psychology to micro cultural psychology, cross-cultural psychology, and indigenous psychology.

### Reflections on cultural psychology in international and interdisciplinary perspective

**Hartnack, Christiane** *Intercultural Studies, Donau-Universität Krems, Krems, Austria*

Increasingly, national, professional and private points of reference dissolve into multiple and seemingly fluid relationships. In the midst of such transformations, cultural psychologists are asked to—and could—play important roles. While striving to have an impact, cultural psychologists themselves face the challenge of keeping pace with constantly changing realities. In order to focus more strongly on the real world, they also need to overcome the constraints of cultural constructs such as national borders and academic disciplines. This presentation highlights, analyses and discusses some of the difficulties and pitfalls of international and interdisciplinary collaboration in cultural psychology.

### Multiperspectival methods in cultural historical activity theory: The fifth dimension and playworlds

**Lecusay, Robert** *Lab. of Comparative Human Cogn., University of California, La Jolla, USA*

Cultural Historical Activity Theory (CHAT) is an interdisciplinary approach that emphasizes the primacy of social processes in human development. A key component of CHAT methodology is the design of activity systems around questions researchers wish to investigate. Researchers then participate in and simultaneously study these systems. In this paper we present analyses of adult-child interactions from two such systems: The Fifth Dimension and Playworlds. Though our analyses are grounded in concepts central to CHAT, we propose a multiperspectival methodology that productively puts CHAT into conversation with complementary approaches from performance studies and distributed cognition.

### Home and school mathematics discourse: Epistemological give-and-take

**Panda, Minati** *Zakir Husain Centre, Jawaharlal Nehru University, New Delhi, India*

Social and cognitive bases of mathematics learning in two psycho-semiotic environments, considered as two discursive contexts - home and school - are explored to compare mathematical ideas and concepts in everyday discourse in Saora community (a tribe in India) and mathematics discourse carried out in schools which Saora children attend. Presence of "as if discourse" as a special characteristic of modern school mathematics as well as various forms of everyday discourse are highlighted. It is argued that "as if discourse" can be used to connect everyday mathematics in indigenous activities and school mathematics by creating a common recognizable discourse frame.

### Application of cultural psychology for intervention in multilingual education program for tribal children in India

**Mohanty, Ajit** *Zakir Husain Centre for Ed., Jawaharlal Nehru University, New Delhi, India*

The paper illustrates theoretical and methodological applications of cultural psychology for developing culturally meaningful and effective intervention in an experimental program of multilingual education for Kond and Saora tribal children in primary grades in India. Both critical reality and activity theory perspectives are applied for selection of curricular areas and designing of pedagogic practices for enhancement of children's achievements in school subject and social communicative skills. Ethnographic data on the everyday knowledge of science, mathematics, stories and riddles in the two communities are used by teachers and the MLE workers for guided development of child-focused classroom and individual activities for intervention.

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### IS-090: Keeping track of developments in self-regulated learning

**Monique Boekaerts** (chair)

Writing requires extensive use of meta-cognitive, social, and motivational strategies. It also relies heavily on writing beliefs and affects. Any writing activity is always situated; it involves a dialogue between the writer and a potential reader. Students conceptualize the reader while they write. In order to understand students' successive attempts at SR during the writing process it is essential to know the accessibility and use of various cognitive and affective strategies. The symposium focuses on the interplay between cognitive and affective strategies during SR writing and on the relations between the social and instructional context and students' strategy use.

### Investigating the integration of motivational orientations and self-regulation strategies:

#### Employing a stimulated recall methodology

**Kaplan, Avi** *Dept. of Education, Ben-Gurion University, Be'er-Sheva, Israel*

I contest a common view of SR as a unitary, distinct, a-contextual construct, and argue that different SR strategies are geared towards different objectives. Different SR strategies become the active manifestation of different motivational orientations for the task. Investigating the embedded meaning of SR strategies within motivational orientations is a methodological challenge. I will describe a stimulated recall methodology which involves a micro-behavioral observation of high-school students' engagement in writing activities followed by a stimulated recall interview in which students report on the strategies they engaged in at different points during engagement and the purpose for employing these strategies.

### From self-regulation to socially shared regulation of writing: Different voices in graduate students' writing

**Castelló, Montserrat** *Educational Psychology, Ramon Llull University, Barcelona, Spain*

Writing has been traditionally considered an individual and cognitive activity that requires the management of the rhetoric problem as well as issues about planning, translating and revising. Contemporary approaches to the SR of writing study the joint effects of "social" and "cognitive" dimensions on SR in real settings. We will examine the role that communicative situations, context, and interactions play in different models of SR and contrast definitions of writing context, writer's conception and activity, empirical methods, and units of analysis. We present a study with graduate students to illustrate how these aspects are considered from a socially-situated perspective.

# **Capturing the multiple components of self-regulated writing: A systemic approach**

**Boekaerts, Monique** Dept. of Educational Studies, Leiden University, Leiden, Netherlands

Researchers in SR selected a limited set of constructs, measured them, and determined their effect on learning outcomes. This research did not reveal the essential links between the components of SR, mainly due to limitations in research methodology. We explored the patterns of SR in the writing domain. To encompass the multiple facets of the SR of writing, we grafted the 6 component model on the writing domain and included numerous context variables. 1500 vocational students took part in the writing assessment sessions. Our on-line assessment tool captured the SR of writing and predictive methodology detected meaningful patterns in it.

# **Fictive systems approach in the identification of expected writing performance and the classification and understanding of student performance characteristics**

**Cascallar, Eduardo** Katholieke Universiteit Leuven, Brussels, Belgium **Costigan, Tracy** **Boekaerts, Monique** Dept. of Educational Studies, Leiden University, Leiden, Netherlands

We used a predictive systems approach in the prediction of writing performance. These machine-learning techniques offer an iterative methodology that is capable of discovering complex relationships and interactions in the inputs and outcomes. The approach maximizes classification accuracy, and was able to model various outcome patterns from the 1500 students studied. A total accuracy of 96% in the identification of "students-at-risk" was achieved. Techniques developed to explore the classification of students according to patterns detected by the predictive systems in students' individual characteristics will be presented. The implications for the application of these methods in educational studies will be discussed.

## **IS-091: Parenting prevention programs: An international perspective**

**Maria Jose Rodrigo, Jan Janssens** (chair)

The symposium illustrates evidence-based programs from the Netherlands, United Kingdom, Sweden, Germany and Spain. These programs differ from each other in theory of change, intervention goals, target group, type of practitioners, design of evaluation, and outcome measures. However, all programs shared an emphasis to prevent child problems by promoting the quality of parenting and family functioning. The different methods of working with parents will be addressed, as well as their practical implications for the implementation of programs in various countries. The discussion will address these points as well as the quality standards that should be met to improve program effectiveness.

# **Effects of Triple P**

**Janssens, Jan** Behavioural Science Institute, Radboud University Nijmegen, Nijmegen, Netherlands

Objective: Study the effects of Triple P on behavioural and emotional problems in preadolescent children and parenting. Method: Effects of Triple P have been studied by comparing pre- and post tests, and by comparing Triple P parents with parents who received care as usual. Results: Analyses show positive results of Triple P with regard to all dependent variables. Conclusions: Triple P has to be implemented in more Dutch cities as a parenting support program to prevent severe child problem behaviour and to prevent seriously inadequate parenting.

# **Attachment, marital relationship, care and knowledge: A preventive intervention with first parents**

**Reichle, Barbara** Educational Psychology, Univ. of Education Ludwigsburg, Ludwigsburg, Germany **Franiel, Sabine** Educational Psychology, University of Education, Ludwigsburg, Germany **Ziegenhain, Ute** Child & Adolescent Psychia, University of Ulm, Ulm, Germany **Gebauer, Sigrid** Child & Adolescent Psychia, University of Ulm, Ulm, Germany **Kolb, Anne-Katrin** Child & Adolescent Psychia, University of Ulm, Ulm, Germany

Objective. The preventive intervention program "The beginning counts" aims to strengthen parents' knowledge and competencies and the marital relationship during the transition to parenthood. Method. Effects were evaluated with a pre-post design comparing trained (n=95) with untrained parents (n=77). Both groups completed questionnaires assessing their knowledge concerning central training issues, relationship satisfaction, self-confidence in interacting with the child and anger management. Results and conclusion. Repeated measures analyses of variance showed positive intervention effects on all variables except marital satisfaction.

# **The ladybird study: A randomised controlled trial evaluation of the lifestart parenting initiative**

**Sneddon, Helga** Inst. of Child Care Research, Queen's University Belfast, Belfast, Ireland **Allen, Sarah** NFER, Queen's University Belfast, Belfast, Ireland **Morrison, Nicoli** Institute of Child Care Resear, Queen's University Belfast, Belfast, Ireland

Objective. To describe the Lifestart program and evaluation methodology. Method. Lifestart is a parent-directed child-centred programme of child development delivered to parents of children from birth to five years of age. Monthly, during a home-visit, trained Family Visitors bring age-appropriate learning materials and discuss these and the child's development with the parent(s). The programme is open to all parents residing in project areas throughout Ireland. Results. A 5 year evaluation of this programme is just about to begin using Randomised Control Trial (RCT) and qualitative methods. Conclusions: Outcome measures include child cognitive development, parenting knowledge, social support and psychological wellbeing.

# **"The Incredible Years": Evaluation of the webster Stratton parent management training programme in Sweden**

**Axberg, Ulf** Dept. of Psychology, Göteborg University, Göteborg, Sweden **Broberg, Anders** Department of Psychology, Göteborg University, Göteborg, Sweden

The Incredible Years is offered to parents whose children display severe disruptive behaviour problems. Its aim is to promote positive parenting and reduce harsh punishment. Parents meet with two trained group-leaders weekly for 12-14 sessions. They practice various parenting skills enlightened by video-vignettes. Objective: To evaluate the effectiveness of the programme in Sweden. Method: Parents of 48 children aged 4-8 participated in the study. A multi-informant, multi-method strategy was used. Results: Preliminary results (pre - post intervention) indicate a statistically significant ( $p < .01$ ), and clinically relevant (effect sizes  $> .80$ ), decrease in children's disruptive behaviour. Final results will be presented and discussed.

# **The "Apoyo Personal y Familiar" program for parents at high psychosocial risk**

**Rodrigo, Maria Jose** Dept. of Developm. Psychology, University of La Laguna, La Laguna, Spain **Byrne, Sonia** Developmental Psychology, University of La Laguna, La Laguna, Spain **Maiquez, Maria Luisa** Developmental Psychology, University of La Laguna, La Laguna, Spain **Martin, Juan Carlos** Developmental

Psychology, University of La Laguna, La Laguna, Spain

The objective is to describe the program (APF) aimed at promoting parental competences and positive childrearing in families living under risky psychosocial conditions. APF is a multi-site program delivered through weekly group meetings conducted by social agents. The method combines the parents exposition to other- and self- views with a reflection on the consequences of parental action in concrete child-rearing episodes. Mode of implementation and program results are presented from the last community trial assessing the level of psychosocial risk, social support, and parental functioning. Evidence was found that indicates positive program results on parental functioning and provides futures lines of improvement.

## **IS-092: Acquisition of control**

**Wolfgang Prinz, Iring Koch** (chair)

Control is a multi-faceted psychological concept, which is characterized by the diversity of research fields and theoretical views. This symposium focuses on the control of cognitive processes. Cognitive control needs to be acquired, which can occur both on the short-term, such as in learning and practicing novel skills, and on the long-term, such as in development across infancy. This symposium aims to bring together contemporary views on normal and disturbed development and learning of cognitive control in humans and non-human primates. To this end, international experts discuss how a more integrated conceptual framework for cognitive control can be advanced.

# **Learning and cognitive control**

**Koch, Iring** Inst. für Psychologie, RWTH Aachen, Aachen, Germany **Prinz, Wolfgang** Inst. für Psychologie, Max-Planck-Institut, Leipzig, Germany

The concept of cognitive control refers to the ability to recruit cognitive resources and mechanisms required for performing given tasks in a goal-directed and context-sensitive manner. However, performance costs in a task switch suggest that cognitive control is prone to interference arising from competing tasks. The presentation focusses on the role of elementary learning and memory processes implied in cognitive task control. To this end, we present an overview on recent empirical findings suggesting that internal task representations become associatively connected to external cues and stimuli. These findings raise the issue of the dynamic interplay between learning and cognitive control.

# **The evolution of cognitive control**

**Call, Josef** Inst. Evolution. Anthropologie, Max-Planck-Institut, Leipzig, Germany **Amici, Federica** **Aureli, Filippo**

Humans have evolved a notable ability to inhibit certain responses in favour of others to solve problems. However, it is unclear when this ability may have evolved. We investigated the evolution of inhibitory control by comparing seven primate species in three tasks. One task required subjects to inhibit directly reaching for a visible reward, another required subjects to find a hidden reward and another required selecting the smaller of two quantities to net the larger one. Results suggested that the enhancement of inhibitory skills might be more strongly related to socio-ecological pressures than to common evolutionary history.

# **Development of understanding the mind and mental control**

**Perner, Josef** Inst. für Psychologie, Universität Salzburg, Salzburg, Austria

Developmental investigations during preschool years show persistent correlations between understanding the mind ("theory of mind") and executive



control. We can rule out the methodological explanation that theory-of-mind tasks are simply tacit executive tasks. I argue for a common denominator. Executive control differs from automatic control in that the former requires representation of one's own intentions as intentions, a core element of "theory of mind". It remains open as to whether development of this core ability is primarily driven by advances in executive control or in attributing mental states to self and others, as assessed by theory of mind tasks.

#### **The development of cognitive control: The influence of verbal processes**

**Karbach, Julia** *Inst. für Psychologie, Universität des Saarlandes, Saarbrücken, Germany*  
**Kray, Jutta** *Entwicklungspsychologie, Universität des Saarlandes, Saarbrücken, Germany*

Recent empirical findings suggest that the development of cognitive control abilities underlie different developmental trends throughout childhood. The first aim of this presentation is to provide an overview of these findings, indicating that some cognitive control abilities are acquired relatively early in development, such as the ability to ignore irrelevant information, while others are acquired relatively slowly, such as the ability to maintain and to select relevant goals. The second aim is to provide some evidence that language influences some of these cognitive control processes and serves as a useful tool to support the regulation of behavior, especially in childhood.

#### **Typical development of cognitive control and abnormal development in ADHD and autism**

**Konrad, Kerstin** *Klinische Neuropsychologie, Universitätsklinikum Aachen, Aachen, Germany*  
**Kohls, Gregor** *Herpertz-Dahlmann, Beate*

Immature cognition during typical development is characterized by increased susceptibility to interference. Two frequent neurodevelopmental disorders, autism spectrum disorder (ASD) and attention deficit/hyperactivity disorder (ADHD), are both associated with marked deficits in cognitive control abilities. In a series of behavioral and fMRI experiments, we investigated how the neural basis of different aspects of cognitive control (such as interference control and response inhibition) develops in healthy children and in children with ADHD or ASD. Our results indicate some shared behavioral deficits across both disorders but distinct brain abnormalities associated with interference control and response inhibition in ASD and ADHD.

#### **Neurocognitive development of cognitive control: fMRI studies on rule use across development**

**Crone, Eveline A.** *Dept. of Psychology, Leiden University, Leiden, Netherlands*

The ability to control our thoughts and actions has a long developmental trajectory, not reaching adult-level until late adolescence. Recent advances in developmental imaging indicate that these changes are associated with the maturation of subregions within the prefrontal cortex (PFC), which each contribute to different aspects of control. Using fMRI, we investigated the role of different PFC regions when we adjust our behaviour on the basis of positive and negative feedback. Results of two studies including over 90 participants show that medial PFC and lateral PFC have separate developmental timecourses and that young children use different strategies when learning from feedback.

#### **IS-093: Neuropsychological functioning after exposure to toxic environments**

**Rosemarie M. Bowler** (chair)

Neurotoxic chemicals have been shown to cause adverse health effects in occupational and environ-

mental evaluations across the world. This symposium will illustrate methods used in evaluating the brain function of both children and adults exposed to solvents, heavy metals and other chemicals. Results of investigations in Belgium, the Amazon, the United States and Canada will be presented. Intracellular systems in prenatal life and subsequent psychomotor and cognitive processes and functions in the brain are discussed as recent advances in the field of neurotoxicology. Attending this symposium will contribute to theoretical and applied knowledge on neurotoxins and neuropsychological methodologies used.

#### **Neuropsychological testing of adults exposed to neurotoxins**

**Bowler, Rosemarie M.** *Dept. of Psychology, San Francisco State University, San Francisco, USA*

Selected neuropsychological tests are sensitive and specific to the evaluation of environmental or occupational exposures to neurotoxins. Extensive research has been published reporting the use of neuropsychological testing in evaluating exposures of adults to organic solvents, pesticides (i.e. organophosphates), gases and heavy metals. Although evaluations of patients exposed to neurotoxins traditionally requires a lengthy test battery, experience and knowledge gained in the field suggests the efficacious use of a shorter, test battery for adults. This presentation will illustrate the use of clinical tests of cognitive, motor and mood function in a proposed environmental study.

#### **Environmental neurotoxins and child development**

**Bellinger, David** *Dept. of Neurology, Children's Hospital Boston, Boston, USA*

The vulnerability of children to compounds that disrupt the development of the central nervous system has raised the specter of a "silent pandemic" of environmental disease resulting from low-level but chronic exposures to chemical contaminants. The evidence is compelling that neurotoxicities occur at environmentally-relevant exposures to lead, methylmercury, and polychlorinated biphenyls, while emerging evidence implicates arsenic, manganese, pesticides, and other chemicals among the other 80,000 chemicals in commercial use. Although the impact of such exposures on an individual child might appear to be modest, their cumulative impact on population health and well-being could be enormous.

#### **Persistence of neuropsychological changes in formerly exposed workers: Possible implications**

**Viaene, Mineke K.** *Dept. of Occupational, Catholic University of Leuven, Leuven, Belgium*

Numerous industrial processes rely on organic solvents which causes substantial health problems in the work force. Although the acute neurotoxic potentials of most solvents were known for a long time, only recently investigations documented exposure causing an organic encephalopathy. In a group of 90 formerly exposed workers we demonstrated that even subclinical effects on visuomotor function persist three years after exposure cessation. This implies that neuropsychological tests can be used in secondary prevention. Although controversial, this may imply that aging-related neuronal attrition superimposed on these subclinical effects might cause delayed clinical neuropsychological deficits emerging years after exposure cessation.

#### **Neurotoxic effects of mercury exposure in fish-eating populations of the Brazilian Amazon**

**Mergler, Donna** *Dépt. des Sciences Biologie, Université du Québec, Montréal, Canada*

In the Amazon, gold-mining and deforestation release mercury into the aquatic systems where it bioaccumulates through the trophic chain, resulting in elevated mercury in carnivorous fish. Studies

have shown mercury-related neurobehavioral deficits in motor, psychomotor, visual and/or cognitive functions. We carried out a follow-up study, which sought to maintain fish consumption while reducing mercury exposure. Re-testing after 5 years showed that persons ate the same quantity of fish, but fewer carnivores; exposure diminished by 39%. Motor functions improved, but visual functions decreased in relation to previous exposure. These findings suggest that some mercury-related deficits, but not visual, may be reversible.

#### **Linking neurotoxicology to cognitive neuroscience: A first attempt**

**van Thriel, Christoph** *Neurobehavioral Toxicology, Leibniz-Forschungszentrum, Dortmund, Germany*

**Juran, Stephanie A.** *Neurobehavioral Toxicology, Leibniz-Forschungszentrum, Dortmund, Germany*

During recent years substantial progress in neurotoxicology and neuroscience have been made. Cognitive processes and functions of the brain can be described at different levels of aggregation: cellular level, neurotransmitter systems, neuronal circuits, and brain areas. Neurotoxic mechanisms have been identified on similar levels. These advances are not sufficiently linked with each other. Hence, we investigated effects of long-term occupational toluene exposure, a chemical suspected to interact with the dopaminergic system, on set shifting task performance. At life-time doses of 50 ppm no diminution of performance were found. More research is needed to bridge the gap between neurotoxicology and -psychology.

#### **Could monoamine and intracellular calcium systems be related to postnatal brain development?**

**Huel, Guy** *Dept. of Environmental Health, INSERM U472, Villejuif, France*

The monoamine and intracellular calcium systems are two major elements of the nervous system functions. However, their role in human brain development is unclear. Studies on association between the activity of these two systems during prenatal life and subsequent psychomotor performances are relevant. Prenatal factors influencing the monoaminergic and ATPases activities in the early psychomotor development of humans could be demonstrated. It is also suggested that specific psychometric measures such as fine motor tests may be a better developmental measurement to correlate with biochemical parameters than a general cognitive scales. Findings support the use of Ca pump activity as a biomarker of calcium mediated toxicity related to environmental in utero exposures.

#### **IS-094: Leadership and power distance**

**Kwok Leung** (chair)

Effective leadership is important for a group to achieve its goals in any cultural context, but what defines good leadership may show some drastic variation across cultures. Hofstede has identified power distance as an important dimension to characterize cultures, which refers to the extent to which hierarchies and inequalities are accepted in societies. This symposium explores the dynamics of leadership and power distance in several diverse cultural contexts, including Taiwan, Japan, Singapore, Italy, and the U.S. In addition, using data from the GLOBE project, the relationships between power distance and leadership are explored in cultures around the world.



### Power distance and authoritative leadership matter: Probing the efficacy: Performance relationship in Taiwan

**Wang, An-Chih** Dept. of Psychology, National Taiwan University, Taipei, Taiwan **Chou, Li-Fang** Department of Business Administration, Yuan Ze University, Taoyuan, Taiwan **Cheng, Bor-Shiuan** Dept. of Psychology, National Taiwan University, Taipei, Taiwan

While the positive relationship between self-efficacy and performance in the workplace is well-documented, whether this relationship varies with cultural value and leadership has received little attention. Using a sample of 190 supervisor-subordinate dyads from Taiwan, we found that the positive relationship between employees' creative self-efficacy and performance (measured by rated creativity, number of formal suggestions, and overall performance rating) was stronger for individuals low (versus high) on power distance. We also found that authoritative leadership interacted with creative self-efficacy: the relationship between creative self-efficacy and performance was stronger when authoritative leadership was high.

### Leader-subordinate relational identity and prosocial organizational behavior: The moderating effects of power distance

**Chou, Li-Fang** Business Administration, Yuan Ze University, Chung-Li, Taiwan **Cheng, Bor-Shiuan** Department of Psychology, National Taiwan University, Taipei, Taiwan **Jiang, Ding-Yu** Department of Psychology, National Chung Cheng University, Chia-Yi, Taiwan

Relational identity is significant in Chinese organizations. This study classified leader-subordinate relational identity into expressive and instrumental relational identity. We explored the influence of leaders' leader-subordinate relational identities upon subordinates' prosocial organizational behavior (POB); and further probed into the moderating effect of subordinates' power distance values. Results from a sample of 795 dyadic leader-subordinate data demonstrated that expressive relational identity was positively related to all POB dimensions; instrumental relational identity was negatively related to POB-leader and POB-coworker, but not to POB-organization. Finally, subordinates' power distance played a moderating role in the relationships between relational identity and prosocial organizational behavior.

### Culture and power distance effects on norm-enforcement: Intuitive prosecutors as fair but softer toward leaders

**Singh, Ramadhar** Dept. of Psychology, Nat. University of Singapore, Singapore, Singapore **Tasuo, Fujimori** Dept. of Psychology, Yokohama Natl Univ, Japan, Japan **Yamaguchi, Susumu** Dept. of Social Psychology, University of Tokyo, Tokyo, Japan **Osborne, Chandra** Dept. of Psychology, University of Connecticut, Connecticut, USA **Srinivasan, Hans** Dept. of Marketing, University of Connecticut, Connecticut, USA **Fisher, Jeffrey D.** Dept. of Psychology, University of Connecticut, Connecticut, USA

In two experiments, Easterners and Westerners recommended punitive actions against those involved in an organizational decision leading to an in-group bias in pay revision. The status of people (chair vs. committee) and the circumstance (control vs. extenuating) of the decision were manipulated. Americans were harsher than Singaporeans or Japanese independent of the status of decision makers. However, situational correction was made in actions against the chair but not against the committee in both the cultures. Mediators of the cultural and circumstance effects were anger and/or the punishment goal of deterrent. Obviously, intuitive prosecutors are fair but softer toward leaders.

### Leadership structures, group norms and work motivation in Japanese organizations

**Muramoto, Yukiko** International Graduated School, Yokohama National University, Yokohama, Japan **Yamaoka, Toru** International Graduated School, Yokohama National University, Yokohama, Japan

The present research aimed to investigate which factors could be good sensors to detect the decreased motivation to work. Respondents of our panel survey were staff and managers in Japanese chain stores. The questionnaire consisted of several scales, such as work attitude in the previous month, passion for work, perceived quality of working life, leadership structure, and implicit rules in a workplace. Preliminary results suggest that leadership structure (i.e., combinations of formal and Informal leaders) and group norms have a strong impact on work motivation of employees. Further results of longitudinal analysis in a workplace and comparative analysis across workplaces will be presented.

### The differential relationship of the immediate supervisor and top management on collective efficacy

**Borgogni, Laura** Dept. of Psychology, University 'La Sapienza', Roma, Italy **Petitta, Laura** Dept. of Psychology, University 'La Sapienza', Roma, Italy **Dello Russo, Silvia** Dept. of Psychology, University 'La Sapienza', Roma, Italy **Latham, Gary** Rotman School of Management, University of Toronto, Toronto, Ontario, Canada

Professionals (N = 797) in an Italian mail delivery organization were administered a questionnaire measuring self- and collective efficacy, perceptions of their immediate supervisors (IS) and top management (TM), organizational commitment (OC) and job satisfaction (JS). SEM tested the hypothesized nomological net. Self-efficacy, IS and TM were related to CE which in turn was related to JS more so than to OC. Specifically, IS displayed a stronger relationship with CE and JS, while TM was related to OC. This study points to the necessity of intervening on employees' perceptions of leadership at different levels for CE and OC enhancement.

### Leadership processes and power distance: A fundamental relationship

**Dorfman, Peter** Dept. of Management, New Mexico State University, Las Cruces, USA

Leadership Processes and Power Distance: A Fundamental Relationship Peter W. Dorfman New Mexico State University The objectives of this presentation are to explore the cultural effects of Power Distance on various aspects of leadership. Using Hierarchical Linear Modeling (HLM), the GLOBE data set of 62 countries provides evidence to the importance of Power Distance on leadership processes. Charismatic/Value Based and Participative leadership prototypes are endorsed in low power distance societies and organizations whereas Self-Protective leadership is endorsed in high power distance societies and organizations. The implications for managerial leaders and as yet unanswered questions will be discussed.

### IS-095: Psychophysiology of hidden memories

**Istvan Czigler** (chair)

Event-related brain potentials (ERPs) disclosed memory systems capable of representing regularities in auditory and visual stimulation. Mismatch components (auditory and visual MMN) emerge whenever a stimulus violates the established regularities. The function of such implicit memory systems will be discussed in relation to veridical perception and attentional processing. ERP research also indicates that visual stimuli are processed at semantic level by implicit memory systems. Data

will be presented showing the implementation of the auditory memory system.

### Automatic and attentional detection of violations in abstract auditory rules

**Schröger, Erich** Inst. für Psychologie, Universität Leipzig, Leipzig, Germany **Bendixen, Alexandra** Inst. für Psychologie, Universität Leipzig, Leipzig, Germany **Horvath, Janos** Inst. für Psychologie, Universität Leipzig, Leipzig, Germany **Roeder, Urte** Inst. für Psychologie, Universität Leipzig, Leipzig, Germany **Trujillo-Barreto, Nelson** Brain Dynamics Department, Cuban Neuroscience Centre, Havana, Cuba **Prinz, Wolfgang** Human Cognitive and Brain Sci, Max Planck Institute, Leipzig, Germany

We investigated the automatic and intentional encoding of abstract rules inherent in sound sequences. Rules concerned within-feature ("ascending frequency between successive tones") or between-feature relations ("short tone is followed by low tone, long tone is followed by high tone"). Initially, none of the subjects acquired explicit knowledge of the rule nor became aware of the presence of rule violations (e.g. infrequent descending frequency with an "ascending" rule). Nevertheless, rules and their violations were automatically detected as revealed by the elicitation of the Mismatch Negativity (MMN) brain wave. It seems that this automatic encoding of rules partly governs the intentional encoding.

### The role of implicit memory representation in everyday auditory perception

**Winkler, István** Dept. of General Psychology, Institute for Psychology, HAS, Budapest, Hungary

In everyday life, multiple sound sources are active in the environment. The mixture of sounds arriving to the ears is sorted into coherent sound sequences (auditory streams) by heuristic algorithms, many of which require information about past behavior of previously detected streams. We suggest that this information is provided by implicit memory representations taking the form of predictive neural models, which have been established by extracting regularities from the auditory input. These models also underlie the deviance detection process reflected by the mismatch negativity event related potential an electric brain response involved resolving competition between alternative sound organizations.

### A multimodal look on the neuroanatomy of the auditory mismatch response

**Deouell, Leon** Dept. of Psychology, Hebrew University, Jerusalem, Israel

Violation of regularities at multiple organizational levels and along every acoustic dimension elicits a distinct set of electrical brain responses, the hallmark of which is the mismatch negativity. Are the responses all elicited by a central 'deviance detector' or are they dependent on diverse processors with some domain specificity? In this presentation, I will review findings concerning the intracranial sources of mismatch responses, from multiple imaging modalities, including inverse solutions of EEG and MEG data, hemodynamic measurements (PET and fMRI), and particularly data from patients with circumscribed brain lesions. These data suggests that diverse brain regions support the mismatch response.

### Representation of regularities in visual memory: Event-related potential studies

**Czigler, Istvan** Budapest, Hungary

As many influential demonstrations (e.g. change blindness) shows, visual changes outside the focus of attention frequently remain unnoticed. However, visual stimuli violating regularities of stimulation may elicit an event-related potential (ERP) component, the visual mismatch negativity (vMMN), even if there are no conscious representations of the



regularity/irregularity. VMN is sometimes preceded by an earlier posterior ERP component. VMN emerges to deviant stimulus features (color, spatial frequency, motion direction, contrast), to the conjunction of features (objects), and to sequential and temporal irregularities.

#### Ultra-rapid and involuntary semantic processing of stimuli in rsvp streams

**Pesciarelli, Francesca** *Cognition and Language Lab., University of Padua, Padua, Italy*

An Attentional Blink paradigm was used to directly compare and contrast semantic and repetition priming to reported versus missed words. Three target words (T1, T2, T3) were embedded among rapidly black non-word distractors for report at the end of each trial. T1 was never related to T2 and T3, while, T2 and T3 were unrelated, semantically related, or identical. Whether or not T2 was reported, I observed both semantic and repetition priming of T3 in both report accuracy and certain ERP measures. The results suggest that semantic and repetition priming appear to engage at least partially overlapping mechanisms.

#### IS-096: Evaluation policy and practice in different countries

**Thomas D. Cook, Renate Soellner** (chair)

Within this symposium our goal is to emphasize the significance of evaluation in today's society, especially in the field of psychology. The symposium will promote the exchange of information and opinions among international evaluation experts. Therefore the policy and practice of evaluation research in different countries will be reflected. Difficulties of applied evaluation research and answers to these problems will be discussed. In particular, specifics when doing evaluation in developing countries will be presented. Furthermore, the issue of educating evaluators will be raised.

#### Empirically validated non-experimental methods in evaluation

**Steiner, Peter M.** *Dept. of Policy Research, Northwestern University, Evanston, USA*

Randomized experiments constitute the gold standard for evaluating treatments and social programs. Since randomized experiments are often hard to implement non-experimental methods are frequently employed to estimate causal effects: regression discontinuity designs, interrupted time series designs, or non-equivalent comparison group designs. Here, we mainly focus on propensity score techniques for balancing non-equivalent groups. Using an experimental within-study comparison of a randomized and quasi-experiment as well as corresponding results from Mexico's PROGRESA program we empirically show under which conditions non-equivalent group comparisons can reproduce experimental results. These conditions include the measurement of all covariates related to treatment selection and outcome as well as sufficient overlap, i.e. homogeneity of groups.

#### Special considerations when doing evaluations in developing countries: The experience of the World Bank and of regional development banks

**Cook, Thomas D.** *Dept. of Policy Research, Northwestern University, Evanston, IL, USA*

This paper describes and critically analyzes the more recent evaluation philosophy and practice in international agencies dealing with developing nations, especially the World Bank and regional development banks. An explanation is offered as to why this philosophy was adopted. The explanation emphasizes the perceived failure of strategies predicated on statistical adjustments for selection bias and the growing sense of the viability of

experimental alternatives with which psychologists are familiar.

#### Institutionalizing the randomized experiment as the praxis model in educational evaluation in the US

**Wong, Vivian** *Dept. of Policy Research, Northwestern University, Evanston, IL, USA*

This paper describes the 2001-2007 funding activities of the Institute for Education Sciences (IES) that are designed to privilege random assignment experiments in American educational research. This priority is manifest in IES' research grant programs, evaluation research activities, training programs, founding of a novel professional association, and recruiting psychologists and economists into education research. Although this agenda was initially met with resistance, the process of privileging experiments is now well underway. But will it outlast the Bush Administration, and be incorporated into university teaching curricula and the decisions of journal editors?

#### Education of evaluation in German-speaking countries

**Soellner, Renate** *FB 12, AB Evaluation, Freie Universität Berlin, Berlin, Germany*

The education in evaluation has been part of the academic formation in psychology in Germany for two decades. With an increased demand on evaluators in various social fields in the last years a growing offer of master programs in evaluation emerged. In order to reveal the contents of a psychological based education in evaluation research a web based research of academic courses of 44 German institutes of psychology was conducted. The results of the study will be discussed against the background of master programs' topics in evaluation research in German-speaking countries.

#### Evaluation policy and practice in German-speaking countries

**Spiel, Christiane** *Inst. für Psychologie, Universität Wien, Wien, Austria*

The significance of evaluation and its constant development require a continual dialogue between professionals involved in scientific evaluation, evaluation implementation, and commissioning of evaluation. To meet these demands the DeGEval – Gesellschaft fuer Evaluation was founded in 1997. Central aims of the DeGEval are: (1) professionalization of evaluation by e.g., the "Standards for Evaluation" and the "Guidelines for Evaluation Clients", (2) consolidation of different perspectives, and (3) promotion of information flow and dialogue. The paper presents the DeGEval's contributions to these goals and discusses evaluation policy and practice in the German-speaking countries.

#### IS-097: Research with Hispanic populations in the Americas

**Rolando Díaz-Loving** (chair)

Wundt (1916) pioneered both behavioral and cultural psychology. In retrospect, his principal objective of integrating them into an objective, generalizable, yet culturally sensitive science is a project in progress. An ecological or cultural perspective requires direct inclusion or measurement of cultural and structural variables as well as functional relationships of psychological variables within a cultural system. In this symposium we address the contributions that emic studies with Hispanic populations living in the Americas have on the development of further theme selection, theory building, measurement issues, intervention strategies and evaluation. In particular, suicide, family, children and self will be touched on.

#### Understanding the higher rates of suicide attempts among Hispanic teenage females

**Zayas, Luis George** *Warren Brown School, Washington University, St. Louis, USA*

Two decades of national surveys conducted in the U.S. show that adolescent Hispanic females report suicidal behaviors, including suicide ideation and attempts, at higher rates than U.S. youth of other ethnic and racial groups, however only recent research has been focused on Hispanic girls. This paper presents theoretical explanations drawn from cultural psychology, female development, and family functioning. Findings from qualitative and quantitative analyses will be presented. The phenomenology of the suicide attempts suggests a dissociative process not unlike other well-known cultural syndromes. Questionnaire data points to malalignments in the relationship between adolescent females and their parents, especially their mothers.

#### Mexican ethnopsychology and measurement

**Reyes Lagunes, Isabel** *Facultad de Psicología, Nat. Auton. Univ. of Mexico, México City, Mexico*

Assuming that the purpose of all psychological test is to obtain a representative sample of behaviors in which the characteristic, we want to measure is reflected, a series of qualitative-quantitative techniques have been developed to efficiently and ethically evaluate Mexican populations since it allows us to identify the "etic" and "emic" elements of the psychological constructs. The technique of Modified Natural Semantic Networks (Reyes-Lagunes, 1993) is presented as well as diverse examples of its use. Besides, universal instruments and definitions will be contrasted with the peculiarities found in our country.

#### Assertiveness and copying in Mexican children

**Flores-Galaz, Mirta** *Dept. of Psychology, Universidad Autonoma Yucatan, Merida, Mexico*

The development of assertiveness is a complex process which occurs through time and is linked to the developmental processes, inserted in a cultural context. The objective of this research is to present studies used to elaborate a scale of measurement assertiveness for children, as well as to explore the relationship among coping styles, attachment styles, and the locus of control. In these studies, participated 1487 children from the city of Merida, Yucatan, Mexico, selected through a non probabilistic sample. The statistic analysis is presented for each one of them and the findings are discussed from the Mexican ethnopsychology.

#### IS-098: The 2nd century of 'mental tests': Perspectives and prospects on assessment in the 21st century

**James Pellegrino** (chair)

2008 marks the 100th anniversary of Binet & Simon's publication *Le développement de l'intelligence chez les enfants*. In *L'Année psychologique*.. Their seminal work helped spawn the 1st century of mental tests. Without doubt, the assessment of individual intellect has had a profound effect on psychology and education across the globe. As we begin the 2nd century of mental testing, a group of scholars from across the globe has been assembled to consider what we now understand about the nature of human intellect and individual achievement and its implications for theory and practice in the fields of psychological and educational assessment.

### Integrating learning theory in an era of accountability testing

**Gitomer, Drew** Policy Evaluation & Research, Educational Testing Service, Princeton, USA

Determining the effectiveness of schools, teachers, and educational interventions has increasingly relied on outcomes of large-scale standardized achievement tests together with increasingly sophisticated analytic evaluative models and research designs. However, the usefulness of these techniques is limited by the quality of assessment instruments that remain relatively divorced from theories of learning and performance. This schism also leads to unfortunate practices in school systems and classrooms. This talk will describe a project being conducted at ETS that builds on advances in cognitive science, technology, and psychometrics to design a new approach to the assessment of student learning outcomes.

### Diagnostic testing that just might make a difference

**William, Dylan** Inst. of Education, University of London, London, United Kingdom

There is appeal in the idea that assessment might support instruction, as well as measuring its effects, but to date the contribution of the psychometric community has been limited. Diagnostic tests are relatively insensitive to instruction, provide instructional guidance that arrives too late to be useful, and are more focused on what students have not learned, rather than what might be done about it. In this paper, I describe a model for the development of single items that can be integrated by teachers into their own classroom practice as "hinge-point" questions, allowing them to make "real-time" adjustments to instruction.

### A cognitive architecture framework for the assessment of the human mind: Modular approaches and technical advances

**Cascallar, Eduardo** Katholieke Universiteit Leuven, Brussels, Belgium

The renewed focus on a cognitive architecture as the basic tool to understand the functions of the human mind and its connections to the underlying physical structure, has renewed the emphasis on accurately representing and measuring the functioning of the modular components involved in our "mind's functioning". New measurement approaches and technical developments assess the emergence of and the level of functioning of such cognitive functions through the understanding of the independent modules and their interactions, opening new possibilities in the assessment of mental functions, and the understanding of the role of consciousness and mental workspace in efficient information processing.

### Educational assessment and advances in the understanding of human learning

**Masters, Geoff** Educational Research, Australian Council for, Camberwell Vic, Australia

Research into human learning during the 20th century underlined the importance of providing individuals with learning opportunities appropriate to their current levels of readiness and motivation; of developing deep understandings of concepts and principles that provide meaning and structure to knowledge; and of providing supportive learning environments that encourage risk-taking, self-monitoring and a positive view of one's own capacity for learning. This paper will consider the implications of this research for educational assessment in the 21st century. It will be argued that a greater focus will be required on the use of assessments to explore and understand the learning progress of individuals.

### IS-099: Advances in evidence-based psychological practice

**John Hunsley** (chair)

In this symposium we present a sense of the scope of evidence-based practice in psychology and illustrate some of the promises and challenges associated with such practices. Beginning with a focus on assessment, developments in evidence-based psychological assessment and the scientific basis of clinical case formulation will be explored. Turning to evidence-based treatments, the important issues of considering treatment acceptability as part of service delivery and dissemination efforts and evaluating the results of treatment effectiveness studies are examined. The symposium concludes with an illustration of how research can and should inform efforts to develop and implement prevention programs.

#### Evidence-based assessment

**Hunsley, John** Dept. of Psychology, University of Ottawa, Ottawa, Canada

In recent years there has been growing attention to the importance of ensuring that psychological assessment instruments are firmly supported by scientific evidence. In this presentation, diverse strategies that have been proposed for determining the extent to which an instrument is evidence-based will be briefly reviewed. Additionally, to illustrate the range of evidence-based instruments that are available for both clinical and research purposes, examples will be provided of evidence-based instruments for assessing both youth and adults. Finally, a case will be made regarding the pressing need for research evidence that addresses the clinical utility of psychological instruments.

#### Empirical foundations of case formulation

**Haynes, Stephen N.** Dept. of Psychology, University of Hawaii, Honolulu, USA

Clinical case formulation is based on the assumption that, compared to standardized treatments, matching treatment mechanisms to causal relations for clients' behavior problems will result in enhanced treatment outcome. The arithmetic and conceptual models underlying the presumed benefits and challenges of clinical case formulation will be presented. Additionally, necessary research designs and data on the incremental outcome of clinical case formulation for several behavior problems (focusing on severe behavior problems) will be presented.

#### Parents' acceptance and use of evidence based treatments for childhood Attention-Deficit/Hyperactivity Disorder: How to sell what works

**Johnston, Charlotte** Dept. of Psychology, University of British Columbia, Vancouver, Canada **Mah, Janet** Dept. of Psychology, University of British Columbia, Vancouver, Canada

Medication and behavior management are evidenced-based (EB) treatments for childhood Attention-Deficit/Hyperactivity Disorder (ADHD). However, parents are frequently reluctant to use these treatments and prefer nonEB alternatives. We present studies examining parents' acceptability and use of these treatments. Parents see medication as less acceptable than behavioral treatment, despite acknowledging medication's greater effectiveness. Acceptability of behavioral treatment predicts short-term, but not longer-term, use. In addition, factors such as parents' beliefs about ADHD and attributions for child behavior predicted aspects of acceptability and adherence to these EB treatments. The implications for increasing parental uptake of EB treatments are considered.

### An update on research-informed benchmarks for psychological treatments

**Lee, Catherine** Dept. of Psychology, University of Ottawa, Ottawa, Canada

Hunsley and Lee (2007) conducted a focused review of the treatment effectiveness literature published up until March 2006. A comparison of data from these studies to benchmarks from recent reviews of efficacy trials revealed treatment completion rates comparable to those found in the efficacy benchmarks. Moreover, in most instances, the improvement rates were comparable in effectiveness studies to those reported in randomized clinical trials of treatment efficacy. In this presentation, the review will be updated to include studies published between March 2006 and March 2008. Recommendations for practice and research will be presented.

### Systemic challenges facing school based mental health programs

**Santor, Darcy** Dept. of Psychology, University of Ottawa, Ottawa, Canada

School based health centers, early identification screening programs and curriculum based prevention programs are three of the most common delivery modalities for mental health problem identification and intervention in schools. Many of the challenges facing these various initiatives are systemic but may be resolved by embedding them within a health literacy framework emphasizing knowledge acquisition and by implementing these programs with interactive, internet based tools. I illustrate how internet-based approaches can address a number of these challenges, including (a) increasing the availability and accessibility mental health resources, (b) improving knowledge uptake and ensuring on-going evaluation, and (c) maximizing program sustainability.

### IS-100: Disaster trauma and intervention

**Damodar Suar** (chair)

On average, more than two disasters occur every day somewhere in the world. Natural disasters are most devastating in developing countries and cause widespread human sufferings. Following a disaster, survivors are plunged into psychological and physical sufferings. Survivors need psychosocial care and survival necessities to ameliorate their conditions. With this backdrop, the symposium aims to discuss the disaster trauma, its causes, risk and protective factors of trauma at individual level, and the mass-hysteria and fear psychosis at the community level. It further aims to focus on intervention strategies to ameliorate the trauma at individual level and the symptoms at community level.

#### Phase-specific intervention for psychosocial sequel of disasters: A longitudinal perspective for improving disaster planning

**Kar, Nilamadhab** Dept. of Psychiatry, Wolverhampton City PCT, Wolverhampton, United Kingdom

Disasters are traumas of such magnitude that the internal existing systems fail to cope with the effects. Psychiatric outcomes vary among individuals and societies depending on their psychosocioeconomic status, resource loss, personal meaning of loss, and adequacy of external intervention. The paper discusses the conceptual framework of different phases relevant to psychosocial sequelae of disasters taking into consideration of manifestations and needs over a period of time. Supporting evidences for predisaster warning phase, during and immediately after, early, recent and remote post-disaster phases based on their manifestations and needs are provided along with suggestions for phase-appropriate interventions.



### Exploring the psychological scar of tsunami in children and adolescents

**Bhushan, Braj** Humanities & Social Sciences, IIT Kanpur, Kanpur, India

A three phase study was conducted to understand the psychological aftereffects of the December 26, 2004 tsunami on children and adolescent victims (primary and secondary). Initially, posttraumatic stress and emotional distress were measured in 101 child victims. This was followed by examining 130 children and adolescents who did not directly experience this catastrophe but had verbal/pictorial exposure of it. Finally, young volunteers who rushed to one of the sites as relief volunteers were studied. Females reported higher rate of symptoms in the affected group. Non-affected males were higher on intrusion and females on withdrawal symptoms.

### Resource loss and trauma

**Das, Namita** CAS in Psychology, Utkal University, Bhubaneswar, India **Suar, Damodar** Humanities and Social Sciences, IIT Kharagpur, Kharagpur, India

The study examines the impact of resource loss and social support on disaster trauma of tsunami survivors. Data were collected through structured interview schedule 14 months after the tsunami from 416 survivors in Nagapattinam district. The postdisaster trauma was assessed using measures of posttraumatic stress, anxiety, and physical health symptoms. The results reveal that the loss of varied resources increases the postdisaster trauma. Increase in received social support enhances perceived social support and both decrease postdisaster trauma. The internal control, communal mastery, and coping style interacting with the extent resource loss and social support have buffered the post-disaster trauma.

### Outgrowing the trauma: Some lessons from disasters in India

**Misra, Girishwar** Dept. of Psychology, University of Delhi, New Delhi, India

Disasters arrest the normal functioning at individual and community levels by causing unanticipated loss of material and human resources and creating health problems. This presentation examines the various consequences of disasters at individual and community levels and efforts to cope and outgrow from the trauma. The role of socio-economic and psychological sub systems in defining trauma and reconfiguring their lives for healthy development is examined. The results imply an urgent need to evolve culturally embedded comprehensive support systems in the developing countries like India which are becoming more vulnerable in the wake of population pressure, environmental hazards and inadequate technology.

### Disaster and trauma: Who suffers and who recovers from trauma, and how?

**Suar, Damodar** Humanities and Social Sciences, IIT Kharagpur, Kharagpur, India **Das, Namita** CAS in Psychology, Utkal University, Bhubaneswar, India

This study examines the occurrence of disasters, disaster trauma, causes of trauma, and intervention strategies. In India, a disaster occurs in each eight days and natural disasters are most devastating. Disaster trauma manifests in cognitive, affective, behavioural, and physical symptoms. What causes trauma are the reactivation of disaster memory, resource loss, and inadequate social support. Severely exposed victims, children, elderly, poor, lowly educated people, low caste survivors, widows/widowers, and members from larger families are at risk for trauma. Certain personality characteristics and social support buffer trauma. Intervention strategies are discussed to ameliorate trauma during different phases of natural disasters.

### Psychosocial support and intervention in Godhra riots

**Nanda Biswas, Urmi** Clinical and Health Psychology, Whitelands College, London, United Kingdom

The Godhra riots in 2002 witnessed about 1,000 deaths and large number of families were uprooted and forced to seek shelter in rehabilitation camps. The enormous pain and loss to people was not easy to overcome. Civil societies planned intervention that resulted in the Gujarat Reconciliation Programme launched by CARE India, and also the intervention initiated by Action Aid India. In this paper, case studies of five organizations namely: UTTHAN, OLAKH, UNNATI, SEWA, and Tribhubandas Foundation are covered in riot-affected area. Their intervention in managing emotions, anxiety, support, and lifestyle modification is presented and implications are discussed.

### IS-101: Social and cognitive variables related with physical activity practice

**Jesús Rodríguez Marín** (chair)

The objective of this Symposium is to show the more relevant lines of investigation analyzing theoretical and practical perspectives about the prediction of sport and physical activity practice. Concretely, in this symposium we present results of investigations that have applied different theoretical models that improve the understanding of the processes of acquisition of the exercise behavior. Different models as the Eccles' (1996) expectancy-estimates socialization model and Bronfenbrenner's (1993) ecological systems approach to development, the self-determination theory (Ryan & Deci, 2002), the achievement goals theory (Nicholls, 1989), and the theory of planned behavior (Ajzen, 1991) applied to the study of the acquisition of healthy-lifestyles and the sport dropout, were analyzed.

### The role of significant others in the practice of physical activities

**Brustad, Robert** School of Sport and Exercise, University of Northern Colorado, Greeley, CO, USA

This presentation will focus on the nature of significant other influence on the physical activity and sport involvement of children and adolescents. The nature and type of significant other influence changes substantially according to the age and developmental status of the individual affected, and according to the context and meaning that characterizes the involvement. Relevant theoretical perspectives will be addressed, most notably Eccles' expectancy-value theory and future directions identified. Current methodological advances will also be discussed.

### Motivation, commitment and drop-out in youth elite soccer

**Torregrosa, Miquel** Psic. Bàsica y Evolut., Universitat Autònoma Barcelona, Bellaterra, Spain **Cruz, Jaume** Psicologia Bàsica, Universitat Autònoma Barcelona, Barcelona, Spain **Sousa, Catarina** Psicologia Bàsica, Universitat Autònoma Barcelona, Barcelona, Spain

The present study explored the relations between motivation, commitment and drop-out in youth soccer players. One hundred and twenty eight young soccer players competing in elite leagues participated in the study. Results show that elite youth players are both highly ego and task oriented, and that they show high levels of sport commitment. At the beginning of the following season 80.4% of the players continued in the same team, and the 19.6% of so-called drop-out split in 16.46% of change of club, 0.60% of changing sport and only a 2.43% of effective drop-out of youth elite soccer.

### Motivation and healthy life styles in adolescents

**Cervello, Eduardo** Art, Humanities and Laws,

University Miguel Hernandez, Elche, Spain

This study analyzes the relationships between the motivational climate, goal orientations, the assessment of physical education classes and the behavioral patterns of healthy (i.e., practicing sports as extra-curricular activity), and non-healthy lifestyles (consumption of alcohol, tobacco and other drugs) of 502 physical education students. A correlational-descriptive methodology was employed. The results indicated that the perception of a task-involving motivational climate predict positively the student's assessment of the physical education classes. Perception of an ego-involving the motivational climate predicts negatively this assessment. Additionally, the assessment of the physical education classes predicts positively the practice of extracurricular sport activity and, such practice predicts negatively the consumption of drugs

### IS-103: Gene x environment interactions in the life-course development of temperament and attachment

**Liisa Keltikangas-Jarvinen** (chair)

Interactions between genes and childhood environments in human development have evoked increasing interest. Serotonin system has been suggested to have a special role in a development of personality. Here, an effect of an interaction between serotonin system and childhood environment on adulthood temperament, depression, and attachment have been studied. The findings suggest an obvious role of serotonin in a development of human temperament, however so, that there mostly exists no main effect of serotonin on adulthood outcomes, but serotonin moderates a way how a person experiences his or her environment. In addition, adulthood attachment may be, at least partly, biologically rooted.

### The serotonin transporter in emotion regulation and social cognition

**Lesch, Klaus-Peter** Psychiatrie und Psychotherapie, Universität Würzburg, Würzburg, Germany

**Objectives:** The gene encoding the serotonin transporter (5-HTT) has been associated with anxiety-related traits and susceptibility for depression. Here we highlight recent discoveries related to allelic variation of 5-HTT function with respect to emotion regulation and social behavior, drawing from an interdisciplinary perspective of behavioral genetics and cognitive neuroscience. **Results:** We compare two models of 5-HTT-dependent modulation of brain activity and discuss the role of life stress experience in modifying 5-HTT function in the brain. **Conclusions:** The findings suggest that the impact of the 5-HTT gene on behavior is much broader than is commonly appreciated and may have a role in social cognition.

### Temperament in childhood as a predictor of Harm Avoidance in adulthood: Moderation by the 5-HT2A gene

**Pulkki-Räback, Laura** Dept. of Psychology, University of Helsinki, Helsinki, Finland **Merjonen, Päivi** Dept. of Psychology, University of Helsinki, Helsinki, Finland **Jokela, Markus** Dept. of Psychology, University of Helsinki, Helsinki, Finland **Salo, Johanna** Dept. of Psychology, University of Helsinki, Helsinki, Finland **Lehtimäki, Terho** Medical School, University of Tampere, Tampere, Finland

**Objectives:** To study the association of childhood temperament (Emotionality, Sociability, Activity) with adulthood Harm Avoidance and whether the association is moderated by the serotonin receptor 5-HT2A gene. **Methods:** 21-year follow-up study of 852 participants from a population-based sample aged in average 10 years at the baseline. **Results:**

Higher Sociability predicted lower Harm Avoidance over 21 years ( $B=-0.11$ ,  $p=.002$ ). However, in a subgroup of carriers of the T/T variant of the 5-HT<sub>2A</sub>, higher Sociability was associated higher Harm Avoidance. Conclusions: Early temperament manifests itself in adulthood differentially, depending on genetic factors that regulate the serotonergic system.

#### **Mother's life satisfaction and child's negative emotionality in adulthood: The moderating role of serotonin receptor 2A gene**

**Merjonen, Päivi** Dept. of Psychology, University of Helsinki, Helsinki, Finland **Pulkki-Råback, Laura** Dept. of Psychology, University of Helsinki, Helsinki, Finland **Lehtimäki, Terho** Medical School, University of Tampere, Tampere, Finland

**Objectives:** We tested whether the interaction between HTR2A gene and maternal life satisfaction affects child's later negative emotionality (NE). **Methods:** The participants were 706 participants from the Cardiovascular Risk in Young Finns study, being 3-18 years old, when their mothers' life satisfaction was measured. Participants' NE was assessed 12, 17 and 21 years later. **Results:** Mother's dissatisfaction was associated with child's higher NE, especially its anger component, among carriers of any T allele, but not among carriers of CC genotype. **Conclusions:** Carriers of T allele are sensitive to environmental effects.

#### **Attachment style in adulthood, the role of interleukin-6 (IL-6) gene and stressful events in early childhood**

**Salo, Johanna** Dept. of Psychology, University of Helsinki, Helsinki, Finland **Pulkki-Råback, Laura** Dept. of Psychology, University of Helsinki, Helsinki, Finland **Lehtimäki, Terho** Medical School, University of Tampere, Tampere, Finland **Keltikangas-Järvinen, Liisa** Dept. of Psychology, University of Helsinki, Helsinki, Finland

**Objectives:** Tentative evidence shows that in addition to environmental effects, individuals may differ in their genetic susceptibility to form attachment bonds. We examined whether the IL-6 -174 G>C genotype, a potential determinant of stress-reactivity, is associated with adult attachment style i) directly ii) by moderating the association between childhood stressful events and adult attachment. **Methods:** a 21-year, prospective, longitudinal study with a population based sample of 1691 subjects. **Results:** IL-6 genotype had a main and a moderating effect on dismissing-avoidant adult attachment style. **Conclusions:** Genes may directly influence the development of attachment, and increase vulnerability to environmental effects.

#### **The association between mother-child relationship in childhood and reward dependence in adulthood is moderated by the serotonin receptor 2A gene**

**Jokela, Markus** Dept. of Psychology, University of Helsinki, Helsinki, Finland **Salo, Johanna** Dept. of Psychology, University of Helsinki, Helsinki, Finland **Pulkki-Råback, Laura** Dept. of Psychology, University of Helsinki, Helsinki, Finland **Lehtimäki, Terho** Medical School, University of Tampere, Tampere, Finland **Keltikangas-Järvinen, Liisa** Dept. of Psychology, University of Helsinki, Helsinki, Finland

**Objective:** To examine whether the T102C polymorphism of the serotonin receptor 2A gene (HTR2A) moderates the association between maternal nurturance in childhood and adolescence, and reward dependence (RD) in adulthood. **Methods:** Cardiovascular Risk in Young Finns study, participants aged 3 to 18 years at baseline and followed for 21 years ( $n=913$ ). Temperament and Character Inventory (TCI). **Results:** High maternal nurturance predicted high RD in T/T genotype carriers but not in T/C or C/C carriers, independently of depressive symptoms. **Conclusions:** The

role of early mother-child relationship in adult attachment-related temperament may depend on allelic variation in the HTR2A gene.

#### **IS-104: Adolescent psychoemotional wellbeing during the period of social change: Actual situation and possibilities of intervention**

**Andrei Podolskij** (chair)

Main purpose of the recent symposium is to consider and compare approaches to the adolescent psychoemotional wellbeing elaborated and tested in the frames of essentially different theoretical outlooks and paradigms - cultural-historical, cross-cultural, and psychoanalytical. The central angle of consideration is to find similarities (phenomena found, intervention technologies implemented, etc.) rather than differences. The emphasis is done on the possibilities of intervention and its efficacy to improve adolescent psychoemotional wellbeing during the period of social change under different social-economic and cultural conditions.

#### **Psychopathology of adolescence as a normal way of being in the post-modern social link**

**Lesourd, Serge** Faculté de Psychologie, Université Louis Pasteur, Strasbourg, France

Adolescence is time, structural more than chronological, during which the subject confront to the interdiction to realise entirely and totally the desire. Well our post-modern social link, the liberal one, preaches individualisation of the human relations, so the teenager let be alone in front of his choose and his necessary limits. In this work, we display, with clinical examples, how post-modern society teenagers are controlled by logics who prescribe to thrill (addictions) and to do (consummation, violence, etc.). When use is impossible, then personal fall in value (suicide, depression, etc.) or attacks of our fellow-men (violence, law refusal, etc.) become the normal ways of being.

#### **Testing intervention program to decrease adolescent depressed mood and anxiety**

**Podolskij, Andrei** Dept. of Developm. Psychology, Moscow State University, Moscow, Russia **Idobaeva, Olga** Developmental Psychology, Moscow State University, Moscow, Russia

The purpose of the study is to construct and test the intervention program designed to decrease adolescent depressed mood and anxiety. Theoretical and empirical sources of the intervention design are presented and discussed. The key factors that affect an adolescent psycho-emotional non-wellbeing are selected on the base of the big scale data base collected in the sample of Russian and Ukrainian adolescents, their parents, and school teachers. An intervention program has been designed and implemented in accordance with those findings. The results achieved demonstrate strong and weak sides of the intervention program for junior and senior, male and female adolescents.

#### **The role of school environment and family climate in promoting identity change, psychological well-being and integration of immigrant and refugee youth in Canada**

**Chirkov, Valery** Dept. of Psychology, University of Saskatchewan, Saskatoon, Canada **de Guzman, Jaqueline** Dept. of Psychology, University of Saskatchewan, Saskatoon, Canada **Geres, Koreen** Dept. of Psychology, University of Saskatchewan, Saskatoon, Canada

The presentation reports the results of semi-structured interviews of 76 immigrant and refugee families from China, India, Iraq, Sudan, Columbia and other countries regarding their relations within families and consequences of these relations for

children's feeling of ethnic identity, well-being, future life plans and potential for integration into Canadian society. Children's perceptions of school environment will also be reported. Statistical analysis together with the qualitative analysis of the interviews was conducted to reveal direct and moderated relations among the variables. Universal and specific regularities will be reported. The interdisciplinary approach to study immigrant youth will be strongly advocated.

#### **IS-105: Sex and attachment across cultures: A 56-nation study**

**David Schmitt** (chair)

In this symposium, presenters will focus on the systematic distribution of romantic attachment styles and sexual strategies across cultures. Findings from the International Sexuality Description Project—a survey study of over 17,000 people from 56 nations—will be highlighted to reveal, for example, that secure romantic attachment is “normative” in a majority of cultures, preoccupied romantic attachment is particularly prevalent in East Asian cultures, and dismissing romantic attachments are associated with high-stress ecological environments. Research will be presented on sociosexuality, harassment, and sexual jealousy across cultures, as well as using the Internet to effectively collect cross-cultural data on human sexuality.

#### **Sex and attachment across cultures: A 56-nation study**

**Schmitt, David** Dept. of Psychology, Bradley University, Peoria, USA

This presentation will focus on the systematic distribution of romantic attachment styles across cultures. Findings from the International Sexuality Description Project—a survey study of over 17,000 people from 56 nations—will be highlighted to reveal, for example, that secure romantic attachment is “normative” in a majority of cultures, preoccupied romantic attachment is particularly prevalent in East Asian cultures, and dismissing romantic attachments are associated with high-stress ecological environments.

#### **Sexuality and attachment: Large scale data collection and cross-validation via the internet**

**Reips, Ulf-Dietrich** Inst. für Psychologie, Universität Zürich, Zürich, Switzerland

Internet-based research bears various benefits: (a) studies can be delivered to large numbers of geographically and demographically distributed participants quickly and with low effort; (b) Internet-based research is cost-effective in time, space, administration, and labor; (c) one can recruit large heterogeneous or homogeneous samples, also of individuals with rare conditions of interest (e.g. sexomnia, Mangan & Reips, 2007). Due to the anonymity of the setting, the Internet is particularly suited for studies on sensitive topics. An Internet-based version of the Internet Sexuality Description Project (ISDP-2) survey created with WEXTOR (<http://wextor.eu>) is presented, methods and challenges are discussed.

#### **Sociosexuality: Effects of attachment, sex and age in Brazilian samples**

**Benedetti, José** Dept. of Experim. Psychology, University of São Paulo, São Paulo, Brazil **Corrêa Varella, Marco Antônio** Dep. Psicologia Experimental, Universidade de São Paulo, São Paulo, Brazil **Bussab, Vera Silvia** Dep. Psicologia Experimental, Universidade de São Paulo, São Paulo, Brazil

Inter and intra-sexual variation in sociosexuality was investigated regarding attachment and age. 221 undergraduates (Social, Engineering and Biological Areas; 21 years) and 81 adults (38 years) answered the Sociosexual Orientation Inventory (Simpson & Gangestad, 1991) and Relationship Questionnaire



(Bartholomew & Horowitz, 1991). Few researches had been done with non-psychology students and adults. In both age groups, men were more unrestricted (ANOVA). Only unrestricted women had higher model of self (undergraduates) and model of other (adults) styles (r-Pearson). Independently of the cycle in Life History, universal sex differences were confirmed, and attachment style interacted with the sociosexuality differently in each sex.

#### **Sexual development of Lebanese youth: Perceptions and practices of sexuality**

**Khoury, Brigitte** Dept. of Psychiatry, American University of Beirut, Beirut, Lebanon

The purpose of this study was to assess the sexual development of youth in Lebanon: their perceptions, attitudes and practices of sexuality. The study was conducted on a sample (n=500) of Lebanese university students. The topics investigated included sexual development, education and practices, society and sexuality, virginity, masturbation and sexual myths. Results showed that despite the apparent modernization of the Lebanese society, conservatism seemed to be prominent when it came to sexuality. Clear differences were found between men and women. Family and religion, the two pillars of society, were still found to be the main influences of sexual development with the youth group.

#### **Sexual harassment across cultures**

**DeSouza, Eros** Dept. of Psychology, Illinois State University, Normal, USA

This paper will discuss empirical studies that used the Sexual Experiences Questionnaire (Fitzgerald et al., 1988), generally considered one of the most widely used, as well as one of the most valid and reliable instruments that assesses sexual harassment, to highlight frequency rates and outcomes across countries. In addition, studies that investigated perceptions of cross-sex and same-sex sexual harassment, including recommended punishment, will be discussed. Implications will be drawn from the cultural dimensions of high-low power and individualism-collectivism proposed by Hofstede (2001), as well hierarchy-egalitarianism and conservatism-autonomy proposed by Schwartz (1999).

#### **Sexuality and jealousy across cultures**

**Fernandez, Ana María** Escuela de Psicología, Universidad de Santiago, Santiago, Chile  
Research on jealousy responses to sexual and emotional infidelity supports the universality and sex differentiated nature of this phenomena (in the US, Europe and Asia). A few studies have evaluated jealousy in Spanish-speaking countries, which will be revised in the present discussion, addressing replications conducted in Argentina, Chile, Colombia, Venezuela and Spain. There is also some recent developments and variants of the classical forced-choice methodology, extended to include continuous ratings of jealousy situations, as well as attachment motives for the jealousy response. The implications of the universality of this phenomenon supports the deeper inquiry on universal attachment mechanisms that may be sexually dimorphic.

#### **IS-106: Testing and assessment in emerging and developing countries II: Challenges and recent advances**

**Fanny M. Cheung, Marise Born** (chair)

With the growing need for psychological assessment in emerging and developing countries, psychologists encounter many scientific and ethical challenges. This part of the symposium illustrates the challenges of testing and assessment in Vietnam, Indonesia, China and South Africa, and how

psychologists contribute to recent advances. In addition to translation and adaptation of imported tests, the combined emic-etic approach of developing indigenous personality assessment measures in China and South Africa are presented as examples of good practice.

#### **Adapting tests for diagnosing learning disabilities in developing countries: The case of Vietnam**

**Grégoire, Jacques** Dept. of Psychology, Université Cathol. de Louvain, Louvain-la-Neuve, Belgium

Vietnam puts strong emphasis children education. As a consequence, the number of children with learning disabilities is growing and there is a need for diagnostic tests. Some French tests were adapted recently in Vietnamese, raising several issues. Unlike achievement tests, diagnostic tests are based on models of cognitive processes involved in reading, writing and calculating. Because of the specificity of the Vietnamese language, the models underlying the tests and the related tasks had to be adapted. Education of test users had also to be organized because an understanding of the models is required to correctly interpret the tests scores.

#### **Challenges of test adaptation and development in Indonesia**

**Halim, Magdalena** Dept. of Psychology, ATMA JAYA Catholic University, Jakarta Selatan, Indonesia

With a growing need for Indonesian-language psychological tests, imported tests are often translated, despite unfamiliarity with cross-cultural assessment methods and copyright requirements. The translation process is not well defined and documented. Standardization and norming of imported tests are inadequate. Developing local tests is not regarded as an important contribution for Indonesian psychologists. I will illustrate the problems of test adaptation and development in Indonesia including the implications on test interpretation with examples from the Indonesian NEO PI-R, MMPI-2, WAIS-R and a local personality test. Possible strategies to stimulate the development of local tests in the future will be discussed.

#### **Etic vs. Emic personality assessment: An integrative approach for deriving an indigenous measure for Chinese personality**

**Cheung, Fanny M.** Dept. of Psychology, Chinese Univ. of Hong Kong, Hong Kong, China, People's Republic of : Hong Kong SAR

In response to the need for culturally relevant personality measures, we adopted a combined emic-etic approach to develop the Chinese Personality Assessment Inventory (CPAI). I will report the program of research that went into the development and validation of the CPAI for adults and for adolescents (CPAI-A). In addition to confirming universal personality dimensions, the interpersonal aspects of personality salient to the Chinese culture are highlighted in the CPAI. Cross-cultural applications of the CPAI showed that these relationally oriented traits are also relevant to non-Chinese cultures, resulting in the renaming of the CPAI to Cross-Cultural Personality Assessment Inventory (CPAI-2).

#### **Uncovering the personality structure of the 11 language groups in South Africa: SAPI project**

**Meiring, Deon** Dept. of Industrial Psychology, University of Stellenbosch, Stellenbosch, South Africa  
**Van de Vijver, Fons** Department of Psychology, University of Tilburg, Tilburg, Netherlands

**Rothmann, Ian** Dept. of Industrial Psychology, North-West University, Potchefstroom, South Africa  
**De Bruin, Deon** Dept. of Industrial Psychology, University of Stellenbosch, Johannesburg, South Africa

South Africa has 11 official languages and four major ethnic groups. There is a societal and scientific need for comprehensive personality ques-

tionnaires that provide reliable and valid measures across all cultural and language groups. Imported questionnaires based on a Western model of independence may not be appropriate for describing African personality in which interdependence (Ubuntu) is more salient. The SAPI project aims to develop a comprehensive personality questionnaire for all South-African language groups. We describe Stage 1 of the project in which person-descriptive terms were gathered and clustered across the 11 languages to come up with a personality structure.

#### **IS-107: Social development, peer relationships and pro-social behaviour**

**José Eduardo Moreno, Annie Karin Schulz** (chair)

The importance of bonding with parents, socialization of the developing child and adolescent within the family and school context, measurement of social skills and the contribution of peer relationships to social development will be discussed. We present some interesting findings on the relation of peer interaction with their family, social environment and personality. As personality is concerned, psychoticism, neuroticism and extroversion are associated positively with peer negative influence and peer delinquent behaviour. Special attention will be given to the assessment of intervention programs for the development of prosocial behaviour and to the Social Skills Improvement System.

#### **Two decades of social skills research with the social skills rating system**

**Elliott, Stephen N.** Learning Science Institute, Vanderbilt University, Nashville, TN, USA  
The Social Skills Rating System has for many researchers become a common lens to capture perceptions of the prosocial behavior of children and youth. Thus, it is important to understand the history of this instrument and what has been learned about children's social behavior over 20 years. This knowledge has played a substantial role in the revision of the SSRS, called the Social Skills Improvement System (SSIS). A co-author of the SSIS will share perspectives on (a) the measurement of social skills, (b) what has been learned about children's social behavior, and (c) what changes lie ahead for persons who wish to use the revised instrument to assess children's social skills.

#### **Methodological perspectives in measuring the effects of an intervention program with adolescents: Pre-post test assessment and questionnaires to evaluate the program**

**Garaigordobil, Maite** Dept. of Clinical Psychology, University Basque Country, San Sebastián, Spain  
**Maganto, Carmen** Dept. of Clinical Psychology, University Basque Country, San Sebastián, Spain  
**Pérez, José Ignacio** Dept. of Clinical Psychology, University Basque Country, San Sebastián, Spain

The study compared the results obtained when evaluating the program with two assessment methodologies. The sample is made up of 174 adolescents from 12 to 14 years of age (125 experimental and 49 controls). The research uses an experimental multi-group pre-posttest design with repeated measures and control groups. The results suggest that pre-posttest assessment is more suitable when the goal is to validate the intervention, whereas the questionnaires are useful as screening instruments. The results obtained in the questionnaires completed by adolescents and adults were very coherent. The positive effects of the program on diverse factors of socio-emotional development are observed with both methodologies.

### The relation of peer interaction to personality and family social environment

**Ma, Hing Keung** Dept. of Education Studies, Hong Kong Baptist University, Hong Kong, China, People's Republic of : Hong Kong SAR

Overall peer influence and peer's social behavior are associated positively and significantly with good relationship in family. In other words, positive peer interaction is associated with good family relationships. Adolescents came from family with strong cohesion and less conflict tended to have positive peer influences and peer relationships. As far as personality is concerned, psychoticism, neuroticism and extroversion are associated positively and significantly with peer negative influence and peer delinquent behaviour. On the other hand, social desirability is associated positively and significantly with peer positive and negative influences, and peer prosocial and antisocial behaviour. The findings will be interpreted in terms of the cultural context and psychological development.

### Promoting prosocial behaviour in school by playground improvement: The effect of supervisors and play materials

**Rebolo Marques, Amália** Escola Básica Integrada, Faculdade Motricidade Humana, Sesimbra, Portugal  
Children in primary school have better relations when the play spaces are improved with material to play freely, and active supervision. We will present three intervention programs that have been held in Portugal. These programs have as main objective the reduction of conflicts and bullying behaviour. We used anonymous questionnaires about peer relations in the playground during recess that children answered before, during and after the intervention to assess this programs. There are statistic differences between aggression and victimisation before and after the intervention, the percentages of children victimised and/or aggressors are lower in the end of all the programs.

### Parental styles, self-perception and peer-attributed roles

**Moreno, José Eduardo** CIIPME, CONICET, Buenos Aires, Argentina  
**Schulz, Annie Karin** CIIPME, CONICET, Buenos Aires, Argentina

The main goal of this project was to assess the characteristics of those children who are attributed certain roles as bullies, leaders or isolated. The Argentine Scale of Child Perception of Parental Relationship, Loneliness Scale, Social Competence Scale and RCP of Masten were administered to a sample of 580 children from 9 to 11 years old who attended primary schools in Buenos Aires (Argentina). The results, for example, show that: the bullies have a low perception of their social competence as well as they do not seem to have any difficulties in their relationship with friends and classmates.

### IS-108: Aging of the mentally retarded persons in South Asia

**Anwarul Hasan Sufi** (chair)

Life span of the mentally retarded persons significantly increased in some of the South Asian countries in recent years with the improvement of medical facilities and immunization programs. But new problems are being faced by the families to care them at home. The researcher depicts the life of the aged mentally retarded persons of south Asian countries on the basis of his personal observation of last 25 years. It was observed that the mild and moderate mentally retarded persons live longer than severe and profound mentally retarded persons. Psychosocial conditions are better among the rural than their urban counterparts.

### Aging of the female mentally retarded persons in Bangladesh

**Nazneen, Sultana** Higher Secondary Education, HSTTI, Rajshahi, Bangladesh

In Bangladesh, longer life spans due to improved medical conditions have created new problems to maintain them inside their families. The problems faced by the female mentally retarded persons are more serious than their male counterparts due to socioeconomic conditions and many other drawbacks. The researcher closely observed 12 aged female mentally retarded persons during last 20 years. The researcher studied their health, economy, housing and social security conditions. It was found that though there are many problems they possess excellent subjective well-being. They consider themselves happy to live inside the warmth of their families.

### Aging of the mentally retarded persons in Bangladesh: Biological

**Haque, Tofazzal** Dept. of Pharmacology, Rajshahi Medical College, Rajshahi, Bangladesh

The researcher closely studied 106 mentally retarded cases during 2001 -2006 in the north western part of Bangladesh. He studied the illness and diseases suffered by the cases. Though the major interest was to study the etiology and treatment of convulsive disorders of the cases, the researcher rank ordered the diseases those are barriers to the longer life span of the mentally retarded persons in the country. He also investigated the factors and recommended preventive measures. The researcher also depicts specific geriatric problems of selected 16 cases which project their biological conditions. Finally the researcher recommends some health policy programs.

### Residential problems of the aged mentally retarded persons in Bangladesh

**Sultana, Sabina** Dept. of Psychology, University of Rajshahi, Rajshahi, Bangladesh

In the absence of social welfare networks and residential institutions for the mentally retarded persons in Bangladesh, all the mentally retarded persons are given care by their families. Due to many drawbacks of land and property ownership laws, many wealthy aged mentally retarded persons lead a miserable life inside their own families after the death of their parents. The researcher investigated their living condition, compared the residential accommodation problems and compared these conditions in relation to their degree of retardation, gender and rural-urban residential status.

### Social security of the aged mentally retarded persons in Bangladesh

**Rahman, Masudur** Institute of Bangladesh Studie, University of Rajshahi, Rajshahi, Bangladesh

Though the national constitution of the Bangladesh guarantees that the state will take all the responsibilities of the handicapped persons, yet nothing is being done by the government. All the programs are run by the NGOs. The researcher investigated health, education, employment, housing and social security problems and prospects of several sample in different parts of the country. Finally he recommends that the government should provide monthly financial benefits to the families that the family members are motivated to take the responsibilities instead of sending them to residential homes.

### Psychotropic Drug dependence of the aged mentally retarded persons in Bangladesh

**Anisuzzaman, M.D.** Dept. of Clinical Psychology, Gono Bishwabiddalaya, Dhaka, Bangladesh

Lack of awareness, negligence, healthcare behavioural drawbacks, etc. large majority of the mentally retarded persons are treated as mentally ill and not as mentally retarded. The physicians

prescribe them psychotropic drugs which the family members continue in future without consulting the physicians. Thus a large majority of the aged mentally retarded persons were found completely dependent on psychotropic drugs, especially anticonvulsants. The researcher completed in-depth case studies of 12 aged cases and depicted how and why they were prescribed psychotropic drugs during their childhood and why they are completely dependent on these drugs at their old age.

### IS-109: Psychosocial consequences of long-term unemployment

**Branimir Sverko** (chair)

Despite considerable research during several decades and across various countries, the consequences of unemployment are still at issue. This symposium seeks to take stock of recent research advances and improve our understanding of the psychosocial impact of unemployment. First, the results of two recent long-term longitudinal studies examining the health effects of unemployment will be presented. Meta-analytic findings of the mental-health impact will be given next, followed by a paper discussing how the effects should be explained. The symposium will also address the experiences during job search, and tackle the issues of health impacts of enterprise restructuring.

### Unemployment, underemployment and mental health in school leavers: A prospective longitudinal study

**Winefield, Anthony H.** School of Psychology, University of South Australia, Adelaide, Australia  
**Metzger, Jack** School of Psychology, University of South Australia, Adelaide, Australia  
**Winefield, Helen** School of Psychology, University of Adelaide, Adelaide, Australia

We report data from a 10-year prospective longitudinal study of school leavers that commenced in 2001. Although the official unemployment rate in Australia is much lower than in the early 1980s, it appears that unemployment is leading to more psychological distress now than it did then. We suspect that this is because young people are more likely to blame themselves for being unable to get jobs when the government keeps insisting (falsely) that jobs are plentiful. The current definition of unemployment in Australia excludes anyone who worked for one hour or more in the week prior to being surveyed.

### Health impacts of prolonged unemployment and reemployment: A longitudinal study

**Galic, Zvonimir** Dept. of Psychology, University of Zagreb, Zagreb, Croatia  
**Sverko, Branimir** Dept. of Psychology, University of Zagreb, Zagreb, Croatia  
**Masic Sersic, Darja** Dept. of Psychology, University of Zagreb, Zagreb, Croatia

In a three-way longitudinal survey of initially unemployed persons (N=370), we examined the impact of prolonged unemployment and reemployment on a series of self-assessed measures of both physical and mental health (captured by the SF-36 Health Survey). Already at T1, on most of the health indicators, the participants who remained unemployed scored lower than those who later gained employment. The participants reemployed at T2 and T3 exhibited improved health, but only on the mental-health indicators. The results suggest that poor physical health contributes to prolonged unemployment, while poor mental health both contributes to and results from unemployment.

### The impact of long-term unemployment on mental health: Meta-analytic evidence

**Paul, Karsten** Business und Ökonomie, Universität Nürnberg-Erlangen, Nürnberg, Germany

Objectives: Testing unemployment duration as a moderator of the mental health effects of unem-



ployment. Methods: Meta-analysis of cross-sectional and longitudinal data. Results: Among cross-sectional studies, a linear moderator effect of unemployment duration was identified: The longer the average unemployment duration of the study participants, the more distressed they were. There was no clear evidence for a curvilinear relationship between unemployment duration and distress. In longitudinal studies, however, we found only a weak, non-significant deterioration of mental health among persons who were permanently unemployed and were tested repeatedly. Conclusions: Artificial testing effects may explain the weak agreement between cross-sectional and longitudinal results.

#### **The psychosocial consequences of long-term unemployment: Consequences of what?**

**Fryer, David** Dept. of Psychology, University of Stirling, Stirling, United Kingdom

How should the psychological effects of unemployment be explained? A number of explanatory accounts have been offered by researchers in the unemployment and health literature. Jahoda's Latent Function Deprivation Account has long been influential. In contrast, Fryer's 'Agency Restriction Account' has also received some support. In this presentation, David Fryer revisits the question of what is responsible for the mental health consequences of unemployment drawing upon more recent work in community and critical psychology and suggests a critical synthesis which captures what is important in but also transcends both.

#### **The dynamics of job-search: A daily experience sampling study**

**Wanberg, Connie** 3-300 Carlson School of Mgmt., University of Minnesota, Minneapolis, USA

This repeated measures study applies insights from motivation theories toward the understanding of affect and persistence during job search. Unemployed individuals completed a paper-and-pencil baseline survey, then were sent 15 online surveys every weekday for three weeks. Perceived goal progress positively related to positive affect and reemployment efficacy, and negatively to negative affect. Positive affect related positively to job-search intentions for the next day. Goal progress related negatively to next day job search efforts. The study expands understanding of the dynamics of job search, and the role of goal progress and affect in explaining these dynamics.

#### **Enterprise restructuring, health effects and health promotion**

**Kieselbach, Thomas** Inst. für Arbeitspsychologie, Universität Bremen, Bremen, Germany

Traditional unemployment research has focused on the effects of job loss and unemployment. More recent approaches try to conceive of the process of occupational transitions in a more complex way including the repercussions of unemployment on survivors-of-layoffs and interventions cushioning occupational transitions. Results from a EU project are presented including case studies of companies undergoing restructuring in different EU-countries analyzing health effects and health promotion interventions during restructuring. Preliminary results of a EU Expert Group on "Health in Restructuring" chaired by the author will be outlined aiming at the development of EU-policy recommendations on Occupational Safety and Health.

#### **IS-110: Cognitive functions in aging, psychopathology and social stereotyping**

**Grzegorz Sedek, Ulrich von Hecker** (chair)

The main aim of this symposium is to foster innovative research on cognitive functions. Cognitive functions have become one of the most

important topics in psychology and neuroscience. Among the most intensively studied cognitive functions are working memory and executive attention (the control of one's thoughts and actions), often investigated using neuroimaging techniques. Many populations – among them older adults, persons with emotional disorders, and negatively prejudiced persons – have been shown to demonstrate characteristically different patterns of limitations in cognitive functions. The proposed symposium is aimed at gaining better understanding of cognitive functions, their limitations and possible compensations across specific populations.

#### **Prospective and retrospective memory across the lifespan: An internet study**

**Maylor, Elizabeth** Dept. of Psychology, University of Warwick, Coventry, United Kingdom **Logie, Robert** Department of Psychology, University Edinburgh, Edinburgh, United Kingdom

Over 89,000 people aged 10-65 years participated in an Internet study that included objective and subjective measures of both prospective and retrospective memory. Generally, performance improved across childhood and declined almost linearly across adulthood. These trends were similar for working memory, binding in short-term memory, and visuo-spatial memory; however, development was more apparent than aging for digit span, with the reverse pattern for prospective memory. One manipulation in the prospective memory experiment benefited younger more than older people whereas another did the reverse. Self-reported prospective and retrospective memory failures varied less across the lifespan and did not correlate with performance.

#### **Development of prospective memory across the lifespan: The impact of inhibitory efficiency**

**Kliegel, Matthias** Inst. für Psychologie, Technische Universität Dresden, Dresden, Germany

Developmental changes in prospective memory (PM) across the lifespan are thought to depend upon the developmental trajectory of executive control. This study applies a PM task to children, young, and older adults. During intention execution, inhibitory requirements were additionally varied. Group differences mirroring inverted U-shaped functions were observed in intention formation, initiation, and execution. Age differences in intention execution were substantially greater when active task interruption was necessary. The current study suggests that the degree of inhibitory control needed to succeed in the task may be one factor underlying lifespan development of PM.

#### **The dynamic relationship between cognition and walking under dual task conditions in healthy aging**

**Li, Karen Z.H.** Dept. of Psychology, Concordia University, Montreal, Canada **DeMont, Richard** Department of Exercise Science, Concordia University, Montreal, Canada **Penhune, Virginia** Department of Psychology, Concordia University, Montreal, Canada **Fraser, Sarah** Department of Psychology, Concordia University, Montreal, Canada **Abbud, Gabriela** Department of Exercise Science, Concordia University, Montreal, Canada

A growing literature suggests that in healthy aging, more attentional capacity is allocated to motor tasks such as walking and balancing to compensate for age-related declines in physical functioning. Three studies of young and older adults were conducted to evaluate this proposition during concurrent treadmill walking and cognitive performance. Across the experiments we varied the difficulty levels of the walking and cognitive tasks, findings that older adults with poor balance showed prioritization of walking under very easy walking and cognitive conditions. Increasing task difficulty alters poor balancers' ability to prioritize. The

results suggest a boundary condition for compensatory attentional allocation.

#### **Does impaired inhibition for emotional material underlie depressive rumination?**

**Zetsche, Ulrike** Universität Marburg, Marburg, Germany **Joermann, Jutta** Psychology, University of Miami, Coral Gables, USA

Rumination is an important risk factor for the maintenance and recurrence of depressive episodes. It is still unclear, however, why some people are especially prone to ruminate. The present study investigated whether deficits in cognitive inhibition of emotional material underlie rumination. The sample comprised 25 clinically depressed individuals and 25 healthy controls. Participants completed five computer based reaction time tasks designed to assess the ability to inhibit emotional material (words or face pictures) at different stages of information processing. The Response Style questionnaire was used to assess the level of rumination. Results suggest a link between rumination and inhibitory deficits.

#### **Specific cognitive deficits in subclinical depression**

**von Hecker, Ulrich** School of Psychology, Cardiff University, Cardiff, United Kingdom

In this research, the specificity of functional deficits in subclinical depression is examined. We assume that depressed states are not associated with a general cognitive deficit, but with a highly specific one. In a series of studies we address the hypothesis that depressed individuals have difficulties with generative reasoning, that is, the process of combining piecemeal information into larger, comprehensive mental representations. Two examples are given, one pertaining to the construction of mental models of social cliques out of pairwise sentiment relations, and another with regards to the construction of a linear mental model, based on transitive order information.

#### **Effects of prejudice on memory and linear order reasoning**

**Sedek, Grzegorz** Warsaw, Poland **Piber-Dabrowska, Kinga** Department of Psychology, School of Social Psychology, Warsaw, Poland

This research examined the impact of individual differences in the strength of negative and positive components of ethnic stereotypes on memory and linear order reasoning. The results of Study 1 indicated that emotional elements (relations with the outgroup) were preserved in the memory of negatively prejudiced participants, but their memory and reasoning concerning ingroup members were significantly impaired. Study 2 replicated these results in a more general positivity x negativity design, including an ambivalent representation. The results suggest a need to integrate theoretical conceptions that encompass an efficiency view of stereotypes and basic research on emotional interference with cognitive processes.

#### **IS-111: Team processes and team effectiveness: Fifty years of progress and prospects for the future**

**Steve Kozlowski** (chair)

The last two decades have witnessed a worldwide shift from work structured around individual jobs to team-based work systems, and there are increasing pressures to enhance team processes, performance, and effectiveness. Although there is a vast research literature relevant to work groups and teams, findings are often contradictory or confusing and actionable information is diffuse. This symposium brings together a panel of experts to summarize the current state of the knowledge-base

on how to enhance team processes, performance, and effectiveness and to highlight promising areas for future theory and research development.

#### Enhancing team processes and effectiveness: Fifty years of progress and prospects for the future

**Kozlowski, Steve** Dept. of Psychology, Michigan State University, East Lansing, USA

There is over 50 years of psychological research focused on understanding and influencing the processes that underlie team effectiveness. This presentation will highlight what we know, what we think we know, and what we need to know to improve work group and team effectiveness. Primary attention will be devoted to topics that have well-developed theoretical and empirical foundations to ensure that recommendations are firm. There is a solid foundation for concluding that there is an emerging science of team effectiveness and several means to improve it. Future research and policy implications will be discussed. Emerging research is represented in presentations by other presenters

#### Team leadership in multicultural teams

**Chao, Georgia** Dept. of Management, Michigan State University, East Lansing, USA

Cultural diversity presents a challenge for team leadership; diverse team members enhance team resources, but differences can also impede consensus and effectiveness. Chao and Moon (2005) have developed a conceptualization of culture that spans the individual, team, and organizational levels. According to their theory, activation of a specific cultural identity is influenced by the strength of that identity to the person's self-concept, as well as situational characteristics that activate particular patterns of cultural tiles. Leaders can activate specific cultural identities to facilitate team development in diverse teams, creating a unique team identity. Implications for effective team processes, team development, and team leadership in multicultural teams will be discussed.

#### Shared cognitions, collaboration and team effectiveness

**Tannenbaum, Scott** Effectiveness, The Group for Organizational, Albany, USA **Donsbach, Jamie** gOE, Inc, Group for Org. Effectiveness, Albany, USA **Beard, Rebecca** gOE, Inc, Group for Org. Effectiveness, Albany, USA **Nicklin, Jessica** gOE, Inc, Group for Org. Effectiveness, Albany, USA

High performing teams collaborate effectively, although teams fail often to collaborate as effectively as they could. A strong contributing factor for collaboration is the extent to which teams possess shared cognitions. This presentation examines and summarizes the research on shared cognitions. There is a growing body of research on shared cognitions with well over twenty empirical studies that have demonstrated their impact on various facets of team performance. We will present a framework of shared cognitions and their relationship with team collaboration and effectiveness. Different types of shared cognitions and ways of enhancing shared cognitions in applied settings will be discussed.

#### Optimizing resource allocation in teamwork

**DeShon, Richard P.** Dept. of Psychology, Michigan State University, East Lansing, USA **Kozlowski, Steve W. J.** Dept. of Psychology, Michigan State University, East Lansing, USA

When working as a member of a team, individuals must allocate resources (effort) toward individual and team goals. As a result, individual and team goals, and feedback related to progress toward these goals, should be potent levers for affecting resource allocation. This presentation will describe ongoing research driven by a multilevel, multiple

goal model of individual and team regulatory processes (DeShon et al., 2004) that affect the allocation of resources across individual and team goals resulting in individual and team performance. Current work is directed toward understanding dynamic, within-person resource allocation processes, formally modeling such processes, and identifying interventions to improve optimal resource allocation.

#### Twenty-five years of team performance research: Discoveries and developments

**Salas, Eduardo** Inst. for Simulation, University of Central Florida, Orlando FL, USA

This presentation will focus on outlining what have been the recent discoveries and developments in team performance research since Dyer's (1984) seminal review. Dyer's review covered the literature from 1955-80; our review covered from 1980-2005. So, this presentation will briefly outline what we know about team performance; what have we learned about teamwork, team training and team-level performance assessment; and how the field has changed and evolved over the last two decades.

#### IS-112: Creating methodological strategies for researching vulnerable populations: Examples from Latin America

**Silvia Helena Koller, Marcela Raffaelli** (chair)

Psychological researchers working with impoverished and at-risk populations must contend with methodological challenges stemming from their characteristics and the larger context. This symposium will bring together researchers from different Central and South American countries who conduct research and intervention with homeless and impoverished children, adolescents, and their families. The symposium will feature an overview of the Latin American situation, followed by presentations drawing on research conducted in Brazil, Colombia, Peru, and Mexico. Presenters will describe strategies developed to overcome methodological challenges in their work, and the discussion will address the implications of this work for cross-cultural and international research.

#### Agency and agentic empowerment: Background and measurement of the concepts

**Pick, Susan** Dept. of Psychology, National University of Mexico, Mexico City, Mexico **Lewin, Irwin** Evaluación, IMIFAP, Mexico City, Mexico

Most studies in (social) psychology make use of participants of a moderate to high educational level. Accordingly, many recommendations about (quasi-)experimental design and instrument construction take such educated samples as a starting point. Experience with marginalized populations has shown that additional aspects must be included. Here we present some of the lessons we learned during the process of developing programs and conducting research working with (highly) marginalized Latin American populations. These lessons include aspects such as the role of shame and fear, of the unpredictability in their lives, and the use of closed vs. open questions in instruments.

#### Handling conflicts: From parents to children and from children to parents

**Livia Segovia, Jose** Dept. of Psychology, Univ. Nac. Federico Villareal, Lima, Peru

A psycho-educational program was delivered to families living in a peri-urban zone of Lima. Three groups differing in who received the training (parent only, adolescent only, or parent and child in separate sessions) were compared to each other and to a no-intervention control group. Each group consisted of 8 participants who completed 8 sessions on social abilities, self-control, conflict

resolution, drugs, sexuality, anti-social behaviour and life goals. Results indicated that intervention effectiveness was maximized when either the parent or the adolescent was trained and asked to pass on what they had learned to their (non-participating) child or parent.

#### Context and development in poor urban sectors in Cali, Colombia

**Orozco Hormaza, Mariela** Dept. de Psicología, Universidade del Valle, Cali, Colombia **Sánchez Ríos, Hernán** Dept. de Psicología, Universidade del Valle, Cali, Colombia

Some authors state that children growing up in poor urban settlements generally show some deficit in their cognitive development. The presentation will discuss the use of conventional scales as instruments to evaluate cognitive development, and new methodologies to measure and describe cognitive development. Findings on the relations between cognitive development and characteristics of children's family environment will also be discussed. The application of a social network model to the strategies used by children to solve problems and to dimensions of family contexts, allows the researcher to find affiliation patterns and identify those characteristics in the context that have greater contribution to children's cognitive development.

#### The situation in Latin America: An overview

**Raffaelli, Marcela** Psychology and Ethnic Studies, University of Nebraska, Lincoln, USA

Latin America encompasses an array of cultures, reflecting diverse mixtures of the region's original indigenous inhabitants, European colonizers, previously enslaved Africans, and (in recent years) immigrants from around the world. After independence in the early 19th century, many Latin American countries experienced foreign interventions and internal conflicts; more recently, many suffered economic difficulties and political unrest. This history continues to affect the approximately 650 million people who currently live in Latin America. The region is characterized by economic and social inequality, and millions of people live in situations of extreme vulnerability that present challenges and opportunities for psychological researchers.

#### Naturalistic research on emotional development in at risk Colombian children

**Carrillo Ávila, Sonia** Dept. de Psicología, Universidad de los Andes, Bogotá, Colombia

Developmental studies in natural settings allow researchers to observe behavior in its complexity within the individual's context. However, this approach demands care with measurement, research biases, behavioral disruption and ethical issues, particularly when working with at risk populations. Two studies involving home-visit observations of at risk Colombian children will be presented. In the first study attachment relationships between children, their adolescent mothers and their grandmothers were assessed. In the second, relationships of premature babies with their mothers were analyzed in two treatment programs: a traditional-care and the Kangaroo's program. The role of naturalistic studies in socioemotional research will be discussed.

#### IS-113: Narrative impact: Foundations and mechanisms

**Timothy C. Brock, Melanie Green** (chair)

Narratives or stories, even fictional ones, can have profound effects on individuals' beliefs. The research presented in this symposium will explore the underlying mechanisms of narrative persuasion, and the extent to which narrative impact endures over time. Common themes include the role of the



self in narrative processing, the importance of mental simulation and transportation, and the limits of narrative influence. Presenters will discuss these topics from perspectives ranging from neuroscience to individual differences. The talks also span a variety of contexts, from consumer psychology to attitudes about social issues.

#### Understanding narrative persuasion through simulation and self-projection during narrative comprehension

**Mar, Raymond** Dept. of Psychology, York University, Toronto, Canada

In order to understand how narrative has an impact on our attitudes and beliefs, it is necessary to understand how narratives are understood. Recently, a great deal of evidence has started to indicate that readers undergo a simulation of experience during reading, one that draws upon cognitive and emotional systems normally employed during real-world experience. This evidence is reviewed, including our recent work based on meta-analyses of neuroimaging findings, and its relevance for theories of narrative impact discussed.

#### 'Tis only a novel? Interactive effects of text and reader characteristics on persuasion

**Schreier, Margrit** School of Humanities, Jacobs Univer. Bremen gGmbH, Bremen, Germany

In a quasi-experimental study, the effects of credibility of a fictional text (credible / lacking in credibility), text focus (inner / outer world), reader involvement (high / low), biological sex, and gender (high / low instrumentality and expressiveness) on persuasion were assessed. Analyses of variance showed that, as predicted, women were more likely to agree with statements concerning protagonists' inner world, whereas men more frequently agreed with statements concerning the outer world. Also as predicted, agreement with textual statements was stronger for readers high in emotional involvement. For text credibility and gender, no significant effects were obtained.

#### Self-referencing and persuasion: Narrative transportation versus analytical elaboration

**Escalas, Jennifer** Marketing Dept., Vanderbilt University, Nashville, USA

his research contrasts narrative self-referencing with analytical self-referencing. We propose that narrative self-referencing persuades through transportation, where people become absorbed in a story (Green and Brock 2000). When ad viewers are transported by narrative thoughts, persuasion is not negatively affected by weak ad arguments. Conversely, analytical self-referencing persuades via more traditional processing models, wherein cognitive elaboration is enhanced by relating incoming information to one's self or personal experiences, resulting in a differential persuasive effect of strong versus weak arguments. We also propose that ad skepticism moderates the effect of narrative transportation. These assertions are tested in a series of experiments.

#### Does media entertainment have a long-lasting impact on its users?

**Vorderer, Peter** Communication Science, VU University Amsterdam, Amsterdam, Netherlands

According to more recently developed theories of communication, media entertainment can have an effect on its users during exposure as well as shortly after exposure. Little is known, however, about how media users are influenced by entertainment products over an extended period of time. What happens, i.e., to adolescents who grow up with a high exposure to entertainment programming? How do young adults regard and appreciate ethnic diversification if much of their perception of other ethnicities goes back primarily to their playing entertaining video games? On the background of a

recently proposed theory of media entertainment this presentation will derive some hypotheses about the impact continuous exposure to entertainment has on its consumers.

#### Narrative impact: Effects of fiction and falsehood

**Green, Melanie** Dept. of Psychology, University of North Carolina, Chapel Hill, USA

Individuals are often equally persuaded by fiction as by fact. There is no moral stigma attached to fiction; it is acceptable to present made-up information if it is appropriately labeled. Do narratives still retain their persuasive power if they are intentionally deceptive? In our research, some participants were first told that a story was factual, and after reading, were informed that the story was inaccurate (either due to intentional deception by the author or a publishing mistake). Individuals in the deception condition still showed narrative-based belief change, even though they derogated the author. Narratives appear to hinder correction efforts.

#### IS-114: Current directions in apology and forgiveness research

**Seiji Takaku** (chair)

This symposium presents the most current cross-cultural research on apology and forgiveness. Topics covered in this symposium ranges from cross-cultural examinations of the meaning of apology and responsibility-taking, account-selection bias (i.e., a tendency for both transgressors and victims to perceive their accounts to be more accurate descriptions of the conflicts than their counterpart's), the effects of apology in intergroup conflicts, and two specific case studies dealing with intergroup conflict and forgiveness: (1) intergroup conflict among Angolan, East-Timorese, and Guinean; and (2) intergroup conflict in Northern Ireland.

#### Can admission of responsibility function as an apology?

**Coon, Heather** Dept. of Psychology, North Central College, Naperville, USA **Matsubara, Fukumi** Modern and Classical Languages, North Central College, Naperville, USA

One reason people apologize is to admit responsibility for their actions. Are apologies always necessary following a transgression, or can simply admitting responsibility suffice? In research conducted in Japan and the U.S., students read a scenario where another student ran into them on a bicycle. The cyclist apologized, admitted responsibility for the incident, or did neither. Participants evaluated their satisfaction with his comments, his responsibility for the incident, and his positive and negative attributes. Results indicate that simply taking responsibility may be a good strategy, especially in the U.S.

#### Forgiveness and intergroup conflict: Northern Ireland a case study

**Cairns, Ed** Dept. of Psychology, University of Ulster, Coleraine, United Kingdom **Hewstone, Miles** Dept. of Psychology, University of Oxford, Oxford, United Kingdom

Working from the premise that the conflict in Northern Ireland is best understood in intergroup rather than interpersonal terms (Hewstone & Cairns, 2002) we have explored the possibility that forgiveness can take place at the intergroup (rather than the interpersonal) level. We believe that if the current peace settlement in Northern Ireland is to take root then the historical cycle of revenge will have to be brought to an end. To assist this process we have focused on trying to understand forgiveness in the context of the conflict in Northern Ireland and in particular the factors that promote

or hinder forgiveness and this paper will review our work in that area

#### What college students say, do and feel as transgressors

**Matsubara, Fukumi** Modern and Classical Language, North Central College, Naperville, USA **Coon, Heather** Psychology, North Central College, Naperville, USA

In research conducted in Japan and the U.S., students read two scenarios in which they were a transgressor toward a stranger. In the first scenario they bump into another student while riding a bicycle, causing slight injury. In the second scenario, they are at a fast food restaurant, someone bumps into them and their coffee spills onto a third person. Participants were asked what they would say and do, and how they would feel in each situation, as well as their overall level of responsibility for the incident. Responses were coded qualitatively to examine strategies used in such situations.

#### Conceptualizations of intergroup forgiveness: Angolan, East-Timorese and Guinean perspectives

**Mullet, Etienne** Ethics and Work Laboratory, Institute of Advanced Studies, Plaisance, France

We present the results of three studies that examined the significance of intergroup forgiveness among adults in East-Timor, Angola and Guinea-Bissau who had personally been affected by long-term wars and conflicts in their area. Only a small percentage of participants believed that it was not possible for a group of people to forgive another group of people. Participants appeared to have articulated conceptions on what could define intergroup granting of forgiveness. Through structural analyses of the East-Timorese participants' responses, an eight factor model of conceptualizations of intergroup forgiveness was found. Using confirmatory techniques, this model was subsequently tested on the samples of Angolan, and Guinean participants.

#### A cross-cultural examination on perpetrator: Victim account bias

**Takaku, Seiji** Social and Behavioral Sciences, Soka University of America, Aliso Viejo, USA

When transgressions occur, victims and perpetrators become victim to their own subjective reality (i.e., naïve realism). As a result, victims often demand apology whereas perpetrators opt for giving accounts that reduce their responsibility (e.g., excuse or justification). In a series of four studies we tested the universality of this so-called perpetrator-victim account selection bias. Study 1 involving the participants' recalling their own past interpersonal conflicts showed that the bias was displayed more by Americans than by Asians; however, the following studies using hypothetical vignettes revealed that the bias was displayed equally by Americans and Asians. Implications of this semi-universal perpetrator-victim account selection bias are discussed.

#### When outgroup members offer their apology to the ingroup: Perceived suffering and responsibility-taking as predictors of satisfaction and forgiveness

**Zebel, Sven** Dept. of Social Psychology, University of Amsterdam, Amsterdam, Netherlands **Giner-Sorolla, Roger** Department of Psychology, University of Kent, Canterbury, Kent, United Kingdom

Recently, psychological research addressed how people experience compunction (e.g. shame, guilt, regret) about their in-group's misdeeds. However, how victimized groups appraise such emotions is yet unclear. We derived a model postulating two distinct inferences from these emotions: the perceived suffering and whether the individual takes responsibility for the in-group's actions. Both

should predict satisfaction among victims, but only responsibility-taking may induce forgiveness. We found partial support for this model in four studies in the UK and The Netherlands among non-smokers who read a smoker's compunction for the consequences of passive smoking. The model's external and cross-cultural validity is discussed.

### IS-115: Structural equation modeling: State-of-the-art

**Helfried Moosbrugger, Karin Schermelleh-Engel**  
(chair)

This symposium deals with state-of-the-art SEM methodology. Rabe-Hesketh presents the generalized linear latent and mixed modeling framework that accommodates different types of responses. Marsh et al. show that the typical multilevel manifest covariate approaches can result in biased estimates of contextual effects. Eid et al. present modern approaches for structurally different methods. Kaplan discusses causal inference within a counterfactual theory of causation. West and Wu show that model fit indices for growth curve models are related to the type of longitudinal data being modeled. Moosbrugger et al. discuss problems of evaluating the fit of nonlinear models.

#### Multilevel structural equation modeling: Comparing frameworks

**Rabe-Hesketh, Sophia** Graduate School of Education, University of California, Berkeley, USA

Multilevel structural equation models (SEMs) include latent variables varying at different hierarchical levels such as students and schools. Conventional multilevel SEM partitions the covariance matrix of level-1 variables into between and within components and specifies separate models for each level. Limitations of this approach, and of most generalizations of this approach, include that they do not permit direct specification of cross-level effects of latent variables and that latent variables can be measured by level-1 variables only. We describe the generalized linear latent and mixed (GLLAMM) modeling framework which overcomes these limitations and accommodates ordinal, continuous, and other types of responses.

#### Multilevel latent covariate models: Controlling for unreliability in contextual studies

**Marsh, Herbert** Dept. of Educational Studies, Oxford University, Oxford, United Kingdom **Lüdtke, Oliver** **Robitzsch, Alexander** **Trautwein, Ulrich** Zentrum für Bildungsforschung, Max-Planck-Institut, Berlin, Germany **Asparouhov, Tihomir** **Muthén, Bengt**

In multilevel modeling, group-level (L2) characteristics are often measured by aggregating individual-level (L1) characteristics within each group to assess contextual effects (e.g., group-average effects of SES, achievement, climate). We show that the typical multilevel manifest covariate approach based on observed (manifest) group means can result in substantially biased estimates of contextual effects and standard errors, depending on sample sizes at L1 and L2, intraclass correlations, sampling ratios, and nature of the data. We introduce a new class of multilevel latent covariate models that provide unbiased estimates and control for unreliability L1 and/or L2, and critically evaluate their appropriate application.

#### Analyzing multimethod data

**Eid, Michael** Inst. für Psychologie, Freie Universität Berlin, Berlin, Germany **Geiser, Christian** **Nussbeck, Fridtjof W.**

Structural equation modeling has become the most often applied method for analyzing multimethod data. Unfortunately, many applications of structural equation models in this context are affected by identification problems and improper solutions. The main message of this talk will be that different

types of methods require different types of models. Modern approaches for structurally different methods will be presented and discussed from a conceptual point of view. In particular, some misunderstandings with respect to the so-called CTC(M-1) model will be addressed and it will be shown how some apparent limitations of this approach can be overcome.

#### Causality and exogeneity: Implications for structural equation modeling

**Kaplan, David** Educational Psychology, University of Wisconsin, Madison, USA

This talk will focus on the problem of causal inference in the context of structural equation modeling. I will situate the discussion within a counterfactual theory of causation (Lewis, 1973; Mackie, 198) supplemented with the manipulationist viewpoint of Woodward (2003). I argue that these viewpoints can be imbedded within an improved practice of structural equation modeling based on the probabilistic reduction approach of Spanos (1986) but with special focus on the importance of examining exogeneity assumptions – including weak exogeneity and super exogeneity (including parameter invariance). Both forms of exogeneity are needed to warrant causal claims.

#### Evaluating fit in growth models for longitudinal data: Insights from SEM and HLM

**West, Stephen G.** Dept. of Psychology, Arizona State University, Tempe, USA **Wu, Wei** Dept. of Psychology, Arizona State University, Tempe, USA

Evaluating fit in Growth Curve Models (GCMs) is an important but under studied issue. GCMs involve both mean and covariance structures as well as potential design and missing data issues. The ability to obtain model fit indices for GCMs is directly related to the type of longitudinal data being modeled. Three types of data structures in longitudinal data can be distinguished: balanced, balanced missing at random, and unbalanced. We discuss possible ways of evaluating model fit for each of the three types of longitudinal data in both the SEM and HLM frameworks.

#### Problems of assessing model fit in nonlinear structural equation models

**Moosbrugger, Helfried** Inst. für Psychologie, Universität Frankfurt, Frankfurt, Germany **Schermelleh-Engel, Karin** Inst. für Psychologie, Universität Frankfurt, Frankfurt, Germany **Klein, Andreas** Dept. of Psychology, University of Western Ontario, London, Canada

In our presentation we will focus on the question how model fit can be assessed for nonlinear structural equation models, as for example, interaction models. The assessment of overall fit is both a conceptual and practical problem. The conceptual problem is that it is unclear what counts for a saturated model for a nonlinear structure, the practical is related to the fact that nonlinear effects may be difficult to distinguish from data-specific irregularities. New approaches and directions to resolve this problem for nonlinear models are presented and discussed.

### S-111: Modulation of automatic social behavior: From an integration of effects towards future research directions

**Kai Jonas** (chair)

Automatic social behavior is a well established effect in social cognition, with replicated already classic studies. Research has so far mostly focused on general effects. Thus, the aim of this symposium is to present recent findings that provide evidence for moderators and to point to boundary conditions. Schubert et al. suggest incidentally primed

category salience as a boundary condition within mimicry effects. Hansen & Wänke address the impact of the self on automatic behavior, a perspective that is broadened and carried further by Cesario. Ferguson as well as Jonas suggest goals and their evaluation as important moderators for automatic behavior.

#### Category salience kills imitation: The impact of incidental category activation on mimicry

**Schubert, Lisa** Inst. für Sozialpsychologie, Universität Jena, Jena, Germany **Becker, Antje** Socialpsychologie, University of Jena, Jena, Germany **Burmeister, Kerstin** Socialpsychologie, University of Jena, Jena, Germany **Steuvel, Anna** Socialpsychologie, University of Jena, Jena, Germany **Jonas, Kai** Socialpsychologie, University of Jena, Jena, Germany

Automatic interpersonal mimicry is an affiliation strategy used to bond with other individuals. This imitation effect can be moderated by previously activated categories. In our research, we investigated this impact in a running interaction. Therefore, a social category was made salient halfway through an interaction. A strong effect of category salience on automatic behavior was shown in terms of decreased mimicry behavior in case of a negative social category. Further studies investigated alternative explanations (e.g. decrease over time, distraction) for this effect. Based on this dependency of mimicry on category salience, boundary conditions for the imitation effect are discussed.

#### Stereotype-activation affects the self

**Hansen, Jochim** Inst. für Sozialpsychologie, Universität Basel, Basel, Switzerland **Wänke, Michaela** Social Psychology, University of Basel, Basel, Switzerland

The present research investigates whether stereotype-activation influences a person's behavior through altered self-representations (i.e., the active-self account; Wheeler & Petty, 2001). In Experiment 1, priming (young) participants with the stereotype of the elderly caused participants to include stereotype-consistent characteristics into their working self, as assessed with explicit (i.e., self-descriptive) and implicit (i.e., reaction-time based) measures. In Experiment 2, priming (student) participants with the stereotype of professors led participants to be more confident of their own knowledge than participants primed with a less educated profession. These higher self-efficacy beliefs resulted in better performance at a general knowledge test.

#### A preparatory interaction account of automatic social behavior: Implications and future directions

**Cesario, Joseph** Dept. of Psychology, Michigan State University, East Lansing, USA

We have proposed that automatic behavior following social category priming results from perceivers preparing to interact with primed category members (Cesario, Plaks, & Higgins, 2006). This motivated preparatory process integrates features of the target, perceiver, and situational opportunities to determine the most effective interaction behavior. I summarize recent research from this perspective, and discuss how considering all three of these input sources makes unique predictions concerning automatic behavior, such as: substitutability of behavioral outputs; identical behavioral output from multiple category primes; multiple behavioral outputs from a single category prime; and effects of the situational constraints unintentionally imposed by researchers.



### Goals as moderators of automatic response priming

**Jonas, Kai** Dept. of Socialpsychology, University of Amsterdam, Amsterdam, Netherlands **Sassenberg, Kai** Sozialpsychologie, Institut für Wissensmedien, Tübingen, Germany

Interacting with a member of a social category can be relevant to attain ones goals. Thus, automatically activated response behavior (ARP, Jonas & Sassenberg, 2006) can become a mean to a goal. Here, we test whether automatic response priming is moderated by activated individual goals. In Study 1, matching behavior targets were activated faster in a lexical decision task depending on activated goals. Study 2 shows that mere concept activation isn't sufficient to elicit these effects. Taken together, the presented research shows the potential of individual goals to act as a moderator on the selection of automatic response behavior activation.

### On the implicit evaluation of goals

**Ferguson, Melissa J.** Dept. of Psychology, Cornell University, Ithaca, USA

Recent research shows that people's implicit evaluation of an end-state significantly predicted the success of their reported and actual pursuit of that end-state. Across four experiments, people's implicit and quick (less than 150 ms) evaluations of abstract goal words (e.g., "equality," "thin") significantly predicted their success at pursuing those goals, and sometimes did so above and beyond participants' explicit (i.e., intentional, conscious) ratings of the desirability of the goals (Ferguson, 2007). Together, these findings suggest that successful goal pursuit (e.g. refusing a fattening snack), may at times depend on people's "snap" evaluative reactions to abstract words related to their goals.

### S-112: Shame: The ugly emotion?

**Julien Deonna** (chair)

The literature on shame has followed two divergent tendencies: One has been to downgrade the status of Shame as a moral emotion, involving three related claims: (1) shame is social, (2) there is no moral appraisal in shame, (3) shame is maladaptive. Another tendency holds that shame is closely tied to self-protection by adherence to moral values. This interdisciplinary symposium (psychology and philosophy) will bring new data to the debate concerning the social nature of shame (Olthoff, Harris, Teroni) and its maladaptiveness (Gilbert, Ferguson), and how they inform the status of shame as a moral emotion.

### Myth busting: The science of shame or shame on science?

**Ferguson, Tamara** Dept. of Psychology, Utah State University, Logan, UT, USA **Dansie, Elizabeth J.** Dept. of Psychology, Utah State University, Logan, UT, USA Western science frequently contrasts the "ugly" emotional villain of shame with nobler or heroic guilty feelings. We criticize this prevailing view, stressing that guilt may not be an emotion, shame exists in multiple varieties, and many findings are equivocal due to flawed measurement or manipulations. Recent findings of ours ( $n > 1000$ ), and uncontaminated published results, supported each criticism among diverse nationalities and methods, particularly in individuals 12 years or older and for shame as an anticipated emotion. Shame's painful affective nature may powerfully motivate appropriate self-criticism, desires to learn from one's past, and the avoidance of similar future mistakes.

### What role does social validation play in explaining shame?

**Harris, Nathan** RegNet College of Asia, Australian National University, Australian Capital Territory, Australia

There has been considerable debate about the role of shame, and whether it is a productive or useful emotion for individuals to feel. Particular emphasis has been placed on comparisons with guilt. In a previous study, which examined the dimensionality of shame-related emotions in drink-driving offenders, shame and guilt formed a single dimension. This research replicates this analysis with 513 juveniles in criminal justice interventions for property and violence offences and shows that the social context in which disapproval of behaviour is expressed has a significant impact on the emotion that is reported.

### Shame and morality in school age children

**Olthoff, Tjeert** Faculty of Psychology and Educ, VU University Amsterdam, Amsterdam, Netherlands

In contrast to claims that shame affects moral behavior negatively, I propose that shame in response to a moral transgression functions as a moral emotion if a relevant audience values the individual's adherence to moral norms. To examine this issue we asked 598 10-13 year old children to rate their shame-before-adults and empathy-based guilt in response to imagined acts of bullying. Additional measures reflected other aspects of children's moral attitude and their real life anti-social and pro-social interpersonal behavior. Shame and guilt were similarly related to these measures, which indicates that shame can serve as a moral emotion.

### Theoretical underpinnings of shame-related therapy

**Gilbert, Paul** Mental Health Research Unit, Kingsway Hospital, Derby, United Kingdom

This talk will explore our approach to shame, distinguishing between internal and external shame, and humiliation. The talk will then focus on self-criticism as a form of internal shame. Many people with high shame can be fearful of feelings of warmth and self-reassurance and seem unable to access soothing affect systems. Compassion focused therapy was developed for people who have high shame and self-criticisms and are unable to self-soothe. The talk will outline how compassionate mind training seeks to activate positive affects related to soothing. I will also note some recent data on its effectiveness.

### Shame socialism and morality: Some conceptual distinctions

**Teroni, Fabrice** Center for Affective Sciences, University of Geneva, Genève, Switzerland

Both in philosophy and psychology, some authors have claimed that, because of its social nature, shame at best plays no role in morality, or at worse promotes immoral behaviour. Others, mainly within philosophy, have claimed that shame, precisely thanks to its sensitivity to social disapproval, is of paramount importance for morality and moral development. In this contribution, we attempt to pin down the role of shame in morality by contrasting it with guilt and argue that the social or non-social nature of shame is not directly relevant to this role. We defend the thesis that the moral relevance of shame is to be ascribed to its function of protecting one's self-respect.

### S-113: The higher order factor structure of the big 5: Substance, style or both

**Matthias Ziegler** (chair)

In recent years there has been a debate on the higher order factor structure of the Big 5. Some results indicate the existence of two stable traits,

alpha and beta. Other researchers have argued that these traits are just signs of social desirable responding. Finally, there also seems to be some evidence for a combination of both trait and response bias. This controversy of substance versus style bears implications for future research in the field of personality psychology. Aim of this symposium is to present all different views and their impact on current and future research.

### The two broad factors in lexical studies of personality descriptors

**Thalmayer, Amber Gayle** Dept. of Psychology, University of Oregon, Eugene, USA **Saucier, Gerard** Dept. of Psychology, University of Oregon, Eugene, OR, USA

The Big Five do not emerge in lexical studies conducted with wider variable selections or replicate well cross-culturally outside northern European languages. A two-factor model, with factors of Dynamism and Social Propriety, however, appears robust across languages and variable selection strategies. The current study used two-factor outputs from lexical studies in nine languages (eight language-groups) to test this hypothesis and define the most recurrent terms associated with these broader factors. Two-factor solutions were highly consistent and closely resembled higher-order factors of the Big Five. This model might be usefully integrated with models of biological processes and of mental disorders.

### The highest order factor of personality and its psychological meaning

**Musek, Janek** Dept. of Psychology, University of Ljubljana, Ljubljana, Slovenia

The evidence of the strong highest order factor (The Big One) has been established in the recent research of the personality structure. The Big One is characterized by high versus low Emotional Stability, Conscientiousness, Agreeableness, Extraversion, and Openness. It represents a very basic personality disposition that correlates with social desirability, emotionality, motivation, well-being, satisfaction with life, and self-esteem. Quite substantial correlations with the general factor of well-being indicate the existence of a common psychological base of personality dimensions and dimensions of well-being. The possible biological roots of the Big One, evolutionary, genetic, and neuropsychological, are also discussed and analyzed.

### Higher order personality factors: What role do states have?

**Ziegler, Matthias** Inst. für Psychologie, Universität München, München, Germany **Bühner, Markus** Inst. für Psychologie, Universität München, München, Germany

Some researchers argue for the existence of one or two higher order factors above the Big 5. Whether these factors represent bias or trait remains unclear. In 3 experiments the impact of state on the higher order factor structure was investigated. Study 1 used a Latent State Trait design to evaluate general state impact. In study 2 a faking scenario was used to judge the loading pattern stability of the higher order structure. Finally, study 3 employed an emotion manipulation design to assess the role of emotions. All results will be presented and discussed in the light of existing theories.

### Higher-order factors in a five-factor personality inventory and its relation to social desirability

**Bäckström, Martin** Dept. of Psychology, Lund University, Lund, Sweden

The effort to measure the five factor model of personality has been beset by problems to explain why the factors often are correlated. One possible explanation to this problem is that social desirability (SD) accounts for an important part of personality rating variance. One way of under-

standing the role of SD is to consider it as a separate factor, more or less uniformly influencing the ratings of the personality factors. This model will be described, scrutinized and compared with other possible models.

#### Substance and artifact in personality description

**Riemann, Rainer** Inst. für Psychologie, Universität Bielefeld, Bielefeld, Germany **Ostendorf, Fritz** Abteilung Psychologie, Universität Bielefeld, Bielefeld, Germany **Döbrich, Christian** Abteilung Psychologie, Universität Bielefeld, Bielefeld, Germany Dignan (1997) proposed that the Big Five personality traits showed a higher-order structure with two factors labeled  $\alpha$  and  $\beta$ . These factors have been alternatively interpreted as heritable components of personality or as artifacts of evaluative bias. McCrae et al. (2007) showed that artifact models outperformed substance models, but models combining both artifact and substance were slightly better. We extend these analyses to the level of the factor structure of the NEO-PI-R facets, to test the hypotheses that "substance" factors are more important at this level of analysis. Two German data sets (self- and peer reports) are analyzed using SEM.

#### S-114: Prediction of academic achievement: Theory and practice in different countries

**Paul Lengenfelder, Ulrich Schroeders** (chair)

Ability and personality measures used in college admission procedures are expected to meet content requirements, assessment standards, and context considerations like institutional utility and legislative risks. The symposium brings together researchers from Austria, Germany, Switzerland and the USA, who are working on admission tools in higher education. The interplay of content, assessment, and context aspects and its effect on admission procedures will be presented and discussed from an international perspective. In the discussion we will focus on the impact of various interventions on the success of admission procedures.

#### Medical admission test in Switzerland and Austria: Does the same test work similar in different countries? Experiences regarding fairness, gender aspects and prognostic validity

**Hänggen, Klaus-Dieter** Zentrum für Testentwicklung, Universität Fribourg, Fribourg, Switzerland **Spicher, Benjamin** Zentrum für Testentwicklung, University of Fribourg, Granges-Paccot/FR, Switzerland The "Medical Admission Test EMS", an advancement of the German TMS, has been mandatory in Switzerland since 1998 and at two Austrian universities since 2006. The EMS consists of ten subtests, takes five hours and aims at predicting abilities needed to successfully complete medical studies (duration of study, passing of exams). Due to European mobility, about 50% of candidates in Austria originate from other countries. Success can be predicted equally well for all testees. However, participants from different countries differ in their abilities. This talk will address the question of how to ensure fairness of admission regarding countries and gender.

#### Validity of a work sample approach in a student admission procedure for psychology

**Lengenfelder, Paul** Inst. für Psychologie, Universität Salzburg, Salzburg, Austria **Baumann, Urs** Department of Psychology, University of Salzburg, Salzburg, Austria Access to Austrian universities has changed markedly due to a decision of the European Court of Justice in 2005. For the first time and at short notice, admission procedures had to be introduced in studies like psychology or medicine. The

Department of Psychology (University of Salzburg) developed an admission procedure containing empirically recommended elements as grades and specific measures of aptitude. Additionally, a work-sample, which tests learning abilities, was included. The procedure has been applied three times and shows high predictive validity. Conceptual ideas and results are presented and the current status of access in Austrian higher education is discussed.

#### What you test is what you get: Validity and classificatory efficiency for a new selection tool

**Schroeders, Ulrich** Iqb, Humboldt-Universität zu Berlin, Berlin, Germany **Formazin, Maren** Iqb, Humboldt-Universität zu Berlin, Berlin, Germany **Wilhelm, Oliver** Iqb, Humboldt-Universität zu Berlin, Berlin, Germany

In a college admission context, it is advisable to combine a variety of tests, each assessing a specific aspect of proficiency for successfully completing a course. A broader variety of measures reduces method and training effects, allowing for a more precise prediction of academic success. We have developed new tests for the selection of undergraduate Psychology students, assessing reasoning, psychological science comprehension, maths, English, and biology. We will present results from a high-stakes test with 1.191 applicants, focusing on the structure of the tests, their quality and covariance structure and how classification decisions change as a function of the number and variety of subtests.

#### Do psychosocial factors have a role in promoting college success?

**Robbins, Steve** Research Dept., ACT, Iowa City, USA We unravel the differential effects of standardized achievement, grades, status variables (e.g., race and SES), and psychosocial factors (PSF's) when understanding college retention and academic performance behaviors using a longitudinal sample of 14,800 students who entered 48 2- and 4-year postsecondary institutions. We argue that for high stakes testing the issues of coaching, multiple forms, and fakeability preclude use of PSF's. However, we also describe the practical benefits of using PSF's to classify students who are at risk for academic difficulty and dropping out so that interventions can be aimed at improving college success.

#### What personal qualities are most important for success in higher education?

**Kyllonen, Patrick C.** Center for New Construct, Educational Testing Service, Princeton, USA U.S. higher education institutions make admissions decisions based on prior grades, standardized test scores, previous course work, and indicators of noncognitive skills (e.g., leadership, motivation, experience) taken from biographical surveys, personal statements, reference letters, and interviews. Meta-analyses show these variables are predictive of a wide range of academic outcomes, such as grades, completion, comprehensive examinations, research citation counts, and faculty evaluations. I review this evidence along with prospects for new measures we are currently experimenting with, and I discuss the implications of these findings for what they tell about what qualities are most important in determining success in higher education.

#### Prediction of academic achievement: Theory and practice in different countries

**Lengenfelder, Paul** Inst. für Psychologie, Universität Salzburg, Salzburg, Austria **Formazin, Maren** Iqb, Humboldt-Universität zu Berlin, Berlin, Germany Ability and personality measures used in college admission procedures are expected to meet content requirements, assessment standards, and context considerations like institutional utility and legislative risks. The symposium brings together researchers from Austria, Germany, Switzerland and the

USA, who are working on admission tools in higher education. The interplay of content, assessment, and context aspects and its effect on admission procedures will be presented and discussed from an international perspective. In the discussion we will focus on the impact of various interventions on the success of admission procedures.

#### S-115: Interactions with animals and socio-emotional competence

**Birgit U. Stetina, Andrea Beetz** (chair)

Numerous studies have documented the positive effects of social-emotional competence on personal relations, work life, health and life-contentment. Animals can help people deal with their feelings. They can assist individuals in approaching negative feelings more consciously as well as in coping with these emotions. The positive effects of animals on individuals are shown in many studies and so is their assistance in developing social skills. The overall research question of the presented studies regards the contribution of animal-assisted work to the development of social-emotional competences. Results provide strong evidence for the positive effects of animals on persons of different ages.

#### Attachment to dogs, emotional intelligence and emotion regulation

**Beetz, Andrea** Inst. für Bildung, Universität Erlangen-Nürnberg, Erlangen, Germany **Podbersek, Anthony** Clinical Veterinary Medicine, University of Cambridge, Cambridge, United Kingdom

This study investigated attachment to humans and the current dog, Emotional Intelligence (EI), and perceived stress during a stressful task. In 28 female dog-owners and 19 women without a dog (age 18-72) attachment and EI was assessed once and the current emotional state was assessed 5 times during a stressful computer simulation. Interactions with the dog were rated from videotapes. Secure attachment was associated with better EI, and this was linked to less stress during the task. Women attached to their dogs interacted more positively with it, which was linked to less stress. Dogs can be used for emotion regulation, however, its presence alone does not reduce stress.

#### Quality of relationships to pets and emotion regulation in adolescence

**Beetz, Andrea** Inst. für Bildung, Universität Erlangen-Nürnberg, Erlangen, Germany **Mayr, Christine** Dept. of Psychology, Universität Salzburg, Salzburg, Austria **Reiter, Alfons** Dept. of Psychology, University Salzburg, Salzburg, Austria

This study investigated the link between the quality of the relationship to humans and animals and emotion regulation (ER) strategies. Questionnaire data (Inventory of Parent and Peer Attachment; Animal Relations Questionnaire; FEEL-KJ) from 101 Austrian juveniles (56% female, 44% male; age 13-15) were collected. Attachment to the mother, but not father was linked to adaptive ER. Regression analysis showed a positive association between alienation from peers and mother and maladaptive ER. Juveniles with negative representations of animals showed more "over-control" of emotions, while attachment to pets correlated negatively with over-control. Caregiving to animals was related to adaptive ER. Results document connections between attachment to humans and animals and emotion regulation.

#### Changes in social-emotional behavior and attention span during animal assisted activities with children with psychiatric problems, living in a residential setting

**Enders-Slegers, Marie-Jose** Faculty Social Sciences, University Utrecht, Utrecht, Netherlands The present study investigated the effects of animal assisted activities on the behavior, emotions and



attention span of children with psychiatric problems. A treatment group (N=13) was tested before and after 9 weekly interventions with Connors Global Index and Child Behavior Checklist. Interventions were videotaped and evaluated with a Social Behavior Observation list (Kongable et al, 1989). Personal caretakers were interviewed twice. Questionnaire data document positive changes regarding social and emotional aspects of the behavior of 7 children. Positive changes with 13 children were observed during interventions: increasing attention span, new behavior, positive emotions. Animal assisted interventions can improve functioning during the animal visits and even long-term.

#### Enhancing emotional wellbeing, communications and physical activities with animal assisted interventions with mentally handicapped elderly

**Enders-Slegers, Marie-Jose** Faculty Social Sciences, University Utrecht, Utrecht, Netherlands **von der Linden, L. Geerdink, J.**

The study investigated the effects of visiting dogs and their handlers on the emotional wellbeing, communications and activities of mentally handicapped elderly. There was a pre-test and 2 post-tests and 6 repeated measures (videotaped observations) of the visits. Group A was visited by dog and handler (N = 10); Group B was visited by a volunteer (N = 8) and Group C was not visited (N = 7) (age: 47-88). Group A & B showed significant changes in emotional wellbeing and communication during the visits; Group A showed a significant increase in physical activities as well. Visiting dogs can enhance wellbeing, communications and physical activities with mentally handicapped elderly.

#### Changes in social-emotional competences of adolescents during an animal-assisted-training (MTI)

**Stetina, Birgit U.** Forschung und Ausbildung, Universität Wien, Wien, Austria **Burger, Eva** Research and Training Practice, Universität Wien, Wien, Austria **Turner, Karoline** Research and Training Practice, Universität Wien, Wien, Austria **Lederman Maman, Tamara** Research and Training Practice, Universität Wien, Wien, Austria **Handlos, Ursula** SPZ 9, Stadtschulrat für Wien, Wien, Austria **Kryspin-Exner, Ilse** Research and Training Practice, Universität Wien, Wien, Austria

**Objectives:** The present study investigated the effects of an animal-assisted-training (MTI) on social-emotional competences of adolescents. **Methods:** Using a pre-post design a treatment group (27 students aged 11-14 years) and a respective control group were surveyed with questionnaires at two test points. Parameters were among others self-concept and self-esteem. The data was evaluated through statistical inference procedures (GLM). **Results:** Significant and relevant differences regarding effect sizes were found. A visible development (e.g. more positive self-concept) was documented for the treatment group. **Conclusion:** Adolescents seem to improve their social-emotional competences during the animal-assisted training (MTI).

#### Changes in social-emotional competences of first-graders during an animal-assisted-training (MTI)

**Stetina, Birgit U.** Forschung und Ausbildung, Universität Wien, Wien, Austria **Turner, Karoline** Lehr- und Forschungspraxis, Universität Wien, Wien, Austria **Burger, Eva** Lehr- und Forschungspraxis, Universität Wien, Wien, Austria **Lederman Maman, Tamara** Lehr- und Forschungspraxis, Universität Wien, Wien, Austria **Handlos, Ursula** SPZ 9, Stadtschulrat für Wien, Wien, Austria **Kryspin-Exner, Ilse** Lehr- und Forschungspraxis, Universität Wien, Wien, Austria

**Objectives:** Intention of the present study was to evaluate the effects of the animal-assisted training (MTI) on social-emotional competences of first graders. **Methods:** In a pre-post design a treatment group of 19 first-graders (aged 5-7) was evaluated with questionnaires at two testpoints in comparison to a respective control group. Parameters were among others self-concept and emotion regulation. The data was analysed with statistical inference procedures (GLM). **Results:** Significant and relevant improvements were found (e.g. healthier emotion regulation strategies). **Conclusion:** The animal-assisted training (MTI) seems to have an enhancing effect on social-emotional competences of young school children.

#### S-116: Psychobiological consequences of stress

**Beate Ditzen, Urs Nater** (chair)

There is consistent data from animal research showing that stress might negatively impact health. In line with this, studies in humans suggest that stress might mediate the influences of genes on cognition, emotion regulation, and behavior, with potential implications for clinical conditions such as depression, chronic fatigue syndrome, and obesity. In the symposium, we would like to present and discuss recent findings from international research groups. We will particularly focus on clinical research in humans and discuss cognitive behavioral and non-cognitive treatment options in stress-related disorders.

#### Serotonin transporter gene variation impact on the Cortisol response to psychosocial stress

**Mueller, Anett** Biopsychologie, Technical University Dresden, Dresden, Germany

Serotonin has significant links with depression, anxiety and stress responsivity. Here, we studied the impact of the 5-HTTLPR polymorphism on the stress response in three healthy groups (8-12 y., 20-30 y., 60-80 y.) which have been confronted with the Trier Social Stress Test. Additionally, stress responses in infants have been examined by a preventive medical check-up. In these newborns, stress responses did not differ between 5-HTTLPR genotypes. Surprisingly, adults carrying the higher expressing allele of the 5-HTT polymorphism revealed a significantly higher cortisol response than individuals carrying the lower expressing allele. Increased amygdala responsiveness appears to be linked to a relatively low adrenocortical response to psychosocial stress.

#### Stress, cortisol and memory retrieval in humans: An update on recent findings

**Wolf, Oliver** Inst. Verhaltenspsychologie, Ruhr-Universität Bochum, Bochum, Germany

Studies in animals and humans have repeatedly observed that stress or treatment with the stress hormone cortisol impairs delayed memory retrieval. This presentation gives an overview about recent findings trying to characterize the brain regions involved in these processes in the human with functional neuroimaging techniques. In addition the relevance of these findings for several clinical groups (e.g. patients receiving glucocorticoid therapy or older subjects with age associated cortisol alterations) is discussed. Here the difficulty to differentiate acute from chronic effects of the stress hormone is illustrated.

#### The relationship between stress and chronic fatigue syndrome (CFS): A population-based approach

**Nater, Urs** Chronic Viral Diseases Branch, Centers for Disease Control, Atlanta, USA **Reeves, William** Chronic Viral Diseases Branch, Centers Disease Control, Atlanta, USA **Heim, Christine** Psychiatry &

Behavioral Sc, Emory University School of Med, Atlanta, USA

Studies of CFS suggest that stress factors contribute to the development of CFS. We summarize findings from various studies investigating stress factors in persons with fatigue. Subjects meeting the 1994 Research Case Definition of CFS and matched controls were examined using a population-based approach. Early life stress, chronic stress, coping, and salivary cortisol were assessed. Early life stress influences later manifestation of CFS. Attenuated salivary cortisol levels, higher chronic stress levels in adulthood, and maladaptive coping styles are typical of CFS. Stress likely influences central nervous, neuroendocrine and immune systems, resulting in functional changes that lead to CFS symptoms.

#### Stress and obesity: Is stress reactivity a predictor of weight change?

**Messerli-Burgy, Nadine** Dept. of Epidemiology and PH, University College London, London, United Kingdom **Tunklova, Libuse** Dept. of General Internal Med, University Hospital Bern, Bern, Switzerland **Znoj, Hansjoerg** Dept. of Clin Psychology, University of Bern, Bern, Switzerland **Laederach-Hofmann, Kurt** Dept. General Internal Med, University Hospital of Bern, Bern, Switzerland

Increasing evidence indicates a relationship between obesity and stress. To date, little is known about the influence of stress reactivity on weight change. We examined 20 obese patients attending a one year weight reduction program and, in parallel, a group receiving diet counselling only. All patients completed autonomic testing sessions at baseline and 12 months follow-up. Stress reactivity did not differ between the treatment groups at baseline. However, results revealed discriminative changes in stress reactivity depending on degree of weight loss. The results provide evidence that stress reactivity may influence weight loss in obese patients.

#### Treatment options in stress-related disorders

**Gaeb, Jens** Inst. für Klin. Psychologie, Universität Zürich, Zürich, Switzerland **Ditzen, Beate** Clinical Psychology and PT, University of Zurich, Zurich, Switzerland **Hammerfeld, Karin** Clinical Psychology and PT, University of Zurich, Zurich, Switzerland **Nater, Urs** Chronic Viral Diseases Branch, Ctrs f. Disease Control (CDC), Atlanta GA, USA **Ehlert, Ulrike** Clinical Psychology and PT, University of Zurich, Zurich, Switzerland

In a series of studies, we sought to examine the influence of anticipatory cognitive appraisal processes on cortisol stress responses. Using regression analyses we identified anticipatory cognitive appraisal as an important determinant of the cortisol stress response, explaining up to 35% of the variance of the salivary cortisol response. Based on these findings, we examined the ability of cognitive and non-cognitive interventions to influence psychoneuroendocrine responses during acute as well as chronic stress in healthy subjects and patient populations. Results indicate that psychological processes determine neuroendocrine stress responses. Psychotherapeutic interventions may positively modulate these psychobiological interactions in health and disease.

#### Role of acute versus longterm depressive symptoms in predicting systemic inflammation

**Rohleder, Nic** Dept. of Psychology, University of British Columbia, Vancouver, Canada **Miller, Gregory E.** Dept. of Psychology, University of British Columbia, Vancouver, Canada

Depression is a risk factor for coronary heart disease and inflammation has been proposed as mechanism. It is unknown whether long-term or short-term mood changes are responsible. Sixty-five young women provided weekly online ratings of depressive mood over twenty weeks using the CES-

D, and inflammatory mediators were measured before and after. Hierarchical regressions revealed that trait depressive symptoms were not associated with inflammation. In contrast, state depressive symptoms predicted Interleukin-6, but not C-reactive protein. Results suggest that at younger age, fast-reacting inflammatory mediators respond to short-term mood changes, probably mediated by acute changes in stress hormones, rather than long-term endocrine dysregulations.

### S-117: New directions in romantic relationship research

**Ina Grau, Rainer Banse** (chair)

This symposium presents innovative empirical studies in the field of romantic relationships. 1) Culture: Banse investigates the hitherto almost ignored area of arranged marriages in Asia and Arabia. Asendorpf and Penke focus on new trends in Western culture, such as couples living apart, and speed dating to better understand the mechanisms of romantic attraction and relationship maintenance. Neyer uses principles of evolutionary psychology to better understand different family forms. 2) Methods: Dewitte uses latency-based measures and Schönbrodt a virtual reality environment to investigate behavioral aspects of approach-avoidance behavior, and the regulation of intimacy and autonomy.

### Speed dating as a paradigm for the study of initial romantic attraction, mate choice and courtship behavior

**Penke, Lars** Inst. für Psychologie, Humboldt-Universität zu Berlin, Berlin, Germany **Asendorpf, Jens** Institute of psychology, Humboldt-University Berlin, Berlin, Germany

Research on romantic attraction and mate choice usually relies on self-reports, reactions to isolated cues, or observations in artificial laboratory situations. In contrast, speed dating offers a unique environment to observe initial romantic attraction, mate choice, and courtship in real life. In the Berlin Speed Dating Study, a community sample of 383 singles participated in speed dating events under experimentally controlled conditions. Individual characteristics were assessed, all interactions were videotaped, and two follow-up studies were conducted over a period of 1 year. First results will be presented on what seems to be the first speed dating study including behavioral observation.

### Living apart together: Age-dependent faces of a new form of nonconventional couples

**Asendorpf, Jens** Inst. für Psychologie, Humboldt-Universität zu Berlin, Berlin, Germany **Neberich, Wiebke** Institute of psychology, Humboldt-University Berlin, Berlin, Germany

We compared living apart together (LAT) couples where two committed partners live in different households with couples sharing a household. A representative German longitudinal study (N=8,000) showed a lower stability of LAT, an increase of LAT over the last 15 years, and a decrease of LAT and the tendency to move together after LAT with increasing age. Two internet surveys (N>2,000) showed a trade-off between more insecure attachment and more intense and satisfactory sexuality with the partner among older LATs. The results suggest that LAT relationships are mainly transitional until midlife but later become a life form of its own.

### Differentiating partner from other relationships through emotional closeness and perceived reciprocity

**Neyer, Franz J.** Inst. für Psychologie, Universität Potsdam, Potsdam, Germany **Wrzus, Cornelia** Institute of psychology, University of Potsdam, Potsdam, Germany **Wagner, Jenny** Institute of

psychogerontology, University of Erlangen, Erlangen, Germany **Lang, Frieder R.** Inst. für Psychogerontologie, Universität Erlangen-Nürnberg, Erlangen, Germany

We propose an evolutionary model of relationship regulation based on 2 mechanisms, the regulation of emotional closeness and reciprocity. Both mechanisms are supposed to differentiate between and within kin, non-kin, and partner relationships. These expectations were confirmed by 2 studies, one online study with 455 young adults and a field study involving 171 middle-age couples from 4 different family forms (i.e., traditional vs. patchwork families, involuntarily vs. motivated childless couples). The associations between closeness and reciprocity differed across family life forms indicating that basic mechanisms of relationship regulation vary also as a function of environmental affordance.

### Relationship quality in arranged marriages: First data from Saudi Arabia and India

**Banase, Rainer** Inst. für Psychologie, Universität Bonn, Bonn, Germany **Grau, Ina** Institute of psychology, University of Bonn, Bonn, Germany **Al Tamimi, Nadia** Department of psychology, University of York, York, United Kingdom **Jaiswal, Tulika** Department of psychology, University of York, York, United Kingdom Research on marital satisfaction has almost exclusively focused on Western choice marriages, very little is known about predictors and the development of marital quality in arranged marriages. In five studies (total N > 500) in Saudi Arabia and India we measured relationship satisfaction, attachment, and conflict behavior of romantic partners in arranged marriages. The translation of measures into Hindi and Arabic was by and large successful. Marital satisfaction in arranged marriages had similar correlates as in choice marriages, but the level of fearful and preoccupied attachment was significantly higher. Contradicting previous results, relationship quality in arranged marriages did not increase over time.

### The role of automatic approach-avoidance tendencies in adult attachment

**Dewitte, Marieke** Exp Clinical and Health Psych., Ghent University, Ghent, Germany **De Houwer, Jan** Exp Clinical and Health Psych., Ghent University, Ghent, Belgium **Buysse, Ann** Exp Clinical and Health Psych., Ghent University, Ghent, Belgium

To understand attachment-related behaviour, we conceptualized proximity seeking as an automatic approach-avoidance tendency influenced by context and attachment style. In two experiments, participants made approach and avoidance movements towards/away from attachment figure- and known person-related cues after priming with a distressing or non-distressing context. Results showed that automatic approach responses towards the attachment figure were stronger in a distressing than a non-distressing context. Attachment anxiety heightened the tendency to approach the attachment figure, attachment avoidance reduced this tendency. Findings highlight the utility of indirect measures for understanding attachment processes and provide new evidence on the role of motivational action tendencies in adult attachment.

### Intimacy and autonomy in close relationships: Assessment of implicit motives in virtual environments

**Schönbrodt, Felix** Department of Psychology, Saarland University, Saarbrücken, Germany

In the regulation of distance in close relationships two basal motivational systems are involved: the need for intimacy and the need for autonomy. As it is difficult to satisfy both motives jointly in one situation, a motivational dynamic between both is implied. To assess the dynamics of this process, behavior in virtual environments (VE) is observed.

Therefore an online applicable VE was programmed. Three main advantages are expected from this approach: (a) economical application through online assessment (b) effective instigation of motivational systems and (c) the observation of motivational dynamics. First results of this study will be presented.

### S-118: Sexual aggression: Social, individual and professional attitudes

**Barbara Krahé, Gerd Bohner** (chair)

Misconceptions and stereotypes about sexual aggression are widespread in Western societies. Six papers examine their impact on (biased) information processing and judgments about rape, sexual assault, and sexual harassment. Using data from the United Kingdom and Germany, they examine the influence of extra-legal factors on assessments of victim credibility, victim blame, and perpetrator guilt in rape cases (vs. other crimes), the role of rape-supportive attitudes, circumstances of alcohol-related rapes, effects of media campaigns on rape awareness, and of attractiveness stereotypes on perceptions of sexual harassers. Strategies for reducing the impact of rape stereotypes will also be discussed.

### Bad but a beau? Effects of harasser attractiveness on judgments of unwanted sexual attention

**Vanselow, Nina** Inst. für Sozialpsychologie, Universität Bielefeld, Bielefeld, Germany **Bohner, Gerd** Inst. für Psychologie, Universität Bielefeld, Bielefeld, Germany

Women's reactions to unwanted sexual attention were studied in a "computer chat" experiment. Female students (N = 152) interacted online with a (virtual) male partner. The male's attractiveness (high, low), the material he sent (remarks, jokes), and its nature (harassing, neutral) were manipulated between participants. The students rated partner and material on several dimensions. Results showed that attractive (vs. unattractive) males and the material they sent were generally rated less negatively. This attractiveness effect was pronounced in the harassing remarks conditions but absent when participants directly judged the material's harassingness. Theoretical and legal implications will be discussed.

### Relationship, location and alcohol: Increasing the risk of being raped

**Horvath, Miranda** London, United Kingdom **Brown, Jennifer** Department of Psychology, University of Surrey, Guildford, United Kingdom

This paper clarifies that the crucial factors for identifying when a woman has least negotiable space and hence is most at risk of being raped are the relationship she has with the male and the location in which they encounter each other. The findings suggest that different relationships and locations have different etiquettes attached to them and as a result will create different latitudes which affect the amount of space for action women have. Both of these elements interact with the incapacitation or sobriety of the victim. It can be concluded that alcohol can only ever increase risk of being raped and never decrease it.

### Rape complainant credibility and expert evidence: Findings of a Mock Jury study

**Munro, Vanessa** School of Law, University of Nottingham, Nottingham, United Kingdom **Ellison, Louise** School of Law, University of Leeds, Leeds, United Kingdom

In determining the issue of consent in rape cases, research suggests that jurors are influenced by extra-legal factors relating to the complainant's behaviour before, during and after the alleged



attack. In some jurisdictions, prosecutors may introduce evidence to 'educate' jurors on the realities and impact of rape. Such initiatives (recently proposed for England and Wales) assume that (i) behavioural cues reduce jurors' perceptions of complainant credibility, and (ii) inferential shortcomings in juror understanding are responsive to education. Preliminary findings of a project (drawing on a series of mock jury deliberations) that scrutinised these assumptions will be presented and evaluated.

#### Effects of irrelevant information on judgments of guilt in a rape case: The moderating role of rape myths and hostile sexism

**Bohner, Gerd** *Inst. für Psychologie, Universität Bielefeld, Bielefeld, Germany* **Eysel, Friederike** *Inst. für Psychologie, Universität Bielefeld, Bielefeld, Germany*

We examined how irrelevant information about victim and defendant affects laypersons' judgments in a rape case. After reading a report containing few vs. many irrelevant details about the victim and few vs. many irrelevant details about the defendant, students ( $N = 106$ ) judged the defendant's guilt and recommended a sentence. They also completed scales of rape myth acceptance (RMA) and hostile sexism (HS). For students high (vs. low) in RMA and HS, many (vs. few) irrelevant details led to lower judgments of guilt and lower sentence recommendations. Rape-related attitudes (RMA, HS) thus caused biased interpretations of case information.

#### Differences in the attribution of victim blame in cases of sexual assault and robbery

**Bieneck, Steffen** *Inst. für Psychologie, Universität Potsdam, Golm, Germany*

Research in legal decision making provides evidence that the evaluation of sexual assault cases is influenced by schematic information processing. To clarify, whether those findings are limited to cases with a sexual connotation, two experimental studies have been conducted. 400 participants were presented with scenarios describing incidents of rape and robbery with the victim being either female or male. Subjects rated perpetrator and victim blame for each case. In addition, stereotypic beliefs about sexual assault were measured. Results indicate that the impact of extraneous information is limited to the processing of cases with a sexual connotation.

#### Raising rape awareness through mass media campaigns: An experimental evaluation

**Krahé, Barbara** *Inst. für Psychologie, Universität Potsdam, Potsdam, Germany* **Temkin, Jennifer** *Sussex Law School, University of Sussex, Brighton, United Kingdom*

The study examined the effects of a rape awareness poster campaign on judgments of perpetrator reliability in rape cases differing in defendant-complainant relationship and coercive strategy (force vs. alcohol).  $N = 2,176$  members of the public in the UK rated defendant liability and recommended sentences for six rape scenarios whilst exposed to one of two rape awareness posters, a written paragraph about consent, a combination of both, or a control condition. No effects of the posters or the consent paragraph were found. Recommendations are presented for theory-based media campaigns to raise awareness about sexual assault and to dispel rape myths.

#### S-119: Service work, emotional labor and emotion regulation

**Andrea Fischbach** (chair)

Recently, antecedents and consequences of service work have received increased attention in work and organizational psychology. In this international

symposium, studies from Europe, China and Australia will be presented allowing for a broad cross-cultural discussion of service work topics. We present empirical studies which focus on specific aspects of antecedents and consequences of service, emotional labor and emotion regulation processes involved in professional social interactions. Studies include customers' perspectives as well as service-employees' perspectives and focus on display rules and their sources, mediators and moderators in the emotional labor-burnout relationship, emotional intelligence, and emotion regulation strategies.

#### Customer and employee perception of critical incidents in service encounters

**Neumann, Christina** *Arbeits-, Organisationspsychologie, Universität Rostock, Rostock, Germany* **Nerdinger, Friedemann W.** *Org. and Busin. Psychology, University of Rostock, Rostock, Germany*

The behavior of frontline service providers determines whether the customer is satisfied or not. In a recently conducted study of brief service encounters in bakery stores we identified out of 105 incidents seven critical behavior-categories (e.g. individual treatment of the customer), representing the perception of customers. In a second study in the same field we ask 40 frontline-employees of bakery-stores for incidents that satisfied or dissatisfied them in the interaction with the customer. The incidents mentioned by employees are compared with those mentioned by customers in the previous study. Similarities, differences as well as conclusions are discussed.

#### Customers' perception of employees' friendliness in service interactions: Effects of display rules

**Fischbach, Andrea** *Inst. für Psychologie, Universität Trier, Trier, Germany* **Cillien, Patrick** *Psychology, Trier University, Trier, Germany*

We explored effects of implicit and explicit emotional display rules of a German bank on customers' received friendliness. A sample of 42 tellers reported implicit display rules at work and was explicitly required either expressing friendliness or expressing felt emotions for one week. Their customers ( $n=160$ ) rated received friendliness. A strong effect of the explicit display rule on customer-ratings was revealed when tellers reported weak implicit display rules for anger-suppression, with maximum ratings in the "friendly"- and minimum ratings in the "felt"-condition. When tellers reported strong implicit display rules, customer-ratings were on average in both conditions. Practical implications were discussed.

#### Motives for doing emotional labour

**Zapf, Dieter** *Abreits-, Organisationspsychologie, Universität Frankfurt, Frankfurt, Germany*

Customer-oriented organisations expect from their service employees to comply with the display rules of the organisation and to show desired emotions in interactions with customers such as being friendly and showing positive emotions. Extending the study of Totterdell and Holman (2003) we hypothesised specific motives such as demonstrating competence, establishing trust, avoiding conflict escalation or motivating a customer to be associated with specific emotion regulation strategies such as attentional deployment, perspective taking or faking emotions. Results from a qualitative study and a diary study with nurses, police officers, salespersons, coiffeurs and flight attendants using hierarchical linear modelling supported our assumptions.

#### Linking emotional labor and burnout in China

**Chen, Xiaofang** *Dept. of Psychology, University of Maryland, Maryland, USA* **Hanges, Paul** *Dept. of Psychology, University of Maryland, Maryland, USA* The present study examined the relationship between the emotional labor demands of a job and eventual employee burnout. We also examined

the moderating effect of job control and social support on the "emotional labor-burnout" relationship. A survey was distributed to 116 hotel employees, 96 tour guides, and 94 call-center employees in China. Factor and reliability analyses were conducted to confirm scale properties. We found support for our hypotheses. Emotional labor was found to be related to employee burnout. Further, job control and social support moderated this relationship.

#### Mediating mechanisms among emotional labor, customer related stressors and burnout

**Dudenhoeffer, Sarah** *Inst. of Psychology, Johannes Gutenberg-University, Mainz, Germany* **Dormann, Christian** *Psychology, Gutenberg-University, Mainz, Germany*

In the present study we investigated emotional labor as a mediator of the relationship between customer related social stressors and burnout. For this purpose we integrated data of 15 studies comprising different service jobs (e.g., flight attendants, nurses, teachers;  $N = 3155$ ). A series of alternative models involving different types of mediation were tested using latent variable structural equation modelling. By means of multi-group-analysis we also tested if the validity of the overall model could be generalized across occupations.

#### Upward exaggeration and downward regulation: Emotions felt and emotion regulation in interactions at work

**Semmer, Norbert** *Inst. für Psychologie, Universität Bern, Bern, Switzerland* **Tschan, Franziska** *Inst. de Psychologie du Travail, Université de Neuchâtel, Neuchâtel, Switzerland* **Messerli, Laurence** *Inst. de Psychologie du Travail, Université de Neuchâtel, Neuchâtel, Switzerland*

We try to expand emotion work research by assessing a) 16 different emotions, b) interactions with peers and superiors, and c) fine-tuned upward and downward regulation. Multi-level analyses of more than 1200 interactions of 102 employees with peers and superiors show that appraisal theories predict felt emotions in interactions better than status expectation theories. Negative emotions and self-relevant emotions are more often downplayed, and most positive emotions are more often exaggerated. Hierarchical position and relationship closeness influence emotions felt and displayed. The results suggest that the regulation of emotion display is influenced by display rules, impression management, and protection of face.

#### Emotion regulation in service

**Härtel, Charmine** *Dept. of Management, Monash University, Clayton, Australia* **Russell, Kay** *Director, SJP Financial Services Group, West End, Australia* **Lloyd, Shannon** *Management, Monash University, Clayton VIC, Australia* **Russell-Bennett, Rebekah** *Advertising, Marketing and PR, QUT, Brisbane, Australia*

The link between emotional intelligence and emotional labour has been both theorised and implicitly assumed. The assumption in the literature is that people differ in their abilities to manage their own and others' emotions and this is related to their experiences of emotional labour in service work. To date, little empirical research has been undertaken investigating this link. This paper seeks to address this gap by presenting findings of empirical research undertaken in the complaint handling context. The results suggest that the relationship between emotional intelligence and emotional labour is complex and not entirely parsimonious with current theorisations of emotional intelligence.

## S-120: Advances in internet-mediated psychological research

**Ulf-Dietrich Reips** (chair)

Methods for Internet-based research are currently one of the hot areas in methodology. Within a dozen years, the field has seen a massive increase in the number of studies conducted on the Internet, marking a grass-roots change in how psychological research often is conducted (for examples of Web experiments and surveys see the web experiment list at <http://genpsylab-wexlist.unizh.ch/>). The present symposium brings together researchers from five countries who present findings on methods, techniques, and tools in Internet-based research and on differences to laboratory research.

### Are there effects of color on results of web experiments?

**Birnbaum, Michael** Dept. of Psychology, California State University, Fullerton, USA **Galesic, Mirta** ABC, Max-Planck-Institut, Berlin, Germany

Web researchers often use color to make their questionnaires more interesting or easier to navigate. Can color have unintended effects on respondents' answers? A recent study by Elliot, Maier, Moller, Friedman, & Meinhardt (2007, Journal of Experimental Psychology: General, 136, 154-168) suggests that even a brief exposure to the color red may negatively affect performance in achievement tasks, such as IQ tests. If this result replicates on the Web, it would have important implications for the design of Web-based studies. We present results of Web studies in which we manipulated background color and investigated its effect on respondents' answers.

### Assessment with visual analogue scales on the internet

**Funke, Frederik** Kassel, Germany **Reips, Ulf-Dietrich** Inst. für Psychologie, Universität Zürich, Zürich, Switzerland

Even though visual analogue scales are established instruments for assessing subjective phenomena in self-administered questionnaires, they are rarely used for surveying large samples. One reason is that in a paper and pencil environment, this way of collecting data is burdensome as values have to be read out manually. The burden is reduced in computer-based administration of VAS on the Internet. We conducted two Web experiments to examine data quality of VAS in Internet-based surveys. Findings: There is strong evidence that data collected with VAS are equidistant and on the level of an interval scale, while categorical scales produce ordinal data only.

### Spotlight: Validation of an online eye tracking replacement

**Schulte-Mecklenbeck, Michael** DICE Lab Faculty of Psychology, University of Bergen, Bergen, Norway **Murphy, Ryan O.** Center for the Decision Scienc, Columbia University, New York, USA **Hutzler, Florian** Department of Psychology, University of Salzburg, Salzburg, Austria

In this talk we give an overview of different tools for collecting process data via the Internet. Getting a better insight into the actual actions a participant performs during an experiment gives an additional layer of information that helps building better models of (online-) behavior. The examined methods include recordings of mouse-movements, text-queries to databases or the building processes of knowledge networks. Different methods to visualize gathered data will be discussed. Special focus will be given to Spotlight a new tool that has the potential to mimic laboratory based eye-tracking online.

### The effectiveness of the high hurdle technique: Do artificially increased loading times enhance data quality?

**Stieger, Stefan** BEMAW, Medizin. Universität Wien, Wien, Austria **Göriz, Anja** Dep Organizational Social Psy, University Erlangen-Nürnberg, Nürnberg, Germany

Two Web-based experiments examined the usefulness of artificially delaying the loading of the first study page. The hope attached to this technique is to filter out less-motivated respondents through a higher respondent burden. Participants who remain in the study are expected to be more motivated and thus to produce data of higher quality. In both experiments the longer the loading time, the lower the likelihood of people responding to the study. However the dropout rate and quality of data were independent of the loading time. Therefore, artificially delaying the loading of the first study page is counterproductive.

### Sources of error in response time measurement in the lab and on the web

**Czienskowski, Uwe** ABC, MPI for Human Development, Berlin, Germany **Liske, Nannette** Lifespan Psychology, MPI for Human Development, Berlin, Germany **von Oertzen, Timo** Lifespan Psychology, MPI for Human Development, Berlin, Germany **Kaczmarek, Lars** Online Surveys, GESIS-ZUMA, Mannheim, Germany **Galesic, Mirta** ABC, MPI for Human Development, Berlin, Germany **Reips, Ulf-Dietrich** Psychologisches Institut, Universität Zürich, Zürich, Switzerland

Response time is a frequently used dependent variable in psychological studies, but its measurement can be contaminated by errors originating from different technical sources. We study time delays between the moment the response is made to the moment it is recorded, using Web and lab software applications under various load conditions of computers with varying equipment (CPU, memory, input devices). We find that client-based applications can achieve a reasonable accuracy and precision, and that peripheral devices can be a major source of error. Our results can help researchers to choose the appropriate measurement technology for response time related research questions.

### iScience.eu: A toolbox for Internet-based research

**Reips, Ulf-Dietrich** Inst. für Psychologie, Universität Zürich, Zürich, Switzerland

A free resource for conducting research on the Internet is presented along with usage data, the iScience Server at <http://www.iscience.eu/>. The iScience Server is a portal that links to a number of tools that fulfill the following functions. 1. create Internet-based studies (WEXTOR, iDex), 2. create visual analogue scales for Web questionnaires (VASgenerator.net), 3. recruitment of participants (web experiment list, web survey list, Web Experimental Psychology Lab), 4. analysis of log files (Scientific LogAnalyzer), 5. inclusion of an Internet-based Big Five personality test with other studies, 6. Automatic interviewing in instant messaging (DIP) 7. teaching of Internet-based research, 8. research in teams and groups (VTT).

## S-121: Emotion and behavior

**Fritz Strack, Paul Pauli** (chair)

In different areas of psychology, explanations of behavior focus on different mechanisms. While social psychologists have long been convinced that people's reflections about the outcomes of their behavior determine what they will do, biological and clinical psychologists have concentrated on the more impulsive impact of emotions (e.g., in addictions). The contributions to this symposium attempt to reconcile the reflective and controlled

perspective with the impulsive and automatic accounts of human behavior. They address issues that lie at the intersection of social and clinical psychology and demonstrate the fruitfulness of an integration of both approaches.

### Influence of pain on emotion processing

**Gerd, Antje** Inst. für Psychologie, Universität Würzburg, Würzburg, Germany **Kenntner-Mabiala, Ramona** Department of Psychology, University of Würzburg, Würzburg, Germany **Alpers, Georg W.** Department of Psychology, Universität Würzburg, Würzburg, Germany **Andreatta, Marta** Department of Psychology, University of Würzburg, Würzburg, Germany **Weyers, Peter** Department of Psychology, University of Würzburg, Würzburg, Germany **Pauli, Paul** Inst. für Psychologie, Universität Würzburg, Würzburg, Germany

Emotion modulates pain perception. In order to test whether pain can also influence emotion processing, emotional pictures were presented to 49 healthy volunteers during either a painful pressure stimulation or without pain. Subjective ratings and startle reflex were measured. During pain, positive and neutral pictures were rated more negative and for all pictures arousal ratings were enhanced. Independently of pain, startle reflex amplitudes were reduced for positive and enhanced for negative pictures only when attention was focused on the picture. Thus, pain influences explicit emotion processing, but the startle reflex seems to be more affected by general attentional allocation.

### Facial expressions towards food cues are moderated by food deprivation

**Deutsch, Roland** Lehrstuhl für Psychologie II, Universität Würzburg, Würzburg, Germany **Höfling, Atilla** Inst. für Psychologie, Universität Würzburg, Würzburg, Germany

This study examined the impact of physiological need states on affective information processing. Facial EMG of forty-six subjects who were satiated or food-deprived was recorded at the zygomatic, corrugator and levator labii muscle while watching pictures of palatable vs. unpalatable foods, and control pictures. Compared to satiated subjects, hungry participants exhibited stronger activity in the zygomatic region when watching pictures of palatable foods, and weaker activity in the levator labii region when watching pictures of unpalatable foods. These results prompt to an adaptive reevaluation mechanism whereby even disgust reactions might be attenuated to facilitate ingestion when being deprived of food.

### Do anger stimuli elicit approach or avoidance behavior?

**Krieglmeyer, Regina** Inst. für Psychologie, Universität Würzburg, Würzburg, Germany **Deutsch, Roland** Institut für Psychologie, Universität Würzburg, Würzburg, Germany **Strack, Fritz** Institut für Psychologie, Universität Würzburg, Würzburg, Germany

Emotions and behaviors are regulated by an approach and an avoidance system. However, it is unclear how frustration (obstacles blocking goal pursuit) and anger relate to these systems. Some suggest that these stimuli elicit an approach motivation by arguing that typical behaviors (aggression) imply approaching the target. Others focus on the negativity of the situation and propose that these stimuli elicit an avoidance motivation. Confirming the latter position we demonstrated that goal blocking in an achievement task as well as idiosyncratic anger stimuli facilitate avoidance behavior. These experiments confirm a fundamental relationship between negativity and avoidance motivation.



### Mediators of goal effects on facial mimicry

**Likowski, Katja** Inst. für Psychologie, Universität Würzburg, Würzburg, Germany **Mühlberger, Andreas** Institut für Psychologie, Universität Würzburg, Würzburg, Germany **Seibt, Beate** Social and Organiz. Psychology, Utrecht University, Utrecht, Netherlands **Pauli, Paul** Inst. für Psychologie, Universität Würzburg, Würzburg, Germany **Weyers, Peter** Institut für Psychologie, Universität Würzburg, Würzburg, Germany

Previous studies demonstrated that the extent to which mimicry is shown depends on actual interaction goals - people with affiliation goals mimic more, whereas people in competition situations show less or even countermimicry. The following study examines the processes underlying these goal effects on mimicry. After manipulating participant's interaction goals (cooperation, competition) they had to look through emotional expressions (happy, angry, sad) while activity of facial muscles was recorded electromyographically. Additionally, potential mediators (cognitive/emotional empathy, self-construal, interpersonal closeness, emotional reactions, strategic concerns) of the expected goal effects on mimicry were assessed. Results are presented at the International Congress of Psychology.

### The automatic regulation of basic needs: Food and sexual deprivation prepare us to approach relevant stimuli

**Seibt, Beate** Dept. of Social Psychology, University of Utrecht, Utrecht, Netherlands **Häfner, Michael** Dept. of Social Psychology, Utrecht University, Utrecht, Netherlands **Strack, Fritz** Institut für Psychologie, Universität Würzburg, Würzburg, Germany **Deutsch, Roland** LS Psychology II, University of Würzburg, Würzburg, Germany

We predicted that immediate reactions towards food and sexual stimuli are tuned to the basic needs of the organism. In Study 1, immediate motivational reactions toward pictorial food stimuli were assessed. As hypothesized, approach reactions were facilitated for participants tested before as compared to after lunch, even in a sample with eating disorders. In Studies 2 and 3, approach reactions towards sexual stimuli were facilitated the longer participants had abstained from sex. This effect obtained independent of gender (although women approached sexual stimuli overall less than men). We conclude that this behavioral readiness is an adaptive reaction serving need fulfillment.

### Effects of visual stimuli related to the beginning and the end of the smoking ritual on the reward system

**Stippekohl, Bastian** Inst. für Psychologie, Universität Gießen, Gießen, Germany **Strack, Fritz** Institut für Psychologie, Universität Würzburg, Würzburg, Germany **Vaitl, Dieter** Institut für Psychologie, Universität Gießen, Gießen, Germany

Drug associated stimuli from different temporal stages of drug intake are hypothesized to have different effects on craving in addicts. While cues related to the beginning are shown to be appetitive cues related to the end seem to have a less activating or even inhibitory effect on craving. By means of fMRI we investigated, whether this effect corresponds to differential activation of the brains reward systems. Smokers and non-smokers were presented visual stimuli depicting different temporal stages of smoking. First results show that activation of the reward system and the orbitofrontal cortex differentiate between stimuli related to the beginning and the end of the smoking ritual.

### S-122: Applications of eye tracking in research on learning and instruction

**Halszka Jarodzka, Tamara van Gog** (chair)

Eye tracking, possibly combined with verbal reporting, can be applied to study learners' cognitive processes evoked by different learning materials, which leads to better understanding of why materials are (in)effective. Moreover, it provides input for instructional design (e.g. worked examples) by uncovering experts' cognitive processes when interacting with visual materials. Furthermore, eye movement data can provide detailed insight into the attention allocation and processing demands, therefore eye tracking is a valuable tool for research on learning and instruction - although yet little used in educational research. The studies presented here focus on various applications of eye tracking in instructional research.

### Uncovering cognitive processes in learning and instruction: Cued retrospective reporting based on records of eye-movements

**van Gog, Tamara** OTEC, Open University, Heerlen, Netherlands **Brand-Gruwel, Saskia** OTEC, Open University, Heerlen, Netherlands **van Meeuwen, Ludo** OTEC, Open University, Heerlen, Netherlands **Paas, Fred** OTEC, Open University, Heerlen, Netherlands

The verbal reporting techniques used most in research on learning and instruction, concurrent and retrospective reporting, both have drawbacks. Retrospective reporting often results in omissions/fabrications, and concurrent reporting is difficult to implement when tasks impose high cognitive load or contain auditory information. Cued retrospective reporting (CRR) based on eye-movement records might be able to overcome these drawbacks: while maintaining the retrospective nature, the cue shows both physical (mouse/keyboard) and cognitive (eye movements) actions, thereby presumably leading to less omissions/fabrications. Because a previous study showed promising results, the present study extends the test of CRR to qualitative data (i.e., process coverage).

### A process-oriented approach to natural sciences by means of eye-tracking and verbal protocols

**Jarodzka, Halszka** KMRC, Tübingen, Germany **Scheiter, Katharina** Cognition and Media Psychology, University of Tübingen, Tübingen, Germany **Gerjets, Peter** Knowledge Acquisition with Hyp, KMRC, Tübingen, Germany

In the Natural Sciences, novices have difficulties in recognizing and capturing natural objects when observing their complex and dynamic behavioral patterns. Understanding how experts analyze dynamic scenes will help to overcome these difficulties. Hence, we investigated eye movements and verbal protocols within different expertise levels during a movement classification task. Expertise had no effect on a coarse-grained analysis level, e.g., the number of fixations. Rather, its influence became evident when using more fine-grained methods like scan path analyses, showing that experts are better able to identify and interpret meaningfully relevant patterns. These eye tracking data builds the basis for modelling expert strategies.

### Effects of information problem solving skill on judging google search results: An eye-tracking study

**van Meeuwen, Ludo** Eindhoven, Netherlands **Brand-Gruwel, Saskia** OTEC, Open University, Heerlen, Netherlands **van Gog, Tamara** OTEC, Open University, Heerlen, Netherlands

Information-problem solving (IPS) research has shown that many students lack knowledge of how internet search engines work and of the criteria on

which to judge search results. In this study, students' eye movements were recorded while they worked on two tasks, in which they had to select one link from a Google search-page with 20 results, that they thought contained reliable answers to the query. It is hypothesized that students with low IPS skill will not consider all results, but select a top-of-page result very fast. The results (currently being analyzed) can contribute to the improvement of IPS training materials.

### Are there strategies for visual scanning of diagrams?

**Rasch, Thorsten** Gen. and Educ. Psych., University of Koblenz-Landau, Landau, Germany **Sarti, Julia** Inst. Bildungspsychologie, Universität Koblenz-Landau, Landau, Germany **Schnotz, Wolfgang** Inst. Bildungspsychologie, Universität Koblenz-Landau, Landau, Germany **Horz, Holger** Inst. Bildungspsychologie, Universität Koblenz-Landau, Landau, Germany

Line graphs display a spatial arrangement of several symbolic and graphic elements, at least labels, numbers, axes, and graphs. A learner is required to look at these elements successively. The visual scanpath of the learner may reflect different linearization strategies. We consider a mapping-strategy (paired x/y-values) versus a tracing-strategy (trends within value ranges). Scanpaths of 36 participants who observed time-to-distance diagrams were analyzed. Results indicate an effect of prior knowledge on gaze durations but no consistent linearization strategies. Obviously an integrated mental representation of the elements succeeds despite of a nearly random visual input.

### Animation is not worth ten thousand words

**Schneider, Emmanuel** LEAD, University of Burgundy, Dijon, France **Boucheix, Jean-Michel** LEAD, University of Burgundy, Dijon, France

This study analyzed the role of a text explaining the mechanical system comprehension with an animation. The task was to understand a pulleys system with an animation and an explanative text or with an animation only. Results showed that an animation and a text did not improve the comprehension performances compared to an animation only, despite of a more important study time. The eye tracking data showed that the number of fixations in specific areas of the animation and the number of transitions between these areas were less important when participants studied animation with text. When animation is alone learners used more animation display, study time is less, and comprehensions best.

### How does the distribution of spatial information across representations affect visual attention in multimedia learning?

**Schüler, Anne** Inst. of Psychology, Universität Tübingen, Tübingen, Germany **Schmidt-Weigand, Florian** Inst. für Psychologie, Universität Kassel, Kassel, Germany **Scheiter, Katharina** Cognition & Media Psycholo, University Tübingen, Tübingen, Germany

Learning with written verbal and pictorial representations challenges students, because they have to decide on how to divide their visual attention across these representations. In an experiment it was investigated how visual attention would be affected by removing the spatial information from the text. Contrary to our expectations that the latter manipulation would induce a more intensive and thus compensatory processing of the visualization, the eye tracking revealed a balanced processing of both representational formats irrespective of the experimental manipulation; however, students' eye movements were affected when applying a more fine-grained and qualitative level of analysis.

## S-123: Mechanisms of memory changes across the lifespan

**Yee Lee Shing, Marcus Hasselhorn (chair)**

Memory functioning undergoes reorganization from childhood to old age. This symposium brings together developmental and aging researchers to discuss the mechanisms of memory changes. The five papers examine (i) associations between rehearsal and recall in children; (ii) focus-switching processes and working memory decrements in older adults; (iii) factors of associative deficits in older adults; (iv) associative and strategic components of lifespan episodic memory changes; and (v) determinants of memory functioning (including genetic) from age 11 to 70. Systematic comparisons of different mechanisms contributing to memory changes provide unique opportunities for empirical and conceptual integration of the development and aging of memory functioning.

### Tracking down the item's way: Longitudinal study-recall observations in children within a free-recall task

**Lehmann, Martin** DIPF, Frankfurt, Germany **Isemer, Claudia** DIPF, DIPF, Frankfurt, Germany **Hasselhorn, Marcus** Bildung und Forschung, Deutsches Inst. für Internat., Frankfurt, Germany

With increasing age, children rehearse more actively in a free-recall task, that is they repeat several to-be-learned items together. In our longitudinal study we explored why and when active rehearsal is associated with better recall. We examined children between the ages of 10 and 12 who were mainly using active rehearsal. Within the children's study-recall performance we tracked each item's manifestation from the first rehearsal during the learning phase down to its recall or loss in the recall phase, respectively. The results are discussed with regard to the hypothesis of a common underlying process responsible for rehearsal and recall.

### Are age-related decrements in working memory performance caused by differences in focus-switching processes?

**Titz, Cora** DIPF, Frankfurt, Germany **Hasselhorn, Marcus** Bildung und Forschung, Deutsches Inst. für Internat., Frankfurt, Germany

Until now there is no consensus on why working memory performance declines in later life. We examined whether age-related performance decrements in a working memory span task are caused by age differences in focus-switching processes. Thirty younger (aged 19-32) and 30 older adults (aged 59-70) performed a number reading task under both high and low focus-switching conditions. Older adults were slower and remembered fewer items than younger, but no interaction emerged for age group by switching condition. The results suggest that while older adults have problems in maintaining items outside the focus of attention, focus-switching processes remain intact.

### Assessing potential factors that mediate age-related associative deficits in episodic memory

**Naveh-Benjamin, Moshe** Psychological Sciences, University of Missouri, Columbia, USA

One notion put forth to explain age-related episodic memory decline is the associative-deficit hypothesis, according to which the decline is partially due to older adults' inability to encode separate components of episodes as cohesive units. In the current research, we assessed the role of several factors thought to mediate age-related changes in cognition and evaluated their function in the associative deficit. Several experiments assessed the degree to which speed of processing, attentional resources, inhibitory processes, and sensory loss, may underlie older adults' difficulty in encoding and retrieving of associative information.

### Associative and strategic components of episodic memory: A lifespan dissociation

**Shing, Yee Lee** Zentrum für Lebenserwartung, Max-Planck-Institut, Berlin, Germany **Werkle-Bergner, Markus** Center for Lifespan Psychology, MPIB, Berlin, Germany **Li, Shu-Chen** Center for Lifespan Psychology, MPIB, Berlin, Germany **Lindenberger, Ulman** Zentrum für Lebenserwartung, Max-Planck-Institut, Berlin, Germany

We investigate strategic (i.e., elaboration of information) and associative components (i.e., binding mechanisms) of episodic memory and their interactions in a lifespan sample (9-10, 14-15, 20-23, and 70-75 years of age). By varying associative strength and levels of instruction, we examine age differences in recognition memory for word pairs under instructions that emphasize item, pair, or elaborative-pair encoding. Relative to young adults, young children's difficulties in episodic memory primarily reflect lower levels of strategic functioning. In contrast, older adults show impairments in both strategic and associative components. Results support the hypothesis of a lifespan dissociation between associative and strategic components.

### Associations with lifetime cognitive ageing in the Lothian Birth Cohort 1936

**Deary, Ian J.** Inst. für Psychology, University of Edinburgh, Edinburgh, United Kingdom **Gow, Alan J.** Inst. für Psychology, University of Edinburgh, Edinburgh, United Kingdom **Luciano, Michelle** Inst. für Psychology, University of Edinburgh, Edinburgh, United Kingdom **Taylor, Michelle D.** Inst. für Psychology, University of Edinburgh, Edinburgh, United Kingdom **Corley, Janie** Inst. für Psychology, University of Edinburgh, Edinburgh, United Kingdom **Brett, Caroline** Inst. für Psychology, University of Edinburgh, Edinburgh, United Kingdom **Wilson, Valerie** Inst. für Psychology, University of Edinburgh, Edinburgh, United Kingdom **Campbell, Harry** Inst. für Psychology, University of Edinburgh, Edinburgh, United Kingdom **Whalley, Lawrence J.** Inst. für Psychology, University of Edinburgh, Edinburgh, United Kingdom **Porteous, David J.** Inst. für Psychology, University of Edinburgh, Edinburgh, United Kingdom **Starr, John M.** Inst. für Psychology, University of Edinburgh, Edinburgh, United Kingdom

The Lothian Birth Cohort 1936 comprises over 1000 surviving participants of the Scottish Mental Survey of 1947. They took a valid mental ability test at age 11. They were traced and retested at age about 70, at which time they undertook detailed cognitive testing (including multiple tests of memory), provided blood for DNA extraction and other measures, and also provided a range of other medical, physical and psycho-social data. Here, we describe the association between cognition at age 11 and age 70, and investigate the determinants, including genetic influences, of individual differences in age-related cognitive change over that period.

## S-124: Innovative psychological interventions for recurrent headache

**Paul Martin (chair)**

This symposium has been convened to commemorate the first international colloquium on headaches from a psychological perspective, convened in Ulm, West Germany, 25 years ago. The speakers come from four countries and include three of the participants from the Ulm colloquium. The papers challenge traditional methods of managing recurrent headaches such as the advice to avoid trigger factors; and suggest innovative approaches including internet-based interventions, client-treatment matching strategies, preventative programs, how to deliver psychological interventions in primary care, and psychological intervention for medication overuse headache.

### Do we need to revise advice/interventions pertaining to headache triggers?

**Martin, Paul** Psychological Medicine, Monash Medical Centre, Clayton, Australia

The traditional clinical advice to headache/migraine sufferers is that the best way to prevent headaches is to avoid the factors that trigger them. This advice is logical but criticisms can be offered, such as: the advice is offered in a theoretical vacuum; there is limited empirical support for avoidance; and it is impractical as triggers are omnipresent. Four recent laboratory studies will be reviewed that show avoidance leads to sensitisation to triggers and exposure leads to desensitisation, in a manner analogous to anxiety. These findings have important theoretical implications and practical implications, including the need to revise traditional clinical advice.

### Finding what fits you: Tailoring psychological treatment for headache in a 21st century health care environment

**Nicholson, Robert** Community and Family Medicine, Saint Louis University, USA

Despite being a first-line option for headache prevention, <5% of headache sufferers use psychological treatment for headache. This may be in part due to the "one size fits all" nature of traditional psychological headache interventions. This presentation will discuss how treatment can be tailored to individual needs. The presentation will focus on published and ongoing research looking at how biological, behavioral, cognitive, and social variables can be used to match a treatment to individual needs. Moreover, there will be a discussion of how emerging technologies are being used to increase the accessibility and usability of psychological interventions for headache.

### Innovation in delivering headache care

**McGrath, Patrick** IWK Health Centre, Dalhousie University, Canada

The prevalence of headache is such that most health care management, if it is to be available to the majority of headache sufferers, must be given in primary care. Although, many medical treatments originate and are evaluated by specialists, these treatments usually shift to primary care with only the most complex patients being seen in speciality clinics. Psychological interventions have had much more difficulty in making this migration because these interventions require more than writing a prescription. This presentation will examine the strengths and weaknesses of strategies to enhance uptake of psychological interventions and present data on the Family Help approach.

### Internet based interventions in recurrent headache

**Kräner-Herwig, Birgit** Inst. für Klin. Psychologie, Universität Göttingen, Göttingen, Germany

Albeit there are effective pharmacological treatments psychological interventions constitute a valuable treatment option. Two meta-analyses on relaxation, biofeedback and multimodal trainings confirmed their efficacy. Minimal contact interventions showed comparable effects. This encouraged the development of self-help programs presented via internet, predominantly for adult patients. Not considering the rather large drop-out rates, the improvement reached was significant. In children psychological interventions are even more successful than in adults. Considering that only a fraction of afflicted children have access to psychological treatment, internet based treatment was evaluated in two recent studies. Though the outcome may not be as convincing as in clinic based treatment, it seems to be a viable option of therapy.



### Preventative programs in migraine and headaches in children: Basics, description, and effects

**Gerber, Wolf-Dieter** *Inst. für Medizin. Psychologie, Universität zu Kiel, Kiel, Germany* **Andrasik, Frank** *Emerging neuro(pscho)physiological data suggest that migraine is a brain stem in-formation processing dysfunction, characterized by cortical hypersensitivity and re-duced habituation to stimuli. From these findings we have developed a two-process biobehavioral model of migraine aetiology: (1) a genetically determined hyperactivity of the central monoaminergic (catecholaminergic) system which could be possibly modulated by learning processes and (2) a homeostatic (counter) regulation and mobilization of reduced (mitochondrial) energy reserve. This talk describes a preventative headache program - MIPAS Family (migraine patient seminar in families)- derived from this model and presents a study comparing this program with a biofeedback training approach.*

### Headaches and obesity

**Nash, Justin** *Dept. of Psychology, Brown University, USA*

**Objective** – To examine the role of psychological factors and behavioral treatment in medication overuse headache. **Methods** – Twenty-five individuals with medication overuse headache were evaluated for headache and psychological factors and then participated in a 10-week outpatient behavioral treatment that was hospital-based and delivered in a group format. **Results** – Participants showed significant improvement in headache frequency, acute medication use, depression, and quality of life. **Conclusions** – Pharmacologic treatment alone may have limited benefit due to the presence of psychological factors in medication overuse headache. Combining behavioral treatment to pharmacological approaches may help to yield more significant improvement.

### S-125: Assessing community violence in a multicultural context

**Rafael Javier** (chair)

This symposium features 5 different presentations with a discussant covering issues of assessment of community violence in USA and Lebanon. Scholars from these countries will present their research and observations in this regard. Emphasis of the discussion will focus on the specific challenges researchers tend to face in the assessment of violence in individuals coming from different cultural and linguistic communities.

### Violence exposure in a diverse community

**Clauss-Ehlers, Caroline** *Educational Psychology, Rutgers University, New Brunswick, USA*

Community violence shifts our view from an individualistic notion of violence to consider how violence is experienced on a larger, contextual level where the community, not the individual, is targeted. Community violence occurs in public areas where people live. It does not refer to violence that occurs in someone's home or in a school. While children across diverse racial/ethnic and socioeconomic backgrounds are exposed to community violence, research shows that African American and Latino youth are at greatest risk because of the stressors faced by those who live in inner cities. This symposium presentation will further explore the impact of community violence exposure on diverse communities such as the development of post-traumatic stress disorder (PTSD), externalizing behavior problems, and school issues. A review of the limited research that does exist will also focus on prevention and intervention strategies. The author will then present a mediational model that addresses community violence experienced by middle school children from diverse Latino commu-

nities. Barriers to research will be discussed such as ethical guidelines associated with youth who report exposure to community violence when they are research participants as well as school concerns about a critical inquiry process that may ultimately reveal students are more unsafe than expected.

### Assessing post-traumatic disorder in a Lebanese context

**El-Jamil, Fatimah** *Dept. of Psychology, American University of Beirut, Beirut, Lebanon*

Despite ongoing violence, rates of PTSD in Lebanon remain comparable to estimates reported in Western European WMH surveys. These results may be an indication of protective factors that prevent PTSD as well as an indication of the PTSD diagnosis failing to capture the complexity and variability in the way the Lebanese people perceive the impact of their traumas and the ways in which they are affected by them. Only a narrative approach can address the struggles and symptoms associated with violence in Lebanon. Results will be geared towards developing a culturally relevant understanding of the impact of trauma in Lebanon.

### Effects of community violence on children from diverse communities in the USA

**Javier, Rafael** *Dept. of Psychology, St. John's University, Queens, USA*

Our study seeks to expand on previous studies on community violence (CV) by providing a much more comprehensive assessment and by assessing such an impact in the context of a culturally/linguistically diverse population. 8-16 year old urban youths exposed to CV in NYC were assessed. Following the General Aggression Model and Hierarchical Linear Model of analysis, our findings are discussed around three basic predictions: 1) Type/nature of CV exposure will have a direct impact on the youth's cognitive/emotional adjustments. 2) The impact of CV will be differentially experienced depending on the youths' characteristics. And 3) this effect will be mediated by the youth's perception of CV, school experience, coping skills, IQ, acculturation, perceived social support, etc.

### Effects of community violence on children from diverse communities in USA

**Mora, Louis** *Dept. of Psychology, St. John's University, Queens, USA* **Javier, Rafael** *Art. Dept. of Psychology, St. John's University, Queens, USA*

**Kupferman, Fernanda** *Dept. of Pediatrics, Flushing Hospital Medical Ctr, Queens, USA* **Ford, Sue** *Dept. of Pharmacy, St. John's University, Queens, USA* **Primavera, Louis** *Dept. of Psychology, Touro College, New York, USA*

Our study seeks to expand on previous studies on community violence (CV) by providing a much more comprehensive assessment and by assessing such an impact in the context of a culturally/linguistically diverse population. 8-16 year old urban youths exposed to CV in NYC were assessed. Following the General Aggression Model and a Hierarchical Linear Model of analysis, our findings will be discussed around three basic predictions: 1) Type/nature of CV exposure will have a direct impact on that youth's cognitive and emotional adjustments. 2) The impact of CV will be differentially experienced depending on the youths' characteristics. And 3) that this effect will be mediated by the youth's perception of CV, school experience, coping skills, etc.

### Evidenced-based treatments for post disaster symptoms in Latino children

**Costantino, Giuseppe** *Dept. of Mental Health, Lutheran Family Health Centers, Flushing, USA* **Primavera, Louis** *Graduate School of Psychology, Touro College, New York, New York, USA* **Meucci,**

*Carolina* *Dept. of Mental Health, Lutheran Family Health Centers, Brooklyn, NY, USA*

**Background.** This study is part of CATS Consortium, the largest youth trauma research related to September 11th terrorist attacks. A 2002 study showed that 75,000 school-age students in NYC exhibited PTSD. Mental health symptoms tend to increase unless immediate postdisaster treatment is provided. **Method.** In our study, 131 students with PTSD, depression and anxiety were randomly assigned to individual CBT or group TEMAS Narrative Therapy. They underwent 18 therapy sessions. **Results.** Results indicated that students in both treatments showed significant reduction in PTSD. However, students in TEMAS treatment showed significant greater reduction in depression and in anxiety. **Discussion.** CBT and TEMAS were effective in reducing PTSD in Latino children. But TEMAS was more effective in reducing anxiety and depression; thus showing the clinical utility of TEMAS as a culturally competent treatment modality.

### S-126: Prenatal sex-hormonal programming of behavior: Progress of digit ratio (2D:4D) research and implications for psychology

**Martin Voracek** (chair)

Currently, there is intense research interest in psychology pertaining to the 2nd-to-4th digit ratio (2D:4D), a probable biomarker for the organizing (permanent) effects of prenatal sex steroids (testosterone and estrogen) on the human brain, body, and behavior. 2D:4D has been shown to be a correlate of a multitude of sex-dependent, hormonally influenced traits and phenotypes, reaching into various domains (ability and cognition, attractiveness, behavioral traits, somatic diseases and mental disorders, personality, physique, physiology, fertility and sexuality, and sporting success). Following an introduction to 2D:4D research, contributors from 4 countries (A, CH, D, UK) will present their novel findings on 2D:4D.

### Psychological research on digit ratio (2D:4D): A primer

**Voracek, Martin** *Psychologische Fakultät, Universität Wien, Wien, Austria*

The 2nd-to-4th digit ratio (2D:4D) is sexually differentiated: on average, men have lower 2D:4D than women. This inconspicuous anatomical trait has generated much research interest recently (200+ journal articles since 1998), in particular in psychology. Multiple lines of evidence suggest that 2D:4D is a proxy for the organizational (permanent) effects of exposure and sensitivity to prenatal androgens on the human brain, body, and behavior. Individual differences in 2D:4D relate to a variety of sex-dependent, hormonally influenced traits/phenotypes. Preluding 5 specific presentations, this talk presents a general introduction to 2D:4D research and its recent progress for psychologists.

### In retrospect: Digit ratio (2D:4D) and manual work

**Rösler, Hans-Dieter** *Inst. für Medizin. Psychologie, Universität Rostock, Rostock, Germany*

The aim of this historical study (1957), which evaluated hand outline drawings of 3,237 men and women, aged 14-70 years, was to investigate possible associations between 2D:4D and use of hands. 2D<4D more frequently occurs in people performing heavy physical jobs than in office workers. This difference seems to develop early in the job. Employees in fine handicraft jobs more often exhibit 2D>4D than do academics. This difference is already evident at the beginning of the job training. Such associations between 2D:4D

and manual dexterity, more pronounced for women, point to sex-hormone effects in the development of both traits.

# Digit ratio (2D:4D) and child developmental psychopathology

**Wolke, Dieter** Dept. of Psychology, University of Warwick, Coventry, United Kingdom **Samara, Muthanna** Dept. of Psychology, University of Warwick, Coventry, United Kingdom  
2D:4D may be a correlate of child behavior problems (in particular, of attention-deficit hyperactivity disorder, ADHD). We studied a large cohort of children ( $N > 6,000$ ) prospectively from birth (Avon Longitudinal Study for Parents and Children, ALSPAC). 2D:4D, measured at age 11, was positively associated with ADHD and prosocial problems, whereas negatively associated with conduct problems, hyperactivity problems, relational bullying, and family adversity. These associations were, for the most part, confined to boys and diminished with controls for family adversity (except those with ADHD). Family adversity may be a confounder of previously reported associations of 2D:4D with child behavior problems.

# Digit ratio (2D:4D) in adults with gender identity disorder

**Krämer, Bernd** Abt. Psychiatrie, Universitätsklinik Zürich, Zürich, Switzerland **Noll, Thomas** PPD, Stadt Zürich, Zürich, Switzerland **Delsignore, Aba** Inst. für Psychiatrie, Universitätsklinik Zürich, Zürich, Switzerland **Milos, Gabriella** Inst. für Psychiatrie, Universitätsklinik Zürich, Zürich, Switzerland **Schnyder, Ulrich** Inst. für Psychiatrie, Universitätsklinik Zürich, Zürich, Switzerland **Hepp, Urs** Extern. Psych. Dienst, PDAG, Aarau, Switzerland  
To examine possible influences of prenatal testosterone on gender identity, we compared 2D:4D of 39 male-to-female (MtF) and 17 female-to-male (FtM) patients with gender identity disorder with data from 176 male and 190 female controls. Group comparisons showed that right-hand 2D:4D of MtF was significantly higher (feminized) than in male controls. Also, comparisons of 2D:4D in biological women revealed significantly higher (feminized) values for the right hands of right-handed FtM. These findings indirectly point to a weak influence of reduced prenatal testosterone as an etiological factor for the development of gender identity disorder.

# Digit ratio (2D:4D) and short-term mating orientation

**Schwarz, Sascha** Inst. für Sozialpsychologie, Universität Wuppertal, Wuppertal, Germany **Mustafic, Maida** Psychologie: Life-Management, Universität Zürich, Zürich, Switzerland **Hassebrauck, Manfred** Inst. für Sozialpsychologie, Universität Wuppertal, Wuppertal, Germany  
Schwarz and Hassebrauck (2007) proposed a two-dimensional space of relationship preferences, suggesting that preferences for close relationships (long-term mating orientation) are independent from those for various sexual partners (short-term mating orientation). For both sexes, 2D:4D might be negatively related to short-term mating orientation. Study 1 confirmed this negative association for men ( $n = 94$ ), which was replicated in Study 2 ( $n = 69$  men), even with controls for age, relationship status, social desirability, and strength of sex drive. However, there was no association for women ( $n = 149$ ). This sex difference is discussed in terms of flexible female sexual strategies (contingent on the local environment).

# Digit ratio (2D:4D), facial attractiveness and facial proportions in frontal and profile view

**Offenmüller, Denise** School of Psychology, Universität Wien, Wien, Austria **Oeckher, Michael** Craniomaxillofacial Oral Surgery, Medical University of Vienna, Vienna, Austria **Stieger, Stefan** Unit for Medical Education, Medical University of Vienna, Vienna, Austria **Hofer, Agnes** School of Psychology, Universität Wien, Vienna, Austria **Schwedler, Andreas** Department of Psychology, University of Nürnberg-Erlangen, Nürnberg, Germany **Voracek, Martin** School of Psychology, Universität Wien, Vienna, Austria

Previous research suggests possible permanent developmental effects of prenatal androgens (gauged via 2D:4D) on objective and perceptual features of the face. We examined relations of 2D:4D with frontal-view and profile-view facial proportions or angles (10 each) and 6 perceptual dimensions (including attractiveness), using facial photographs of 124 young adult men and women and 2 rater samples ( $n = 40$  each). Although various checks (measurement repeatability, rater consistency, sex differences) indicated data typicality and procedural validity, altogether there was no evidence for relations of 2D:4D with the traits under study, which we chiefly discuss in terms of prior replications failures in 2D:4D research.

# S-127: Youth at risk: International interventions and research

**Pamela Maras** (chair)

This symposium draws together interventions and research for 'youth at-risk' in different countries aiming to consider separate and overlapping issues in interventions and research. Presentations focus on behaviour and school failure in England and France (e.g. Maras, Bradshaw & Croft), the involvement of young people in addressing gang issues in South Africa (e.g. Cooper), the inclusion of young people with disabilities in Ireland (e.g. Fleming & Martin) and, in Australia, coping skills training (e.g. Eacott & Frydenberg) and adolescents at-risk of substance abuse (e.g. Gordon). Identification of common themes will enable the development of interventions for young people at-risk.

# Psychology and interventions for pupils at risk of underachievement and school exclusion: The year 10 effect

**Maras, Pamela** Psychology and Counselling, University of Greenwich, London, United Kingdom **Bradshaw, Vicki** Psychology & Counselling, University of Greenwich, London, United Kingdom **Croft, Catherine** Psychology & Counselling, University of Greenwich, London, United Kingdom  
Findings are presented from a longitudinal study of over 1,500 adolescents. Some were engaged in interventions aimed at reducing social disaffection. Participants completed measures of social-identification, academic self-concept and motivation, and social, emotional and behavioural difficulties. Consistent with our previous research, developmental trends in identity and self-concept were found - adolescents became more negative about some school-based factors and more positive about aspects of identity. Trends were less clear in the 120 adolescents receiving interventions. Findings demonstrate the importance of psychology in work with young people.

# Youth at risk: A model for intervention

**Cooper, Saths** of South Africa, Psychological Society, Houghton, South Africa

A significant percentage of youth in South Africa are out of school or out of work, reflecting historical patterns that have not been seriously impacted by the country's democratisation. This presentation will primarily focus on the work of a Johannesburg youth organisation, Conquest for

Life, which has developed interventions based on actual youth experience in various black townships in Johannesburg. This model of intervention, and its impact on engaging youth afflicted by gang violence and other self-destructive behaviour, will be discussed against personality developmental considerations.

# Supporting the inclusion of children with autism

**Fleming, Mitchel** St. Paul's Services, Beaumont, Dublin, Ireland **Martin, Aoife** St. Paul's Services, Beaumont, St. Paul's Services, Beaumont, Dublin, Ireland

Children with autism have enormous difficulties relating and communicating with others socially. They find it difficult to form relationships and can be excluded from multiple social activities. Over the last decade the Irish education system has evolved and three models of service provision have emerged to address the educational and social needs of these children. This presentation will give an overview of these models and will use illustrative examples to demonstrate the variables which are necessary for successful inclusion and highlight the challenges that lie ahead.

# Benefits of the 'best of coping' program for students at-risk of depression

**Frydenberg, Erica** Faculty of Education, University of Melbourne, Melbourne, Australia **Eacott, Chelsea** Faculty of Education, University of Melbourne, Victoria, Australia

This paper reports on the implementation of the Best of Coping (BOC) program to 114 targeted Year 9 students in a co-educational Catholic school in rural Victoria, Australia. At-risk students were identified according to scores on the Kessler Psychological Distress Scale (K10). Pre-program, at-risk students showed significantly greater use of Non-Productive coping strategies namely self-blame, not cope, tension reduction and keep to self compared to non at-risk students. Positive program effects were reported for the at-risk group with significant reductions in use of Non-Productive coping, including self-blame and a decrease in level of risk for depression.

# Australian adolescents at risk

**Gordon, Amanda** Society, Australian Psychological, Melbourne, VIC, Australia  
Australian Adolescents at risk A snapshot of Australian young people indicates that issues relating to alcohol and drugs (43.5%), bullying/emotional abuse (36.5 %) and coping with stress (35.1%) were the three most common concerns. A recent media campaign using shock tactics to address the dangers of drug use and young people's reactions to such attempts will be presented. The Australian Psychological Society has now entered into a contract with Drug and Alcohol Services to provide clinical placements for psychologists in training, with the hope of being able to present evidence based interventions for health promotion and drug education, which will be acceptable to their target audience.

# S-128: Beyond natural numbers: Understanding and processing other categories of numbers

**Jacques Grégoire** (chair)

A large body of researches is devoted to the development of children's understanding of natural numbers. On the other hand, few researches were conducted on the understanding of the other categories of numbers (e.g., negative integers, rational numbers...). This symposium is devoted to the development of children's understanding of these numbers. Several studies, conducted in Belgium, Greece, Hong Kong and Taiwan, will be



presented. These studies emphasize the bias of natural numbers on the learning of new categories of number and the need to reorganize previous knowledge to understand and process these new numbers.

#### **Facilitating the development of fraction concepts in third-grade classrooms: Effects of partitioning and measurement approach**

**Ni, Yujing** Dept. Educational Psychology, Chinese Univ. of Hong Kong, Hong Kong, China, People's Republic of : Hong Kong SAR

This study examined effects of the partitioning and the measurement approach to fraction instruction in third-grade classrooms. Two groups of students received the instruction using one or the other approach. Results of a posttest and a pretest showed a significant improvement in students' understanding of fraction concepts after the instruction using either approach. The performance between the groups also indicated relative benefits of the approaches. The partitioning group performed better on the tasks involving part-whole relation. The measurement group performed better on the tasks about relationship between a given unit and "the whole" and the measure meaning of fraction numbers.

#### **The idea of discreteness and beyond: Aspects of students' reasoning about the dense structure of the rational numbers set**

**Vamvakoussi, Xenia** Cognitive Science Laboratory, University of Athens, Athens, Greece **Vosniadou, Stella** Cognitive Science Laboratory, University of Athens, Athens, Greece

We conducted a series of studies investigating secondary school students' understanding of the density of rational numbers. We assumed that there would be two constraints a) transfer of natural number knowledge, and in particular of the idea of discreteness, b) students' tendency to treat integers, decimals and fractions as if they were unrelated sets of numbers. According to our results, the idea of discreteness is strong and is not lifted overnight: Students refer to the infinity of numbers in an interval first for integers; they are also reluctant to accept that there can be decimals between fractions and vice versa.

#### **Processing the magnitude of fractions**

**Meert, Gaëlle** Dept. of Psychology, Université Cathol. de Louvain, Louvain-la-Neuve, Belgium **Grégoire, Jacques** Dept. of Psychology, Université Cathol. de Louvain, Louvain-la-Neuve, Belgium **Noël, Marie-Pascale** Dept. of Psychology, Université Cathol. de Louvain, Louvain-la-Neuve, Belgium

This study explored the cognitive processes and representations involved in the numerical comparison of fractions. The fractions magnitude could be processed in an analytic way (based on the magnitude of their components) or in a holistic way. In this study, fractions had either a common denominator or a common numerator. To identify the representations involved in the comparison of each category of fractions, we analyzed: (1) the effect of the numerical distance between fractions and between their components and (2) the effect of comparing fractions on subsequent comparison of natural numbers.

#### **The application of the benchmark strategy when comparing fractions**

**Lai, Meng-Lung** Early Childhood Education, National Chiayi University, Minhsiung, Taiwan **Yang, Der-Ching** Inst. of Mathematics Education, National Chiayi University, Chiayi, Taiwan

The focus of the present research was the application of the benchmark (i.e., transitive) strategy when comparing fractions with different denominators. Little is studied about elementary students' problem-solving strategies on comparing fractions.

Twenty-eight 5th graders were tested to gauge their understanding of fractions. Five types of misconceptions were found and most of which were related to their whole number learning experiences. After the intervention of the benchmark strategy accompanied with pictorial representations, not only most students' misconceptions disappeared but more than half of the participants successfully solved the fraction comparison problem(s). Educational implications for fostering student's fraction understanding are discussed.

#### **Natural numbers and their interference in students' interpretations of literal symbols in algebra**

**Christou, Konstantinos P.** Cognitive Science Laboratory, University of Athens, Ano Ilissia, Greece **Vosniadou, Stella** Cognitive Science Laboratory, University of Athens, Ano Ilissia, Greece

The purpose of the series of studies we briefly present here is to investigate students' interpretation of literal symbols in algebra. Based on the conceptual change theoretical framework, which admit that prior knowledge can support and also inhibit the acquisition of a new concept, we hypothesized that students' intrinsic knowledge about natural numbers and their privileged role in arithmetic would affect their interpretation of literal symbols in algebra. Our findings support this hypothesis and suggest that students tend to interpret literal symbols to stand only for natural numbers and this affects their performance in mathematical tasks such as functions and inequalities.

#### **Transcoding of decimal numbers**

**Desmet, Laetitia** Dept. of Psychology, Université Cathol. de Louvain, Louvain-la-Neuve, Belgium **Grégoire, Jacques** Dept. of Psychology, Université Cathol. de Louvain, Louvain-la-Neuve, Belgium

Our first goal was to study the development of transcoding between the Arabic numerical representation (decimals and fractions), the verbal numerical representation, and the analogical representation of rational numbers. Another goal was to enlighten the relationships between transcoding, on one hand, and comparison and addition of decimal numbers, on the other hand. We postulated that transcoding requires more conceptual knowledge than comparisons or additions, both requiring only procedural knowledge (algorithms). Therefore, children should succeed in transcoding tasks later than in comparison or addition tasks. To test this hypothesis, a longitudinal study was conducted from grade 3 to grade 6.

#### **S-129: Unraveling intuitive interference in reasoning: How cognitive-psychological methods can advance science and mathematics education**

**Wim van Dooren, Reuven Babai** (chair)

Human (analytic) reasoning is frequently affected by intuitive/heuristic processes, often accounted for in psychological research by dual process theories. Educational research has shown that intuitive processes are also crucial in reasoning in mathematics and science. The current symposium aims to show that introducing cognitive-psychological methodologies (reaction time measurements, working memory load manipulations, and fMRI data) to the field of education enhance our understanding of reasoning in mathematics and science, enabling to develop and to evaluate improved instructional strategies. It will be shown and discussed how such an interdisciplinary research may cross-feeds both domains, and advance the knowledge in the psychology domain as well.

#### **Interference of primary intuitive concepts in adolescents' reasoning**

**Babai, Reuven** Dept. of Science Education, Tel Aviv University, Tel Aviv, Israel **Sekal, Rachel** Dept. of Science Education, Tel Aviv University, Tel Aviv, Israel **Stavy, Ruth** Dept. of Science Education, Tel Aviv University, Tel Aviv, Israel

Previous studies showed that young children tend to classify objects as living or nonliving based on the characteristic of movement. We studied whether this primary intuitive model of living things (moving is living) persists and affects high school students after formal learning of the concept of life, by measuring the accuracy and reaction times of students' classifications. Results showed that student's classifications are interfered by this intuitive model in terms of both accuracy and reaction times. The longer reaction time evident for classification of the "problematic" objects might represent an effortful process needed in order to overcome this intuitive interference.

#### **Proportional reasoning as a heuristic-based process: Time pressure and dual task considerations**

**Gillard, Ellen** Instruct Psych. & Technology, Catholic University of Leuven, Leuven, Belgium **van Dooren, Wim** Instruct Psych. & Technology, Catholic University of Leuven, Leuven, Belgium **Schaeken, Walter** Lab of Experimental Psychology, Catholic University of Leuven, Leuven, Belgium **Verschaffel, Lieven** Instruct Psych. & Technology, Catholic University of Leuven, Leuven, Belgium

This study aimed at validating the heuristic-based character of proportional reasoning by focusing on two processing claims of dual-process theories: analytic processes are time-consuming and effortful, whereas heuristic processes are fast and effortless. Participants solved two types of problems: Proportional problems (where proportional strategies are correct) and non-proportional problems (where proportional strategies are incorrect). In experiment 1 we manipulated available solution time. In experiment 2 executive resources were burdened. As expected, for non-proportional problems both manipulations increased proportional and decreased correct answers, whereas for proportional problems no significant effects were observed. This indicates that proportional reasoning relies on heuristic processing.

#### **Characterising intuitive and analytic mathematical reasoning: Intuitive rules and over-use of proportionality**

**van Dooren, Wim** Instruct Psych. & Technology, Catholic University of Leuven, Leuven, Belgium **Gillard, Ellen** Instruct Psych. & Technology, Catholic University of Leuven, Leuven, Belgium **de Bock, Dirk** Instruct Psych. & Technology, Catholic University of Leuven, Leuven, Belgium **Verschaffel, Lieven** Instruct Psych. & Technology, Catholic University of Leuven, Leuven, Belgium

This study aimed at validating whether students applying the 'more A-more B' and 'same A-same B' intuitive rules, and over-using proportionality in mathematical reasoning share the same characteristics: immediacy (intuitive reasoning occurs faster than analytic reasoning) and saliency (salient problem characteristics strengthen intuitions and speed up intuitive reasoning). 129 10th and 11th solved 15 mathematical problems on a computer. Some triggered intuitive rule use, some the over-use of proportionality. Results showed that for all tasks (erroneous) intuitive answers occurred faster than correct answers. Saliency did not affect intuitive reasoning, nor in speeding up answers. Implications for further research are discussed.

### The cost of intuitive interference inhibition

**Stavy, Ruth** Dept. of Science Education, Tel Aviv University, Tel Aviv, Israel **Babai, Reuven** Dept. of Science Education, Tel Aviv University, Tel Aviv, Israel **Zilber, Hanna** Dept. of Science Education, Tel Aviv University, Tel Aviv, Israel **Tirosh, Dina** Dept. of Science Education, Tel Aviv University, Tel Aviv, Israel Numerous examples have shown that application of the intuitive rule 'more A-more B' leads to incorrect judgments. Our previous research suggested that in such cases conflict training could improve participants' performance. In the current study we measured if such training will affect the accuracy rate and reaction times of eight graders. The results showed that conflict training, indeed, improved the success rate. However, these correct responses were obtained with longer reaction times. The reaction times results suggest that the training activated control mechanisms that are effortful and needed in order to overcome the incorrect application of the intuitive rule.

### Intuitive rules: The case for and against dual process theories

**Osman, Magda** Dept. of Psychology, University of Surrey, Guilford, United Kingdom Theories of adult and developmental reasoning propose that reasoning is comprised of two functionally distinct systems that operate under different mechanisms. I will present developmental studies of the formation and application of intuitive rules to argue the following: 1) Although there is evidence that is consistent with dual process theories, there are also limitations within this approach 2) The evidence suggests that what is crucial to understanding how children reason is the saliency of task features 3) The evidence is consistent with a single reasoning system framework that sets out differences in performance according to the saliency of task properties.

### S-130: Diagnostic competencies of teachers in assessing students' performance

**Sabine Krolak-Schwerdt** (chair)

Teachers' diagnostic competencies in assessing students' performance are a major prerequisite to high quality teaching. Though judgment biases and relatively low prognostic validity of diagnostic judgments are well documented, little is known about the causes of low judgment and assessment competencies of teachers. The symposium focuses on diagnostic assessment competencies by interconnecting and broadening perspectives from educational and social psychology. Special topics are teachers' capacities, anchoring and representativeness heuristics in using assessment information as well as reference-group-effects in assessments and judgment stability. Methodologically, contributions cover a wide range of approaches, from experimental to formative classroom assessments and longitudinal measurements.

### Stability of primary grade teachers' diagnostic competences

**Lorenz, Christian** Inst. für Humanwissenschaften, Universität Bamberg, Bamberg, Germany **Karing, Constance** Inst. für Humanwissenschaften, Universität Bamberg, Bamberg, Germany **Artelt, Cordula** Inst. für Bildungsforschung, Universität Bamberg, Bamberg, Germany Teachers' diagnostic competence is sometimes claimed to be a core competence for high quality teaching. Nevertheless, little is known about the development as well as the stability of teacher judgements related to students' characteristics. Almost all studies in this field are cross-sectional. Based on data from the longitudinal research project BiKS, we will use two measurement points with individual student assessment in different

cognitive and non-cognitive domains (N= 2200) as well as corresponding teacher judgements (N=160) for individual students. We will analyse stability of teachers' judgement accuracy related to students' rank order in the domains of the study.

### Reference-group-effects on teachers' judgments: A study with the simulated classroom

**Südkamp, Anna** Inst. für Psychologie, Universität zu Kiel, Kiel, Germany **Pohlmann, Britta** Inst. für Psychologie, Universität zu Kiel, Kiel, Germany **Möller, Jens** Inst. für Psychologie, Universität zu Kiel, Kiel, Germany

In this study with N = 42 University students, reference group effects on performance judgments could be demonstrated, using the computer simulation of a classroom. In the Simulated Classroom, the user poses questions and subsequently assesses the performance of simulated students. Multilevel analysis revealed a negative effect of class average achievement on grades: students were judged less favorable in classes with high average achievement than in classes with low average achievement. Additional analyses of variance showed that this reference group effect on teachers' judgments is stronger for low achieving than for high achieving students.

### Assessment for learning: Using assessment formatively in classroom instruction

**Pellegrino, James** Learning Sciences Research, University of Illinois, Chicago, USA Wise instructional decision making and differentiated instruction depend on teachers taking evidence of what students know and can do, comparing it to expected learning outcomes, and creating learning opportunities that reflect appropriate "next steps" for individual students. Substantial evidence shows that quality formative assessment practices enhance teaching effectiveness and can produce substantial student achievement gains higher. This presentation will focus on two critical issues related to the use of assessment for learning: (a) availability and quality of formative assessment materials within selected U.S. K-8 mathematics curricula, and (b) evidence of teacher capacity to implement such materials in their instructional practice.

### Anchor effects in teachers' assessments on student performance: An experimental study with novices and experts in teaching

**Dünnebier, Katrin** Inst. für Pädag. Wissenschaft, Universität Wuppertal, Wuppertal, Germany **Nölle, Ines** Fachbereich G, ZBL, Universität Wuppertal, Wuppertal, Germany **Krolak-Schwerdt, Sabine** Faculty of Humanities, Arts, University of Luxembourg, Walferdange, Luxembourg Research on social cognition gives evidence of anchoring effects in decision making: A preceding judgement influences a subsequent judgement of the same target or task. Anchoring effects can be found in different decision and judgement domains, and the consequences may severely affect individual lives, e.g. medical or legal decision making. In our experiments we investigate whether anchor effects can be found in teachers' assessment of student performance. Following the continuum-model of Fiske and Neuberg (1990) we assume that the anchoring effect can be found in novices' (students), but not in experts' judgements.

### The impact of assessment goals on representativeness biases in teachers' assessments

**Krolak-Schwerdt, Sabine** Faculty of Humanities, Arts, University of Luxembourg, Walferdange, Luxembourg **Böhmer, Matthias** Fachbereich Erziehungswissen., Universität Wuppertal, Wuppertal, Germany

Representativeness biases in judgments involve the use of a social stereotype (e.g., "bloomer") and have been documented in teachers' assessments of students' performance. However, the occurrence of biases may depend on the assessment goal, where goals which increase accountability reduce representativeness biases. Two experiments investigate the effects of teachers' assessment goals on their use of stereotypes in processing of students' information. Results show that attention, memory and assessments of teachers were either biased or relatively unaffected by stereotypes depending on the assessment goal. Thus, assessment goals appear as moderators in teachers' judgments.

### S-131: Trauma and Recovery within global contexts

**Kate Richmond** (chair)

Amidst global crises, PTSD has emerged as a global problem that international psychologists are researching on a variety of fronts. When PTSD was first introduced, it was conceptualized as a response to extreme stress; however, as more reliable methods for detecting the disorder have emerged, researchers have been able to identify pre-morbid factors related to developing PTSD (Yehuda & McFarlane, 1995). In this symposium, we will highlight the work of several international psychologists who are studying and responding to various experiences of trauma. In particular, we will discuss epidemiology (particularly among cross-cultural contexts), prevention, consequences of and responses to trauma.

### Coping with generations of wars: The case of mental health professionals in Lebanon

**Kalayjian, Anie** Dept. of Psychology, Fordham University, Cliffs Park, NJ, USA

The on-going military conflict in the Middle East is a well recognized world problem. The international public's emotional and psychological response to the war was explored. Fifty-five randomly selected participants, ages 15 to 65, were interviewed. Almost three quarters of those interviewed said they felt hopeless or that there was little to no hope for the future, the majority of this group feeling cynical, pessimistic, or disempowered. Israelis were more likely to support their state, but even this group expressed on the apparent unfeasibility of the situation and the desperation of the future. Recommendations will be discussed.

### PTSD and natural disasters: A cross-cultural examination

**Richmond, Kate** Dept. of Psychology, Muhlenberg College, Allentown, USA

This presentation aims to describe the psychological effects reported by survivors of three natural disasters: Katrina (New Orleans), 2005 Tsunami (Sri Lanka), and 2006 Earthquake (Pakistan). Cross-cultural analyses demonstrated high levels of PTSD among all participants; however PTSD scores were moderated by education level. Participants' explanations of the disaster varied across cultures, and this had implications for specific trauma responses. Recommendations for developing culture-specific interventions will be highlighted.

### PTSD in victims of sex-relating trafficking

**Antonopoulou, Christina** Dept. of Psychology, University of Athens, Athens, Greece

The purpose of this study was to examine the symptoms of PTSD in female victims of trafficking and to establish how they differ than the symptoms of PTSD experienced by other victims of abuse and by females in the general population of Greece. Fifty two females completed the Trauma Syndrome Inventory (TSI) and the Brief Betrayal Trauma Survey (BBTS). The mean scores on the TSI and BBTS for the abused women were significantly



higher than the TSI scores of the non-abused women. Recommendations will be made regarding assessment and diagnosis.

**Axioprepia (human dignity) and sex trafficking**  
**Pipinelli, Artemis** Dept. of Psychology, Lehman College, New York, USA

As the population identified as "human trafficking victims" continues to increase, greater attention is being given to ways to improve the lives of the survivors so they can be treated with dignity and respect. Human dignity or Axioprepia, in Greek comes from the word axios (of value or worth) and the verb prepo (means "ought to" signifying a moral value). Human Trafficking victims need "Axioprepia." This presentation will explore the necessary role of social support and empowerment within therapeutic contexts. Specific attention will be given to how axioprepia can effectively inform treatment.

**Surviving and thriving after trauma: Reclaiming sexual health in treatment**

**Needle, Rachel** Dept. of Psychology, Nova Southeastern University, Fort Lauderdale, USA  
 Sexual trauma can lead to sexual difficulties (DeSilva, 2001). Sexual functioning and intimacy in adulthood can be significantly affected by child sexual abuse (Courtois, 1979; Finkelhor, 1990). In addition, intimate partner violence (IPV) contributes to poor sexual health. Specifically, IPV has been consistently associated with sexual risk taking, inconsistent condom use or partner nonmonogamy, and sexual dysfunction, particularly chronic pelvic pain (Coker, 2007). Furthermore, intimacy is commonly affected by exposure to trauma. In this presentation, the consequences of trauma on sexual health will be discussed, as well as suggestions for clinicians treating trauma survivors in therapy.

**S-132: Occupational health promotion: Interventions on multiple levels**

**Christian Schwennen, Bernhard Zimolong** (chair)

Research readily acknowledges that health promotion is a key feature in organizations. Recent investigations on occupational health promotion focus on different/multiple levels of intervention in workplace settings. The scope of the present symposium is to present on-going research and recent results with respect to different intervention levels. Research projects to be presented cover individual, team, organizational, inter-organizational and multi-level approaches. Studies report on workplace health promotion via work design, leadership behavior, occupational health management, health programs to reduce and prevent back pain and increase physical activity as well as on up-to-date qualification needs of safety officers of public authorities.

**Evaluating multi-level physical activity interventions in work settings**

**DeJoy, David M.** Dept. of Health Promotion, University of Georgia, Athens, USA **Wilson, Mark G.** Dept. of Health Promotion, University of Georgia, Athens, GA, USA **Vandenberg, Robert J.** Dept. of Management, University of Georgia, Athens, GA, USA **Dishman, Rod K.** Dept. of Exercise Science, University of Georgia, Athens, GA, USA

This presentation summarizes outcome and process evaluation results from a randomized 12-week physical activity intervention consisting of organizational action and personal and team goal-setting implemented in a sample of over 1400 employees at 16 of a large retail organization in the US. The intervention was effective in increasing moderate and vigorous physical activity and walking among the intervention group (relative to controls). More-

over, the process measures showed generally effective implementation. While this study possessed some important methodological strengths, it also highlights many of the challenges inherent in implementing and evaluating theoretically-driven, multi-level interventions in workplace settings. These challenges will be discussed along with issues related to translation and dissemination of worksite health promotion interventions.

**Evaluation of the "Healthy Back" program in a tax administration**

**Schwennen, Christian** Arbeits- und Org.-Psychologie, Ruhr-Universität Bochum, Bochum, Germany  
**Zimolong, Bernhard** A&O Psychologie, Ruhr-Universität Bochum, Bochum, Germany

A holistic occupational health management system was implemented at a tax administration. It integrates a multicomponent health program that focuses on back pain prevention. The present study reports results from a health screening of 1043 employees, which measured 13 risk factors followed by individually tailored interventions. Participation rates vary between 36 to 66% for the screening, and between 7 to 59% for the interventions. One half of the participants exhibits moderate to high back pain risk. Results of the pre-post-test evaluation of the interventions will be discussed with regard to the effectiveness of work site health programmes.

**The influence of workplace health promotion, leader behavior and team climate on health, attitudes and performance at work**

**Schraub, Eva Maria** A&O-Psychologie, Universität Heidelberg, Heidelberg, Germany **Michaelis, Björn** A&O Psychologie, Universität Heidelberg, Heidelberg, Germany **Stegmaier, Ralf** A&O Psychologie, Universität Heidelberg, Heidelberg, Germany **Sonntag, Karlheinz** A&O Psychologie, Universität Heidelberg, Heidelberg, Germany

The present study investigated the impact of workplace health promotion characteristics, leader behavior and team climate on health, attitudes and performance on the individual and team level. Using a multi-source approach, data from 500 blue- and white-collar workers as well as objective performance indicators of a German large-scale enterprise were assessed. As assumed, structural equation analyses revealed that employees' health and attitudes mediate the effects of workplace health promotion characteristics, leader behavior and team climate on performance. Implications for the current need of organizations to establish healthy working conditions besides traditional workplace health promotion programs are discussed.

**Healthy leadership: The role of leaders in health promotion**

**Gurt, Jochen** Arbeits- und Org.-Psychologie, Ruhr-Universität Bochum, Bochum, Germany **Elke, Gabriele** Inst. für Psychologie, Ruhr-Universität Bochum, Bochum, Germany

Several studies indicate that leadership behaviour has a significant impact on employees' health. This contribution will show the foundations of healthy leadership and explain the role of leadership with regard to the implementation of a health management system. Regression models analyzing longitudinal data from two successive health surveys 2005 and 2006 in a German tax administration (N=1,357) will be presented indicating that specific leadership behaviour indeed influences health related outcome variables. Building on these grounds evaluation results of individual and organisational interventions to promote healthy leadership of middle managers and further possibilities to stabilize such behaviour will be discussed.

**Workplace health promotion in a tax office: A participatory approach of work design**

**Görg, Peter** A&O-Psychologie, Bergische Univ. Wuppertal, Wuppertal, Germany **Wieland, Rainer** A&O-Psychologie, Bergische Univ. Wuppertal, Wuppertal, Germany

Based on the results of five team-oriented workshops on participation and work design in a tax office the present study examines the hypothesis that reduced control due to a new type of workflow management has a significant influence on stress and job satisfaction of the employees. Measures of stress, satisfaction and health are assessed from a group of 35 participants. The intervention consists of variations in control over job characteristics between groups. Finally empirical findings referring to the intervention will be presented.

**Effectiveness in occupational health and safety: A longitudinal study of 2000 industrial safety experts**

**Trimpop, Rüdiger** A&O-Psychologie, Universität Jena, Jena, Germany **Kalveram, Andreas** A&O-Psychologie, Universität Jena, Jena, Germany **Hamacher, Werner** Consulting, Sytemkonzept, Köln, Germany **Winterfeld, Ulrich** Psychology, BGAG, Dresden, Germany **Schmauder, Martin** Arbeitsingenieurwesen, Technische Universität Dresden, Dresden, Germany  
 The 8-year interdisciplinary study maps task changes for safety experts and points out necessary training. 2000 experts are questioned online about activities, effectiveness, occupational and societal frame of their employing company. Individual strategies, roles and effectiveness attributions are assessed and validated by 300 respective managers, works councils and physicians. Results indicate factors for effectiveness in different company sizes, and cultures. Health, personnel and psychological topics are least developed in skills and effectiveness. Research implications are discussed.

**S-133: Posttraumatic stress disorder: Theoretical and empirical advances**

**Andreas Maercker, Anke Ehlers** (chair)

Posttraumatic stress disorder received much attention recently in psychochological research as well as in the public. The symposium brings together contributions of psychobiology, cognitive and social processes in PTSD research. Ask Ekli discusses a new four-factor PTSD symptom model with re-experiencing, avoidance, dysphoria, and arousal. Tanja Michael focuses on re-experiencing and discusses why triggers are often unaware to patients. Kris Kaniasty proposes that both social causation and social selection models account for the causal linkages between perceptions of social support and psychological distress in PTSD. Anke Karl discusses the interaction between psychophysiological correlates of PTSD, of its treatment and genetic polymorphisms. Symposium co-chairs Ehlers and Maercker present new results of their research groups.

**Easy triggering of intrusions: Associative learning without contingency awareness in PTSD**  
**Michael, Tanja** Inst. für Psychologie, Universität Basel, Basel, Switzerland

We examined conditioning to trauma-related stimuli with a paradigm of no unconditioned-conditioned stimuli contingency awareness. Under an attention task, PTSD patients and controls viewed a series of distracters interspersed with pairings of CSs with trauma-related USs. Participants displayed no CS-US contingency awareness, but indicated feeling more anxious when subsequently viewing the trauma-related CS than when viewing the pleasant CS. This conditioning effect was more pronounced in the PTSD group. These findings may explain why reexperiencing is often

triggered by stimuli associated with the trauma although individuals are unaware of the triggers.

#### **Towards a new social facilitation model of posttraumatic stress disorder**

**Maercker, Andreas** *Inst. für Psychopathologie, Universität Zürich, Zürich, Switzerland* **Nietlisbach, Gabriela** *Int. für Psychopathologie, Universität Zürich, Zürich, Switzerland* **Gaebler, Ira** *Inst. für Psychopathologie, Universität Zürich, Zürich, Switzerland*

Complementing to known models of risk and protective factors of PTSD the processes of social facilitation plays a central role in development and maintenance of the disorder and its symptoms. Relevant psychological processes are disturbed empathy in survivors, perceived lack of social acknowledgment as victim or survivor, and emerging processes of anger, hate, and rage in trauma survivors. We present a series of studies focusing on these processes. In result, we propose a comprehensive model of social facilitation that not only explains current signs and symptoms of PTSD but also may serve as framework for (secondary or tertiary) prevention and treatment.

#### **Social causation and social selection models of perceived posttraumatic stress**

**Kaniasty, Krys** *Dept. of Psychology, Indiana Univ. of Pennsylvania, Indiana, PA, USA*

Authors propose that both social causation and social selection models account for the causal linkages between perceptions of social support in PTSD (and depression). Specifically, it was predicted that the importance of each mechanism would emerge sequentially over time. Structural equation modeling indicated that social causation (more support, less distress) dominated in the early phase of coping with disaster, 6 to 12 months after the impact (Wave 1 and 2). Social selection (more distress, less support) emerged later in time after the event (Wave 3 and 4). Findings demonstrate that causal paths between social support and distress are influenced by interpersonal and social dynamics that are changing across time as coping with a stressor progresses.

#### **Biopsychological risk and protective factors for PTSD and its successful psychotherapeutic treatment**

**Karl, Anke** *Dept. of Psychology, University of Southampton, Highfield, United Kingdom*

Current models of PTSD postulate that biopsychological factors are involved in the aetiology and maintenance of the disorder. There is also an accumulating body of research that there may also be predisposing biopsychological factors. The aim of this talk is to focus on the interaction with PTSD severity and successful treatment. Based on previous research in treatment-seeking survivors of motor vehicle accidents (MVAs) the interaction between psychophysiological correlates of PTSD, of its CBT treatment and genetic polymorphisms will be discussed. In addition, a framework for future research about the gene person environment interaction will be discussed.

#### **The structure of PTSD symptoms**

**Elklit, Ask** *Dept. of Psychology, University of Aarhus, Aarhus, Denmark* **Sherlin, Mark** *Dept. of Psychology, University of Aarhus, Aarhus, Denmark*

Based on previous factor analytic findings and the DSM-IV formulation, six confirmatory factor models were specified and estimated that reflected different posttraumatic stress symptom (PTSD) clusters. The analyses were based on responses from 1116 participants who had suffered whiplash injuries and screened for full or sub-clinical PTSD using the Harvard Trauma Questionnaire. A correlated four-factor model with re-experiencing, avoidance, dysphoria, and arousal factors fitted the

data very well. Correlations with criteria measures showed that these factors were associated with other trauma related variables in a theoretically predictable way and showed evidence of unique predictive utility.

#### **Mediators of sex differences in posttraumatic stress disorder and depression after trauma: Results from prospective longitudinal studies**

**Ehlers, Anke** *Inst. of Psychiatry, University of London, London, United Kingdom* **Böllinghaus, Inga** *Inst. of Psychiatry, University of London, London, United Kingdom*

After trauma, women have greater risk of developing posttraumatic stress disorder (PTSD) than men. The authors conducted a large prospective longitudinal studies of predictors of PTSD in assault and accident survivors. A range of psychological factors that may mediate sex differences in PTSD rates such as emotional reactions during the trauma and appraisals of the trauma and its aftermath were assessed in the emergency room and at 2 or 4 weeks. Psychological outcome at 6 months was assessed by self-report and diagnostic interview.

#### **S-134: Environmental constraints on cognition**

**Axel Mecklinger** (chair)

There is compelling evidence that environmental affordances, like cultural specific experiences in object or language processing or diversities in schooling and social practice shape cognitive processes in important ways. While environmental influences have been found for basic perceptual and attentional processes, it is largely unexplored how higher order cognitive processes are modulated by environmental factors and how this modulation is reflected in the underlying brain mechanisms. Capitalizing on the diversity of environmental constraints within and between Western and Eastern cultures, the contributors to this symposium explore environmentally adapted visual cognition across a variety of processing domains.

#### **Modulation of spatial-cognitive capacities: Evidence from patients with brain lesions**

**Kerkhoff, Georg** *Inst. für Psychologie, Universität des Saarlandes, Saarbrücken, Germany* **Groh-Bordin, Christian** *Dept. of Psychology, Universität des Saarlandes, Saarbrücken, Germany* **Shan, Chunlei** *Institute of Psychology, Chinese Academy of Sciences, Beijing, People's Republic of China* **Weng, Xuchu** *Institute of Psychology, Chinese Academy of Sciences, Beijing, People's Republic of China*

Visuospatial perception is important for orientation in space and crucially linked to parietal cortex. Parietal lesions cause visuospatial deficits. Here, we investigated the modulation of such visuospatial deficits in 10 patients with right-parietal lesions, and 10 matched controls under 3 conditions: (1) with a static background of small white dots, (2) with slow clockwise or (3) counterclockwise circular motion of these background stimuli. In conditions 1 and 3 the brain lesioned subjects showed pronounced deficits. However, these were completely normalized in condition 2 with clockwise background motion. Possible cognitive and neural mechanisms as well as implications for therapy are discussed.

#### **Working memory capacity and culture-based expertise**

**Zimmer, Hubert** *Inst. für Psychologie, Universität des Saarlandes, Saarbrücken, Germany* **Fu, Xiaolan** *Institute of Psychology, Chinese Academy of Sciences, Beijing, People's Republic of China*

Visual-working memory capacity is a function of the number of objects and of their complexity. We show that not only stimulus characteristics but also the perceiver's expertise influences the capacity. We

compared working memory capacity of Westerners with those of the Chinese for colors, Chinese characters, pseudo and nonsense characters that only looked like characters. Both groups had the same capacity for colors. Capacity of Westerners heavily dropped with all characters. As expected, Chinese capacity for characters was the same as for colors, it fall with pseudo and with nonsense characters, but compared to Westerners an advantage remained.

#### **Associative memories: Boundary conditions during encoding and retrieval**

**Mecklinger, Axel** *Inst. für Psychologie, Universität des Saarlandes, Saarbrücken, Germany* **Weng, Xuchu** *Institute of Psychology, Chinese Academy of Sciences, Beijing, Germany* **Yang, JiongJiong** *Department of Psychology, Beijing University, Beijing, Germany*

A key feature of human episodic memory is the creation and retrieval of associations between items and events. Recent neuropsychological studies have suggested that associative memories differ in the degree to which their components can be encoded to form a holistic (unitized) representation. Associative memories with unitized components can be retrieved without hippocampal involvement, whereas the retrieval of associations between arbitrary components depends on the integrity of the hippocampus. We will present event-related potential (ERP) and fMRI studies investigating the brain systems mediating both forms of associative memories as well as the boundary conditions for the formation of unitized memory representations.

#### **Female's situation awareness is better than male during driving: A simulated study**

**Hao, Xueqin** *Inst. of Psychology, Chinese Academy of Sciences, Beijing, People's Republic of China* **Sun, Xianhong** **Zhang, Khan**

Drivers' situation awareness (SA) and mental work load (MWL) were tested by applying an A PC-based driving simulator. Both the physiological measures and the subjective assessment were employed to measure MWL. It was found that with the increasing of traffic, the driving performance did not worsen, however participant's MWL increased. At the same time, the participant's SA performance deteriorated. It was also found that female participants got better SA performance than male participants did. No significant effect of driving experience on any dependent variable used in this study was found by the simulated driving.

#### **Lexical interference in logographic and alphabetical writing systems: ERP evidence from a stroop task**

**Wang, Kui** *Inst. of Psychology, Chinese Academy of Sciences, Beijing, People's Republic of China* **Mecklinger, Axel** *Department of Psychology, Saarland University, Saarbrücken, Germany* **Hofmann, Juliane** *Department of Psychology, Saarland University, Saarbrücken, Germany* **Weng, Xuchu** *Inst. of Psychology, Chinese Academy of Sciences, Beijing, People's Republic of China*

An important issue in psycholinguistic research is how orthographic and phonological information contribute to meaning activation. Therefore, we conducted a Stroop interference experiment with event-related potential (ERP) measures in Chinese and German readers. While the behavioral interference effects were similar across groups, language-specific ERP differences were obtained for color words and color word associates. Congruent Chinese color words elicited a positive component around 400 ms suggesting a facilitated mapping from orthography to meaning in Chinese. Additionally, incongruent Chinese, but not German, color word associates elicited a late negative component that may reflect additional post-lexical processing demands of logographic writing systems.



### Familiarity effect in artificial grammars learning

**Fu, Xiaolan** *Inst. of Psychology, Chinese Academy of Sciences, Beijing, People's Republic of China*  
**Wan, Lulu** *Inst. of Psychology, Chinese Academy of Sciences, Beijing, People's Republic of China*  
**Dienes, Zoltan** *Department of Psychology, University of Sussex, Brighton, United Kingdom*

Subjects trained on two artificial grammars can control which grammar they use in classifying strings. According to Jacoby, familiarity can not be involved in the control of which grammar to use. In two experiments, participants were trained on two artificial grammars and then used one of the grammars to classify new test strings. After each classification subjects rated the familiarity of the strings. The results showed that when subjects said they were using familiarity, the rated familiarity was greater for test strings consistent with their chosen grammar rather than for strings from the other grammar.

### S-135: Offshore and onshore workplaces: The link between safety, wellbeing and health

**Torbjörn Rundmo, Stig Berge Matthiesen** (chair)

The symposium covers the workplace safety issue, and the link with wellbeing and health. The first presenter demonstrates the effects of working 14 successive 12-hour day shifts. The next presentation compares the health safety culture in Norwegian and UK offshore sector. The third investigates the link between support, commitment and behaviour. Paper 4 studies whether offshore safety may predict mental health. The fifth investigates the associations between participants' experience during skill performance, conducting a safety intervention, and self efficacy. The sixth presentation is aimed to identify which aspects of job insecurity that have impact on turnover intentions and risk behaviour.

### Mood and performance changes during 12-hr day shifts over a two-week offshore tour

**Parkes, Katharine** *Dept. Experimental Psychology, University of Oxford, Oxford, United Kingdom*

The effects of working 14 successive 12-hr day shifts on sleep, alertness, mood, perceived workload, and reaction time (RT) were evaluated among offshore production operators. Three assessments (using hand-held computers) were made during each of 8 test shifts over the two-week tour. Mood and performance remained relatively stable overall, but alertness decreased across individual shifts. RT variability, but not mean RT, increased across shifts and weeks. Few main effects indicative of cumulative fatigue were observed; this result is consistent with, and extends, published findings for 7 x 12-hr day shifts. However, the more subtle signs of fatigue observed should not be ignored.

### A comparative study of HSE-culture on the Norwegian continental and UK continental shelves

**Tharaldsen, Jorunn Elise** *Institute Stavanger, International Research, Stavanger, Norway*  
**Mearns, Kathryn** *Dept. of Psychology, University of Aberdeen, Aberdeen, United Kingdom*  
**Knudsen, Knut** *IRID, IRIS, Stavanger, Norway*

The current study is a comparative analysis of HSE-culture as perceived by drilling employees on the Norwegian and UK Continental Shelves. A survey has been carried out on a total of 12 platforms in Norway and UK. Dimensions are extracted from the OSQ, the Trends in Risk level project, a selection of GLOBE organizational culture scales, safety commitment and trust scales and COPSOQ. The results of the questionnaire study are being analysed and will be taken into the company for further analysis, comparing employees' perceptions on the two shelves and defining challenging and risky areas that need to be improved. To be

included into T.Rundmo's and S.B Matthiesen's symposium

### Relationships between support, commitment and safety behaviour in the UK offshore industry

**Mearns, Kathryn** *Dept. of Psychology, University of Aberdeen, Aberdeen, United Kingdom*  
**Reader, Thomas** *Psychology, University of Aberdeen, Aberdeen, United Kingdom*

Reporting dangers and intervening to protect others are behaviours that help to maintain safety in organizations but perceived organizational support is important for these behaviours to occur. Relationships between support from the organization, supervisors and workmates, organizational commitment, organizational citizenship and reporting dangers and taking action were investigated in a sample of 444 offshore workers on 18 UK installations. The results show no significant relationship between any of the support measures and reporting dangers and taking action, however organizational commitment and citizenship explain 23% of the variance in reporting dangers and 21% of the variance in taking action.

### Demand-control, offshore safety and mental health among offshore workers

**Søiland, Vibeke** *Faculty of Psychology, University of Bergen, Bergen, Norway*  
**Matthiesen, Stig Berge** *Faculty of Psychology, Univ. of Bergen, Bergen, Norway*  
**Einarsen, Ståle** *Faculty of Psychology, Univ. of Bergen, Bergen, Norway*

A workplace survey study was conducted in offshore oil industry, in which 1022 offshore oil workers participated (response rate= 59%). The questionnaire applied covered various topics amongst others risk perception of their offshore work environment, safety climate, demand-control and mental health. The results showed that the workers' experience of demand and control significantly predicted mental health. Additionally, offshore safety, operationalised as risk perception and safety climate, contributed significantly to the explanation of mental health variance, when controlling for the demand and control aspect. Moreover, an interaction effect between safety climate and risk perception were found.

### Is job insecurity related to turnover intentions and risk behaviour?

**Rundmo, Torbjörn** *Science and Technology, Norwegian University, Trondheim, Norway*  
**Emberland, Jan S.** *Dept. of Psychology, Norwegian Univ. of Sci. & Technology, Trondheim, Norway*

This study's aim was to identify which aspects of job insecurity that have impact on turnover intentions and risk behaviour. In addition, the significance of attitudinal (job satisfaction) and psychological outcomes as well as demographic characteristics (gender and age) is accounted for. The results of the study are based on a self-completion questionnaire survey carried out among a representative sample of the Norwegian public (n = 260). Job insecurity indirectly explained turnover intentions and risk behaviour. On this basis it is being discussed whether improvements in management change communication may reduce insecure employees' risk behaviour.

### S-136: Workplace and anxiety

**Beate Muschalla, Alan M. Langlieb** (chair)

Work is an important domain of life. Problems at the workplace and mental health therefore must have interactions. A common final pathway of mental disorders in general and work related anxieties in particular are workplace phobias, with panic when approaching or thinking of the workplace. This is a serious complication with negative consequences for the further course of illness. It makes special therapeutic interventions necessary.

This symposium will present diverse aspects of the interrelations between workplace stress and anxiety, mental health and performance problems, as well as resulting participation disorders, especially appearing as long-term sick leave.

### Work stress and anxiety: Epidemiologic findings in a nationally representative sample of working population

**Wang, Jian-Li** *Dept. of Psychiatry, University Calgary, Calgary, Canada*

This study was to estimate the 12-month prevalence of depressive, anxiety and substance use related disorders in a representative sample of the Canadian working population, and to investigate the relationship between work stress, work/family balance and anxiety disorders in the population. The data from the Canadian Community Health Survey – Mental Health & Well-being (CCHS-1.2) were used. The CCHS-1.2 was the first Canadian national mental health survey targeting on household residents aged 15 years old and over. It was found that mental disorders are prevalent in the working population. Job insecurity and lack of social support are major work stressors. Work/family imbalance is a significant factor for having an anxiety disorder.

### Personal initiative at work and work-related well-being: Why is there no relationship?

**Frese, Michael** *Inst. für Angew. Psychologie, Universität Gießen, Gießen, Germany*

Jahoda argued that well-being should include an active approach to things. We tested in our study whether personal initiative was related to well-being. Personal initiative consists of a self-starting, proactive (future oriented), and persistent (overcoming barriers) approach to work. Facets of health and ill-health were measured with depression, negative affectivity, bitterness, self-confidence, and self-efficacy. A longitudinal study on personal initiative and ill-health showed that there are smallish relationships between personal initiative (particularly if measured with a stringent interview measure) and ill-health.

### Workplace phobia and work-related participation problems

**Linden, Michael** *Psychosom. Rehabil., Charité Berlin, Teltow, Germany*

Background: Workplace-related anxieties appear in different forms. The worst case is a manifestation of a workplace phobia with panic reaction when only thinking of or coming near the workplace. There is a strong tendency of avoidance which does often result in long-term-sick-leave. Method: 230 psychosomatic inpatients were interviewed concerning workplace-related anxieties and resulting work-participation-problems. Results: 56,8% out of 39 workplace phobic patients were on sick-leave because of the symptoms, and in other 24,3% workplace phobia resulted in job-loss. Conclusion: Workplace phobia is the most severe form of workplace-related anxiety. It has to be taken earnest in primary health care.

### Diagnostic instruments for the assessment of workplace-related anxieties

**Muschalla, Beate** *Psychosom. Rehabilitation, Charité Berlin, Teltow, Germany*

Background: Workplaces have anxiety-provoking features: failure, mobbing, angry customers, accidents. The quality and quantity of job-anxiety was investigated in patients with mental and somatic illness. Method: 90 psychosomatic and 100 orthopaedic inpatients filled in the Job-Anxiety-Scale. Results: Psychosomatic patients showed significantly higher job-anxiety-scores than orthopaedic patients. Orthopaedic patients score higher in anxiety of functional impairment, whereas psychosomatic patients do more suffer from job-related



generalised worrying, panic, fears of existence and global job-anxiety. Job-anxiety-level was significantly correlated with sick leave-duration. Conclusion: There are differences in quality and quantity of job-anxiety in different clinical groups. This requires consequences for diagnostic and treatment.

#### **Depression, anxiety and substance use disorders and their relation with the workplace**

**Langlieb, Alan M.** *Workplace Psychiatry, John Hopkins Hospital, Baltimore, MD, USA*

With health care costs rising, many employers are focusing more on the cost of illness and related expenditures of disability and lost productive time. Employers of the new information/technology economy are placing a heightened focus on the prevention of depression, stress and substance use disorders. With this new awareness comes important questions: How many employees suffer from depression, anxiety and/or substance use disorders? What is their impact on productivity? How can employers ensure that their employees are receiving the best treatment, and how can they be measured? What is the emerging role for developing resiliency training among an employed population?

#### **Anxiety and depression in employees returned to work after long-time sick leave**

**Munir, Fahmidah** *Dept. of Human Sciences, Loughborough University, Loughborough, United Kingdom*

**Objectives:** Compare psychosocial factors among those returning to work following depression/anxiety ( $n=65$ ), with those returning following back pain ( $n=40$ ), cancer ( $n=40$ ) or heart disease ( $n=30$ ). **Methods:** Employers, charities and support groups ( $n=60$ ) distributed questionnaires to those meeting participation criteria. **Results:** Those with depression/anxiety and heart disease reported higher severity of depression symptoms, but only depression/anxiety group reported lower work ability ( $\beta=-.22$ ), low self-efficacy in managing ill-health at work ( $\beta=-.56$ ) and low workplace support ( $\beta=-.35$ ). **Conclusions:** To enable those with depression to return and maintain work, healthcare professionals and employers should help improve their well-being through workplace support and intervention.

#### **Workplace stress, anxiety and cognitive errors**

**Harris, Lynne** *Dept. of Health Sciences, University of Sydney, Sydney, Australia*

**Objectives:** Errors in health care settings have been attributed to failures of cognitive function. This paper examines the relationship between the workplace, anxiety, self-reported cognitive errors, and cognitive performance. **Methods:** Allied health professionals completed internet-based protocols. **Results:** Heavy workloads and interpersonal difficulties were associated with elevated anxiety. Anxiety was associated with self-reported workplace cognitive errors, but not with cognitive performance. **Conclusions:** The findings have implications for the development of stress management approaches for allied health and raise concerns about self-report measures of cognitive errors. Self-reported cognitive errors may reflect a tendency to self-criticism, rather than objective difficulties with cognitive function.

#### **S-137: Future time perspective in adolescence and early adulthood**

**Toshiaki Shirai, Willy Lens** (chair)

Due to their higher cognitive functioning, human beings specify their needs and motives in more or less specific motivational goals, plans, and projects. These motivational goals can be analyzed for their content and for their temporal localization, which is the issue of future time perspective (FTP). Adolescence and early adulthood are the critical period to extend FTP. Each of the presentations will discuss

empirical studies showing the positive effects of a deep and well-structured FTP on present motivation and personality development in different cultural contexts.

#### **Future time perspective, social insertion and risk tendencies among high school and post-secondary students in Peru: A developmental approach**

**Herrera, Dora** *Dept. of Psychology, Pont. Universidad Católica, San Miguel, Peru* **Lens, Willy** *Dept. of Psychology, University of Leuven, Leuven, Belgium*

During the last ten years the motivational content and the length of Future Time Perspective (FTP) have been measured among 1941 students in Peru. The purposes of this study were (a) providing a better understanding of the role of FTP in adolescents, (b) studying developments in the motivational contents of students' goals over the years and during a transition period in educational institutions. Data has been collected with the Shorter Form of the Motivational Induction Method (MIM). Differences in degree and quality of Social Insertion and in Risk Tendencies were related to FTP. The results and their implications for upcoming social and educational interventions to enhance a more adaptive educational and professional development among Peruvian adolescents are discussed.

#### **Four years longitudinal study on future time perspective during the transition from junior high school to high school**

**Tsuzuki, Manabu** *Dept. of Psychology, Chuo University, Hachioji, Japan*

In Japan, compulsory education consists of six-year elementary school and three-year junior high school. After graduate from junior high school, students must take an entrance examination to go to high school. Students have a lot of stress during this transition. Based on the four-year longitudinal study, the author has been examined developmental changes concerning future time perspective during the transition from elementary school to junior high school. Analyzing the obtained data, relations between adolescents' future time perspective and other factors (psychological adjustment, academic ability, and self esteem) is examined. The implications for educational support for adolescents' development of future time perspective are discussed.

#### **Considering the future in identity formation: The influence of perceived adult status and a search for mediating variables**

**Luyckx, Koen** *Center for Develop. Psychology, Catholic University Leuven, Leuven, Belgium*

**Goossens, Luc** *Dept. of Psychology, Catholic University of Leuven, Leuven, Belgium* **Lens, Willy** *Dept. of Psychology, University of Leuven, Leuven, Belgium* **Smits, Ilse** *Center for Develop. Psychology, Catholic University Leuven, Leuven, Belgium*

The present paper examined whether perceived adult status influences identity formation, using a recent model of global future-oriented identity formation. Results in a sample of 345 university- and non-university dwelling emerging adults (18-30 years of age) demonstrated that perceived adults scored higher on identity commitments and on identification with these commitments. However, they scored lower on a ruminative (rather than reflective) type of identity exploration than perceived emerging adults did. Mediation analyses demonstrated that these mean differences could be partially accounted for by differences in global need satisfaction and sense of coherence between perceived adults and perceived emerging adults.

#### **Personal goals during educational transitions among adolescence and young adults**

**Salmela-Aro, Katarina** *Dept. of Psychology, University of Jyväskylä, Jyväskylä, Finland* **Riittala, Elina** *Dept. of Psychology, University of Jyväskylä, Jyväskylä, Finland*

The aim of the present research was to find out, what kinds of groups of adolescents can be formed by the content of personal goals among students at academic and vocational track and how these groups differ in goal appraisals, meaningful life events and subjective well-being. Adolescents in upper secondary education ( $N=1144$ ) were grouped according to the content of their personal goals using a person oriented approach. Four groups emerged: (1) property-, (2) occupation-, (3) relationships- and (4) self-focused. Those in the self-focused group were exhausted and especially cynical towards their school work and they suffered from almost clinically significant depression.

#### **Longitudinal study of constructing future on the transition from adolescence to adulthood**

**Shirai, Toshiaki** *Dept. of Psychology, Osaka Kyoiku University, Kashiwara, Japan*

Transition from adolescence to adulthood deals with new life events such as leaving home, financial independence, entrance into work places. This can occur the change of the future prospects. One hundred females were followed to answer the questionnaire on future time perspective in three years after graduation from university in Japan. Results showed that their future prospects played an important role at every wave. This may imply individuals are interacting actively with changing worlds to achieve their transition to adulthood (Lerner, 2002) and to organize their future.

#### **S-138: Exploring the effects of control and value appraisals on emotions within and outside the achievement domain**

**Anne Frenzel, Thomas Götz** (chair)

Grounded in appraisal theoretical thinking, this symposium explores the relationship between control and value appraisals and emotions. In an introductory theoretical input, Pekrun argues these are core appraisals underlying the arousal of emotions in the achievement domain. Frenzel and Lichtenfeld present evidence supporting this claim, using data from experimental and field studies. Götz widens the perspective and provides evidence that these appraisal dimensions are influential also in non-achievement contexts. Kaufmann reports findings from experimental studies showing that perceived control influences positive and negative affect. Zeidner from the Center for Interdisciplinary Research on Emotions (University of Haifa) integrates and discusses the symposium contributions.

#### **Assumptions of the control-value theory of achievement emotions**

**Pekrun, Reinhard** *Inst. für Psychologie, Universität München, München, Germany*

The control-value theory provides an integrative framework for analyzing the antecedents and effects of emotions experienced in achievement settings. It is based on the premise that appraisals of control and value are central to the arousal of achievement emotions, including activity-related emotions such as enjoyment and boredom, as well as outcome emotions such as hope, pride, anxiety, or shame. Implications to be discussed pertain to the domain specificity of achievement emotions; their origins, their effects on performance, and the reciprocal linkages between emotions, antecedents, and effects; their relative universality across genders and cultures; and their regulation, therapy, and development.



### Girls and mathematics: A "hopeless" issue? A control-value approach to gender differences in emotions towards mathematics

**Frenzel, Anne** *Inst. für Psychologie, Universität München, München, Germany*

Based on Pekrun's (2006) control-value theory of achievement emotions, gender differences in mathematics emotions were hypothesized due to different levels of control and value beliefs in mathematics among girls vs. boys. Two age groups were analyzed (grades 5/9,  $N = 2,053/2,528$ , 49/51 per cent girls). Across age groups, girls reported significantly less enjoyment and pride than boys, but more anxiety and hopelessness. The female emotional pattern was due to girls' low competence beliefs and domain value of mathematics, combined with high mathematics achievement value. Multiple-group comparisons confirmed that structural relationships between variables were largely invariant across genders and age groups.

### An experimental test of the control-value theory of achievement emotions

**Lichtenfeld, Stephanie** *Inst. für Psychologie, Universität München, München, Germany*  
**Maier, Markus** *Inst. für Psychologie, Universität München, München, Germany*

In the control-value theory, it is assumed that emotional reactions are determined by a multiplicative combination of control and value appraisals. While correlational data support this assumption (Pekrun, Goetz, Titz, & Perry, 2002), experimental evidence on interactive effects of control and value appraisals is still lacking. In three experiments, we manipulated participants' perceived control and value relating to an achievement test, and assessed their anxiety before the test. Experiment 1 used a scenario approach, experiment 2 self-reports of anxiety, and experiment 3 an implicit measure of anxiety. As expected, there was a significant effect of the control x value interaction on achievement anxiety in all three studies.

### Emotional experiences and their control and value antecedents

**Götz, Thomas** *Inst. für Pädag. Psychologie, Universität Konstanz, Konstanz, Germany*  
**Stöger, Heidrun** *Erziehungswissenschaften, Universität Regensburg, Regensburg, Germany*

In the present study, control and value appraisals as well as three positive and three negative emotions were assessed using the experience sampling method. The sample consisted of 50 university freshmen (78% female). Students completed state questionnaires following a signal from a Pocket PC (42 signals, 7 days). In line with hypotheses, we found clear relations between situation-specific state emotions, perceived control, and value appraisals. Despite the overall equivalence of construct relations in non-achievement vs. achievement settings, the correspondence between control/value and negative affect was stronger in situations involving learning and performance.

### The causal impact of perceived control in emotional experiences: Evidence on asymmetries on positive and negative affect

**Kaufmann, Martina** *Inst. für Psychologie, Universität Erfurt, Erfurt, Germany*  
**Götz, Thomas** *Erziehungswissenschaften, Universität Konstanz, Konstanz, Germany*

According to Pekrun's control-value theory, emotional experiences in achievement contexts should be triggered by appraisals of control over and value of activities and outcomes. Empirical evidence on the impact of value appraisals seems clear cut. Substantiation of the causal role of perceived control is however still scarce, and restricted to the aspect that a sense of uncontrollability elicits negative emotional experience. The present experimental study shows that indeed all emotional

experience, that is both positive and negative emotional experience, varies as a function of perceived control, whether control is actually available (Experiment 1) or merely illusory (Experiment 2).

### S-139: Current developments in the psychology of religion and spirituality

**Stefan Huber** (chair)

In recent years religion and spirituality have become topics of psychological interest again. The important role of religion for global developments as well as for individual needs has been rediscovered, and both the beneficial and the critical aspects of religion and spirituality are now regarded as a challenging field for research. Scholars have started to examine the place and role of religiosity and spirituality in personality, to develop well-elaborated measures for religiosity and spirituality and their centrality, and to analyze their impact on ways of meaning-making, coping, health, and well-being. The symposium gives an overview about trends and findings.

### Core dimensions, centrality and content: A model for cross-cultural and interreligious research in psychology of religion

**Huber, Stefan** *KOOM, Universität Mainz, Mainz, Germany*

The paper discusses a model for cross-cultural and interreligious research in psychology of religion (Huber, 2003). This model is characterized by six core dimensions of religiosity (intellect, ideology, experience, private practice, public practice, and consequences in everyday life). The measurement of these dimensions differentiates between centrality and content of religiosity. While the concept of centrality is related to the general relevance of religion in an individual's personality, the concept of content is related to specific behavioural directions of religion. The discussion of the model is empirically based on representative surveys in 21 nations ( $N > 21,000$ ) covering 5 major religious groups (Christianity, Islam, Hinduism, Buddhism, Judaism).

### Religiosity and values

**Hofmann-Towfigh, Nadi** *Potsdam, Germany*

How do religiosity and values relate to each other? Using the data of a study which explored the value priorities and religiosity of members of the Baha'i Faith in Germany ( $N = 475$ ), some results will be presented to demonstrate how the centrality of religiosity related to values. Further, selected content areas of religiosity, such as fundamentalism and religious reflexivity will be discussed in the framework of the value model (Schwartz, 1992). The measures used for these analyses were the 40-item Portrait Values Questionnaire (PVQ 40; Schwartz, 2000), the "Structure-of-Religiosity-Test" (S-R-T; Huber, 2003), as well as a single-item religiosity measure.

### Implicit religiosity: Diversity of life meanings in church members and non-members

**Schnell, Tatjana** *Inst. für Psychologie, Universität Innsbruck, Innsbruck, Austria*

In contemporary Europe, belonging to a Christian church cannot be equalled with an outlook on life. Similarly, subjective religiosity is not necessarily connected with an institutionalised religion. As research on Implicit Religiosity shows, also secular orientations can be expressed in religious ways and fulfil the 'religious' function of meaning-making. The Sources of Meaning Questionnaire (Schnell & Becker, 2007) was applied to a representative German sample ( $N = 604$ ). With cluster analyses, different types of meaning-orientations among

church members and non-members were identified. Analyses of correlation show diversity in and between sub-samples, but also similarities across sub-samples as regards degree of meaningfulness and other variables.

### Worldviews: Form and contents of atheistic, spiritual and religious beliefs and their relevance for four types of well-being

**Klein, Constantin** *Inst. für Psychologie, Techn. Universität Dresden, Dresden, Germany*

The paper presents a study about the interplay between worldviews (belief systems) and well-being. Several worldviews have been distinguished, ranging from atheistic positions to traditional Christian positions as well as to alternative spiritual positions. More than 660 respondents represented these diverse worldviews. They completed a questionnaire operationalizing formal characteristics and specific contents of the worldviews. The designed worldview scales identified four types of worldviews whose relationship to mental health was compared. As main results, there are characteristic differences of the level of well-being. The findings illustrate the relevance of belief systems for mental health and emphasize to distinguish between worldviews.

### Structure and centrality of religious-spiritual well-being among psychiatric in-patients and healthy controls

**Unterrainer, Human-Friedrich** *ARS Addiction Research Society, Gesellschaft "Grüner Kreis", Graz, Austria*

Abstracts the structure and centrality of religious-spiritual well-being associated to personality or psychopathological symptoms? Methods Addicts ( $N = 120$ ), depressive patients ( $N = 100$ ) and healthy controls ( $N = 200$ ) were investigated using a multi-dimensional inventory for religious-spiritual well-being (MI-RSB 48) in combination with the Centrality scale (C-scale)/ Structure of Religiosity Test (RST) and different personality/ clinical variables. Results Differences in bio-psycho-socio-spiritual well-being were found between the groups. The more central the individual religious construct system is, the more powerful are its effects. Conclusions The association between religious-spiritual well-being and psychopathological symptoms might open up new strategies in prevention and therapy of psychiatric diseases.

### Religious coping: A resource for personal growth?

**Lehr, Dirk** *Inst. für Medizin. Psychologie, Universität Marburg, Marburg, Germany*

In the aftermath of crisis some people manage to find benefit, also referred to as personal growth. These studies examined the role of religious coping for personal growth. Sampling included 210 participants with negative life event and 122 patients suffering from chronic conditions. Pargament's religious-coping inventory (RCOPE) allowed close examination of functional and dysfunctional ways of coping. Significant associations of moderate size were found for all dimensions of Tedeschi's and Calhoun's posttraumatic growth inventory. Results suggest positive religious coping to be a resource for personal growth, while the results for negative religious coping are inconsistent and need further discussion.

### S-140: Family process and content model (Family PCM): A theoretical model for family

**Siamak Samani, Bruce Ryan** (chair)

Family process and content model is a contextual and psychoeducational model. This model tries to provide a valid pattern for family diagnosis and

typology for family preparing and repairing. The aim of this symposium is to clarify the different aspects of the model. The concentration of the program in the symposium will be on describing the main dimensions and assumptions of the model, family definition, family social context, methods of family assessment and family typology, experimental evidences, family prescriptive methods, and family therapy. Also the strongnesses and weaknesses of the model will discuss at the end of symposium.

#### The roles of religion in the family process and content model

**Mazidi, Mohammad** Dept. Educational Philosophy, Shiraz University, Shiraz, Islamic Republic of Iran Samani (2006) in his family model, has introduced three interrelated components (processes, contents and social context) through which determine the quality and performance of the family. In this article, I want to concentrate on the effects of "religion", as an effective factor in social context. Religion is not a social institution, as Durkheim and his advocates believe. Rather, it is a system of sacred beliefs, values, ethics and transcendental ideas which impacts all aspects of the family, as Samani has mentioned. Also, a Bio-Rational-Emotional factor will be introduced, as family production, which is affected by family belief system.

#### A conceptual exploration on family conflicts based on family process and content model

**Ryan, Bruce** Dept. of Family Relations, University of Guelph, Guelph, Canada **Samani, Siamak** Dept. of Edu. Psychology, Shiraz University, Shiraz, Islamic Republic of Iran

A 21-item marital issues scale, previously developed in a pilot study involving 100 couples, was completed by 600 married adults aged 15 to 54 years. These data were subjected to a principal components analysis using a varimax rotation in order to extract the underlying marital conflict factors. The scree plot indicated a three factor solution: process conflicts (relationship issues), content conflicts (extant family conditions such as employment, income, health), and context conflicts (issues concerning place of family in community and culture). These findings are consistent with the three key components of the Family Process and Contents Model.

#### Validity and reliability of family process and family content scales

**Samani, Siamak** Dept. Educational Psychology, Shiraz University, Shiraz, Islamic Republic of Iran The aim of this research was to study the validity and reliability of family process and family content scales. These two scales were used for family typology in family process and content model. The content of these scales was retrieved from 450 interviews with couples. The sample of this study includes 1258 married persons. Family process scale and family content scale includes 47 and 39 items respectively. Principle component factor analysis revealed that there are 8 factors in family process scale and 8 factors in family content scale. Different technical methods were used to check the reliability of these scales

#### An analytic point of view on different dimensions of the family process and content model

**Jowkar, Bahram** Dept. Educational Psychology, Shiraz University, Shiraz, Islamic Republic of Iran All family models are family intervention models. According to components of each model, Family consultants/therapists analyzing the family system and establishing repair and prepare program for solving family problems. The goal of this article is to analysis different component of family process and content model based on Brofenbrenner's

ecological-system model. Adapting and categorizing the model's components in macro, meso and micro systems could be determine limits and level of interventional programs for family problems. This adaptation provides additional support for applicability of the family model in dealing with family system problems.

#### Child management strategies in family therapy

**Crisante, Lea** Sydney West Area Health Serv., Cumberland Hospital, North Rocks, NSW, Australia Family therapy has traditionally provided broad perspectives regarding the management for child behavioural difficulties resulting in criticisms of a lack of strategies for addressing such issues. This paper considers this by considering current theoretical perspectives with a view to integrating systemic thinking with behavioural family interventions. This discussion is in relation to cultural issues in therapy and how such issues have been addressed in providing services in a transcultural context in Australia. The paper will therefore connect practical and theoretical concerns in family therapy provided in cases in which the child is the identified patient with multicultural service provision in Sydney.

#### Family typology: Divorced family and family with an addict member

**Hashemi, Ladan** Arsenjan, Dept. of Psychology, Islamic Azad University of, Arsenjan, Islamic Republic of Iran

The aim of this study was to compare three kinds of family (normal family, family with an addict member and, divorced family) on family process and family content. The sample includes 105 females (35 females for each group). Family process and content scales were used for data gathering. The family process scale includes five subscales (problem solving skills, communication skills, family cohesion, coping strategies and, religious beliefs) and the family content scale has only a general factor. The results of this study revealed that there were significant differences among these families on family process and content

#### Developing a family needs scale

**Nasiri, Habibolah** Dept. Educational Psychology, Shiraz University, Shiraz, Islamic Republic of Iran The aim of this study was develop and to study the psychometric properties of a scale for assessment of basic needs in Iranian family. The sample includes 686 men and women (267 men and 419 women). The results of factor analysis revealed there were 5 factors. The factors named: 1- Psychological/Emotional needs, 2-Financial/Economical needs, 3-Physical Health needs, 4-Recreational needs and 5-Educational needs. Alpha Cronbach for these factors and scale were: .92, .90, .77, .88, .75, .95 respectively. In sum, the results showed that the family basic needs scale were reliable and valid scale for assessing family needs for Iranian families.

#### S-141: From instruction to action: Bridging the gap

**Dorit Wenke, Robert Gaschler** (chair)

One of the outstanding abilities of humans is their capability to use verbal instructions to guide their behaviour. While non-human primates have to learn new behaviour via effortful and time consuming trial and error learning, humans can use verbal instructions to acquire new behavioural options seemingly effortlessly and very rapidly. This symposium brings together research from cognitive psychology, neuroscience, and volition research investigating how verbal instructions are used to control behaviour.

#### Implicit learning based on instructed action codes

**Gaschler, Robert** Inst. für Psychologie, Humboldt-Universität zu Berlin, Berlin, Germany **Wenke, Dorit** Dept. of Psychology, MPI, Leipzig, Germany **Frensch, Peter A.**

We investigated how response instructions determine later implicit sequence learning. We instructed participants to either use color or location (e.g. to respond with the green key vs. the outer left key to the diamond-shape; 4 stimuli and responses total). When responses were instructed in terms of color, participants learned the color and the location sequence, as indicated by transfer. With spatial response instructions, they only learned the spatial sequence. These results demonstrate the enormous flexibility of instruction based task-configuration processes and their consequences for automatic skill acquisition processes, with spatial coding as a potential default.

#### The influence of intentions on behavior

**Cohen, Anna-Lisa** Psychology, Yeshiva University, New York, USA **Gollwitzer, Peter**

Recent findings by Cohen et al. (in press) reveal that complex postponed intentions that can be triggered by two or more cues interfere with ongoing task activities (defined in this study as lexical decision latencies). However, simpler intentions that are triggered by only one cue show no such costs. We demonstrate that subjects in the latter condition spontaneously form if-then verbal plans such as those described by Gollwitzer (1999). Such plans clearly articulate a cue + response link (i.e., If I see "X", then I will perform "Y") and thereby free up processing resources for ongoing activities.

#### Automatic effects of verbally instructed negated relations

**de Houwer, Jan** Dept. of Psychology, Ghent University, Ghent, Belgium

Participants were to select one of two colors based on the identity of a target letter that was flanked on both sides by a distractor letter. The selection rules stated for each letter which color NOT to select (e.g., if target H, do not select blue). Responses were slower when participants had to select the color that was associated with the distractor in a negative manner. This suggests that, contrary to what is assumed by dual process models, negated relations recently acquired via instructions can be activated automatically.

#### Dissociating the neural correlates of overcoming interference from instructed and applied stimulus-response associations

**Brass, Marcel** Dept. of Exper. Psychology, Ghent University, Ghent, Belgium **Wenke, Dorit** Dept. of Psychology, MPI, Leipzig, Germany **Waszak, Florian**

Despite the fundamental role of verbal information for our behavioural regulation, the functional and neural mechanisms underlying the transformation of verbal instructions into efficient behaviour are still poorly understood. To gain deeper insights into this transformation, we investigated the neural circuits involved in overcoming interference from merely instructed stimulus-response (S-R) mappings and applied S-R mappings. Here we show that overcoming interference from an instructed S-R mapping involves the preSMA, whereas overcoming interference from an applied S-R mapping involves the ACC, over and above the pre-SMA. These data suggest functional differences and similarities between instructed and applied S-R associations.



### How task representations guide attention

**Dreisbach, Gesine** Inst. für Psychologie, Techn. Universität Dresden, Dresden, Germany **Metzker, Manja Haider, Hilde**

In a series of experiments we compared the effects of stimulus-response (SR) based vs. rule based processing. That is, all participants act upon the exact same stimulus set with the same responses but are instructed to either use direct SR mappings, or one or two simple categorization rule(s). We have been able to show that these task instructions differentially modulate various phenomena such as switch costs, feature binding, and the Simon effect. From this we conclude that instructions form task representations which then guide attention towards relevant stimulus features and shield against irrelevant information.

### Re-representing instructed tasks

**Wenke, Dorit** Dept. of Psychology, MPI, Leipzig, Germany **Gaschler, Robert** Inst. für Psychologie, Humboldt-Universität zu Berlin, Berlin, Germany Previous research showed that task instructions often determine how humans represent and perform a task. In the present experiments we explored when they would re-represent a task in a way not encouraged by instructions. Participants were instructed to respond to the location of scatter-plots in a spatially compatible manner. We were interested in whether and when participants would use an uninstructed stimulus dimension for responding that was correlated with orientation. First results suggest that subjects strongly rely on and sometimes completely switch to a salient irrelevant stimulus dimension when this dimension facilitates processing.

### S-142: Neurophysiological aspects of emotion regulation in borderline personality disorder and implications for treatment

**Babette Renneberg** (chair)

Recent neurophysiological data support the hypothesis of emotion dysregulation in BPD. The relevance of cognitive aspects, dissociation, anticipation of pain, empathy, and experiential avoidance for processes of emotion regulation are illustrated in the presented studies. Additionally, implications of these results for psychotherapy are outlined.

### Cognitive regulation of emotions in borderline personality disorder

**Herpertz, Sabine** Inst. für Psychiatrie, Universität Rostock, Rostock, Germany **Schulze, Lars** Inst. für Psychiatrie, Universität Rostock, Rostock, Germany **Berger, Christoph** Inst. für Psychiatrie, Universität Rostock, Rostock, Germany **Domes, Gregor** Inst. für Psychiatrie, Universität Rostock, Rostock, Germany Objectives: Prefronto-limbic dysfunction is thought to underlie emotion dysregulation in borderline personality disorder (BPD). However, we know rather little about prefrontal top-down processing involved in cognitive emotion regulation. Methods: fMRI data were acquired in BPD patients compared to healthy controls during a reappraisal task challenging effortful cognitive suppression of emotion. Results: Data acquired while using cognitive reappraisal strategies showed a differential activation of prefrontal areas between BPD subjects and healthy controls, namely the orbitofrontal and cingulate cortex. Conclusions: Neuroimaging data support the theory of a dysfunctional amygdala-prefrontal circuit in BPD which underlies emotional instability in BPD.

### Pain anticipation: A mechanism involved in affect regulation in BPD?

**Schmahl, Christian** Klinik für Psychosomatik, ZI für Seelische Gesundheit, Mannheim, Germany **Klossika, Iris** Psychosomatic Medicine, Central Inst. of Mental Health, Mannheim, Germany **Bohus, Martin** Psychosomatic Medicine, Central Inst. of Mental Health, Mannheim, Germany

Objectives: To investigate the interaction between the anticipation of pain, emotional modulation, and pain processing in patients with BPD. Methods: Thermal pain thresholds as well as heat pain fMRI were assessed. Negative and positive mood was induced by IAPS pictures, anticipation of pain was induced by the announcement of an intensive pain stimulus. Results: All emotional pictures increased pain thresholds in healthy controls and in patients. Only in patients, anticipation of pain increased thresholds and led to amygdala deactivation. Conclusions: Pain anticipation was more pronounced in patients with BPD and may be interpreted as a mechanism involved in affect regulation in BPD.

### Neuronal correlates of empathy in borderline personality disorder: An fMRI study

**Preißler, Sandra** Abt. Psychiatrie, Charité Berlin, Berlin, Germany

Objectives: To determine emotional and cognitive empathy in patients with Borderline Personality Disorder (BPD) compared to healthy controls on the behavioural and neuronal level. Methods: We assessed different facets of empathy in 32 female patients with BPD and controls on a new ecologically valid dimensional measure of empathy, the "Multifaceted Empathy Test" (MET). Furthermore, we established neuronal correlates of empathy in both groups using an fMRI adaptation of the MET. Results/Conclusions: Patients with BPD showed significant impairments in cognitive and emotional empathy at the behavioural level. Also, compared to controls, they showed different activations in the fronto-temporal network mediating empathy.

### How do patients with borderline personality disorder regulate dissociation and affect?

**Ebner-Priemer, Ulrich W.** Inst. für Psychosomatik, ZI für Seelische Gesundheit, Mannheim, Germany Affective instability and dissociative symptoms are essential in borderline personality disorder (BPD). Studies investigating how BPD patients regulate affect and dissociation are sparse. We assessed emotions, dissociative symptoms and regulation strategies in BPD patients during everyday life using electronic diaries, as well as in the laboratory using psychophysiological and fMRI methods. Heightened affect instability was exhibited and dissociative symptoms were positively related to stress in BPD. Self-injuries and skills were identified as strategies to down-regulate stress and dissociative symptoms. If dissociative symptoms work as emotion regulation strategies, as they inhibit emotional processing and reduce activity in the amygdala, remains unclear.

### Hyper-emotionality in borderline personality disorder before and after psychological treatment

**Arntz, Arnoud** Dept. of Psychology, University of Maastricht, Maastricht, Netherlands

Objectives: To test peripheral and central nervous system emotional responses in Borderline Personality Disorder (BPD), and test whether they normalize after successful psychotherapy. Methods: BPD, Cluster-C control patients, nonpatients, and recovered BPD patients saw emotional and neutral slides during fMRI-scanning. Amygdala, hippocampus, heart rate, and skin conductance responses were assessed. Results: BPD patients showed increased emotional responses to negative stimuli

( $p < .05$ ). Recovered BPD patients had normalized responses. Conclusions: BPD is associated with hyper-emotionality to negative stimuli; defensive responses suggest high fear. Psychotherapy normalizes these responses, indicating that amygdala hyper-responsivity is not a simple biological cause, but reflects unsafety in BPD.

### The impact of experiential avoidance on changes of depression and anger during treatment for borderline personality disorder

**Berking, Matthias** Dept. of Psychology, University of Washington, Washington, USA **Neacsu, Andra** Psychology, University of Washington, Washington, USA **Comtois, Kate** Psychology, University of Washington, Washington, USA **Linehan, Marsha** Psychology, University of Washington, Washington, USA

Objectives: Given that experiential avoidance is both a putative maintaining factor for core features of borderline personality disorder (BPD) and a potential hindrance for engaging clients into psychotherapeutic treatment, it was investigated whether experiential avoidance has a negative impact on changes in affect-related symptoms during treatment for BPD. Methods: Experiential avoidance, depression and anger were assessed in 81 clients at four points in time during one year of therapy. Results: EA predicted subsequent changes in depression but not in anger. Conclusion: EA impedes progress in at least one crucial outcome of treatment and should therefore be considered an important treatment target.

### S-143: Recent developments in selection and guidance in higher education

**Oliver Wilhelm, Richard D. Roberts** (chair)

The use of psychological assessment in higher education is gaining momentum across the globe. Two primary uses of these assessments are selection and guidance. In this symposium, we present research related to these applications in a number of countries, using large datasets, state-of-the-art statistical modeling, and new technologies. With respect to selection, important developments include a more global perspective of its importance in higher education and the application of advanced psychometric models to ensure fairness. In the realm of guidance, constructs are being extended beyond the evaluation of interests (to domains such as time management and teamwork), with new approaches to intervention (e.g., content validated feedback and action plans).

### The assessment of time management

**Schulze, Ralf** Inst. für Psychologie, Universität Wuppertal, Wuppertal, Germany

Adequate time management (TM) is regarded as an important success factor in various areas of application, including academic success. Many courses and online resources to guide students include some kind of time management assessment and/or recommendations for better TM practices. This presentation focuses on the structure, assessment and corresponding validity evidence of an instrument to assess individual differences in TM. It is concluded that a) TM can be reliably and validly assessed, b) TM is a promising construct for guidance purposes, and c) available TM assessment should not be used in selection contexts due to susceptibility to faking.

### Ready edge TM: Evidence and processes supporting a new educational guidance system

**Roberts, Richard D.** Research and Development, ETS, Princeton, USA **MacCann, Carolyn** Research and Development, ETS, Princeton, NJ, USA **Minsky, Jennifer** Research and Development, ETS, Princeton,

NJ, USA **Jackson, Teresa** Research and Development, ETS, Princeton, NJ, USA **Schulze, Ralf** Research and Development, ETS, Princeton, NJ, USA

Ready Edge™ is a web-based self-help tool designed to assist students plan and meet educational objectives. Ready Edge™ comprises assessments, feedback, and action plans for several noncognitive constructs, providing students with advisement that is tailored to their proficiency levels on these constructs. A first version includes measures and feedback concerning Time Management, Test Anxiety, Working with Others, Test-taking Strategies, and Career Planning. In this paper, we discuss data from several large scale studies involving over 2,000 college students that provides validity evidence for the assessments. We also discuss the processes and procedures used to derive content validated feedback and action plans.

#### Examining the relationships between personality, learning approaches and academic achievement: A longitudinal study

**Burton, Lorelle** Dept. of Psychology, Univ. of Southern Queensland, Australia

In a longitudinal research project we examined relationships between personality, learning approaches, and academic achievement. Data from 135 psychology undergraduates for a big five measure, an inventory for learning approaches and grade point average for year 1 (GPA1) and year 2 (GPA2) were recorded. Intellect positively predicted GPA1. The surface learning approach negatively predicted GPA1 and GPA2. Conscientiousness and intellect positively predicted use of the deep learning approach. Intellect and emotional stability negatively predicted use of the surface learning approach. Conscientiousness positively predicted use of the Strategic learning approach. The theoretical and practical implications of these findings are discussed.

#### Success in college: Threats to the utility of admission procedures and neglected guidance and placement issues

**Wilhelm, Oliver** IQB, Humboldt-Universität zu Berlin, Berlin, Germany

Training success and more specifically success in college are substantially predicted by measures of maximum behaviour. Although the magnitude of the relation between admission measures and college success is pivotal for institutional utility, many admission procedures are more driven by effort-avoidance, marketing, and legislature rather than the attempt to maximize predictive validity. Consequently admission decisions will be poorer than possible. We will review and reanalyze the consequences of various admission procedures and present recommendations. Additionally, we suggest paying more attention to placement and guidance issues in order to maximize learning and minimize attrition in college.

#### Predictive invariance, measurement invariance and fairness in selection

**Wicherts, Jelte** Dept. of Psychology, University of Amsterdam, Amsterdam, Netherlands **Borsboom, Denny** Dept. of Psychology, University of Amsterdam, Amsterdam, Netherlands **Romeijn, Jan Willem** Dept. of Psychology, University of Amsterdam, Amsterdam, Netherlands

The fair use of achievement tests for selection purposes demands that these tests are free from measurement bias (i.e., measurement invariant) with respect to sex and ethnic groups. Measurement invariance is defined in terms of measurement models, but measurement bias is studied often by verifying whether a test predicts some criterion (e.g., GPA) equivalently across groups. In this talk, we show that measurement invariance is not to be expected when predictive invariance holds. Next, we show that the use of a measurement invariant

test in selection does not imply that selection is necessarily fair across groups. We discuss the implications.

#### S-144: Coping with adolescence: Intercultural perspectives

**Petra Buchwald, Emilia Lucio Gomez Maqueo** (chair)

Adolescence corresponds with critical developmental occurrences in biological, emotional, social, and cultural domains. Teenagers thus live in a context of tremendous and often difficult personal change associated with many problems. Often they are unable to cope with these changes and at high risk for problem behaviors, e. g. substance abuse and suicide. The importance of developing coping skills for adolescents is often underestimated by stress research. However, young people's development of coping strategies and resilience are instrumental in helping them avoid problem behaviors. What adolescents need for social and emotional growth will be analysed in five different studies from different countries.

#### Coping with joblessness in adolescence: Psychiatric diagnoses in a preselected sample of German unemployed adolescents and young adults

**Reissner, Volker** Universität Duisburg-Essen, Rheinische Kliniken Essen, Essen, Germany **Rosien, M. Hebebrand, Johannes**

Unemployment in adolescents is related to psychological distress, such as increased levels of anxiety, depression, reduced self-esteem and life-satisfaction as well as alcohol or drug abuse. The Study on Unemployed with Psychosocial Problems Obtaining Reintegration Training under 25 (SUP-PORT25) assesses psychiatric disorders, health service utilization and attitudes towards unemployment in Germans aged 18-24. Almost all subjects referred for counselling via the case managers of the unemployment agency met criteria for at least one psychiatric disorder according to DSM-IV. To reduce psychological distress and increase chances of vocational rehabilitation, health behaviours of unemployed adolescents should be improved. Adequate treatment programs are urgently needed.

#### Teenagers coping with sexual abuse

**Schwarzer, Christine** Education and Counselling, Universität Düsseldorf, Düsseldorf, Germany **Buchwald, Petra** Education and Counselling, Heinrich-Heine University, Duesseldorf, Germany **Ringeisen, Tobias** Psychology, Univ. of Applied Sc. Münster, Münster, Germany

Empirical studies concerning coping of teenagers are at this point still at the beginning. New research shows however that the choice of reported coping strategies is influenced by sexual abuse that has been experienced. An evaluation of teenagers (N = 367) between the age of 13-17 showed that boys and girls can be differentiated regarding their social and individual coping strategies assessed by the German Strategic Approach to Coping Scale. A grouping of data also revealed that girls that have been sexually abused as opposed to those that did not report such a critical life event significantly decline their social coping and avoid reflection.

#### Religiosity and suicidal ideation among Arab adolescents

**Israelschvili, Moshe** School of Education, Tel Aviv University, Tel Aviv, Israel **Kakunda-Mualem, Helen** School of Education, Tel Aviv University, Tel Aviv, Israel

According to Terror Management Theory every person unavoidably faces the question of "why living?". This question is especially bothering for adolescents, who are in the age of establishing their self-identity. Israeli Arab adolescents completed questionnaires on stress, reasons for living, and

suicidal ideation. Findings showed that stress and lack of meaning in life foster suicidal ideation. However, the major sources of differences in suicidal ideation were related to religion. Nevertheless, the buffering role of religiosity against suicidal ideation was found only for Christen but not for Muslim Arab adolescents. Implications for counselling adolescents and features of future studies will be discussed.

#### Coping, distress, substance abuse and suicide risk in Mexican adolescents

**Lucio Gomez Maqueo, Emilia** Dept. of Psychology, National University Mexico, Mexico, Mexico **Hernandez-Cervantes, Quetzalcoatl** Dept. of Psychology, National University Mexico, Mexico, Mexico

From within a prevention program in Mexico City a stratified random sample of 1,000 preparatory students (ages 15-19) was screened for substance abuse and suicide risk. Substance abuse was measured with the Drug Abuse Screening Test for Adolescents (DAST-A), the WHO Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) and AUDIT. Coping was assessed following a qualitative approach using Seifge-Krenke's coping categories. Distress and suicide risk were assessed with the Adolescent Suicide Risk Inventory (Hernandez-Cervantes & Lucio, 2003). Different risk levels were considered to determine if adolescents could participate in a school-based intervention strategy or be referred to other programs.

#### Posttraumatic growth in Romanian adolescents following flood

**Kallay, Eva** Dept. of Psychology, Babes-Bolyai University, Cluj-Napoca, Romania

Objectives Investigate posttraumatic growth and positive emotional states in Romanian adolescent flood victims. Methods Our study involved 42 Romanian adolescent flood victims assessed regarding: level of depression (BDI), mood states and emotions (POMS), coping (B-COPE), posttraumatic growth (SRGS), and impact of event. Results Significant levels of growth were associated with instrumental support, emotional disclosure, acceptance, humor, and positive emotional states. Nevertheless, we found no significant differences in negative affective states. Conclusions Since 28.2% of the assessed adolescents reported significant levels of growth, our data may represent useful information for developing supportive socio-cultural environments for recovery after disaster by fostering specific coping mechanisms and positive affect.

#### S-145: Quality assurance for professional assessment by means of an international ISO-Norm: Developments and chances

**Lutz F. Hornke** (chair)

In March 2006, the German Institute for Standardization (DIN) submitted a proposal to the International Standardization Organization (ISO), to develop an ISO Standard for "Procedures and methods to assess people in work and organizational settings". The goal is to establish a worldwide standard for psychological assessment based on existing national norms like the DIN33430 and other professional standards like those published by SIOP, AERA-APA-NCME, EFPA, BPS, NIP or EAPA. This symposium discusses the needs for such a standard in regard to globally operating organizations / companies as well as the developments and chances of defining and establishing an ISO Standard.



### How an ISO standard in occupational assessment provision might improve quality

**Bartram, Dave** Research Dept., SHL Group Ltd., Thames Ditton, United Kingdom

Key to the success of the ISO standard will be its acceptance by the relevant communities of users of occupational assessment. In this presentation some ways in which the new norm might provide benefits both for consumers of occupational assessment services and their providers will be considered. It will also consider how the ISO standard might act as a general framework for integrating a range of other more specific and more detailed mechanisms for improving assessment quality: such as test user certification schemes and test quality review and registration procedures.

### Towards an international ISO-norm for professional assessment: Common themes and varieties among existing professional standards

**Hornke, Lutz F.** Inst. für Psychologie, RWTH Universität Aachen, Aachen, Germany **Kersting, Martin**

As a starting point for the ISO initiative, we conducted a systematic review of existing standards for professional assessment like those published by AERA-APA-NCME, DIN, EFPA and ITC. Our review revealed, that these standards have a great deal in common but also some notable differences in both scope and wording of specific requirements. Phrasing of requirements differed on two key dimensions: abstract vs. detailed and normative vs. informative. We discuss how differences between standards are rooted in their cultural and professional context and how universal themes among standards can be integrated into an international consensus for an ISO norm.

### Themes in developing an ISO standard for work-related psychological assessment

**Born, Marise** Inst. of Psychology, Erasmus University Rotterdam, Rotterdam, Netherlands

In a globalized and digitalized world, the necessity of developing an ISO Standard for the work-related assessment of people has become obvious. Tests nowadays are easily available on the internet and more providers of assessment services have become active. By means of a process-oriented view on assessment, several quality-enhancing topics are reviewed which are intended to be to the benefit of the different stakeholders. Among these are the individuals who are assessed, the assessment providers and the assessment users.

### Documentation of validity in professional assessments

**Sjöberg, Anders** Dept. of Psychometric, Assessment International, Stockholm, Sweden

This standard should contain recommendations for procedures and methods used in the psychological assessment of people for work-related purposes. The development of an international ISO-Standard will increase the quality of assessments and encourage an evidence-based approach to assessment. The ISO-Standard should focus on the subsequent decisions that follow the assessments. The interpretation of the assessment should gain support in the documentation provided to the clients. The development and purpose of this ISO-Standard will be discussed and examples of how it can be implemented in organizations.

### The international ISO-norm: Chances from the perspective of psychology-practitioners

**Lang, Fredi** Referat Fachpolitik, BDP e.V., Berlin, Germany

Reasons why the German professional organizations is pursuing an ISO-Standard are described and hypotheses on how the ISO-Standard might foster the quality of psychological assessment in practice are discussed.

### S-146: Is there a best way to study acculturation? An examination of conceptualization and measurement of acculturation

**Saba Safdar** (chair)

In this symposium we examine and compare differences between various conceptualizations of acculturation. Researchers utilize different acculturation conceptualization and measurement. This inconsistency in the literature has yielded different distributions of participants across four acculturation strategies. In other words, different ways of measuring acculturation produce different results and, often, there is poor inter-measure agreement between various conceptualizations. The presenters in this symposium examine these acculturation conceptualizations and their relations with measures of acculturation adaptation. The presenters discuss their empirical data with a particular emphasis on the distinction between these conceptualizations, their relations, and the different results that they produce.

### Ask a different question, get a different answer

**Berry, John** Dept. of Psychology, Queen's University, Kingston, Canada **Sabatier, Colette** Dept. of Psychology, Université de Bordeaux, Bordeaux, France

There are two dimensions in the acculturation strategies framework (the degree to which acculturating individuals value their heritage culture and identity; and seek relations with persons in the larger society), allowing four acculturation strategies: assimilation, integration, separation and marginalisation. Alternative operationalisations of the second dimension refer to cultural identity, and adoption of the larger society's culture. We compare the distributions of the four acculturation strategies using all three operationalisations of the second dimension. We conclude that when the questions differ, the outcomes are also likely to. These differences do not undermine the validity of the original operationalisation of the framework.

### Method effects in the assessment of acculturation orientations are real, but small

**van de Vijver, Fons** Dept. of Psychology, Tilburg University, Tilburg, Netherlands

An overview is given of methods to assess acculturation orientations. A study is then described in which three methods, based on a two-dimensional acculturation, are compared in a group of immigrants in the Netherlands. It is concluded that there is evidence for small method effects.

### Perceptions of immigrant children on their parents' acculturative strategies

**Kurman, Jenny** Dept. of Psychology, University of Haifa, Haifa, Israel **Roer-Strier, Dorit** Social Work, Hebrew University of Jerusalem, Jerusalem, Israel  
Acculturation from the child's point of view is investigated. Immigrant children's perceptions of their parents' intents to socialize them into the new culture, or maintain the socialization goals of the culture of origin, as well as the extent to which parents see themselves as effective socializing agents in the new culture are assessed as predictors of immigrant parents' acculturative strategies. The Roer-Strier's four metaphors (the Kangaroo, Cuckoo bird, Chameleon and Butterfly) are studied quantitatively. The relative frequencies of each strategy, as well as their differential relations with adjustment illuminate acculturation processes of children of families who immigrated to Israel.

### Exploring acculturation conceptualizations with a sample of international students in Canada

**Safdar, Saba** Dept. of Psychology, University of Guelph, Guelph, Canada

In the present study, three acculturation conceptualization are examined among international students in Canada. The study has a longitudinal design in which online questionnaires were administered at three points over a two year period. Adaptation of students was measured in relation to psychological well-being, psycho-physical distress, and socio-cultural difficulties. The results of the study indicated that the method used for measurement of acculturation had a considerable effect on patterns of results across outcomes.

### Do you get what you ask for? An examination of three operationalizations of acculturation with immigrants in rural and urban Canada

**Lewis, Rees** Psychology, University Of Guelph, Guelph, Canada **Dupuis, Darcy** Dept. of Psychology, University of Guelph, Guelph, Canada

In the present study, three popular operationalizations of acculturation: Berry's (1980) framework for intercultural contact, Ward and Kennedy's (1994) operationalization of ethnic and host culture adoption, and the ethnic identity operationalization (Phinney & DeVich-Navarro, 1997) were examined. Participants in the study were 212 immigrants to Canada living in rural and urban settings. Acculturation attitudes of the participants were measured using Kim's (1984) 16-item Acculturation Attitudes Scale. Additionally, three different kinds of adaptation were measured: psychological well-being, distress, and socio-cultural difficulties. The three acculturation conceptualizations yielded different distributions of participants across acculturation strategies and had different relations with the three outcome variables.

### S-147: Psychology of entrepreneurship - current research and trends: Personal resources and entrepreneurial success (Part I)

**Marjan Gorgievski, Ute Stephan** (chair)

Recognition of the importance of entrepreneurship for social and economic well-being leads to the questions of how we can attract more people to entrepreneurship and how we can develop entrepreneurial potential (e.g., GEM, 2006). These questions traditionally fall within the field of Work and Organizational Psychology. In two symposia, we want to present novel trends of today's psychology of entrepreneurship research. This is part one of the symposium, which will focus on personal resources (e.g., resiliency beliefs, mood, personal health), both as predictors of entrepreneurial success, and as results of entrepreneurs' job characteristics.

### Positive psychological capital and process of business start-up

**Laguna, Mariola** Inst. of Psychology, Catholic University Lublin, Lublin, Poland

The present study defines entrepreneurship as a goal attainment process and concentrates on the role of positive beliefs within different stages of the process: goal commitment, entrepreneurial intentions and business start-up. More specifically, the role of self-esteem, self-efficacy, optimism, and hope was analysed. Findings from three studies are compared: (1) 332 unemployed attending an entrepreneurship preparation training programme, a longitudinal study; (2) 569 randomly chosen unemployed; (3) 240 adults. Structural equation modeling revealed a web of relationships that impact entrepreneurial intentions and venture creation. Goal commitment had a direct effect on

entrepreneurial intentions, and mediated the effects of positive beliefs.

#### Mood and decision-making: A diary study among starters

**Gorgievski, Marjan** Industrial and Organisational, Erasmus University Rotterdam, Rotterdam, Netherlands **van Delden, Martijn** IO Psychology, Erasmus University Rotterdam, Rotterdam, Netherlands

The purpose of this diary study among 67 business starters was to test the influence of positive and negative mood on decision-making. Motivation and scope of attention were included as possible mediating variables. Results of mixed linear model analyses showed a strong positive relationship between mood and motivation. However, no relationship between motivation and decision effectiveness was found. Only negative mood, and not positive mood, predicted entrepreneurs' scope of attention. As predicted, negative mood narrowed the scope of attention. In turn, this negatively influenced decision effectiveness and goal attainment.

#### Fear and primary appraisal in the entrepreneurship context

**Spörrle, Matthias** Dept. for Psychology, Ludwig-Maximilians University, München, Germany **Welpe, Isabell** Munich School of Management, LMU München, München, Germany **Breugst, Nicola** Wirtschaftswissenschaften, University of Duisburg-Essen, Essen, Germany **Scapin, Kathrin** Munich School of Management, LMU München, München, Germany

Using cognitive theories of emotion, we examine the impact of cognitive and emotional processes on the evaluation and exploitation of entrepreneurial opportunities. We utilized a questionnaire experiment with 344 respondents to analyse the impact of profit margin, personal investment, time to profit, and probability of success on entrepreneurial evaluation and exploitation in a between subjects design. Results indicate that cognitive appraisal is a central determinant of entrepreneurial activity (especially with regard to exploitation) which also fully mediates the relationship between situational characteristics and entrepreneurial behaviour and that fear moderated the relationship between opportunity evaluation and exploitation.

#### Personal, social and workplace resources of small business owners and their relations to well-being

**Dej, Dominika** Dresden, Germany **Stephan, Ute** Work & Organisational Psycho, Philipps-University Marburg, Marburg, Germany **Richter, Peter Georg** Work & Organisational Psycho, Technische Universität Dresden, Dresden, Germany

Research on entrepreneurs' well-being has yielded inconsistent results. High work-load, job demands, and long working hours may lead to negative health outcomes. However, entrepreneurs may also experience high job control and autonomy, which may have a positive impact on their well-being (Theorell & Karasek, 1996). To gain a better understanding of the issue, we employed Conversation of Resources Theory (Hobfoll, 1988, 2001). We argue that entrepreneurs' personal, social, and workplace resources compensate potential threats to their well-being. The results of a study, including 120 German entrepreneurs, reveal that high self-efficacy, personal initiative, and self-management skills are important factors in entrepreneur's well-being.

#### Entrepreneurs' health compared to other occupational groups in a national representative sample

**Roesler, Ulrike** Inst. für Psychologie, Universität Marburg, Marburg, Germany **Stephan, Ute** Arbeits-Organis.-Psychologie, Philipps-Universität Marburg, Marburg, Germany **Jacobi, Frank** Klinische Psychologie, Universität Dresden, Dresden, Germany  
Prior research has found entrepreneurs to have active jobs. But do they benefit from the potential positive health consequences when compared to other occupational groups? In a national representative sample blood pressure was measured during a clinical examination. Somatic and mental health was assessed with structured clinical interviews. Whilst entrepreneurs showed more favourable blood pressure, lower prevalence of hypertension, mental morbidity, and somatoform disorders, they were not better off concerning other somatic and mental disorders. Referring to the Vitamin model it is suggested that entrepreneurs' jobs could lead to self-exploitation, and that self-management skills moderate the consequences of active jobs.

#### S-148: Workplace bullying: Antecedents, consequences and interventions (Part II)

**Herman Steensma, Stig Berge Matthiesen** (chair)

Aggression is one of the most troubling issues facing workers. It can take several forms: homicide, physical assaults, threats, harassment. A distinction should be made between external aggression, caused by organizational outsiders, and internal aggression, i.e. bullying/mobbing committed by colleagues, superiors, or subordinates. To develop successful anti-aggression policies, it is necessary to gain insight into the network of causes and consequences of aggression in the workplace. In the symposium special attention will be paid both to the causes and consequences of workplace bullying and to policies to apply the knowledge to improve the quality of work and social relations.

#### External aggression, workplace bullying, frustration and the Quality of Working Life (QWL)

**Steensma, Herman** Soc. and Organizat. Psychology, Leiden University, Leiden, Netherlands  
Objectives. To explain relations between external aggression, bullying, absenteeism, turnover, workplace characteristics and frustration. Methods. Employees of hospitals (N = 226) filled out questionnaires with items on leadership, job characteristics, conflict, and aggression between patients, employees, family members of patients. Results. Frustrating job characteristics predicted bullying; bullying predicted absenteeism and turnover. Frequency of aggression toward employees by patients and their family members was higher than the frequency of bullying acts among employees. Bullying correlated relatively strongly with external aggression. Conclusions. Both bullying and external aggression can be reduced by paying attention to QWL. Bullying is an indicator of low QWL.

#### Work environment characteristics, mobbing, satisfaction and absenteeism

**Lopez Cabarcos, M. Angeles** Adm. y Direccion de Empresas, Santiago de Compostela Univer., Lugo, Spain **Vázquez Rodríguez, Paula** Adm. y Direccion de Empresas, Santiago de Compostela Univer., Lugo, Spain **Montes Piñeiro, Carlos** Psicología, Santiago de Compostela Univer., Santiago de Compostela, Spain  
ABSTRACT: Objective: To characterize the mobbing processes in a services organization, analyzing some precedent variables (organizational) and some consequence variables. Subjects: 63 persons belonging to a multinational organization of the sector of the hotel and restaurants sector. Methodology: Study of case Results: The obtained results show the importance of the work environment (healthy),

to prevent mobbing processes, influencing these, in turn, variables as the labour satisfaction or the absenteeism. Conclusions: The processes of mobbing present a series of characteristics about which it is difficult to generalise, which supports the theory that its cause cannot be found in one single factor, but in a multiplicity of factors which operates simultaneously.

#### Victim or Gelotophobic?: How far the pathologic fear of being ridiculous can make people feel victimized in a workplace conflict

**Ege, Harald** Mobbing e Stress, PRIMA Associazione Italiana, Bologna, Italy

Goals. According to our data (ca 4000 cases), many self-declared victims of workplace conflict are not really subjected to persecution, but just feel victimized (paranoia, manic depression, etc). We assumed that some cases may not suffer from psychiatric pathology, but from a specific adaptive disorder: gelotophobia (definition by Ruch, Zurich University). Method. A group of 50 self declared mobbees was tested with the "LIPT", the "Geloph 46" and guided interviews. Gelotophobia diagnostic criteria and the presence of real workplace conflicts were verified. Results and discussion. Hypotheses were confirmed. Treatment of many victims should be adapted.

#### The downloading mobbing process at the workplace

**Tinaz, Pinar** Labour Econ. Indust. Relations, Marmara University, Istanbul, Turkey **Gök, Sibel** Labour Econ. Indust. Relations, Marmara University, Istanbul, Turkey

Objectives. Goals are to determine the mobbing behaviors in downloading mobbing process in Turkey and to reveal the most widespread mobbing behaviors. Methods. A field research was done concerning behavioral signs that refer to mobbing in downloading mobbing process. Data from employees (N = 400) in the banking sector were analyzed by standard methods. Results. The behavioral signs according to gender, education, working period within the subsidiary, age, marital status variables are comparatively examined. Conclusions. Continuous criticism of job's outcome and sarcastic speech as the most frequent behavioral signs of downloading mobbing are determined.

#### Is workplace conflict and workplace bullying the same?

**Matthiesen, Stig Berge** Psychosocial Science, University of Bergen, Bergen, Norway **Einarsen, Ståle** Faculty of Psychology, University of Bergen, Bergen, Norway **Skogstad, Anders** Faculty of Psychology, University of Bergen, Bergen, Norway

A national representative survey study of workplace bullying was conducted (n = 2539). Workplace bullying was mapped by a 22 items instrument which measure negative acts (NAQ). Interpersonal conflicts were measured by a new 4 items instrument, which explores respectively interpersonal conflicts and conflicts of interests. A significant association were found between workplace conflicts and workplace bullying. However, factor analysis revealed that workplace conflicts and workplace bullying are split into separate factors. The analysis indicates that being exposed to conflicts with leaders can be seen as something different from being exposed to conflicts with colleagues (separate factors were found).

#### Long term effects of a bullying prevention program in hospitals

**Pries, Andrea** Inst. für Arbeitspsychologie, Universität Hamburg, Hamburg, Germany **Roscher, Susanne** Inst. für Arbeitspsychologie, Universität Hamburg, Hamburg, Germany **Ostendorf, Pamela** Zeh, Annett  
The objective of this study was to evaluate the long term effects of a bullying prevention program that



was conducted in three German hospitals ( $n = 115$ ). The research design included summative and formative evaluation. Having successfully established work - internal conflict counselling services is an achievement of the project. Further results showed some ambiguous effects of the intervention that can be accounted for by various implementation problems. Poor dissemination of information and a lack of management support impeded the efficacy of the measures. Particular methodological issues concerning evaluation and issues raised by the project will be discussed.

#### **S-149: Mechanisms of adaptation: Determining the specific and shared effects of resources, strategies and beliefs**

**Daniela Jopp** (chair)

Throughout the lifespan, individuals attempt to achieve positive outcomes such as high functioning or quality of life. This effort is challenged when confronted with specific difficulties or age-related losses. The present symposium investigates different factors which help the individual in goal pursuit and coping with challenges. The present symposium offers research on three groups of factors: resources – basic individual characteristics such as health, social support, or cognitive structures as self-complexity –, strategies – such as coping, life- or self-management strategies – and beliefs such as perceived control. Findings demonstrate unique and interactive protective effects, suggesting further investigation of concurrent effects for adaptation.

#### **Developmental trajectories for ego-development across the adult lifespan: Evidence from a 12-year longitudinal study**

**Grühn, Daniel** Inst. für Psychologie, Universität Genf, Genf, Switzerland **Diehl, Manfred** Center on Aging, Colorado State University, Fort Collins, USA **Lumley, Mark** Department of Psychology, Wayne State University, Detroit, USA **Labouvie-Vief, Gisela** Department of Psychology, University of Geneva, Genf, Switzerland

Self-complexity is considered as a resource to buffer stressful events. We report data about the developmental trajectory of self-complexity in adulthood and old age measured by Loevinger's ego-development. Data stem from a 12-year longitudinal study (1992-2004) with a lifespan sample from 10 years to 87 years at T1 ( $M = 44.7$  years,  $N = 400$ ). Analyses (cross-sectional and longitudinal) revealed that ego-development increased considerably until middle-adulthood and reached a peak in late middle-adulthood (40 to 60 years). In old age, ego-development showed small but significant declines. We also report correlates (e.g., well-being) of intraindividual differences and intraindividual change in ego-development.

#### **Complex thinking as a resource in middle-aged and older adults**

**Leipold, Bernhard** Inst. für Psychologie, Universität Hildesheim, Hildesheim, Germany

Traditionally, complex thinking is viewed as a central mean of self-regulation and coping. According to the dual process-model of assimilation and accommodation (Brandstädter, 1998), complex thinking facilitates accommodative flexibility and enhances disengagement from blocked goals. One hundred and forty eight participants ( $M = 61.0$  years) completed two different measures of complexity, assimilative persistence and accommodative flexibility, and depression. Analyses revealed that subjects higher in complexity show a stronger negative relationship between accommodation and depression. Furthermore, complex thinking seems to be a buffer against depressive mood for older adults. Findings are discussed within the framework of the dual process model.

#### **Valuation of life in old and very old age: Shifting importance of resources**

**Rott, Christoph** Inst. für Gerontologie, Universität Heidelberg, Heidelberg, Germany **Jopp, Daniela** School of Psychology, Georgia Inst. of Technology, Atlanta, GA, Germany **Oswald, Frank** Inst. für Psychologie, Universität Heidelberg, Heidelberg, Germany

How much old and very old individuals value their existence has been investigated in the context of quality of life and end of life decisions. Several resources were found to contribute to valuation of life (VOL, Lawton, 1999). The present study investigated whether the importance of resources for VOL varies depending on age, assuming that old and very old age are characterized by differential challenges. Findings showed that for the young-old, the role of health was especially strong, whereas social factors became more significant in the old-old group, suggesting positive adaptation to changing resources far into very old age.

#### **Is better self-management ability associated with smaller resource deficits and with higher well-being later in life?**

**Steverink, Nardi** Dept. of Health Psychology, University Medical Center, Groningen, Netherlands Self-management ability (SMA) can be conceptualized as a person's generative capacity (i.e. behaviors and beliefs) to achieve and maintain important resources (e.g., health, social relationships). Therefore, better SMA is likely to be related to lower levels of resource deficits, and, indirectly, to higher levels of subjective well-being. Results ( $N=439$ , aged 65 and older) showed that SMA was indeed negatively related to resource deficits, and both directly and indirectly – via lower resource deficits – to life satisfaction, positive affect and negative affect. It is concluded that better SMA seems to play a role in successful aging by facilitating resource maintenance and subjective well-being.

#### **Adaptation in adulthood: Which role play resources, strategies and beliefs for well-being?**

**Jopp, Daniela** Institute of Gerontology, Heidelberg University, Heidelberg, Germany **Hertzog, Christopher** School of Psychology, Georgia Inst. of Technology, Atlanta, GA, USA

How well individuals are able to solve everyday tasks and deal with difficulties is related to several psychological factors. The present study investigates how personal resources, life-management strategies, and control beliefs relate to quality of life based on a sample of 256 young, middle-aged, and older individuals. Structural equation models showed that resources had direct effects on well-being, but also indirect effects mediated by strategies and beliefs. Beliefs also moderated the relation between resources and strategies, as well as between strategies and well-being. Taking the functional interplay between resources, strategies, and beliefs into account adds to our understanding of adaptation.

#### **S-150: Advances in statistical applications for developmental research**

**Christopher Hertzog** (chair)

This symposium presents recent advances in statistical methods for research in life-span development, including the issues of (1) measurement of change, (2) separating intraindividual variability from long-term intraindividual change, (3) separating developmental change from mortality and morbidity processes, (4) use of multi-level models for capturing fixed and random effects of aging, and (5) developmental design issues. The papers highlight the compelling need for statistical applications grounded in theoretical and methodological as-

sumptions about the course and nature of human development and other influences on psychological change.

#### **Placing aging individuals within an aging (and dying) population: A need to connect psychology and demography**

**Ram, Nilam** Human Dev. and Family Studies, Pennsylvania State University, University Park, USA Research on aging is focused on understanding how individuals change with age and on changes occurring in an aging population. Despite this dual focus, individual-based longitudinal studies are rarely coupled with population- or cohort-level studies, the mainstay of the demography and sociology of aging. The purpose of this paper is to (1) highlight the need for integration across disciplines, (2) illustrate how individual-level change trajectories might be placed within cohort-level changes, and (3) encourage further innovation of modeling, analysis, and data presentation strategies by which we might develop a more comprehensive view of the nature of aging.

#### **Cross-sectional age variance extraction: What's change got to do with**

**Lindenberger, Ulman** Zentrum für Lebenserwartung, Max-Planck-Institut, Berlin, Germany

Psychologists often use cross-sectional age variance extraction (CAVE) to test hypotheses about the number and identity of causes driving behavioral development, with age as the exogenous variable, indicators of developmental mechanisms as mediators of age-related variance, and indicators of to-be-explained developmental phenomena as target variables. By decomposing cross-sectional associations in terms of bivariate growth, we show that longitudinal change in a mediator variable sharing large amounts of age-related variance with the target variable does not have to correlate with longitudinal change in the target variable. We conclude that CAVE provides invalid approximations to the dimensionality and causes of behavioral change.

#### **A multilevel factor analysis perspective on development**

**Zimprich, Daniel** Inst. für Gerontopsychologie, Universität Zürich, Zurich, Switzerland

Objective: To model and structure within-person multivariate longitudinal cognitive changes in old age. Methods: Sample. 221 individuals from the Bonn Longitudinal Study on Aging followed up to 19 years across 7 measurement occasions. Analysis. Multilevel Confirmatory Factor Analysis. Results: 1. More variance between persons than within persons. 2. Stronger indicator variable correlations between than within persons. 3. A model of three factors (fluid and crystallized intelligence, speed). 4. Equal loadings and equal factor correlations at both levels of analysis. Conclusions: Between-person differences and within-person cognitive changes exhibit the same structure. Hence, they form a functional unity in Cattellian sense.

#### **Comparisons of statistical power for single-indicator and multiple-indicator latent growth curve models**

**von Oertzen, Timo** Life-Span Developm. Psychology, Max-Planck-Institut, Berlin, Germany

We compare the power to detect individual differences in change in latent models with multiple indicators to latent models with one indicator per measurement. We demonstrate the effect of latent residual variance and measurement error to power and give a necessary and complete condition for identical power for models with different numbers of indicators and measurement error. With equally reliable indicators, pooling over  $K$  indicators with a measurement error of  $\sigma^2$  is equal to the power of a single indicator with measurement error  $\sigma^2/K$ .

However, if the indicators are of different reliabilities, pooling causes a loss of power.

#### Age differences in cognitive performance variability: Modeling the relation of mean and variance

**Schmiedek, Florian** Center for Lifespan Psychology, Max-Planck-Institut, Berlin, Germany

In studies on age differences in cognitive performance variability, strong relations of intraindividual means and variances often lead researchers to perform some linear adjustment of variability measures with measures of mean performance. The underlying assumption of a general linear relationship in this context is questioned and alternative approaches, e.g. variance heterogeneity and overdispersion multilevel models, which allow flexibly modeling variance as a (nonlinear) function of mean performance and other predictors, are discussed. The COGITO study, in which 100 younger and 100 older participants practiced a battery of cognitive tasks over 100 daily sessions, is used to illustrate these methods.

#### S-151: Effects of the euro changeover on consumer behavior

**J. Frederico Marques, Tommy Gärling** (chair)

This symposium addresses a number of problems consumers face in their daily economic transactions after the euro changeover or, more broadly, when dealing with a foreign currency. These problems include: learning the value of money in a new currency and the associated mistakes, in particular the effects of the "money illusion"; adaptation to a new currency with special emphasis on conversion strategies and the role of the old currency; and understanding price changes in the new currency with special emphasis on the role of price expectations. Implications for future research and consumer policy will be highlighted.

#### The "Euro Illusion": Illusion or fact?

**Gamble, Amélie** Dept. of Psychology, Göteborg University, Göteborg, Sweden

The euro changeover elicited several studies of consumers' conversion strategies, price knowledge, choice, and purchases, using longitudinal surveys, interviews, and controlled experiments. These studies show that the nominal value of the new currency influence the subjective value of money, a bias termed the "euro illusion". Explanations draw on the numerosity heuristic, the anchoring-and-adjustment heuristic, and biased conversion strategies. Here the argument is made that accuracy-effort trade-offs influence the size of the euro illusion. This has been shown in studies varying task importance, time constraints, familiarity and complexity of the conversion strategy, mood, and attitude towards the country or the currency.

#### Emotional factors in currency perception

**Tyska, Tadeusz** Dept. Economic Psychology, LKAEM, Warsaw, Poland **Przybyszewski, Krzysztof** LKAEM, Warsaw, Poland

People may associate certain currencies with emotional meanings and deeply rooted convictions. Sometimes they become attached to a currency and this attachment may influence their money behavior and price perception. Also, such emotional attachment may cause the resistance to currency changes (e.g. entering euro-zone). In this paper we focus on the influence of positive affect attached to a currency on perception of prices in this currency

#### Consumer adaptation strategies: From Austrian shilling to the euro

**Kirchler, Erich** Inst. Wirtschaftspsychologie, Universität Wien, Wien, Austria **Hofmann, Eva** Inst. Wirtschaftspsychologie, Universität Wien, Wien, Austria **Kamleitner, Bernadette** School of Business/Management, Queen Mary, Univ. of London, London, United Kingdom

On 1st January 2002, in 12 countries of the European Union euro notes and coins replaced existing national currencies. Citizens had to learn to handle new coins and notes, to evaluate values in the new currency, and to adapt their spending behaviour. Data on how these tasks were performed by Austrians are presented. In particular, Austrian consumers applied four different strategies to establish price intuition for the euro: (a) conversion strategy, (b) intuitive strategy, (c) anchor strategy, and (d) marker value strategy. Data on these strategies shows that their application (a) varies across socio-demographic characteristics, (b) differs with purchase situations, (c) relates to euro attitudes, and (d) changes over time.

#### The euro illusion in consumers: Price estimation

**Del Missier, Fabio** Dept. of Psychology, University of Trieste, Trieste, Italy **Bonini, Nicolao** Dept. of Cognitive Sciences, University of Trento, Rovereto, Italy **Ranyard, Rob** Dept. of Psychology, University of Bolton, Bolton, United Kingdom

The euro illusion is a transient phenomenon that consists of currency-related asymmetries in the intuitive judgment of product prices made by consumers. In our communication, we will initially present a review of the findings obtained in studies of price estimation, including the result of our own cross-country research involving Italy and Ireland. Then, we will analyze the potential explanations of the euro illusion in price estimation, focusing in particular on the anchoring-and-adjustment accounts. Finally, we will discuss the complex interplay between structural factors (e.g., the currency exchange rate) and psychological mechanisms that produce long-lasting difficulties for consumers after a monetary changeover.

#### The eurochangeover and numerical intuition for prices in the old and new currencies

**Marques, J. Frederico** Centro de Invest. em Psicologia, Fundacao Uni. de Lisboa, Lisboa, Portugal

I examine how numerical intuition for prices in euros and in the Portuguese currency escudos developed in Portugal after the euro changeover from estimates of prices collected in the two currencies and at four different times from November 2001 to April 2004. Results for euros show that estimates become progressively more accurate by a process that is related to purchase frequency and suggest that the adaptation is a very slow process. Results for escudos show that the former currency is not simply forgotten but remains as a general benchmark for an extended period.

#### The EURO changeover and the factors influencing perceived inflation

**Belting, Julia** Inst. für Psychologie, Techn. Universität Berlin, Berlin, Germany **Jungermann, Helmut** Institute of Psy. & Ergo., Technical University Berlin, Berlin, Germany **Brachinger, Hans Wolfgang** Department of Quant. Economics, University of Fribourg, Fribourg, Switzerland **Grinberg, Katarzyna** Department of Quant.Economics, University of Fribourg., Fribourg, Switzerland **Zacharias, Elisabeth** Institute of Psy. & Ergo., Technical University Berlin, Berlin, Germany

In Germany perceived inflation increased after the euro changeover. The official measure of inflation (H CPI) is not adequate for measuring perceived inflation. Brachinger suggests an alternative Index of Perceived Inflation (IPI) to better account for this observation. The IPI is based on several theoretical assumptions derived from Prospect

Theory. In an experimental study we investigated the influence of two factors: purchase frequency and loss aversion. Two additional factors were included. Judgments of inflation were assessed with three different methods. The study provides empirical support regarding the role of the hypothesised factors determining perceived inflation.

#### Biased price perception after the introduction of the euro: The teuro-illusion

**Schulz-Hardt, Stephan** Inst. für Psychologie, Universität Göttingen, Göttingen, Germany **Traut-Mattausch, Eva** Department of Psychology, Ludwig-Maximilians-University, Munich, Germany **Greitemeyer, Tobias** Department of Psychology, Ludwig-Maximilians-University, Munich, Germany **Frey, Dieter** Department of Psychology, Ludwig-Maximilians-University, Munich, Germany

The population in Germany as well as other European countries perceived high price increases due to the introduction of the Euro, which stood in contrast to official statistics about price developments and inflation rates. We present evidence from an experimental research program showing that in Germany and Austria the changeover from DM (or Schilling) to Euro led to illusionary price rises: Real price rises were overestimated, stable prices were perceived as having been raised, and a decrease of prices was misperceived as price stability. Expectations of rising prices are shown to be the main cause of this price rise illusion.

#### S-152: Embodiment

**Sabine C. Koch, Simone Schütz-Bosbach** (chair)

The traditional problem of body and mind has experienced a revival in recent years. Contrary to Cartesian dualism, recent advances in psychology and neuroscience take the body to be central in the understanding of higher cognitive functions (embodied cognition). Embodiment theories operate on Merleau-Ponty's phenomenological philosophy and a model of knowledge representation that assumes a sensorimotor format of any cognitive activity (Barsalou, 1999). The symposium brings together researchers from various psychological areas with the aim to discuss their findings on body representation, mirror neurons, embodied spatial cognition, body movement, cultural embodiment, and their implications for the body-mind problem.

#### The role of motor skills in action perception

**Knoblich, Günther** Dept. of Psychology, Birmingham University, Birmingham, United Kingdom

Embodied Cognition has many facets. One important aspect is the ability to effortlessly perceive others' actions in the light of one's own action repertoire. Comparing the perception of experts and non-experts in a particular motor skill is one important way of studying this ability. I will provide an overview of recent behavioral and brain imaging studies from different labs that have addressed the issue of how motor skills affect perception. These studies suggest that learning a new motor skill does not only affect the human mirror system, but also basic perceptual processes such as visual discrimination and pitch perception.

#### Embodied spatial cognition

**Tversky, Barbara** Dept. of Psychology, University of Stanford, Stanford, USA

People have 3 primary axes, two asymmetric, one from head to foot and another from front to back, and a third more or less symmetric axis from left to right. They live in a world with three axes, one of which, the up-down, is asymmetric due to gravity. These facts about their bodies and the world affect people's perception of the world and their behavior in it, and in turn, bias spatial thinking as well as metaphoric spatial thinking. A range of empirical



research supporting embodied and situated spatial cognition will be described.

#### Dynamic movement feedback

**Koch, Sabine C.** *Inst. für Psychologie, Universität Heidelberg, Heidelberg, Germany*

Our bodies move in the three dimensions of space, time and gravity. This series of experiments varies aspects of these basic dimensions of movement to investigate dynamic body feedback. It focuses on the influence of movement quality (here: sharp vs smooth movement rhythms), and movement shape, i.e., movement related to the three primary axes (here: approach vs avoidance motor behavior) on affect, attitudes, and cognition. Results suggest systematic influences of movement rhythms on affect, of movement shape on attitudes, and a moderating influence of rhythms on the impact of shape on attitude formation.

#### Is the body image influenced by primary sensorimotor experiences?

**Schütz-Bosbach, Simone** *Cognitive and Brain Sciences, Max-Planck-Institut, Leipzig, Germany*

The term "body image" refers to the conscious visual representation of one's own body, including the structural and geometric details as well as visual and affective aspects. The scientific concept corresponds roughly to the everyday use of the term, namely as the way we see ourselves when we look in a mirror. However, so far little is known on how we learn the (canonical) structure of our own body. A series of experiments will be presented which investigated the possibility that primary sensorimotor experiences may influence the mental representation of one's own body structure.

#### The conceptualization of body parts

**Majid, Asifa** *Dept. of Psycholinguistics, Max Planck Institute, Nijmegen, Netherlands*

According to embodiment theories mental content derives from the body – that we have the concepts we do is due to the particularities of the bodies we have. But little attention has been paid to how people conceptualize the body in the first place. Rather, there is widespread consensus that body parts are based on perception, and thus universal. Cross-cultural experiments, however, show that the body is not conceptualized in the same way by people speaking different languages. The relationship between linguistic and non-linguistic representations of the body need to be re-examined in light of this evidence.

#### Embodiment in cultures of honour

**Ijzerman, Hans** *Leerstoel Semin, Utrecht University, Utrecht, Netherlands*

We tested the hypothesis that cultural orientations have an embodied component. In particular, we investigated the embodiment of honor in two studies, showing that values related to male respect and female 'purity' are affected by erect versus slumped posture directly for individuals from honor cultures, and for individuals from individualist cultures after an honor prime. A third experiment showed that only individuals from honor cultures walked more upright after an honor prime than after a control prime. This demonstration of cultural embodiment is a first experimental support for anthropological suggestions of forming the culturally situated social mind via physical experience.

#### The subtle effects of writing direction on the perception of human action

**Suitner, Caterina** *DPSS, University of Padova, Padova, Italy*

The embodiment approach not only implies that cognition is affected by the body's momentary state, but also by its habitual interaction with its

environment. One such habitual interaction is writing and reading which, in our culture, evolves from left to right. We propose that, as a result, people develop a left-right scheme for action, such that action observed with a left-right (rather than right-left) trajectory is (a) imagined and identified with greater ease, (b) perceived as more powerful and impactful. Empirical evidence, including applications to consumer psychology, will be presented.

#### S-153: Work design for an aging workforce

**Ekkehart Frieling, Jürgen Wegge** (chair)

In many countries the proportion of elderly employees is continuously increasing. This leads not only to difficulties within social security systems but also to problems within organizations as the whole work force is aging and age diversity is also rising. This symposium investigates the relationship between working conditions and aging processes. The understanding of this link is an important precondition for the implementation of age-differentiated work designs, i.e. age-specific distribution of tasks, age-specific design of work equipment and age-specific personnel development strategies. Recent findings about the effectiveness of such interventions with respect to performance, stress and strain are presented.

#### Age-differences in work-related motives:

##### Chronological age versus future time perspectives

**Grube, Anna** *Organisationspsychologie, Universität Münster, Münster, Germany* **Hertel, Guido** *Psychology III, University of Muenster, Münster, Germany*

Considering age-related differences in work motivation is important for successful human resource management, particularly in light of an ageing workforce. Age-related differences in work-related goals, needs, and interests were explored in an online study (N = 358). Age-related differences in the ranking of these motives were observed as expected. However, most of these differences disappeared when participants' future time perspectives were controlled (future work time perspective, date of retirement, work-activities planned after retirement). The results emphasize the importance of perceived time perspectives in comparison to chronological age of employees.

#### Age and role clarity in the relations between demands, resources and psychological well-being: Results of a complete 2-wave study

**de Lange, Annet** *Experim. and Arbeidspsychology, Rijksuniversiteit Groningen, Groningen, Netherlands* **De Lange, AH, Van der Heijden, B. Kooij, D., Jansen, PGW** In this study (based on a sample of N=2611 Dutch workers) we examine the moderating influence of the age-related variable Role clarity in the relation between (quantitative, emotional) demands, and several types of resources in predicting psychological well-being (measured as emotional exhaustion, job satisfaction and depression). The results revealed that role clarity moderated or buffered the effects of emotional demands in predicting job satisfaction and depression. For emotional exhaustion, role clarity moderated the effects of both emotional and quantitative demands, and for possibilities for development. We will discuss the practical as well as scientific implications of the results found.

#### Effect of emotion regulation on the health of teachers over time

**Philipp, Anja** *Arbeits- und Org.-Psychologie, Universität Freiburg, Freiburg, Germany* **Krause, Andreas** *Schüpbach, Heinz* *A&O-Psychologie, Universität Freiburg, Freiburg, Germany*

Teachers are facing high emotional demands in class. What characterises teachers who manage their emotions well and stay healthy compared to those with burnout? Which emotion regulation strategies have a long-term effect on the health and work ability of teachers? A study (N=91) conducted at two points in time tested these questions in a cross-lagged panel design using structural equation modelling. The results indicate that deep acting has a positive effect on the health of teachers. Surface acting is more frequently used if they feel already burned out. These findings contribute to the development of an age-mixed group supervision.

#### Supporting older adults to use interactive systems

**Sengpiel, Michael** *Inst. für Psychologie, Humboldt-Universität zu Berlin, Berlin, Germany* **Wandke, Hartmut** *Inst. für Psychologie, Humboldt-Universität zu Berlin, Berlin, Germany* **Struve, Doreen** *Inst. für Psychologie, Humboldt-Universität zu Berlin, Berlin, Germany*

The aging workforce is bound to use new technical systems that will often pose a challenge to use. We investigate ways to support them in using new interactive systems. We focus on areas of training and design of work equipment, exemplified by the use of a ticket vending machine, for which we developed an interactive learning environment for self-learning. Based on Selection-Optimization-Compensation Theory (Baltes) and Social-Learning-Theory (Bandura) we manipulate characteristics of the learning environment, including the simulation, the instruction and the video models, in experimental settings. Results will be presented and integrated in current research. Practical implications will be discussed.

#### Elderly employees in the automotive industry: Solutions for an age-based work design

**Weichel, Julia** *Inst. für Arbeitswissenschaft, Universität Kassel, Kassel, Germany* **Buch, Markus** *Frieling, Ekkehart* *Inst. für Arbeitswissenschaft, Universität Kassel, Kassel, Germany*

The demographic change leads to a continuously rising number of old employees. The focus of our project is on analysing elderly employees working on assembly lines. The sample consists of blue collar workers from two original equipment manufacturers (N=249, N=160). We used objective and subjective data to analyse the current work systems (e.g. decision latitude) as well as the employees' performance (e.g. adaptive performance) and health status (e.g. somatic complaints). We found positive effects of working conditions on the employees' performance which underlines the importance of adaptive work design that promote learning and health over the lifespan.

#### The impact of age diversity in workgroups on innovation, group performance and health

**Wegge, Jürgen** *Arbeits- und Org.-Psychologie, Technische Universität Dresden, Dresden, Germany* **Schmidt, Klaus** *Helmut Universität Dortmund, IFADO, Dortmund, Germany*

Age diversity in teams can have advantages (e.g., use of different experiences) as well as disadvantages (e.g., emotional conflicts). Under which circumstances these effects occur has been rarely studied. Therefore, we investigate in two longitudinal studies (N1 = 67, N2 = 145 groups) within the administrative sector the influence of age diversity on indicators of work motivation (e.g., satisfaction), group efficiency (e.g., performance) and health (e.g., burnout). Cognitive salience of age diversity, task complexity and diversity mind sets are considered as moderating variables. The results of both studies show that age diversity has positive effects under specific conditions (e.g., complex tasks).



## S-154: The psychology of Web 2.0: Personalities, motives and managing impressions

**Nicole Krämer, Sabine Trepte (chair)**

The buzzword "web 2.0" describes new mechanisms and opportunities: Within the Internet and its platforms like YouTube, MySpace or wikipedia, users are no longer merely recipients but producers of media content. From a psychological perspective, it is open why and how people – despite potential privacy concerns – present themselves in the World Wide Web and publish partly intimate details on their lives. The symposium gives an overview on recent research on social network sites and blogs. The contributions focus on potential the motives and gratifications as well as on the relation of personality factors and the form of self presentation.

### StudiVZ - Determinants of social networking and dissemination of information among students

**Bosau, Christian** Ökonomie und Soz.-Psychologie, Universität Köln, Köln, Germany **Fischer, Oliver** Personnel Department, Bertelsmann AG, Gütersloh, Germany **Koll, Marcus** Economic/Social Psychology, University of Cologne, Cologne, Germany

The network community StudiVZ is extremely popular among students in Germany. However, little is known about the reasons underlying students' willingness to participate in that network community and to present information about themselves – and consume information about others – in this manner. What are the motives and gratifications? Do different patterns of media use depend on personality differences or do students just want to have fun? This study, asking StudiVZ-members via online-questionnaires, presents results regarding the reasons for participating in the network, the behaviour within the network as well as the dissemination of private and personal information.

### Entering the blogosphere: Motives for reading, writing and commenting

**Haferkamp, Nina** Inst. für Sozialpsychologie, Universität Köln, Köln, Germany

Weblogs allow authors to develop an individualized web presence that reflects facets of their personal life, opinions and interests. Additionally, the possibility to post comments on the weblog opens a communicative basis for readers and writers. We conducted a survey with 79 bloggers and 172 recipients in order to investigate the motivations for writing, reading and commenting on blogs in consideration of the gender and age of the participants. Results indicate, for instance, that male readers are primarily interested in informative weblogs and that especially male bloggers serve this need while female bloggers prefer to write about personal experiences.

### Web 2.0 users' values and concerns of privacy

**Trepte, Sabine** Inst. für Medienpsychologie, Medienschule Hamburg, Hamburg, Germany **Reinecke, Leonard** Media Management, Hamburg Media School, Hamburg, Germany **Behr, Katharina-Maria** Media Management, Hamburg Media School, Hamburg, Germany

Who are the users of web 2.0 services in terms of need for privacy and self-disclosure and what are their values in life? Based on data gathered in an online survey with 702 participants, this study examines issues of privacy for Internet users with high vs. low affinity for the Web 2.0. A cluster analyses identified three groups with different usage patterns of user-generated-content. The statistical analysis revealed significant differences between these groups. For instance, 'producers' of user-generated content show significantly higher scores

in self-disclosure compared to 'recipients' and 'novices'.

### The influence of privacy concerns and strategic self presentation motives on self presentation on social networking sites

**Utz, Sonja** Dept. of Communication Science, VU University of Amsterdam, Amsterdam, Netherlands Social networking sites have become increasingly popular and many people put a lot of personal information on their profiles. The paper investigates in how far users of social networking sites are concerned with privacy and strategic self-presentation and how these motives influence the amount of personal information that is disclosed on the profile (visible only for friends vs. visible for everybody). An online survey was held among 144 users of Hyves, the largest Dutch social networking site. People who use the internet to influence their image and to maintain personal relationships make more personal information visible to everyone.

### Impression management 2.0: Self-presentation on social networking sites and its relationship to personality

**Winter, Stephan** Inst. für Sozialpsychologie, Universität Duisburg-Essen, Duisburg, Germany **Krämer, Nicole** Inst. für Sozialpsychologie, Universität Duisburg-Essen, Duisburg, Germany

Social networking sites like MySpace, Facebook or StudiVZ are new, popular means of communicating personality. The aim of this study was to investigate the influence of (offline) personality traits on (online) self-presentation in social network profiles. With a survey among users of the German Web 2.0 site StudiVZ.net and a content analysis of the respondents' profiles we found that self-efficacy of impression management has a strong effect on the number of virtual friends, the detail level of the profile and the style of the personal photo. The results also indicate a slight influence of Extraversion, whereas self-esteem did not have any significant effect at all.

### Relevant aspects of successful project-based learning with Web 2.0 tools in schools

**Jadin, Tanja** Inst. für Kommunikation, Universität Salzburg, Salzburg, Austria **Wiesner, Anja** Inst. für Kommunikation, Universität Salzburg, Salzburg, Austria **Wijnen, Christine** Inst. für Kommunikation, Universität Salzburg, Salzburg, Austria **Paus-Hasebrink, Ingrid** Inst. für Kommunikation, Universität Salzburg, Salzburg, Austria

An evaluation study investigated relevant aspects of successful project-based learning with Web 2.0. 27 teachers and 169 pupils from nine Austrian schools participated in the study. The results show that teacher's attitudes to the Internet as a communication medium predicts the general usage of Web 2.0, the usage of new media in schools, and the usage of Web 2.0 in this project. Significant correlations were found between pupil's learning effects, their use of Web 2.0, and group coherence. Willingness to learn, aspects of class climate, and general satisfaction differ significantly between the project and school. Finally, teacher's actual Web 2.0 usage is discussed.

## S-155: Justice and moral behavior

**Manfred Schmitt, Claudia Dalbert (chair)**

Six studies show that the perception of justice affects moral behavior. Study 1 demonstrates that perceiving justice mediates the effect of the justice motive on rule breaking behavior in schools. Study 2 shows that re-establishing justice is a major goal in revenge. Using an information search paradigm, Study 3 shows that punishment goals are motivated by a desire for justice. Study 4 finds that anti-citizenship behavior at work is driven by the perception of organizational unfairness. Study 5

suggests that justice sensitivity can be increased by priming moral prototypes. Study 6 reveals that civil courage is rooted in justice sensitivity.

### Belief in a just world and legal socialization in adolescence

**Donat, Matthias** Pädagogisches Institut, Universität Halle-Wittenberg, Halle, Germany **Dalbert, Claudia** Inst. für Pädagogik, Universität Halle-Wittenberg, Halle, Germany

In our study we investigated the hypotheses that rule-breaking behavior of adolescents can be explained by justice experiences at school and also the justice motive. In a questionnaire study on secondary and high school students we assessed general and personal belief in a just world (BJW), justice centrality, just school climate, and several dimensions of rule-breaking behavior. Overall, findings suggest a negative association between BJW and rule-breaking behavior, being mediated by justice experiences at school. We discuss the findings in regard to the adaptive functions of BJW and to implications for further educational and developmental research.

### What makes revenge so sweet?

**Gollwitzer, Mario** Inst. für Psychologie, Universität Koblenz-Landau, Landau, Germany

In two experiments, we investigated under which conditions victims/avengers react with satisfaction to the outcome of an unjust episode. In Experiment 1, avengers were compared with non-avengers. In Experiment 2, the offender suffered from revenge vs. from fateful harm. Additionally, the offender's understanding for his suffering was manipulated. Findings show that (a) offenders' understanding increases victims' satisfaction, (b) taking revenge is satisfactory even when the offender does not understand why he is being punished. Findings are discussed with regard to the question what people hope to achieve when intending to take revenge in the context of a common transgression.

### Implicit measurement of punishment goals: Lay people prefer just deserts

**Keller, Livia** Inst. für Psychologie, Universität Bern, Bern 9, Switzerland

Three Swiss studies investigated lay people's implicit and explicit punishment goals with regard to criminal cases. Implicit goals were assessed using a method applied by Carlsmith (2001, 2006). Participants were asked to assign a sentence and were given the possibility to search for more information. The results for the implicit measure replicated the findings by Carlsmith very closely: Participants were more concerned about just deserts than about deterrence and incapacitation. However, when additional information on restorative justice was given, this information was equally important in determining the sentence. The explicit measure, in contrast, suggested that participants preferred positive special prevention.

### Workplace interpersonal deviance (WID) as a reaction to social stressors and organizational justice: The moderating role of personality

**Krings, Francisca** Business and Wirtschaft, Universität Lausanne, Lausanne-Dorigny, Switzerland **Facchin, Stéphanie** Department of Psychology, University of Pittsburgh, Pittsburgh, PA, USA

Research on workplace deviance suggest that deviance results from an interaction between organizational and person factors (Judge, Scott, & Ilies, 2006, Penney & Spector, 2005). Building on these models, we studied organizational(distributive/procedural/interactional justice, social stressors) and Big Five personality factors as predictors of work interpersonal deviance (WID) in 265 employees. As expected, social stressors were positively and interactional justice and agreeableness were negatively related to WID. Moreover,



agreeableness acted as a moderator, demonstrating a stronger relation between interactional justice and WID for disagreeable employees. Stressor and agreeableness did not interact, suggesting differential effects of interactional justice and stressors on deviance.

#### **Moral prototypes, moral behavior and justice sensitivity**

**Osswald, Silvia** *Inst. für Psychologie, Universität München, München, Germany* **Greitemeyer, Tobias** *Inst. für Psychologie, Universität München, München, Germany* **Fischer, Peter** *Inst. für Psychologie, Universität München, München, Germany* **Frey, Dieter** *Inst. für Psychologie, Universität München, München, Germany*

The studies base on the idea of three moral prototypes (just, brave and caring) of Walker and Hennig (2004). It was demonstrated that people relate different moral behaviors to the three prototypes (Studies 1 – 3). Study 4 revealed that the activation of the just prototype promoted moral courage, whereas helping behavior (related to the caring prototype and not to the just) was not affected. Activating the just prototype also affected justice sensitivity on the observer and the perpetrator perspective: Participants became more justice sensitive. For the victim perspective, no differences between the prototype-activation and the control group emerged.

#### **Justice sensitivity and civil courage**

**Hauer, Johannes** *Inst. für Psychologie, Universität Koblenz-Landau, Landau, Germany* **Krettek, Carmen** *Fachbereich Psychologie, Universität Koblenz-Landau, Landau, Germany* **Baumert, Anna** *Fachbereich Psychologie, Universität Koblenz-Landau, Landau, Germany* **Schmitt, Manfred** *Fachbereich Psychologie, Universität Koblenz-Landau, Landau, Germany*

In a longitudinal study ( $N = 70$ ), the hypothesis was tested that justice sensitivity contributes uniquely to civil courage over and above empathy, social anxiety, self efficacy, and responsibility denial. At time 1, these traits were measured. At time 2, participants reacted to eight different stories describing cases of innocent victimization. Participants rated for each incident perceived injustice, moral outrage, and the likelihood that they would help the victim, call for support from bystanders, and rebut the perpetrator. At time 3, civil courage was measured in a naturalistic setting. Justice sensitivity affected civil courage conditionally on the type of situation.

#### **S-156: New approaches to item generation for educational and psychological measurement**

**Carolyn MacCann, Patrick C. Kyllonen** (chair)

The generation of test items to assess abilities and aptitudes dates back to Binet, the USA army's alpha and beta intelligence tests, and the Scholastic Aptitude Test (SAT) that followed. Since these beginnings, automatic and rational approaches to item generation more precisely control item complexity and difficulty, important for computerized adaptive testing or large scale standardized testing. In addition, new constructs somewhat orthogonal to item development. This symposium addresses current approaches for item generation for both traditional and new item types, for use in school assessment, educational readiness and training and organizational psychology.

#### **Automatic item generation: Artificial intelligence and transfer learning in physics**

**Kyllonen, Patrick C.** *Center for New Construct, Educational Testing Service, Princeton, USA*  
ETS has developed a system called the Test Creation Assistant (TCA), a template based system for automatic item generation. The system is used to generate many items from a single item "model," and has been applied to both math and physics word problems. In collaboration with Cycorp, Inc. and Northwestern University we added artificial intelligence methods to the system to create problem variants that systematically differ from a "parent" problem, allowing us to test transfer learning. I review the results of a learning experiment and discuss implications for the future of automatic item generation in creating tests and learning materials.

#### **Item development for new measures of cognitive flexibility**

**Beckmann, Jens F.** *Accelerated Learning Laboratory, University of New South Wales, Australia, Australia* **Bowman, David**

While mental flexibility is a central constituent in many theories of intelligence, this capability is insufficiently captured by traditional test scores. Across several studies, a number of novel tasks were constructed comprising a wide variety of item types emphasising the capacity to deal with ambiguity, to switch frames of reference, and to deviate from routine ways of thinking. Results from student and manager samples provide evidence for the differential sensitivities of mental flexibility scores to predict problem-solving behaviours in comparison to traditional metrics. This new approach may serve to redress the existing discrepancy between conceptualisation and operationalisation of intelligence.

#### **New item development approaches for social and emotional intelligence**

**MacCann, Carolyn** *Center for New Constructs, Educational Testing Service, Princeton, USA*  
Item development for social and emotional intelligence (EI) tests requires different processes than those used in conventional intelligence tests, primarily due to the difficulty in scoring EI items. These approaches include: (1) the situational judgment test (SJT) approach; (2) implicit assessments (e.g., the Implicit Association Test); (3) the use of appraisal theories of emotion to develop test items; (4) the use of perceptual tasks to assess emotion recognition; and (5) affective forecasting. The strengths and weaknesses of these approaches (and the convergence between them) are outlined, with empirical illustrations from multivariate data sets.

#### **Selecting sub-items for signal detection indexes**

**Paulhus, Delroy L.** *Dept. of Psychology, University of British Columbia, Vancouver, Canada*

When maximizing test reliability, standard strategies are to: (1) increase the correlations among items; and (2) increase the number of items. In signal detection theory there are two categories of responses (hits and false alarms), such that these strategies are less straight-forward to implement. Five possible approaches to dealing with this issue are illustrated with a dataset from the Over-Claiming Questionnaire (Paulhus et al., 2003): (1) partition and factor; (2) create sub-accuracy scores; (3) combinatorial approach; (4) crude empiricism; and (5) the ability to discriminate across ability levels.

#### **Using automated text analysis tools to develop verbal ability tests**

**Gorin, Joanna S.** *College of Education, Arizona State University, Tempe, USA*  
A fundamental component of any item generation system is a coding framework used to quantify the

relationship between specific features of test questions and associated underlying cognitive processes. In verbal reasoning assessment, ratings of relevant linguistic and semantic variables are typically examined. Natural language processing tools, such as Latent Semantic Analysis, provide an efficient and reliable method to code many of these text-based variables. This presentation describes how such tools could be incorporated into test development and delivery programs to improve the usability and meaning of verbal ability test scores.

#### **S-157: Associative learning of implicit attitudes**

**Bertram Gawronski, Jan de Houwer** (chair)

Behavior is determined not only by explicit attitudes (carefully constructed opinions of what we like or dislike) but also by implicit attitudes (immediate, spontaneous evaluations). Implicit attitudes toward a stimulus can result from pairing it with other stimuli. In this symposium, De Houwer will discuss potential pitfalls when studying associative learning of implicit attitudes. Gawronski shows that newly learned implicit attitudes can be context dependent. Data presented by Ranganath and by Rydell reveal dissociations between the associative learning of explicit and implicit attitudes. Sherman warns that implicit measures of attitudes might not directly reflect underlying associations. Dijksterhuis will be discussing.

#### **Potential pitfalls in the study of associative learning of implicit attitudes**

**de Houwer, Jan** *Dept. of Psychology, Ghent University, Ghent, Belgium*

Associative learning is an important source of implicit attitudes. However, potential pitfalls complicate the study of associative learning of implicit attitudes. I will discuss four of these pitfalls: One needs to be sure that the measure of implicit attitudes is not contaminated by explicit attitudes. One should realize that different processes might underlie different types of implicit attitudes. Proper controls are needed to exclude the influence of non-associative elements of the procedure. In comparing implicit and explicit attitude formation, results may depend on how explicit attitudes are measured. These pitfalls will be illustrated by referring to new and published data.

#### **I like you, I like you not: Understanding the context-dependency of implicit attitudes**

**Gawronski, Bertram** *Dept. of Psychology, University of Western Ontario, London, Canada*

Previous research has shown that implicit attitudes can be highly context-sensitive. In the present research, we argue that context effects on implicit attitudes depend on the heterogeneity of prior experiences with the attitude object, leading to cue-dependent activation of evaluative associations. Across 4 studies, implicit attitudes reflected the valence of previously learned information regardless of the context, when this information was evaluatively consistent. However, when the acquired information was evaluatively inconsistent, implicit attitudes became context-dependent, such that they reflected the valence of the information that was associated with a particular context during learning.

#### **Covariation detection and attitude formation**

**Ranganath, Kate** *Dept. of Psychology, University of Virginia, Charlottesville, USA*

We investigated the effects of covariation information implicit and explicit attitude formation. Attitudes were induced with an illusory correlation procedure in which participants read twice as many statements about one group (majority) than the other (minority), though the ratio of positive to negative statements was equal. Control conditions

presented an actual correlation between the majority group and positive behaviors or the minority group and positive behaviors. Explicit attitudes showed the illusory correlation effect, implicit attitudes did not. We interpret this as indicating dual-processes wherein implicit attitudes reflect algebraic accounting of covariation and explicit attitudes reflect reflective judgments of that covariation.

#### **The impact of forming discrepant implicit and explicit attitudes: Controlled thought and uncertainty**

**Rydell, Robert** Dept. of Psychology, University of California, Santa Barbara, USA

Discrepant implicit and explicit attitudes toward the same attitude object were formed by concurrently presenting subliminal primes that were inconsistent with the validity of statements about that attitude object. The implications of holding implicit-explicit discrepancies was moderated by ability to perceive them. Normally, people showed decreased attitude certainty but increased cognitive dissonance and implicit ambivalence in response to discrepancies. However, when people could not persevere because of inability (cognitive load) or lack of motivation (self-affirmation) it was as if no discrepancy existed. Discrepancies did not lead to uncertainty, but controlled thought after the formation of the implicit-explicit attitude discrepancies did.

#### **Implicit attitudes and implicit associations are not the same thing**

**Sherman, Jeffrey** Dept. of Psychology, University of California, Davis, USA

Implicit measures of attitudes often are taken as direct reflections of underlying associations. However, our research shows that these measures reflect a variety of component processes. Motivations to control prejudice, exposure to counter-stereotypic exemplars, and practice at negating prejudicial responses all corresponded with less biased associations. However, these variables also were associated with increased controlled efforts to monitor behavior. Old age and alcohol assumption influenced controlled efforts to inhibit automatic associations, but were not associated with differences in underlying associations. Thus, variance in implicit attitude measures reflects a variety of processes, and may be unrelated to differences in underlying associations.

#### **S-158: Challenges in contemporary research on the assessment and evaluation of collectivism and individualism**

**Boaz Shulruf** (chair)

Over the past three decades collectivism and individualism have been the cornerstone of a large body of cross-cultural research. Most of it, however, used mean scores of scales for collectivism and individualism to classify certain populations as either collectivist or individualists. Recent development in this area suggests that relatively large proportion of any population is either high or low on both collectivism and individualism thus the traditional collectivism-individualism classification of peoples is likely to be determined by only small proportion of any group. This symposium discusses the implication of this development on contemporary research in cross cultural psychology.

#### **Challenges in contemporary research on the assessment and evaluation of collectivism and individualism**

**Shulruf, Boaz** Faculty of Education, University of Auckland, Auckland, New Zealand

Over the past three decades collectivism and individualism have become the cornerstone of a

large body of cross-cultural research. Most of it, however, used mean scores of scales for collectivism and individualism to classify certain populations as either collectivist or individualists. Recent development in this area suggests that relatively large proportions of any population can be quite varied in their "mix" of collectivism and individualism. This presentation, demonstrates how cluster analysis can reduce the impact of some response biases when collectivism and individualism are compared across different nations and cultures. Implications for further research in this area are discussed.

#### **Culture as situated cognition**

**Oyserman, Daphna** Dept. of Psychology, University of Michigan, Ann Arbor, USA

Experimental research demonstrates that small and seemingly incidental features of a situation can cue different cultural syndromes and that once cued, a cultural syndrome influences what content and process knowledge seems relevant. Merely reading a short paragraph that primes collectivist or individualist concepts is sufficient to influence people's reasoning strategies in ways that parallel differences between collectivistic and individualistic cultures. Such temporary influences suggest that cultural differences may be better conceptualized within a framework of adaptively tuned situated cognition. I'll present experimental and meta-analytic findings, outline their implications for the conceptualization of culture and discuss basic and applied research implications.

#### **Individualism and well-being: New evidence and theoretical implications**

**Schimmack, Ulrich** Dept. of Psychology, University of Toronto, Toronto, Canada **Diener, Ed** Dept. of Psychology, University of Illinois at Urbana-Champaign, IL, USA

Well-being is a culture-free and universally applicable construct because it allows individuals to judge the quality of their lives based on their own, in part culturally determined, ideals. Thus, culture may influence the criteria that individuals use to evaluate their lives, but the outcome of the evaluation process is comparable across cultures. Individualism is a strong predictor of cultural differences in well-being ( $N = 50$ ,  $r = .67$ ). Thus, individualism is an important and valid dimension of cultural variation, and individualistic cultures are better in that they provide better opportunities to maximize well-being.

#### **Adaptation and cross-cultural validation of the Auckland Individualism Collectivism Scale (AICS) in the Portuguese and Romanian contexts**

**Faria, Luisa** Fac. of Psychology and Educat., University of Porto, Porto, Portugal **Ciochina, Laura** Fac. of Psychology and Educat., University of Porto, Porto, Portugal

This study aims to validate, in Portugal and Romania, the AICS (Shulruf, Hattie & Dixon, 2003), to measure Individualism-Collectivism (IND/COL), using a sample of 200 Portuguese and 195 Romanian, 10th and 12th graders. The AICS with 26 items, 15 of Individualism (3 subscales – Uniqueness, Competition and Responsibility), and 11 of Collectivism (2 subscales – Harmony and Advice) was submitted to confirmatory factor analyses that support the use of subscales to measure IND/COL. Further, multivariate analyses evidenced a principal effect of culture on Competition and of gender on Competition, Responsibility, and Advice, and an interaction effect of culture x gender on Harmony.

#### **Individualism-collectivism and school achievement in Italian students**

**Alesi, Marianna** Dept. of Psychology, University of Palermo, Palermo, Italy **Pepi, Annamaria** Dept. of Psychology, University of Palermo, Palermo, Italy

The aim is to study the relationship between individualism-collectivism, personal conceptions of intelligence and school achievement. Participated 222 students attending High School (humanistic, scientific and technique address), distributed according their gender and socioeconomic status. Subjects were given a questionnaire assessing socioeconomic level and school performance, Personal Conceptions of Intelligence Test (Faria, Fontaine, 1997) and Auckland Individualism-Collectivism Scale (Shulruf, Hattie, Dixon, 2007). Significant differences were found on the individualism linked to gender, school address and socioeconomic level. Moreover results show positive correlations between school achievement and individualism in technique students and negative correlations between school achievement and collectivism in humanistic students.

#### **Measuring values and personality traits across cultures: The case of**

**Norenzayan, Ara** Dept. of Psychology, University of British Columbia, Vancouver, Canada **Buchtell, Emma** Dept. of Psychology, University of British Columbia, Vancouver, Canada **Heine, Steven** Dept. of Psychology, University of British Columbia, Vancouver, Canada

Much research inspired by the individualism-collectivism construct contrasts self-reported values and personality traits across cultures. We submit that this enterprise is weakened by significant methodological problems, particularly the reference-group effect, undermining the validity of average country scores of personality traits. Behavioral and demographic predictors of conscientiousness were correlated with different cross-national measures of conscientiousness based on self-reports, observer-reports, and perceptions of national character. These predictors correlated strongly with perceptions of national character, but not with self-reports and peer-reports. Country-level self- and peer-report measures of conscientiousness failed as markers of between-nation differences in personality.

#### **S-159: Science, technology and innovation psychology**

**Sven Hemlin, Carl Martin Allwood** (chair)

In recent years there has been an increased interest in taking a psychological perspective on science, technology and innovation processes. This research area aims at an improved understanding of R&D processes from the perspective of the scientist, groups and organizations were scientists work in academic and industrial settings. This brings together elements of personality, cognitive, social, cross-cultural and industrial/organizational psychology (Feist, 2006; Ford, 1993; Woodman, Sawyer & Griffin, 1996).

#### **The concept of culture and the indigenized psychologies**

**Allwood, Carl Martin** Dept. of Psychology, Lund University, Lund, Sweden

The modern indigenous psychologies (henceforth: indigenous psychologies) are examples of local approaches to psychology (see e.g. Sinha, 1997). They occur in different varieties but they all aim to be culturally and pragmatically relevant to the researcher's own society and are reactions to the dominance of Western or US-American culture in psychological research. This contribution will argue that the concept of culture has not been sufficiently problematized in the literature on the indigenized psychologies and that one of the most basic



premises of the indigenous psychologies (culture as a fairly stable, within the "cultural group" singly describable and shared entity) is problematic.

#### Why are women avoiding the physical sciences?

**Feist, Gregory** Dept. of Psychology, San José State University, California, CA, USA **Rastogi, Deepika** Dept. of Psychology, San José State University, California, CA, USA

It is not true that women are not going into the sciences, only the physical sciences. We predicted that a preference for people-oriented rather than thing-oriented careers and more flexible working conditions work together to make the physical sciences less appealing to women. The sample consisted of undergraduate and graduate students as well as professors in the physical, social, and biological sciences. As predicted, compared to women in the physical sciences, those in the other sciences scored higher on people-oriented vocational interest and lower on Autism-Spectrum Quotient, and placed higher value on more family-oriented working conditions. Implications are discussed in the context of an emerging new discipline, the psychology of science.

#### Service science: A case study in the social psychology of science

**Gorman, Michael E.** Science and Technology, University of Virginia, Charlottesville, USA

The cognitive literature on expertise demonstrates that domain experts develop distinct ways of representing and solving problems; even what is viewed as a problem is unique to specific domains. There is a social studies of science literature that focuses on shared expertise. An interactional expert understands enough of another expertise community to gauge its needs and work with it towards solutions to problems, but cannot do the actual research done by domain experts. This presentation will link these two literatures and apply them to the emerging field of service science.

#### Creativity stimulating R&D group leaders

**Hemlin, Sven** Gothenburg Research Institute, Gothenburg University, Gothenburg, Sweden **Olsson, Lisa** Gothenburg Research Institute, Gothenburg University, Gothenburg, Sweden

Group leaders play an important role for creative outcomes of R&D groups. Lately, this issue was reviewed by Mumford et al. (2002) ending in a number of questions. We are currently conducting a study based on the Critical Incident Technique (CIT) to find out what group leader actions are involved in creative situations with R&D groups. Data are collected with three members of each R&D group. We will report the preliminary results of this analysis to answer questions about what situations are involved, why are they considered creative and what conclusions can be drawn about creativity stimulating leadership.

#### Psychology of science and popper: Some reflections

**Kumar, Neelam** Sociology of Science, Nistads, New Delhi, India

This paper provides a short note on the evolution of psychology of science. It presents psychology of science as an emerging discipline. The paper also offers some reflections on the links between Popper, one of the most famous philosophers of science, and integration of psychological approaches and methods to study science. Popper had intellectual roots in psychology. His political and scientific views are traced to his early experiences with Marxism and psychoanalysis. Yet Popper not only turned away from psychology as early as 1930 or thereabout, later became one of the most outspoken opponents of psychological approach in science studies.

#### Innovations in science and technology: A social psychological study

**Schulze, Anna Dorothea** Inst. für Psychologie, Humboldt-Universität zu Berlin, Berlin, Germany  
Innovations in Science and Technology - a Social Psychological Study Most innovation studies in Science and Technology come from the fields of sociology and organization studies. Our study focused on social conflicts within the genesis of innovations in the field of Gene Technology (in basic science, scientist/entrepreneur firms and larger R&D firms). We studied the varieties of conflict and conflict management in innovation processes and their importance for innovation success. Results: An appropriate conflict management is decisive for successful innovation. The scientists adopt a configuration of mode of conflict management. They combine and form patterns. The integrating combined with contending behaviour proved to be more successful than integrating behaviour alone.

#### S-160: Risk and protective factors of relational aggression in adolescence

**Herbert Scheithauer** (chair)

Even though in recent years there had been an increasing amount of literature on physical aggression, there is still a lack of studies investigating risk and protective factors for the development of relational aggression in adolescence. This is surprising because studies have shown that in adolescence, relational aggression has especially negative consequences for boys and girls psychosocial development. The studies presented in this symposium investigate contextual or individual risk and protective factors and provide an empirical base for the development of adequate interventions.

#### Risk and protective factors in the development of (instrumental) relational aggression in adolescence

**Ittel, Angela** Fakultät für Pädagogik, Bundeswehr Universität München, Neubiberg, Germany

While research has identified multiple motives and forms of physical aggression, relational aggression has not been investigated to identify different subtypes and expressions of this often more subtle form of aggression. This project therefore examines the expression of instrumental relational aggression in 373 male and female adolescents. Results show that factors related to the family, such as parenting, take an effect on boys expression of instrumental relational aggression. For girls individual attitudes and values as well as psychosocial factors are associated with the expression of instrumental relational aggression. Both boys and girls however benefit from a democratic family climate.

#### The relationship of rejection sensitivity and relational aggression in adolescence

**Rosenbach, Charlotte** Inst. für Psychologie, Freie Universität Berlin, Berlin, Germany **Bull, Heike Dele** Department of Psychology, Free University Berlin, Berlin, Germany **Renneberg, Babette** Department of Psychology, Goethe University Frankfurt, Frankfurt, Germany

Aim of this study was to analyze the relationship between Rejection Sensitivity (RS), Relational Aggression (RA) and individual problems in adolescence. Longitudinal data from three assessment points (t1, t2=three months later, t3=one year later) are available for 41 adolescents (age 14-18). RS, RA and self-reported strengths and difficulties (SDQ) were assessed. Data from t3 will be presented. A positive correlation between RS and RA was observed. Regression-models for the prediction of individual problems and RA are conducted. The results of this study will contribute to the knowledge of risk factors of Relational

Aggression as well as individual problems in adolescence.

#### Empathy and perspective-taking: Risk OR protective factors or risk and protective factors in the development of relational aggression in adolescence?

**Scheithauer, Herbert** Inst. Bildungswissenschaften, Freie Universität Berlin, Berlin, Germany **Bull, Heike Dele** Department of Psychology, Free University of Berlin, Berlin, Germany

The aim of this study was to explore the relationship between empathy (E), perspective-taking (PE) and relational aggression (RA). Data from 126 adolescents (aged 14-16) will be presented. A subsample of 42 adolescents further participated in a longitudinal design over a 15-month-period. PE was assessed with self-reports, E and RA were assessed on the basis of self-, peer- and teacher ratings. We expect both factors to be positively related to RA for extreme groups (high vs. low RA), when the initial measure of RA is controlled. Findings will be discussed with regard to the knowledge about risk and protective factors.

#### "Fight for me!" Girls' and boys' expectations of defense against same- or other-gender peers

**Neuhaus, Janine** Inst. für Psychologie, Freie Universität Berlin, Berlin, Germany **Hannover, Bettina** Inst. für Psychologie, Freie Universität Berlin, Berlin, Germany

This research compares male and female 9th graders' expectations (N=900) of an accompanying peer's reaction after being provoked. By using vignettes we also manipulate the companion's gender, consequently resulting in a 2x2 design (gender-target x gender-companion). Referring to the girls-target situation we assume that the same-gender constellation (girl/girl) leads to higher relational aggression and lower overt aggression expectancy rates, whereas the other-gender constellation (girl/boy) evokes an opposite pattern. Furthermore we expect a moderating effect of the subject's agreement to paternalistic-oriented gender roles as described in the culture-of-honor concept (Nisbett, 1993). Results are discussed with respect to preventive school measures.

#### Longitudinal associations of normative beliefs and relational aggression during middle childhood and early adolescence

**Werner, Nicole** Dep. of Human Development, Washington State University, Pullman, WA, USA **Lyle, Kelsey** Dep. of Human Development, Washington State University, Pullman, WA, USA

Support for social information-processing (SIP) models of child adjustment suggests that patterns of distal (i.e., latent knowledge structures) and proximal (i.e., on-line) processing of social information predict individual differences in overt and relational aggression (RA) (Werner & Nixon, 2005). The current study utilized a longitudinal design and teacher-ratings of RA to extend our understanding of the role of normative beliefs for RA during middle childhood and adolescence (N=465). Findings indicate that children become increasingly approving of RA, particularly across the transition from elementary to middle school. Moreover, normative beliefs about RA significantly predicted increases in RA behavior across one year.

#### Ostracism: Effects of being ignored and excluded

**Williams, Kipling D.** Dept. Psychological Sciences, Purdue University, West Lafayette, USA  
Ostracism, being ignored and excluded, is a ubiquitous and powerful form of relational aggression. I present my program of research demonstrating that the initial reaction to ostracism is unmitigated pain; followed by a perceived threat to four fundamental needs, and coping responses aimed at fortifying these needs. Behavioral re-

sponses can fortify belonging and self-esteem if they make the individual more open to others and socially attractive; fortifying control and existential needs may be fortified by forcing others to attend to and notice – often resulting in anti-social and provocative acts. Implications for adolescents, for whom belonging needs are very high, are discussed.

### S-161: Current perspectives on the concept of wisdom and its development

**Judith Glück** (chair)

A recent focus in psychological wisdom research is on how wisdom develops through actual life experiences. Current theoretical and empirical work suggests two different, but related conceptions of wisdom: one that views wisdom as a largely cognitive variable acquired through learning and one that emphasizes the integration of cognitive, emotional, and motivational aspects and is acquired through actual experience of life challenges. In this symposium, we present empirical work aiming at understanding (1) how these two types of wisdom are related and (2) how they develop in the course of individual life stories.

#### Title to be announced

**Takahashi, Masami** Dept. of Psychology, Northeastern Illinois Univ., Chicago, IL, USA  
Our developmental model of wisdom integrates two moments or modes of wisdom: analytical and synthetic mode. The analytic mode concerns the reduction of global systems of wisdom into elementary qualities, and inquiry into this mode primarily entails the exploration of specific knowledge content or information-processing functions. In contrast, the synthetic mode concerns the integration of psychological systems and transformational changes that characterize this integration. In particular, this wisdom mode pertains to cognition/affect integration and a reflective level of conscious experience. It is argued that both analytical and synthetic modes of experience are equally necessary for defining the concept of wisdom.

#### Christian and Buddhist views on what wisdom is and how it develops

**Rappersberger, Stefanie** Inst. für Psychologie, Universität Wien, Wien, Austria  
Conceptions of wisdom have been shown to be related to culture (Takahashi & Overton, 2005). Spiritual aspects of wisdom, however, though prominent in implicit theories of wisdom, have hardly been studied. In this study, 20 Christian and 20 Buddhist dignitaries were interviewed about wisdom. Content analyses revealed high overlap in conceptions of what wisdom is, although Buddhists put more emphasis on empathy than Christians. Concerning how wisdom develops, Buddhist participants said that wisdom can be acquired through directed learning, while Christian participants emphasized life experience. Both groups viewed reflection as central to the development of wisdom.

#### Implicit theories of wisdom and its development: Evidence for two different conceptions

**Strasser, Irene** Inst. für Psychologie, Universität Klagenfurt, Klagenfurt, Austria **Glück, Judith** Inst. für Psychologie, Universität Klagenfurt, Klagenfurt, Austria **Bluck, Susan** Department of Psychology, University of Florida, Gainesville, USA  
While a number of studies have investigated "lay" theories of what wisdom is, no empirical work exists concerning how people think wisdom develops. In a cooperation with the German GEO-magazine, over 2000 readers completed a brief questionnaire concerning both of these aspects. Data were analyzed in an exploratory way using cluster

analyses. Results showed two different conceptions of wisdom. One focused on cognitive aspects in the definition of wisdom and on learning as the main factor in wisdom development. The other viewed emotional and spiritual aspects as equally important as cognition and focused on challenging life experiences as catalysts for wisdom.

#### Comparing two different approaches to wisdom

**Levenson, Michael R.** College of Health, Oregon State University, Corvallis, USA **Aldwin, Carolyn** Human Development & Family, Oregon State University, Corvallis, OR, USA **Taylor, Amanda** Human Development & Family, Oregon State University, Corvallis, OR, USA **Levaroe, Elizabeth** Human Development & Family, Oregon State University, Corvallis, OR, USA **Kang, Sungrok** College of Health and Hum. Sc., Oregon State University, Corvallis, OR, USA

We contrasted two conceptual and methodological approaches to wisdom, fundamental pragmatics of life (Baltes & Staudinger, 2000) with the liberative model, which focuses on self-transcendence (Levenson et al., 2005), using both qualitative and quantitative measures for both approaches in a sample of 36 women and 14 men (Mage = 71.7). Age was unrelated to self-transcendence, but varied in its relation to pragmatics. Self-transcendence and pragmatics were largely independent, and the vignette measures were uncorrelated with the self-report measures. Self-transcendence related to life satisfaction, practical knowledge inversely to depressive symptoms, and uncertainly management correlated positively with self-report health.

#### Predictive validity of general and personal wisdom

**Staudinger, Ursula M.** Zentr. für Lebenslanges Lernen, Jacobs Universität, Bremen, Germany  
The paper introduces two measures of personal and general wisdom based on the Berlin Wisdom Paradigm. Reliabilities of both measures are reported from age-comparative samples (young and old adults). Furthermore, similarities and differences in predictive validity of the two measures are reported. Indicators from cognitive and personality functioning are used in the validity analyses.

### S-162: Cognition of aesthetics in graphics: The influence of beauty on web-page design and learning

**Neil Schwartz, Wolfgang Schnotz** (chair)

Scant empirical data exist on aesthetics under the auspices of cognitive theory, and none on learning with graphics. This symposium aims to assemble international researchers to examine the issue. Lenzner explores the aesthetics of scientific graphics on learning physics; Schwartz reports a systematic examination of aesthetics on comprehension of graphic theme; Velesianos reveals aesthetic effects on avatars in virtual learning environments; Tractinsky shows reliable aesthetic effects on web-page design; Lowe traces aesthetics in graphic explanatory communication. Leder presents a model providing deep heuristics in aggregating and advancing the work vis-à-vis the influence of aesthetics on affect and cognition in learning.

#### Decorative pictures in learning materials: Do they support learning

**Lenzner, Alwine** Inst. für Psychologie, Universität Koblenz-Landau, Landau, Germany **Horz, Holger** Inst. für Psychologie, Universität Koblenz-Landau, Landau, Germany **Schnotz, Wolfgang** Inst. für Psychologie, Universität Koblenz-Landau, Landau, Germany **Müller, Andreas** Inst. für Psychologie, Universität Koblenz-Landau, Landau, Germany

As already known instructional pictures lead to better learning results, whereas decorative pictures are assumed to be seductive details. We assume an evidence for positive effects of decorative pictures with respect to learners' prior knowledge. Students from 7th and 8th grade (iv1) learned with one of four worksheet versions (iv2: with or without decorative pictures, iv3: with or without instructional pictures). Our results (dependent variables: learning success, eye movements) show a positive effect of decorative pictures for 7th graders and a negative effect for 8th graders. Therefore decorative pictures should only be used for learners with lower prior knowledge.

#### Empirical findings in studies of visual aesthetics in human-computer interaction

**Tractinsky, Noam** Informat. Systems Engineering, Ben-Gurion University Negev, Beer-Sheva, Israel  
This paper will summarize a recent body of empirical research in the field of human-computer interaction (HCI) that calls attention to the importance of aesthetics in the design of interactive systems. Among other things, this new research demonstrates that people judge the aesthetics of information technology products very rapidly; that although "beauty is in the eye of the beholder," on average users tend to agree about what is beautiful; and that, similar to the effects of beauty on social relations, it influences perceptions of other attributes of the system, such as its usability.

#### Aesthetic guidelines for the design and development of pedagogical agents

**Veletsianos, George** Curriculum and Instruction, University of Minnesota, Minneapolis, USA **Miller, Charles** Curriculum and Instruction, University of Minnesota, Minneapolis, USA **Doering, Aaron** Curriculum and Instruction, University of Minnesota, Minneapolis, USA  
Pedagogical agents are anthropomorphic interfaces used in electronic learning environments for instructional purposes. Such interfaces are often portrayed as virtual humans able to interact, collaborate, and converse with learners. Albeit a growing area of study with high expectations for teaching and learning, prior research has disregarded the visuo-aesthetic properties of pedagogical agents. In this paper, we highlight the importance of such properties and present guidelines for the design and development of aesthetically pleasing pedagogical agents. These guidelines may be used to inform the deployment of virtual characters in learning environments and provide a coherent research agenda for exploring the role of aesthetics in the context of pedagogical agents.

#### Psychological aesthetics: Basic and applied aspects

**Leder, Helmut** Inst. für Psychologie, Universität Wien, Wien, Austria  
Beauty for long has not been considered particularly important in design. However, growing interest in aesthetics has revealed a number of answers to the question, what the benefits of beauty might be. Basing on our psychological model which describes cognitive and emotional processes and representations involved in processing of art (Leder, Belke, Oeberts & Augustin, 2004) principles of aesthetics are discussed in the realm of design and ergonomics. It is claimed that the consideration of aesthetics can improve the psychological aspects of design in a number of dimensions, such as cognitive fluency, cognitive load and even well-being.

#### Realism in graphic representation: Aesthetics versus explanatory effectiveness

**Lowe, Richard** Dept. of Education, Curtin University, Perth, Australia  
The degree of resemblance between a referent situation and its graphic representation has long



been considered a key contributor to the aesthetic value of a depiction. Visuospatial realism has traditionally been the main criterion for judging this aspect of aesthetic worth. More recently, technological advances such as computer-based animation have expanded the conception of graphic aesthetics to encompass behavioural realism. For example, both visuospatial and behavioural realism are incorporated at ever increasing levels in computer action games. This paper shows that with education materials however, assumed aesthetic benefits from realism in graphics can occur at the expense of explanatory effectiveness

#### Learning from graphics: Disentangling the influence of theme and aesthetics

**Schwartz, Neil** Dept. of Psychology, California State University, Chico, USA **Battinich, William** Dept. of Experimental Psychology, University of Arkansas, Fayetteville, USA **Lieb, Helmut** Faculty of Psychology, University of Koblenz @ Landau, Landau, Germany **Mortensen, Chad** Dept. of Psychology, California State University, Chico, USA

A tripartite model is debated showing that thematic relations between web-based graphics and text explains the way graphics effect text comprehension—but only if learners have prior knowledge to induce theme and graphics are immediately perceived as beautiful. We report on three partial-replication studies sampling 500 students in which graphics were manipulated for theme valence, aesthetic quality, and learners' reaction time of aesthetic perception to the aesthetically-controlled graphics. Multiple regression analyses under each experimental condition, and focus-group interviews, revealed that aesthetics evoked emotional responsivity in learners that dictated cognitive access to theme, which in turn, predicted deep thematic text processing.

#### S-163: Baby signing

**Mechthild Kiegelmann, Annette Hohenberger** (chair)

While baby signing has recently become popular, little research is available that evaluates potential psychological and linguistic effects of using sign to foster early communication with babies. The presenters in this symposium take two different research perspectives on 1) sign language acquisition in both hearing and deaf children and on 2) symbolic gesturing with hearing children, including evaluating baby signing media. All presenters argue on the basis of empirical research within the context of a controversial debate. An expert in research methodology will serve as a discussant for the presented empirical studies.

#### Effects of a gestural communication program in Chilean babies

**Farkas, Chamarrita** Psychology, P. Univers. Catolica de Chile, Santiago, Chile

The research realized explore the benefits of gestural communication program in children's, parents' and educators' aspects. Two studies are presented: (a) the effects on the synchronic interactions in 14 dyads mothers-babies of medium socio-economical level were studied, during three measurements with a Grid to analyze early interactions. The differences in visual, tactile and vocal interactions are discussed. (b) The effects on the stress level in parents and educators of children from social risk families were studied with the Parent Stress Index, Short Form (PSI-SF), during three measurements. The results in each group of caregivers are discussed.

#### Baby signing with hard of hearing and with hearing children

**Kiegelmann, Mechthild** IfE, Universität Tübingen, Tübingen, Germany **Günther, Klaus-B.** Institute for Science of Rehab, Humboldt-Universität zu Berlin, Berlin, Germany

Newer publications on baby signing suggest an increasing number of ASL-signs than early programs. This increase leads us to question whether baby signing can be especially beneficial for deaf children. We hypothesize that baby signing can enhance the development of signing deaf children more directly, because signing is an integral part of their pre-lingual communicative development. Our current research compares the use of baby signing with hearing, hard of hearing, and deaf children. An electronic medium is used in Germany to teach parents and their children baby signs based on the German Sign Language DGS. Preliminary results will be presented.

#### Baby signing with deaf/blind children

**Wolf, Sylvia** Inst. für Wissenschaft-Rehabil., Humboldt-Universität zu Berlin, Berlin, Germany

Acredolo and Goodwyn convincingly demonstrated the importance of baby signing for developmental psychology. Yet, the practice of baby signing with disabled children still is a relatively new topic in research. We are especially interested in the effects of baby signing with deaf-blind children, especially any effects on motor and kinaesthetic development. We hypothesize that tactile baby signing fosters the development of the space-time inventory as well as the development of cognitive object permanence. We are presenting a pilot study and research design for a longitudinal investigation.

#### A longitudinal study investigating the impact on language development of encouraging infants to communicate using signs and gestures

**Kirk, Elizabeth** School of Psychology, University of Hertfordshire, United Kingdom **Pine, Karen** School of Psychology, University of Hertfordshire, Hatfield, United Kingdom

We present the first set of findings from a longitudinal study of 40 infants exploring the impact of encouraging gestural communication. Infants were randomly allocated to one of four conditions: Symbolic Gesture training, British Sign Language (BSL) training, Verbal training and a non-intervention control group. At 8m, 12m, 16m, and 20m infants' auditory comprehension and expressive communication (PLS-3 UK) and receptive and productive vocabulary (Oxford CDI) were measured during home visits. Data comparing infants' language development will be reported and the findings will be discussed in relation to notions of gestural communication enhancing early mother-infant interaction and infant language acquisition.

#### Does baby signing lead to faster language development in hearing children? Evidence from deaf signing babies

**Morgan, Gary** Dept. of Language and Commu., City University, London, United Kingdom **Woll, Bencie** DCAL, UCL, London, United Kingdom **Woolfe, Tyron** DCAL, UCL, London, United Kingdom

If 'baby-signing' classes during 0-36 months speeds language acquisition, children who are native signers should have earlier and faster vocabulary acquisition than their non-signing peers. In a new study on deaf and hearing children's first signs reported through a British Sign Language version of the MacArthur CDI we found no speeded sign language development. Furthermore hearing children of deaf parent's first signs appear at the same age as deaf children's first signs. Observations from 'baby signing' are due to the gesture advantage over speech and sign and not language development gains.

#### S-164: Cultural psychology and individual agency

**Lars Allolio-Naecke, Carl Ratner** (chair)

The symposium focuses on power relations, social positioning, and cultural meanings that influence individual action. Neither situations nor persons or things for themselves provoke and guide individual action but the meaning of persons, things and situations do. Moreover people, things and situations are not relevant for everybody in the same manner, because meaning-making itself is a social-historic process that is deep-seated in one's own autobiography. To meet that concern individual action is understood and analyzed as reflecting individual and cultural meanings. The relative influence of these will be discussed by the speakers.

#### A cultural-historical vs. a romantic view of agency

**Ratner, Carl** Dept. of Psychology, Institute for Cultural Research, Trinidad, USA

This paper compares contrasting views of agency. The cultural historical view, pioneered by Vygotsky, Luria, and Leontiev, emphasizes the shared, cultural organization of agency. Agency is a cultural-historical phenomenon that is shaped by social institutions, cultural concepts, social position (class). Idiosyncratic forms of agency are subordinate to culturally shared characteristics that are necessary for culture to persist. Agency is the potential to critically analyze one culture and humanize it to enhance social and psychological life. The romantic view postulates that agency is intrinsically active, creative, and fulfilling. It makes the meanings which guide individual action in society. The individual negotiates with society on his own terms. These positions are evaluated in terms of scientific and political criteria.

#### How to deal with polyvalence of action

**Allolio-Naecke, Lars** Inst. für Theologie, Universität Nürnberg-Erlangen, Erlangen, Germany

Everyday activity is structured by ambiguous actions. The question as to the reason why someone did something is not answerable from an outside perspective. But as psychologists, we have to deal with precise models for describing the reasons why someone undertook an action, because from the psychological perspective, we are trying to predict future behaviour. But this is exceptionally difficult, especially in cross-cultural situations. To solve this problem, Ernst E. Boesch proposed the introduction of the polyvalence concept. In my contribution, I show how to use that concept for intercultural trainings.

#### The norms of culture and the participant's stake

**Zielke, Barbara** Intercultural Communication, University of Chemnitz, Chemnitz, Germany

The concept of a "dialogical self" is seen as a tool for adapting psychology to the conditions of globalization: all meaningful entities are subject to dialogical processes of meaning construction and the self is one of those entities. More radically, the idea of dialogicality may be employed to deconstruct the individual actor as the object of psychological interest. However, as long we want to distinguish "cultural psychology" from "cultural studies" we should resist the temptation to simply replace identity (of meaning and of self) with plurality. "Dialogicality" calls for a decentered, but not erased concept of self as participant in culture.

#### Agency, style, and tradition

**Baerfeldt, Cor** Psychology, University of Alberta, Edmonton, Canada

In recent years, the study of discourse has become a central focus in the cultural psychological study of

self. Yet, for lack of an adequate social ontology, discursive psychologies have failed to provide a satisfying account of human agency. This paper turns to the work of the philosopher Merleau-Ponty, who in the last part of his life came to articulate a philosophy of expression and 'style' that could serve as a rich ontological basis for discursive psychology. It is argued that this notion of style provides a way to reconcile the subject of history with the subject of lived experience.

#### The co-regulation of feelings as social cement

**Verheggen, Theo** Dept. of Psychologie, Open University Netherlands, Heerlen, Netherlands  
From neuropsychology it is known that the human brain has different areas for emotions and feelings (Damasio, 2003). Emotions and feelings are distinguished because the former are directly linked to bodily states whereas the latter leave room for reflection or ideation on those states. This ideational dimension to feelings allows for manipulation, in the sense that what is felt and how it is felt will partially depend on the group one is a member of. It will be argued that being able to express feelings in concordance with what is considered 'proper' or 'right', is one key skill for group membership. It takes feeling for social situations to fit in. That feeling for is learned or trained in everyday situations, and thereby co-regulated with skilled members of the own group. Ref. Antonio Damasio (2003). Looking for Spinoza. Joy, Sorrow, and the feeling brain. Harcourt.

#### Can the meaning of childhood be changed?

**Kleeberg-Niepage, Andrea** Psychologie, Freie Universität Berlin, Berlin, Germany  
Children are positioned as inferior beings within the western discourse on childhood. Adults possess the power to define a child's development, to regulate children's daily routine (e.g. going to school) and to ascribe a lower social status to children which is justified with the special need of protection children are supposed to have. The implications of this positioning become very obvious when children themselves object to their inferior status which is the case with working children's organisations. These children demand the same rights (i.e. a right to work) as adults have in society. The implications of this objection for a changed meaning of 'childhood' and changed societal power relations will be discussed.

#### S-165: Evidence-based? Criticism of existing and proposal of new approaches to prevention and treatment of addictive behaviors

**Joachim Körkel** (chair)

On the basis of existing empirical data the symposium will scrutinize that addiction treatment and policy are evidence-based ("best practice"). Springer reports about attitudes that impede the broad incorporation of opioid maintenance therapy. Based on a RCT Körkel, Becker, Happel and Lipsmeier endorse the implementation of programs for self-controlled drug intake. Verthein advocates heroin-assisted treatment for heroin addicts based on the results of a multicentre RCT. Klein and Schaunig call for a subgroups approach in substance abuse prevention with adolescents based on an epidemiological survey. Uhl puts into question the empirical basis of WHO-guidelines on primary prevention of hazardous alcohol consumption.

#### Controlled intake of illegal drugs: A randomized controlled trial of a behavioural self-control training

**Körkel, Joachim** Wissenschaften - Sozialarbeit, Universität für Angewandte, Nürnberg, Germany  
**Becker, Gabi** Management, Integrative Drogenhilfe e.V., Frankfurt on the Main, Germany  
**Happel, Volker** Social Work and Health, University of Applied Sciences, Frankfurt on the Main, Germany  
**Lipsmeier, Gero** Social Work and Health, University of Applied Sciences, Frankfurt on the Main, Germany  
Objective: To test the effectiveness of the Behavioral Self-Control Training (BSCT) "KISS" in reducing drug consumption. Method: 144 intravenous polydrug addicts were randomly assigned to 12 KISS sessions or a Waiting List (WL) condition. Six underwent pre-, post-, and six month follow-up assessment (including timeline-follow-back for all substances and DSM-IV substance diagnoses). Results: KISS participants show significantly ( $p < .01$ ) greater reduction in drug intake than WL controls. Pre-assessment self-efficacy and concomitant methadone maintenance treatment are not predictive. Conclusions: BSCT for controlled drug consumption should be considered as treatment option for severely dependent drug addicts not able or willing to live abstinent.

#### Heroin assisted treatment in Germany, effectiveness and long-term outcome

**Verthein, Uwe** Universität Hamburg, Hamburg, Germany  
In the first 12 months of the German trial on heroin-assisted treatment (HAT) a stratified randomised controlled trial was conducted in order to examine the effectiveness of heroin treatment compared to methadone treatment. Subsequent, a follow-up period was conducted, to assess the long-term effects of HAT. 1,015 patients were included. The central result indicates a significant superiority of heroin treatment over methadone treatment for both primary outcome measures: health and illicit drug use. In the follow up period further improvements took place, a stabilisation of health and social situation was shown. The results confirm the findings of previous international studies. HAT proves to be successful in the long-term treatment of severely dependent heroin users.

#### Management of opioid maintenance therapy in Austria: A recent empirical study

**Springer, Alfred** für Suchtforschung, Ludwig Boltzmann-Institut, Wien, Austria  
**Uhl, Alfred** Alkohol Information und Co-ord, Anton-Proksch-Institut, Wien, Austria  
Objectives: To determine how the situation of oral maintenance treatment for opiate addicts is perceived by physicians and their clients before stricter regulations concerning the use of slow release morphine as substitution drug are enacted. Methods: Interview as well as questionnaire based study involving 176 physicians and 619 of their patients. Results: All used substitution medications, i.e. methadone, buprenorphine and slow release morphine have their sound place in the Austrian treatment system and are appreciated by physicians and patients. Conclusions: The newly enacted stricter regulations concerning slow-release morphine endangers the fragile regional system providing maintenance treatment throughout Austria.

#### Adolescent substance use in relation to school factors: Results of a local monitoring study

**Klein, Michael** Katholische Fachhochschule, Köln, Germany  
**Schaunig, Ines** Centre of Excellence of on App, Catholic University of Applied, Cologne, Germany  
Objectives: To determine whether adolescent substance use varies according to school factors such as level of education, social situation and school climate. Methods: More than 3770 pupils from

grade 6 to 12 were interviewed concerning their substance use. 35 schools from different school types and districts of Cologne participated. Results: Large differences in patterns of substance use depending on school type, social background and climate factors were found. It was shown that young people from school type "Gymnasium" in favorable districts report higher rates of alcohol and cannabis use. Conclusions: Prevention strategies should be individually implemented in the context of schools and focus more on the identified risk group.

#### Evidence based alcohol policy: An oxymoron?

**Uhl, Alfred** Alkohol Information und Co-ord, Anton-Proksch-Institut, Wien, Austria  
Objectives: To determine whether it is sensible and/or possible to base alcohol policy on facts. Methods: Systematic analysis of empirical and theoretical literature concerning evidence based policy development. Results: Speaking logically, practical conclusions cannot be derived from facts solely. The attempt to do so is termed 'Naturalistic Fallacy' in research methodology. The conclusions in the most prominent recent publications on alcohol policy over-simplify the situation from a Northern European alcohol control perspective. Conclusions: We should increasingly discuss ethical considerations involved in policy building and stop to camouflage the decisions as inevitable consequence of evidence.

#### S-282: Learning from multiple documents embedded in new media

**Marc Stadler, Rainer Bromme** (chair)

Learners are frequently required to construct meaning in interaction with multiple documents. E.g., electronic encyclopaedia or Internet websites are used to accomplish learning assignments or to support informed decision making. The skills needed to accomplish such tasks clearly go beyond what is needed in comprehending single and simple documents that have traditionally been investigated in text comprehension research. The symposium brings together researchers that address the crucial question of how readers manage to integrate information across documents and evaluate them in terms of trustworthiness. Thereby, we seek to synthesize and enhance our knowledge of the comprehension of multiple complex documents.

#### The relationship between source evaluation and comprehension of multiple documents

**Bråten, Ivar** Dept. of Educational Research, University of Oslo, Oslo, Norway  
**Stromso, Helge** Institute for Educ. Research, University of Oslo, Oslo, Norway  
We addressed whether source evaluation predicts comprehension of multiple documents containing conflicting information about global warming. After reading, participants rated the trustworthiness of sources and the degree to which they had attended to different source features. Hierarchical regression analyses showed that after controlling for prior knowledge, the degree to which readers trusted information from a research centre and a government office explained additional variance in comprehension. In step three, the degree to which they based their trustworthiness ratings on document type, publisher, and author explained additional variance. Thus, different aspects of source evaluation independently predicted the comprehension of multiple documents.



### Remembering who said what: Effects of source credibility and content consistency

**Rouet, Jean-François** LMDC, CNRS - University of Poitiers, Poitiers, France **Le Bigot, Ludovic** LMDC, CNRS - University of Poitiers, Poitiers, France **Coutieras, Anthony** LMDC, CNRS - University of Poitiers, Poitiers, France

According to the documents model theory, readers integrate information from multiple sources by connecting sources and contents through rhetorical predicates. We investigated the conditions of source separation in the memory for complex messages. We presented pairs of messages about everyday situations. Each message was attributed to a high or a low-authority source. Participants were probed for source-content connections. It was expected that source-content connections would be stronger in the case of (a) discrepant information across messages within a pair and (b) contrasted levels of authority within a pair of sources. The experiment was underway at the time of submitting.

### How does that fit together? Fostering structural mapping processes to enhance the integration of information across texts

**Stadtler, Marc** Inst. für Psychologie, Universität Münster, Münster, Germany **Bromme, Rainer** Psychology Department, University of Münster, Münster, Germany

Readers of multiple online-documents are frequently required to pay attention to intertextual relationships to be able to detect inconsistencies or corroborate claims. We tested the hypothesis that readers' attention to intertextual relationships can be enhanced by providing them with ontological salient categories along which they can compare documents. 40 students with low prior knowledge read 15 websites that contained conflicting evidence about a medical topic. Participants were either provided with salient ontological categories or worked without external support. Results show that the availability of ontological categories enhanced knowledge acquisition and the number of intertextual references made while thinking aloud.

### Epistemic processing of multiple documents

**Richter, Tobias** Psychology Department, University of Cologne, Cologne, Germany

Multiple documents dealing with the same issue from different perspectives require comprehenders to identify and evaluate arguments and to integrate conflicting information into a coherent situation model. The present experiments used multiple documents about science topics to investigate how epistemic processes and their representational outcomes are affected by the order in which the documents are received, the presence of evidential markers, and comprehenders' prior knowledge. The results demonstrate that the ability to construct an adequate situation model across multiple documents critically depends on epistemic processes such as monitoring incoming information for plausibility and internal consistency.

### Effect of epistemological beliefs on processing complex documents

**Vidal-Abarca, Eduardo** Dept. of Psychology, University of Valencia, Valencia, Spain **Gil, Laura** Psychology Department, University of Valencia, Valencia, Spain **Salmeron, Lalo** Psychology Department, University of Valencia, Valencia, Spain **Bråten, Ivar** Institute for Educ. Research, University of Oslo, Oslo, Norway **Strømso, Helge** Institute for Educ. Research, University of Oslo, Oslo, Norway

In two experiments we studied the effect of reader's epistemological beliefs (EB) on the on-line processing of complex documents. In the first study, undergraduate students read various texts on climate change, to either summarizing them or writing an argumentative essay. Students with

sophisticated EB on 'certainty' learnt more from the argumentative task, whereas those with naive EB learnt more from summarizing. In a second study, students read two texts provided with a graphical overview depicting the texts structure. Students with sophisticated EB on 'justification' attended the overview for more time at the beginning of the reading, which improved their comprehension.

### S-293: Human-machine-interaction (Part III): Human factors in transportation systems

**Mark Vollrath** (chair)

Intelligent transportation systems are increasingly introduced in modern vehicles and change the role and tasks of drivers. Mobile (e.g. nomadic devices) and stationary (e.g., navigation systems) information systems contribute to this change. The symposium addresses problems and solutions with regard to the human-machine-interaction in vehicles. On the one hand, assistance and automation may substantially reduce human error. On the other hand, distraction by additional information, system failures and inadequate warnings may lead to new errors and may reduce acceptance of these systems. It will be discussed how to handle these problems by way of the design of the human-machine interaction.

### Drivers' mental representation of a traffic situation – Influencing factors

**Krems, Josef** Allgemeine Psychologie, Psychologisches Institut, Chemnitz, Germany **Baumann, Martin** Allgemeine Psychologie, Psychologisches Institut, Chemnitz, Germany **Roesler, Diana** Allgemeine Psychologie, Psychologisches Institut, Chemnitz, Germany

Situation awareness refers to the perception and interpretation of the current driving situation. If secondary tasks performed while driving impose a significant load on visual attention and WM, then situation awareness should be impaired. In a first experiment we evaluated the visual and WM demand of secondary tasks. In a second experiment these evaluations were further investigated in a simulator study. The results show that both cognitively and visually demanding tasks interfere with the maintenance of a correct situation model in WM. However, visually demanding tasks do not always seem to interfere with visual perception processes.

### Online detection of driver distraction

**Blaschke, Christoph** Human Factors Institute, Universität Bundeswehr, Neubiberg, Germany **Färber, Berthold** Institut für Arbeitswissenschaft, Universität der Bundeswehr Mün, Neubiberg, Germany **Limbacher, Reimund** I/EF-56, AUDI AG, Ingolstadt, Germany

Distraction is one of the most common reasons for traffic accidents. Although much is known about the mental processes of distraction, there are only a few attempts to build up a system which is able to detect distraction online. To define functional requirements and find out easy measurable indicators an experiment in a real driving scenario was conducted. Meanwhile behavioural data from the steering wheel, pedals and an eye-tracking system were synchronously captured. Based on these data the potential to recognize a distracted driver of each measured signal was examined, which can serve as good basis for a technical driver-attention-detection-system.

### Is cognitive distraction a real problem?

**Carsten, Oliver** Institute for Transport Studie, University of Leeds, Leeds, United Kingdom  
Based on recent studies such as the 100-car study of naturalistic driving carried out in the U.S., it has been argued that the only kind of driver distraction that causes safety problems is visual distraction. In other words non-visual, cognitive distraction is not observed as a precursor to traffic incidents and accidents. This paper argues that, although cognitive distraction may be harder to identify, it is indeed a real problem. It causes different impacts on the driving task, but is clearly identifiable in certain kinds of accidents. It is particularly relevant as a problem for elderly drivers.

### Increasing safety may reduce comfort: A dilemma for advanced driver assistance systems

**Vollrath, Mark** Ingenieurspsychologie, Tech. Universität Braunschweig, Braunschweig, Germany  
Advanced driver assistance systems (ADAS) can increase safety by alerts in dangerous driving situations. Early warnings are required so that the driver has sufficient time to react. However, these early warnings may annoy the driver. Two studies are presented to examine this for lane-keeping assistance: a driving simulator and a real driving study with haptic and acoustic lane-keeping assistance, respectively. Driving with both ADAS improved lane keeping quality. However, acceptance of the systems decreased. From the literature, similar effects are known for Intelligent Speed Adaptation systems. Adaptation to drivers' characteristics and the driving situation are discussed as possible solutions.

### The effectiveness of multimodal collision warnings

**Thüring, Manfred** Inst. für Psychologie, Technische Universität Berlin, Berlin, Germany **Fricke, Nicola** Institut für Psychologie und A, Technische Universität Berlin, Berlin, Germany **De Filippis, Mónica** Institut für Psychologie und A, Technische Universität Berlin, Berlin, Germany

Collision warnings must enable drivers to react swiftly and appropriately to an extreme danger they are yet unaware of. To accomplish this, adequate signals must be chosen which prime them on the dangerous object and its relevant features. Empirical studies suggest that auditory icons as well as multimodal signals suit these requirements best. Nevertheless, it still remains unclear which combination of warning features is most effective. To clarify this issue, several combinations were tested in a driving simulator study in which participants were warned about collision dangers. Results showed that particular features of warnings were more effective than others.

### Driver reactions to correct and false autonomous emergency braking

**Sommer, Fanny** CR/AEH3, Robert Bosch GmbH, Stuttgart, Germany **Engeln, Arnd** CR/AEH3, Robert Bosch GmbH, Stuttgart, Germany  
To adequately design autonomous emergency braking systems, knowledge is required about the driver reactions that are provoked by such vehicle interventions in correct and false braking scenarios. Tests were conducted at test sites in September/October 2007 to investigate these driver reactions. The tests included correct and false autonomous braking scenarios. CAN bus data and subjective ratings were collected. Results from the driver reactions in correct and false braking scenarios will be presented and discussed.

## FP-169: Occupational health promotion

### Mental health problems in a large German teacher population and effects of a prevention program

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**Unterbrink, Thomas** Psychosomatische Medizin, Universitätsklinikum Freiburg, Freiburg, Germany  
**Pfeifer, Ruth** Psychosomatische Medizin, Universitätsklinikum Freiburg, Freiburg, Germany  
**Wirsching, Michael** Psychosomatische Medizin, Universitätsklinikum Freiburg, Freiburg, Germany  
**Bauer, Joachim** Psychosomatische Medizin, Universitätsklinikum Freiburg, Freiburg, Germany  
 We applied several inventories (GHQ, SCL, MBI, Effort-Reward-Imbalance Questionnaire) in order to analyze the professional burden and mental health in 949 German teachers and 293 student teachers. Our results indicate high rates of mental health problems (e.g., 29.8% of teachers showed values beyond the GHQ cutoff of  $\geq 4$ ). A regression analysis showed that, among a large number of potential influencing factors, adverse events such as aggressive pupil behaviour had the strongest impact on health parameters in teachers. Teachers who took part in an intervention program (CRT, 10 sessions of a manualized group program) responded with a significant improvement on several health-related parameters.

### Workplace wellness programs: Investigating the applicability of self-determination theory and achievement goal theory

**O'Connor, Christine** School of Business, University of Ballarat, Ballarat, Australia  
 Due to high costs associated with work-time-lost linked to injury and ill health, many companies now offer workplace wellness program to their staff. The aim of this research is to examine two well known motivational theories, self-determination theory and achievement goal theory, and investigate their applicability to the domain of workplace wellness programs. 328 surveys were collected from two organisations with wellness programs. Results showed that more intrinsically motivated individuals scored higher on measures of competence and autonomy, providing support for the tenets of SDT but only partial support was found for the proposed relationship between SDT and achievement goal theory. Further research is discussed.

### Stress management means and recreation during work hours in office work environment

**Kuznetsova, Alla** Faculty of Psychology, Moscow State University, Moscow, Russia  
 The aim of the empirical study - estimation of stress-management means' and recreation procedures' effects on mental states (MS) in office environment. 300 employees were involved. Methods: the multilevel technology of job analysis, including the stress factors inventory; subjective evaluation of MS was measured by the well-being, acute fatigue and state anxiety scales; coping strategies inventory was used, and the special checklist for investigation of recreation means. The results show the different effects of applied stress-management means on MS dynamics as well as work efficiency: the means targeted directly to the required mental state' achievement are the most effective.

**Stress-reduction interventions: Perceived organizational support in Australian universities**  
**Pignata, Silvia** Dept. of Psychology, University of South Australia, Adelaide, Australia  
**Winefield, Anthony** Psychology, University of South Australia, Adelaide, Australia

Staff at 13 universities were surveyed in 2000 and 2003/04. After the 2000 survey, interventions were recommended to improve employee well-being. In 2003/04, staff were asked whether their university had undertaken any stress-reduction measures among its employees since the 2000 survey. Hierarchical regression analyses compared data from longitudinal participants ( $N = 872$ ) answering 'yes' or 'no/don't know'. Those answering positively scored lower on psychological strain and higher on job satisfaction, organizational commitment, trust in senior management, and procedural fairness than those answering negatively. We conclude that perceived organizational support in implementing interventions is linked to improved well-being and organizational attitudes.

### Stages-of-change in occupational health promotion

**Hinrichs, Stephan** Institute of Psychology, University of Freiburg, Freiburg, Germany  
**Wilde, Barbara** Institute of Psychology, University of Freiburg, Freiburg, Germany  
**Bahamondes Pavez, Carolina** Institute of Psychology, University of Freiburg, Freiburg, Germany  
**Schüpbach, Heinz** Institute of Psychology, University of Freiburg, Freiburg, Germany  
 Occupational health promotion often fails because of inadequate interventions. This study examined whether employees' readiness to modify health behavior in the workplace depends on the current stage-of-change (precontemplation, contemplation, action, maintenance) of the individual employee. A questionnaire was used to measure the current stage-of-change of employees and their readiness to modify health behaviour. As expected, stages-of-change predict readiness for behavior modification. The results show that stages-of-change should be recognized as an important factor for occupational health promotion. Companies should use target group-specific strategies for planning health promotion programs in the workplace.

### Professional deformations in heads of educational institutions and their prevention

**Bondarchuk, Olena** Dept. of Psychology, Central Inst. after Pedagog., Kiev, Ukraine  
 Objectives. To find out professional deformations in heads of educational institutions and ways of their prevention. Methods. The investigation was done on a sample of 215 heads of educational institutions using a specially developed questionnaire. Results. 67% of the respondents were found to be professionally deformed and had the following deformation components: 1) intolerance and aggression (23%); 2) self-sufficiency and slow down of professional and individual development, external locus of control (36%); 3) fixation on a manager's position and expansion of responsibilities beyond the professional competence (41%). Conclusions. A considerable number of the respondents are professionally deformed which calls for a development of a special deformation prevention course.

## FP-170: Neuropsychology II

### A powerful questionnaire-based screening tool for congenital prosopagnosia

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**Wang, Hui** Social Science Department, Chang Chun Taxation College, Chang Chun, People's Republic of China  
**Elze, Tobias** Institute for Mathematics, Max Planck Institute, Leipzig, Germany  
**Welling, Brigitte** Human Genetics, Westfälische Wilhelms Universität, Münster, Germany  
**Wong, Virginia** Department of Pediatrics, The University of Hong Kong, Hong Kong, People's Republic of China  
**Liu, Jia** Cognitive Neuroscience, Beijing Normal University, Beijing, People's Republic of China

Objective: Diagnosis of prosopagnosia is generally established by in-depth testing with standardized test batteries for visual cognition. As these time-consuming tests are not suitable for large scale screening, a questionnaire based screening was introduced. Methods: At 2 Chinese universities 2,000 questionnaires with a five-point-rating scale for 21 test items regarding facial and object recognition were distributed. Those students with the highest scores were then invited for diagnostic interview. Results and Conclusions: When starting with the highest scores, every 2nd student was a prosopagnosic. Among a total of 40 students who scored above 2 S.D. more than 1/4 ( $n=11$ , 27.5%) were prosopagnosics.

### Memory systems during transient global amnesia

**Marin, Eugenia** Facultad de Psicología, Universidad Autónoma de Madrid, Madrid, Spain  
**Ruiz Vargas, José María** Psicología Básica, Facultad de Psicología (UAM), Madrid, Spain

The aim of this study was to analyze the functioning of different memory systems during Transient Global Amnesia (TGA). Twenty TGA patients and twenty healthy volunteers, matched by age and educational level, were assessed with a broad battery of memory tests. The functioning of episodic, semantic, perceptual representation, and working memory systems was evaluated. Results revealed that episodic, semantic, and perceptual representation systems were significantly affected during the amnesic episode. Only short-term working memory, among the systems evaluated, was spared. Our results suggest that both explicit and implicit retrieval could be affected during TGA episodes.

### Neuropsychological features of pathological gambling

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**Conversano, Ciro** Psychiatry, University of Pisa, Pisa, Italy  
**Masini, Matteo** Psychiatry, University of Pisa, Pisa, Italy

Pathological gambling is a nosographic category, object of many disputes; that is whether it belongs to impulse-control disorders or to obsessive-compulsive spectrum. Recently the role played by frontal functioning in this disease has been often stressed. Twenty-seven subjects suffering from pathological gambling have been examined by a wide-spectrum neuropsychological battery of executive functioning tests; that is WCST, Gambling task, PM38, Towers of London, Trail Making Test, Verbal Judgments Test, Verbal Fluency Test (Phonetic and Semantic) and Stroop Colour Test. Results show abnormal performances in impulse inhibition skill and verbal abstraction, whereas selective attention and planning appear intact.

### Comparison of cognitive disorders in schizophrenic patients with negative symptoms and patients with unipolar androgen psychotic depression

**Rahimi Taghanaki, Changiz** Clinical Psychology, Shiraz University, Shiraz, Islamic Republic of Iran  
 We examined whether cognitive disorders related to frontal lobe dysfunctions are specific to schizophrenia. 37 schizophrenic patients with negative symptoms and 27 androgen psychotic depressives completed a series of cognitive tests related to frontal lobe disorders. T test showed that Schizophrenic patients had significantly more problems than depressives only on Stroop ( $P<0.01$ ) and verbal fluency test ( $P<0.001$ ), but not on WCST and Turm von Hanoi. It seems such disorders could be seen in any other psychotic disorder. Probably the cognitive disorders in schizophrenia are related to other factors like the severity of clinical symptoms in the patients.



### Ginkgo biloba extract (especially EGb 761®) in cognitive ageing: Specificity of neuropsychological improvement

**Kaschel, Reiner** *Geriatrische Neuropsychologie, Universität Osnabrück, Osnabrück, Germany*

**Objective:** To review the physiological changes underlying the clinical efficacy of Ginkgo biloba. **Methods:** We selected randomized controlled trials reporting specific neuropsychological changes. Effects in different cognitive domains are listed using a widely accepted taxonomy that further distinguishes dissociable aspects within domains. **Results:** The broadest database was available for EGb 761®, which shows most pronounced effects in speed-related components of working and long-term memory. Qualitative aspects of performance (e.g. error reduction) are improved in different domains. **Conclusion:** These findings are compatible with actions on a basic physiological level. Most beneficial effects are exerted on neuropsychological functions usually affected by aging.

### Effects of Ginkgo biloba extract EGb 761® on cognition and quality of life in subjects with very mild cognitive impairment

**Hoerr, Robert** *Clinical Research Department, Dr. Willmar Schwabe Pharma, Karlsruhe, Germany*  
**Grass-Kapanke, Brigitte** *Psychogeriatrisches Zentrum, Alexianer-Krankenhaus Krefeld, Krefeld, Germany*  
**Tribanek, Michael** *Clinical Research Department, Dr. Willmar Schwabe Pharma, Karlsruhe, Germany*  
**Kaschel, Reiner** *Geriatric Neuropsychology, University of Osnabrueck, Osnabrueck, Germany*  
**Objective:** To assess effects of EGb 761® on cognition and quality of life in subjects with very mild cognitive impairment. **Methods:** We randomized 296 subjects with cognitive complaints and low functioning in at least one cognitive test to double-blind treatment with 240 mg EGb 761® or placebo once daily for 12 weeks. **Results:** The intention-to-treat analysis showed significant improvements ( $p < 0.05$ ) beyond placebo effects for EGb 761® in measures of memory (recall and recognition), attention and perceived physical health. Cognitive effects were more pronounced in subjects with lower baseline function. **Conclusion:** EGb 761® improves cognitive function in very mild cognitive impairment.

### FP-171: Neuroimaging

#### Study of local alterations in blood circulation of the brain in anxious patients before and after cognitive group therapy through radio isotopic studies in SPECT method in Taleghani Hospital, Tehran

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**Neshandar, Issa** *Psychology, Shaheed Beheshti University, Tehran, Islamic Republic of Iran*

**Abstract:** Although anxiety is a factor of motivation, When extending beyond necessary, it becomes a factor of disorder in behavioral system. **Methods:** In the present study the method of single photon emission computed tomography (SPECT) was used on patients with anxiety for the first time in Iran, in Taleghani hospital. The research is quasi-experimental with pretest and post-test with a single group, and devices such as: Self Assessment Anxiety Scale, single photon Emission computed tomography (SPECT), diagnosis by psychiatrists, and by clinical psychologists. **Findings:** There was a meaningful difference between the amount of blood in the left frontal lobe before and after group therapy.

### Subcortical responses to colour and luminance in the human visual system as revealed by high-resolution functional imaging at 7T

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**Stadler, Jörg** *Non-Invasive Imaging Lab, IfN, Magdeburg, Germany*  
**Tempelmann, Claus** *Neurology II, Otto-von-Guericke University, Magdeburg, Germany*  
**Heinze, Hans-Jochen** *Neurology II, Otto-von-Guericke University, Magdeburg, Germany*  
**Rieger, Jochem** *Neurology II, Otto-von-Guericke University, Magdeburg, Germany*  
**Speck, Oliver** *Biomedical Magnetic Resonance, Experimental Physics, Magdeburg, Germany*  
**Haynes, John-Dylan** *Large Scale Brain Signals, BCCN, Berlin, Germany*

Here we investigated subcortical responses to colour and luminance stimuli in the human visual system. We recorded responses using ultra-high-field high-resolution functional imaging at 7T (resolution 1.38x1.38x1.5mm, TR=1s). Visual stimuli were hemifield-checkerboards modulated along two directions in cone-contrast-space with four contrast levels each. Monotonically increasing contrast response functions were obtained for colour and luminance stimuli in LGN and superior colliculus. The LGN was driven more strongly by luminance than colour contrast. The gain of luminance responses was sufficient for separating magno- and parvo-cellular subdivisions of the LGN. Thus, subcortical visual processing can be studied non-invasively in the human brain.

### Attending or ignoring similar and dissimilar faces: Neural face selection in the visual stream and Fusiform Face Area (FFA)

**Jansma, Bernadette M.** *Faculty of Psychology, Maastricht University, Maastricht, Netherlands*  
**Gentile, Francesco** *Faculty of Psychology, Maastricht University, Maastricht, Netherlands*

We investigated selection of relevant faces among others and tested "biased competition" as a selection mechanism in FFA. We displayed pairs of pictures that either were similar (high competition) or dissimilar (low competition) in perceptual features. Participants either ignored both or attended one of the pictures in a 3T-fMRI blocked-design experiment. Next to an expected attention effect (BOLD-%-signal change attention>ignore in V1-V4-FFA, left/right), we observed a similarity effect in the ignore condition (dissimilar>similar in V4-VP-FFA, right/left), which was reversed in the attend condition (similar>dissimilar in V4 and VP, left). The results seem in line with biased competition and attentional load theories.

### Imitation learning of nursing actions: A NIRS study with students and teacher

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**Sshiraishi, Tomoko** *Nursing and Health, Aichi Prefectural College, Nagoya, Japan*  
**Ito, Hiroshi** *Graduate School of Information, Nagoya University, Nagoya, Japan*  
**Oi, Misato** *Graduate School of Information, Nagoya University, Nagoya, Japan*

Using 48 channel near-infrared spectroscopy, we measured the cortical activation in nursing students and their teacher while they observed and imitated videotaped nursing actions under two conditions: with or without a patient (P+, P-). The concentration changes in oxyHb in nursing students and the teacher in the P+ condition showed a significant correlation in Brodmann's Area 6, but did not in the P- condition. The results suggest that the existence of a patient induces the upcoming action(s) and modulates the students' action plans to imitate the teacher's.

### Task-induced deactivation of the prefrontal and parietal areas in the monkey: A PET study

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**Kojima, Takashi** *Psychology, Tokyo Metropoli Inst Neurosci, Tokyo, Japan*  
**Hikosaka, Kazuo** *Sensory Science, Kawasaki Univ Medical Welfare, Tokyo, Japan*  
**Tsutsui, Kenichiro** *Systems Neuroscience, Tohoku Univ, Sendai, Japan*  
**Tsukada, Hideo** *Central Research Laboratory, Hamamatsu Photonics, Hamamatsu, Japan*  
**Onoe, Hirotsugu** *Functional Probe Research Lab, RIKEN Frontier System, Kobe, Japan*

Human imaging studies have well documented that several brain areas are less active during the cognitive task performance than during the resting state. To examine whether similar task-induced deactivation is observed in the monkey brain, we conducted a PET study. We compared brain activity of the monkey during the working memory task performance with that during the resting state. During the task performance, medial and lateral prefrontal, anterior and posterior cingulate, and precuneus areas were less active than during the resting state. Thus, task-induced deactivation was observed in the monkey in similar brain areas as observed in the human.

### FP-172: Metacognition, emotion, and problem-solving

#### "Learn to Think" Project (LTP): Introducing a systematic thinking cultivation curriculum

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"Learn to Think" Project is a serious of training curriculum intended to help students develop ability to think critically and creatively. The curriculum is designed for primary and secondary school students. Each grade, from first to eighth, has an activity manual detailing instructions for 18 activities and/or exercises specific to thinking skills involving observation, problem finding, concrete and abstract thinking, problem solving, and creative thinking. We started our experiment since 2003. There are more than 100 thousands students participated in the experiment. Preliminary results strongly indicated that the curriculum has very significant impact for all grades on thinking ability, creativity, problem finding ability, learning motivation and study method, and academic performance.

### The effectiveness of mindfulness training in mental health promotion in the community

**Yu, Nicky K.K.** *Dept. of Psychology, Chinese Univ. of Hong Kong, Hong Kong, China, People's Republic of Hong Kong SAR*  
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The effectiveness of a five-day mindfulness retreat conducted in Hong Kong in May 2007 was assessed. Based on 191 participants, results showed significant increases in the awareness of mindfulness, use of adaptive metacognitive plans, empathy, self actualization, use of cognitive coping methods, and decreases in symptoms of depression, anxiety, and stress. Findings support the effectiveness of using mindfulness to reduce psychological distress in non-therapeutic setting. Possible mechanisms of mindfulness were also tested with partial support in the study.

### Use of metacognitive strategies in high and low critical thinking performance: A think-aloud study

**Ku, Kelly Yee Lai** *Dept. of Psychology, University of Hong Kong, Hong Kong, China, People's Republic of: Hong Kong SAR*

We examined the role of metacognitive strategies in critical thinking. A total of 138 Chinese undergraduates were assessed on verbal-cognitive ability, critical thinking disposition, and critical thinking performance using Halpern's Critical Thinking Assessment Using Everyday Scenarios (HCTAES). Subsequently ten participants with comparable cognitive ability and critical thinking disposition but with different levels of critical thinking performance (five scoring high and five scoring low on the HCTAES) were retested on thinking tasks with think-aloud procedures. Results indicated that good critical thinkers used more planning, monitoring, and evaluation strategies. Implications for theory development and enhancement of critical thinking are discussed.

### Emotion and problem solving: A contribution

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The present study addresses the effects of failures and successes encountered over the course of a problem on physiological and expressive components of emotion. Nineteen female participants were asked to solve the five-disks version of the Tower of Hanoi problem. The spontaneous skin conductance activity and the facial expressions were recorded without interruption during the problem-solving activity. The specific patterns of emotional manifestations observed during the impasses and the subgoals achievements are interpreted within the framework of the Appraisal Theories and are discussed as reflecting the implication of emotion in a goal-oriented activity such as problem-solving.

### Visual imagery and problem solving: Does affective states have any role to play

**Singh, Tushar** *Department of Psychology, Allahabad University, Allahabad, India*

Two experimental studies were carried out to explore the effect of affective states and imagery ability on participants' judgment about the usefulness of imagery in problem solving. A 2 \* 2 (high and low imagery ability \* positive and negative affective state) factorial design was used for the study. In the first study affective states were generated using narrative method and In the second study participants' success and failure on problem solving task resulted in positive and negative affective states. Results showed affective states is particularly important when it is generated from the feeling of success or failure.

### Self-regulation and selective exposure: The impact of depleted self-regulation resources on confirmatory information processing

**Fischer, Peter** *School of Psychology, University of Exeter, Exeter, United Kingdom* **Greitemeyer, Tobias** *School of Psychology, University of Sussex, Brighton, United Kingdom* **Frey, Dieter** *Inst. für Sozialpsychologie, Universität München, München, Germany*

The present research investigates the impact of self-regulation resources on confirmatory information evaluation and search. Four studies employing different decision cases consistently found that individuals with depleted self-regulation resources exhibited a stronger tendency for confirmatory information processing than non-depleted individuals. Alternative explanations for this effect based on processes of ego-threat, cognitive load, and mood could be ruled out. Mediation analyses suggested that individuals with depleted self-regulation resources experienced increased levels of

commitment to their own standpoint, which resulted in increased confirmatory information processing. In sum, the impact of ego-depletion on confirmatory information search seems to be more motivational rather than cognitive in nature.

### FP-173: Moral emotions

#### Antecedents of moral emotions: An analysis guided by Heider's naive action analysis

**Rudolph, Udo** *Inst. für Psychologie, Techn. Universität Chemnitz, Chemnitz, Germany* **Angermann, Nadine** *Institut für Psychologie, TU Chemnitz, Chemnitz, Germany* **Schulz, Katrin** *Institut für Psychologie, TU Chemnitz, Chemnitz, Germany*

In two studies, the cognitive antecedents of moral emotions are analyzed by means of Heider's (1958) concepts of ought (i.e., normative information), goal attainment and trying. In both studies, participants evaluated situations characterized by different combinations of these concepts. As dependent variables, participants reported whether they experience moral observer emotions (admiration, anger, contempt, disgust, envy, indignation, jealousy, pride, respect, Schadenfreude, and sympathy) and moral actor emotions (embarrassment, guilt, pride, regret, and shame). ANOVAS reveal that Heider's concepts explain impressive amounts of variance in the emotion ratings. Furthermore, cluster analyses confirm that the respective moral emotions map into theoretically meaningful clusters.

#### Why are we grateful? Pharmacy bonus experiment

**Szczesniak, Malgorzata** *Dept. of Psychology, Catholic University Lublin, Lublin, Poland* **Zaleski, Zbigniew** *Dept. of Psychology, Catholic University Lublin, Lublin, Poland*

Gratitude is a common emotion that an individual may experience towards a benefactor. In a pharmacy-based real-life experiment and its paper-and-pencil version it was shown that the larger the gift (50% discount on the price of a medication vs. 15%) and the greater the effort of the donor (money earned through personal work vs. money received from a wealthy company) then the stronger the gratitude from the recipient. The study provides evidence that gratitude is positively associated with moral and religious values, emotional intelligence, extraversion and agreeableness, while being negatively related to hedonistic values and neuroticism. The results are discussed within the attributional theory.

#### Moral sphere development in pre-school age

**Sharkova, Svitlana** *Dept. of Foreign Languages, National Metallurgical Academy, Dnipropetrovsk, Ukraine*

The specific objective of our study is to research moral sphere development in pre-school age and the factors that influence child's moral choice. Two groups of children (4-5 and 5-6 years old) were suggested eight different situations and the results of the interview revealed the importance of aspects connected with emotional and intellectual sphere development in moral choice. E.g., sometimes children were intent to use their intellect in order to break moral standards and to hide it. As a conclusion we suggest the approaches to improve child's ability to -regulate his/her own emotions, -understand causative factors and others.

#### Why do I feel so bad?: Autobiographical recollections of moral emotions

**Schulz, Katrin** *Inst. für Psychologie, Techn. Universität Chemnitz, Chemnitz, Germany* **Angermann, Nadine** *Institut fuer Psychologie, TU Chemnitz, Chemnitz, Germany* **Rudolph, Udo** *Institut fuer Psychologie, TU Chemnitz, Chemnitz, Germany*

Two studies analyze the cognitive antecedents and social functions of moral emotions. Autobiographical recollections of moral actor emotions and moral observer emotions were generated by semi-structural interviews, and analyzed by means of ANOVAS and multiple regressions. As dependent variables, participants assessed Heider's (1958) concepts of ought (normative information), goal attainment, and trying, as well as hedonic quality, motivational impact on self-regulation, and regulative social functions (e.g., reward vs. punishment). Results provide strong evidence for a comprehensive classification of moral emotions in terms of Heider's naive action analysis and are discussed with respect to evolutionary explanations of moral emotions.

#### The psychology of sperm donation: Implications for donor recruitment

**Riggs, Damien** *School of Psychology, South Australia, Australia*

**Objectives:** Little research has been conducted on sperm donor's experiences in Australia. This project aimed to explore the ways in which men who act as sperm donors negotiate their identities in regards to their own families, the families to whom they donate, and their own sense of self. **Methods:** Individual interviews were undertaken with men in South Australia. **Results:** A discursive analysis of the interviews highlights the complex range of emotions that shape men's experiences of sperm donation. **Conclusions:** The results provide clear implications for the recruitment of sperm donors in Australia and the further development of guidelines for ethical practice.

#### The relation of shame with anger, hostility, physical and verbal aggression between collage students in Tehran

**Pourshahriari, Mahsima** *Dept. of Psychology, Alzahra University, Tehran, Islamic Republic of Iran*

The relation of shame, anger, aggression and hostility has been the focus of considerable theoretical discussion, but empirical funding has been inconsistent. Two hundred and seventy undergraduate students of Tehran universities have been chosen according to a multi-stage cluster sampling. The self-conscious Affect Test and the Buss-Perry aggression Questionnaire have been used. The results of seven hypothesis considered Indicated that there were a significant relation between shame, anger, hostility and aggression in both sexes. There were also a positive significant difference between hostility and all other variables in The study except verbal aggression. **Key words:** shame, hostility, anger, aggression, sex.

### FP-174: Human resources and job performance

#### Reversals in performance evaluation: A range theory perspective

**Wong, Kin Fai Ellick** *Management of Organizations, HKUST, Hong Kong, China, People's Republic of: Hong Kong SAR* **Kwong, Jessica Y.Y.** *Marketing, CUHK, Hong Kong, China, People's Republic of: Macao SAR* **Ng, Carmen K.** *Management of Organizations, HKUST, Hong Kong, China, People's Republic of: Macao SAR*

This paper examines preference reversals in performance evaluation (i.e., one ratee is preferred in one condition and the other one is preferred in the other condition, although all relevant performance information is identical in the two conditions). Results from three studies showed that the perceived difference in performance between two ratees was greater when the information was presented in a narrow range than in a wide range context. This range effect led to evaluation reversals when evaluating two ratees with tradeoffs between performance attributes across rates. This pattern



did not occur when global range information was presented.

#### Performance in low-quality jobs

**Bayona, Jaime Andrés** *Social Psychology, University of Barcelona, Barcelona, Spain*

Low-quality employment is an area that has not been sufficient studied by the Work-Organizational Psychology (WOP) despite around 30% of the world labour force work under these conditions. This study reviews the usefulness of the traditional methods and indicators used by WOP to measure the performance in the low-quality job population (especially for workers outside formal organizations). A comparison is made using subjective and objective measures of job performance at the organizational, group and individual level. Results showed the need to adjust the job-performance assessment methodology for this population. Implications for employability and social policies will be discussed.

#### A measure of Psychological Capital (PsyCap) and its relationship with work performance, work well-being and social well-being

**Siu, Oi-Ling** *Sociology and Social Policy, Lingnan University, Hong Kong, China, People's Republic of : Hong Kong SAR*

This paper aimed to develop and validate a PsyCap measure (Luthans, 2002), and examine its relationships with outcomes. Data were collected among health care workers in Hong Kong and PRC by a longitudinal survey (N = 773 & 287 respectively). The results obtained by CFA supported a 22-item PsyCap scale measuring: self-efficacy, optimism, hope, and resiliency. Hierarchical regression analyses showed that PsyCap (Wave 1) predicted better work performance (job performance, injuries at work), better work well-being (job satisfaction, physical/psychological symptoms), and better social well-being (work-life balance, quality of life) (Wave 2). The construct and criterion validity of PsyCap were demonstrated.

#### Relation of general aptitudes and job performance in Saipa car company

**Oreyzi, Hamid Reza** *Psychology, Isfahan University, Isfahan, Islamic Republic of Iran Amir, A. tehran, Saipa car company, iran, Islamic Republic of Iran Moradi, A. tehran, Saipa car company, iran, Islamic Republic of Iran Golparvar, Mohsen psychology, Khorasgan University, iran, Islamic Republic of Iran* Job performance of 300 personnel in saipa car company was obtained as an archival data. Relation between general aptitudes which measure by GATB and performance was significant. Multiple regression analysis show significant relation between certain combination of aptitudes and job performance. Recommendations based on findings presented.

#### Approaches to developing human capital in manufacturing industries

**Muthuraj, Birasnav** *Management Studies, IIT Roorkee, Roorkee, India Rangnekar, Santosh Management Studies, IIT Roorkee, Roorkee, India* Emphasizing human capital development strategies makes modern organizations being different from the last millennium organizations. The purpose of this paper is to explore the extent to which manufacturing industries give importance to identified factors influencing human capital creation practices with reference to a survey conducted among 70 Indian companies. The survey questionnaire comprises of these factors classified under human resource practices, leadership, and knowledge management. This paper finds that leadership styles and appraising performance play a leading role in human capital development. Companies take major efforts to create such capital by

integrating leadership with knowledge management and human resource practices.

#### Effects of job attitudes and identity resources on intentions of professional maintenance among women and men in non traditional careers

**Vonthron, Anne-Marie** *Dépt. de Psychologie, Université Bordeaux 2, Bordeaux, France Becker, Maja Département de Psychologie, Université Bordeaux 2, Bordeaux, France Lagabrielle, Christine Département de Psychologie, Université Bordeaux 2, Bordeaux, France Pouchard, Dominique CROP, AFPA, BEGLES, France*

This research examined the effects of job attitudes (job satisfaction, organizational and trade affective commitment) and of identity resources (job self-efficacy, perception of gender identity conflict) on intentions of current job maintenance and of trade maintenance. A survey was conducted among 131 women and 61 men (in male versus female-dominated occupations). Regression analyses showed that the intention of staying in the current job was more influenced by the perception of the job context among men than among women. The intention of staying within the trade was more affected by the perception of personal identity resources among women than among men.

#### FP-175: Human-environment interaction

##### Lighting for effect: A cross-cultural comparison of the influence of types of light in spiritual and secular environments

**Augustin, Sally** *PlaceCoach, Inc., Holland, USA*

Physical environments have a profound effect on human experience, both directly and through nonverbal communication. The psychological influences of daylight and artificial light on people in contemporary spiritual and secular spaces was investigated cross-culturally via in-person interviews of individuals of varied religious orientations and national cultures, site visits, and content analysis of relevant visual and written materials. This investigation revealed that experiencing daylight has a similar expansive effect in both spiritual and secular settings. Conversely, current modes of use of artificial light have more variable influence on mood and symbolic attributions. Designers must consider these diverse effects to optimize place design.

##### Linking place attachment with social identity orientation: An examination of the relationship between place attachment, social identity orientation and integration to city

**Karakus, Pelin** *Dept. of Social Psychology, Ege University, Izmir, Turkey Görgenli, Melek Social Psychology, Ege University, Izmir, Turkey*

The general purpose of the study was to investigate the relations between attachment and social identity orientation as related to city integration. The study was carried out by a field research with a sample of 237 participants. The Urban-Identity Scale (Lalli, 1992), The Aspects of Identity Questionnaire (Cheek, Trop, Chen & Underwood, 1994) and other concerned scales were used in order to collect data. The results revealed significantly different place attachment levels depending on the living area. The main conclusion of the study is the social identity orientation is a significant predictor of the place attachment level. The group who has a higher level of social identity orientation has a higher place attachment.

#### Physical activities for senior citizens: An analysis of the impacts resulting from the project Academia da Cidade in Camaragibe

**Santos, Azenildo** *Educação Física, Faculdade Maurício de Nassau, Recife, Brazil Menezes, Vilde Educação Física, Universidade do Porto, Recife, Brazil* Our objective was to analyze the impacts resulting from physical activities in open spaces in the city, conducting documentary analysis, semi-structured interviews and focal groups. The results: 1) Civic and grassroots participation is a fundamental element and is relevant in the qualification process; 2) Public users there were a 39% reduction in the use of medication, a 72% increase in people's physical well-being; and 86% increase in the sense of belonging and happiness. Conclusions: a) Civic and grassroots participation is fundamental in the structuring and control of policies; b) There is a growing awareness of the concept of healthy communities.

#### Mind, body, environment: An integrative approach

**Imamichi, Tomoaki** *Environmental Psychology, City University of New York, Hoboken, USA*

This project attempts an integrative approach by examining destination marathon runners, whose activity highlights and integrates mental, physical and environmental components that need to be successfully negotiated. This project also attempts to resolve the apparent paradox of a leisure activity done for fun and pleasure, taken seriously and involving pain. The integrative approach includes quantitative and qualitative measures, investigating how participants have rated their experiences, and why participants have rated their experiences that way. In addition to theoretical and methodological merits, this project hopes to shed light on personal and environmental factors contributing to satisfying and meaningful experiences.

#### FP-176: Learning in groups

##### Can advanced digital video technologies support group knowledge processes in complex collaborative design tasks?

**Zahn, Carmen** *Knowledge Media Res. Center, Tübingen, Germany Hesse, Friedrich W. Institut für Wissensmedien, Tübingen, Germany Pea, Roy SCIL, Stanford University, Stanford, CA, USA Rosen, Joe SCIL, Stanford University, Stanford, CA, USA*

The research to be presented here relates to the affordances of digital media and their possible implicit impacts on cognitive processing and group discussions during knowledge construction. In an experiment (N=24 dyads), we investigated effects of using an advanced digital video technology as a cognitive tool supporting the accomplishment of a collaborative 'visual design' task. Two conditions were compared, one with activity support by an advanced video tool, one control condition using a comparably simple technology. Results revealed significant effects concerning design strategies, individual knowledge test scores and skills transfer. Practical implications for computer-supported learning at school are discussed.

##### Impact of culture, personality and digital media on the virtual classroom

**Hogg, Jerri Lynn** *Communication Management, Bay Path College, West Hartford, USA*

Language, culture, and personality play a significant role in communication and learning behaviors. The study examined the impact of culture, personality types, and digital media preference on the virtual classroom. A group of African American college students were given the MMPI-2, a demographic information assessment, and an electronic communication survey. Results indicate that certain technologies can facilitate learning and remove some communication barriers across cultures and

personality types. I will demonstrate that, aided with this knowledge, educators can plan more effective ways to utilize technology to reach out to various groups.

#### **Does participation in groups problem solving setting influence individual learning?**

**Lepage, Beatriz** Los Chaguaramos, Centr. University of Venezuela, Caracas, Venezuela

This study examines instructional design model based on cooperative learning focused on the link between cognitive and social processes. Teachers and students from different programs are involved in solve community problems and sharing naive and academic knowledge. Results indicated that 60% of the participants showed cooperative behaviors, 25% presented and solved problems without significant social involvement in cooperative solutions, and 15% showed no interest in solving the problems. This framework has respect for participant's backgrounds, a belief in skills success of all participants, learning as a social process, and learning as an active and constructive process of knowledge acquisition

#### **Behavioral strategies of pupils with high levels of anxiety in the situation of the group interaction**

**Nechayeva, Raisa** Psychology, State University HSE, Moscow, Russia **Skatova, Anna** Psychology, Lomonosov State University, Moscow, Russia

Anxiety predicts low performance in the variety of educational domains (Sarason, 1960). We aimed to study the relationship between anxiety and behavior in group discussion. 55 high-school students completed MAS (Taylor, 1953) and participated in discussion. We found that both pupils, who demonstrated low and high anxiety levels, can be equally successful in group discussion. It is contradictory to the traditional view that anxious pupils are less prosperous in the situation of group interaction. The findings are discussed in regard to behavioral strategies utilized by pupils with the high anxiety levels in classroom interaction.

#### **Implementing an online monitoring instrument for supporting motivated learning in groups: Experiences from German and Dutch social science students**

**Martens, Thomas** Internation. Bildungsforschung, Deutsches Institut für, Frankfurt, Germany **de Brabander, Cornelis** Social and Behavior Sciences, Leiden University, AK Leiden, Netherlands **Martens, Rob** Social and Behavior Sciences, Leiden University, AK Leiden, Netherlands

Previous studies show that an online monitoring tool for reflecting feelings of relatedness, autonomy, competence and interest can compensate motivational loss in learning groups. This hypothesis was tested with social science students learning statistics at university by conducting three studies in Germany and Netherlands: a randomized control group experiment (n=128), a comparative study (n=64) and an implementation study (n=100). Statistical analysis shows a significant effect of the instrument regarding motivational outcome just in the first study. Nevertheless, with interview data from the third study guidelines for implementation were identified concerning proper embedding of the instrument in the course framework.

#### **The potentials of ECAM model of mediation in the classroom**

**Abdul Rahim, Fauziah** Dept. of Education, Universiti Utara Malaysia, Kedah, Malaysia

This qualitative study is about building a community of learners that places mediation as central in the learning and teaching of English and Mathematics in a second language context. The study was conducted within a period of three months in Malaysia where I worked with two teachers and two groups of pupils from a Year One class

whereby intense classroom observations, classroom discourse and dialogic discussions with teachers and pupils were gathered. Microgenetic analyses of transcripts revealed four typology of mediation that emerged from the data: environmental mediation, cognitive mediation, affective mediation and metacognitive mediation (i.e. ECAM model of mediation).

#### **FP-177: Gender issues**

##### **Distribution of domestic tasks and its perceived fairness: A cross-cultural analysis**

**Toth, Katalin** Social Psychology, University of Nevada, Reno, Reno, USA

The present study examined the cultural effects on the relationship between domestic tasks' distribution and its perceived fairness. Married people from the 2002 ISSP were selected. Hofstede's individualism indices were added. Multilevel modeling was used to analyze two-level variables – cultural and individual variables. Results showed that the higher the level of individualism the bigger the differences between wives' level of perceived fairness and husbands' level of perceived fairness, women always perceiving the division of labor as less fair, even when both contributed equally. In conclusion, culture alone and in interaction with individual characteristics affected people's perception of tasks' distribution fairness.

##### **When Laura and Lukas learn: Stereotype threat and processes of knowledge acquisition**

**Appel, Markus** Bildung und Psychologie, Universität Linz, Linz, Austria **Kronberger, Nicole** Education and Psychology Dept., University of Linz, Linz, Austria

Stereotypes are harmful when they predict inferior academic performance of a group because victims tend to behave accordingly: stereotype threat affects test performance. Little is known, however, whether and in what ways the phenomenon applies to processes of knowledge acquisition. In this contribution we address this lacuna. While women are seen to be more successful learners in general, they are assumed to underperform when it comes to matters of science and technology (study 1, N = 1058). Multivariate analyses of two further experiments (N = 40; N = 60) document and specify the effect of stereotype threat on learning processes.

##### **Liked women, valued men: Range and limits of the "women are wonderful effect"**

**Ebert, Irena Dorothee** Inst. für Psychologie, Universität Jena, Jena, Germany **Steffens, Melanie** Caroline Psychological Department, University of Jena, Jena, Germany

On a general evaluative dimension, women are judged more positively than men, both when applying direct (questionnaires) as well as indirect (reaction-time based) measurement tools. The present work aims at illuminating the determinants and generality of the "female preference". In a series of experiments (total N > 500) it was shown that the female preference is partially caused by stereotypic associations of women and warmth. A "male preference" emerges when the general evaluative dimension is replaced by a value based dimension, indicating that women are judged more positively but men are seen as more valuable.

##### **Gender-(a)typical behavior and status: Evaluation of leaders, subordinates, and job-applicants**

**Michel, Birgit** University of Geneva, NCCR Affective Sciences, Geneva, Switzerland **Schmid Mast, Marianne** Department of Work and Organiz., University of Neuchâtel, Neuchâtel, Switzerland

Intending to expand role congruity theory of prejudice toward female leaders (Eagly & Karau, 2002) we hypothesized that (1) in role-incongruent situations individuals are evaluated more favorably when behaving according to their gender role (2)

whereas in role-congruent situations this effect is significantly smaller. 285 students evaluated 16 person descriptions varying on status, gender, and gender-typicality of behavior. Findings support our second hypothesis and yield contradictory results concerning the first hypothesis indicating that for female leaders the gender role but for male subordinates the status role becomes salient. Results of a current study applying this paradigm to job-interview-situations are presented.

##### **Ambivalent sexism in Roman Catholic Poland: where values and equality conflict**

**Pietrzak, Janina** Faculty of Psychology, University of Warsaw, Warsaw, Poland

The subjective positivity associated with being the target of benevolent sexism appears far removed from traditional views of sexism as a negative, devaluing attitude towards women. Benevolent sexism beliefs, however, are based in values that promote and perpetuate gender inequality in society. In Poland, many of these positive attributes of womanhood are emphasized and encouraged by the Roman Catholic Church, an institution that dismisses hostile sexist attitudes while being characterized by strict inequality between the sexes. The studies (Study 1: correlational, Study 2: priming) presented here investigate the relationships between religion, values and ambivalent sexism.

##### **Stereotype threat, intellectual performance and affirmative action in Brazil**

**Pereira, Marcos** Dept. of Psychology, Universidade Federal da Bahia, Salvador, Brazil **Silva, Joice** Psychology, Universidade Federal da Bahia, Salvador, Brazil

This paper intends to evaluate the intellectual performance of the students favored by affirmative action program. The main hypothesis is that the performance of the students favored by university quotas would be inferior to the others, due to the stereotypes' threat situation. The research was conducted with 120 students. The instrument employed to measure the intellectual performance was a questionnaire with 21 questions about logic. The results demonstrate that the students in stereotypes threat experimental condition achieve a lower performance, but suggests that the negative effects of the stereotypes' threat can be reverted in special conditions.

#### **FP-178: Romantic relationships**

##### **The study of the relationship between identity styles, sex roles and sex with spouse selection in single university students**

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the Relationship of Identity Styles, Sex Roles and Sex on Spouse Selection investigated. Three measures of Identity Style (ISI- 6G) Sex Roles (Bem, 1974) and Spouse Selection Criteria were administered to 196 university students. A three way analysis of variance indicated significant interaction effects of identity styles, sex roles and sex on some factor of spouse selection criterias. In the second part of this research, the relationship between sex roles and sex, identity style and sex roles also sex and identity style was investigated. Results showed a significant relationship in all. Sex differences in Spouse Selection, indicated significant differences between males and females in some factor of spouse selection criterias.



### Dating experiences and attitudes towards romantic relationships among Colombian adolescents

**Caycedo, Claudia** Psychology, Fundación Universitaria Konrad, Bogotá, Colombia **Berman, Steven L** Psychology, University of Central Florida, Daytona Beach, USA **Ovieda, Ana María** Psychology, Fundación Universitaria Konrad, Bogotá, Colombia **Suarez, Ingrid** Psychology, Fundación Universitaria Konrad, Bogotá, Colombia **Martin, Angie** Psychology, Fundación Universitaria Konrad, Bogotá, Colombia **Cubides, Inghry** Psychology, Fundación Universitaria Konrad, Bogotá, Colombia

Existing associations between experiences in romantic relationships and attitudes towards love of 223 adolescents aged 15 to 20 years from Bogotá are analyzed. Data were analyzed using correlational statistics and the one-way ANOVA. Significant differences were found among age and gender groups regarding the Beliefs Scale towards love, and gender differences concerning attitudes towards love and involvement. Finally, it was found a positive correlation between identity and intimacy with friendly, altruistic and romantic love as well as a negative correlation between intimacy and ludus love

### The study of Iranian couple's love relationship and it's relation with marital satisfaction and demographic variables

**Ghamarani, Amir** Psychology, University of Isfahan, Isfahan, Islamic Republic of Iran **Sharyati, Maryam** psychology, university of isfahan, isfahan, Islamic Republic of Iran

The purposes of this study were: 1-The investigation of Iranian couple's relationship based on sternberg model. Data selected from 66 couples (young and middle years) chosen with available sampling method result: 1- there are significant differences between young and middle years couples in commitment and passion, but no in intimacy. 2- in middle years couples, commitment and in young couples, passion were pre-eminent component. 3- love relationship are predicted by level of education, Job and during of marriage, but not with age and number of members of couple's family. 5-love relationship predicted the marital satisfaction in terms of following component : marital communication, sexual relation, and personality issue.

### Is love blind?: Attractiveness ratings by self, partner and others and the outcome of dating relationships 25 years later

**Hill, Charles** Dept. of Psychology, Whittier College, Whittier, USA **Peplau, Letitia Anne** Psychology, UCLA, Los Angeles, CA, USA **Rubin, Zick** lawyer, private practice, Newton, MA, USA

Physical attractiveness ratings of self and dating partner, plus a panel's ratings of their photographs, were available for both members of 173 couples from the Boston Couples Study. For both sexes, ratings of dating partner were higher than self ratings, which were higher than the panel's ratings. For women only, the difference between their rating of their dating partner and the panel's rating was correlated with their Rubin Love Scale score and with a Romanticism Scale, but not with eventual marriage. However, women with low self ratings were more likely to marry their partner and remain married 25 years later.

### Sexual and marital satisfaction in the transition to parenthood

**Oronoz, Beatriz** Dept. of Psychology, Univ. of the Basque Country, San Sebastian, Spain **Alonso Arbiol, Itziar** Department of Psychology, Univ. of the Basque Country, San Sebastian, Spain **Gorostiaga, Arantxa** Department of Psychology, Univ. of the Basque Country, San Sebastian, Spain **Balluerka, Nekane** Department of Psychology, Univ. of the Basque Country, San Sebastian, Spain

The aim of this study was to analyze the changes experienced by parents in their sexual and marital satisfaction after the birth of the first baby. The sample was composed by 228 married or cohabiting heterosexual individuals (114 women and 114 men) who were assessed with the Spanish version of the MSI-R in two moments: in the last months of their first pregnancy, and four months after the delivery. Results showed that sexual and marital satisfaction diminished for both men and women, and that sexual satisfaction is more related to marital satisfaction for men.

### The function of similarity in relationship regulation

**Wrzus, Cornelia** Inst. für Psychologie, Universität Potsdam, Potsdam, Germany **Lang, Frieder R.** Inst. für Psychogerontologie, Universität Erlangen-Nürnberg, Erlangen, Germany **Neyer, Franz J.** Psychology, University Potsdam, Potsdam, Germany

The Evolutionary Model of Relationship Regulation proposes Closeness Regulation and Reciprocity Monitoring as central mechanisms in relationships. Also, similarity correlates positively with emotional closeness and cooperation. The assumed mediational function of similarity was tested in an internet study with 455 young adults and a dyadic study with 171 middle-aged couples. Participants rated the relationships of their ego-centered networks on emotional closeness, reciprocity and three types of similarity. Multilevel mediational analyses confirmed similarity as a mediator in both samples. Physical, skill and subjective similarity mediated large parts of the association between genetic relatedness and emotional closeness, but were of smaller importance for reciprocity.

### FP-179: Psychotherapy - Research and treatment methods VI

#### The case study of Self-Active Relaxation Therapy (SART) for people with physical, developmental and severely mental and physical disabilities

**Ki, Heyoung** Faculty of Human Relation, Fukuoka Jo Gakuin University, Fukuoka, Japan **Ohno, Hiroyuki** Faculty of Human Relation, Fukuoka Jo Gakuin University, Fukuoka-shi, Japan

In Japan, Dousa-hou (Naruse, 1975) has been a popular method of psychological rehabilitation for people with disabilities over the past 30 years. SART (Ohno, 2003) is a progressed method based on the theory of Dousa-hou. In this presentation, the characteristics of method and process of SART will be outlined, including outcome data of 30 cases, with 10 physical, 10 developmental and 10 severely mental and physical disabilities. These cases had participated in an intensive SART therapy program, and showed remarkable changes after a week. The effectiveness of SART with 30 cases will be reported with evaluating criteria and visual data.

#### Family systems coping with threatened illness:

**The use of therapeutic technique of eye movement desensitization and reprocessing (EMDR), in the psychological treatment protocol Molero Zafra, Milagros** Sintest Psychology, Valencia, Spain **Pérez Marin, Marián** Faculty of Psychology, C. University of Valencia, Valencia, Spain

When a threatened illness affects a person, the whole family system is seriously affected too. The illness produces deep effects on family members that could be traumatic for some of them. We developed a psychological treatment protocol that includes the EMDR technique that it's effective in the treatment of the emotional symptoms caused by situations of traumatic events. The combined approach that include EMDR and family systems therapy can result in profound changes for both the individual and the family (Kaslow and Shapiro, 2007). We present this protocol that includes both

approaches to help families coping with the threatened illness.

### The investigating of effectiveness of training relaxation without tension along with Biofeedback and EMDR on war veterans with PTSD

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**Objectives:** The aim of this study was to examine the effectiveness of training of Relaxation without tension along with Biofeedback and EMDR on war veterans with Post Traumatic Stress Disorder. **Methods:** In this research 20 war veterans with PTSD were selected availability sampling and divided into 3 groups of: training of Relaxation without tension along with Biofeedback (n=7), EMDR (n=7) and control group (n=6). After that, experimental groups was attended in treatment sessions while control group didn't attend in any treatment session. **Result:** experimental groups has been found to be effective on PTSD among Iranian war veterans but there was no significance difference between two treatment method.

### FP-180: Dietary behavior I

#### The dual-motivation model of unhealthy eating behavior

**Ohtomo, Shoji** Graduate School of Inf.Sci., Tohoku University, Sendai, Japan **Hirose, Yukio** Graduate School of Env.sStu., Nagoya University, Nagoya City, Japan

This study examined the determinants of dual motivation model of unhealthy eating behavior. 237 undergraduate students responded to a questionnaire measuring intentional motivation, impulsive motivation, descriptive norm, injunctive norm, availability, self efficacy and actual performance of snack eating and instant food eating. Our results indicated that both intentional motivation and impulsive motivation determined unhealthy eating behavior. Moreover, injunctive norm affected intentional motivation. Descriptive norm and availability influenced impulsive motivation and behavior. Furthermore, multiple-sample path analysis suggested that self efficacy moderates the effect of dual motivations on unhealthy eating behavior.

#### The presentation of 'pro-anorexia' in online group interactions

**Gavin, Jeff** Dept. of Psychology, University of Bath, Bath, United Kingdom

This project focuses on pro-anorexic identities in an online group setting. Specifically, it examines the presentation of pro-anorexia via an interpretive phenomenological analysis of postings to a 'pro-ana' online discussion forum. Analysis indicates that pro-anorexic identities are normalised and strengthened through the normalization of participants' 'pro-ana' thoughts and behaviours and the group bond created through sharing a 'secret identity'. This process renders participants less likely to reveal their pro-ana identity to friends and family in the real world. The implications of our findings are discussed in relation to the theory of identity demarginalisation.



## FP-181: Developmental tasks and challenges in midlife I

**Gains and losses related to menopause: An analysis within the framework of conservation of resources theory (COR) by S. E. Hobfoll**

**Bielawska-Batorowicz, Eleonora** *Inst. of Psychology, University of Lodz, Lodz, Poland* **Mikolajczyk, Marzena** *Institute of Psychology, University of Lodz, Lodz, Poland*

**Objectives:** Menopausal transition was conceptualized within COR theory. It was hypothesized that (1) evaluation of gains and losses correlates with intensity of symptoms, (2) positive attitudes towards menopause correlate with higher evaluation of gains. **Methods:** Participants were 91 menopausal women. Menopause Representation Questionnaire by Hunter & O'Dea and Questionnaire of Evaluation of Resources by Dudek et al. were administered. **Results:** Evaluation of gains and losses was related to the use of hormonal replacement therapy. Women perceiving more gains during menopause reported less symptoms and expressed more positive attitudes towards menopause. **Conclusions:** COR theory provides meaningful framework for analysis of menopause.

## Change for the better or change for the worse? Perceived changes as a consequence of an adverse life event and their associations with ruminative thoughts.

**Leist, Anja** *Inst. für Psychologie, Universität Trier, Trier, Germany* **Filipp, Sigrun-Heide** *Department of Psychology, University of Trier, Trier, Germany*  
After the occurrence of an adverse life event, people experience positive and negative changes in their lives (e.g., losses in the occupational domain) and in perceived individual characteristics (e.g., gaining wisdom). In a questionnaire study with N=260 participants (aged 41 to 86 years; temporal distance of the event: one to 52 years), we examined Tait and Silver's (1989) assumption that ruminative thoughts about an adverse life event will persist as long as changes caused by the event are salient for the individual. Ruminative thoughts were not associated with perceived positive changes, but significantly associated with perceived negative changes.

## An ecological understanding of stress and self esteem of divorced women in Malaysia

**Juhari, Rumaya** *Human development & Family Stu, Universiti Putra Malaysia, Selangor, Malaysia* **Yaacob, Siti Nor** *Human development & Family, Universiti Putra Malaysia, Selangor, Malaysia* **Baharudin, Rozumah** *Human development & Family, Universiti Putra Malaysia, Selangor, Malaysia* **Kahar, Rojanah** *Human development & Family, Universiti Putra Malaysia, Selangor, Malaysia*

The study aimed to determine the influences of family ecological processes on divorced women's stress level and self esteem. A total of 510 divorced women completed self-administered questionnaires measuring the respective variables. The findings indicate that stress level, family functioning, and boundary ambiguity are unique predictors of divorced women's self-esteem, ( $R^2 = 0.38$ ). As for stress level, the predictors are self-esteem, boundary ambiguity, support system, economic hardship and family functioning ( $R^2 = 0.39$ ). The study concludes that divorced women's stress level and self esteem are highly influenced by the ecological processes within the self, family and environmental contexts.

## FP-182: Dimensions of personality I

### Personality and work values

**Inceoglu, Ilke** *The Pavilion, SHL Group Limited, Thames Ditton, United Kingdom* **Warr, Peter** *Institute of Work Psychology, University of Sheffield, Sheffield, United Kingdom* **Bartram, Dave** *Research, SHL Group, Thames Ditton, United Kingdom*

This paper examines conceptual and empirical links between people's values and their personality traits. Personality traits and people's values are often treated separately, with distinct literatures, but they operate together in important ways. Data collected with 294 working adults supported the conceptual propositions: absolute correlations were high when a work value and a personality trait were logically overlapping and low when no such overlap was predicted. Theoretical implications include the development of models of personality structure in terms of networks of values, treating each trait in terms of its mix of those.

## The "Little-Five" personality in China: A review of theory, measurement and research

**Yu, Yibing** *Yingdong Building, Room 255, Beijing Normal University, Beijing, People's Republic of China* **Hong, Zou** *Ins. Developmental psychology, Beijing Normal University, Beijing, People's Republic of China*

This presentation will review the theory, measurement and research about what we have made relating to the "Little Five" personality during the past 10 years in China. It concludes: (1) The issues of culture-specific and age-specific in Chinese "Little Five" Personality; (2) The development of Chinese "Little Five" Personality Scale and its psychometrics qualities; (3) Research relevant to "Little Five" Personality and its distinct findings in the field of educational, Developmental and personality & social psychology et al. The limitation and future directions have also been discussed in the end.

## Structure of Russian personality lexicon through the lens of the Cube-in-Globe and Big Five models

**Putilov, Arcady** *Berlin, Germany* **Putilov, Dmitriy** *Biology and Biophysics, Research Institute Molecular, Novosibirsk, Russia*

We tested whether six bipolar dimensions predicted by the Cube-in-Globe model represent the first six factors revealed by factor analysis of personality-relevant words of everyday language. More than 300 students rated 498 emotion- and personality-referring nouns: whether each term describes herself/himself, someone else whom s/he likes, and someone else whom s/he dislikes. The prediction of the Cube-in-Globe model that any personality trait might be located in three-dimensional space was confirmed. Moreover, the factors of the six-factor varimax solution demonstrate considerable overlap with factors usually referred as the Big Five.

## FP-184: Disability and rehabilitation I

### Constructing consumer values for community and independent living solutions

**Mpofu, Elias** *Counselor Education and Reha., The Penn State University, University Park, USA*

**Objective:** The study investigated community and independent living solutions preferred by consumers with disabilities. Community and independent living solutions for people with disabilities historically have been service provider rather than by consumer driven. **Method:** Two-hundred and ten consumers with disabilities participated in the study. Consumer preferred solutions were constructed using concept mapping, a mixed method data analysis approach. **Results:** Consumer preferences segmented into six clusters weighted mostly to solutions for self-determination and access to enabling resources. **Conclusion:** Consumer-oriented community and independent living solutions hold great promise for quality of life with a chronic illness or disability.

## Forms and senses of everyday space from a wheelchair perspective

**Hernandez Anzola, Maria Elisa** *Cienc. y Tecn. del Comportam., Universidad Simon Bolivar, Caracas, Venezuela*

From a Social Psychology interested in the affective dimensions of everyday life, this qualitative study aims to understand how everyday space is configured in narratives (collected through conversational interviews) told by people with motor disabilities who use wheelchairs. Practicing a hermeneutical approach, we identify some forms that everyday space takes in these stories, and analyze expressions which communicate how narrators deal with such space, interpreting from that possible ways to relate to others and to (re)signify senses of coexistence.

## Cognitive and psychological rehabilitation in patients with mild and moderate dementia

**Agogiatiou, Christina** *Dept. of Psychology, GAARD, Thessaloniki, Greece* **Kounti, Fotini** *Psychology, GAARD, Thessaloniki, Greece* **Karagiozi, Konstantina** *Psychology, GAARD, Thessaloniki, Greece* **Bacoglidou, Evaggelia** *Psychotherapy, GAARD, Thessaloniki, Greece* **Nikolaïdou, Evdokia** *Psychology, GAARD, Thessaloniki, Greece* **Nakou, Stilian** *Psychology, GAARD, Thessaloniki, Greece* **Siampani, Aikaterini** *Psychology, GAARD, Thessaloniki, Greece* **Poptsi, Eleni** *Psychology, GAARD, Thessaloniki, Greece* **Zafeiropoulou, Miro** *Psychology, New York College, Thessaloniki, Greece* **Varsamopoulou, Anastasia** *Psychology, GAARD, Thessaloniki, Greece* **Tsolaki, Magda**

**Objectives:** Improvement of cognitive, functional and emotional performance of patients with mild and moderate dementia. **Method:** Intervention included 7 therapeutic programs. Participants were 21 demented patients, classified in experimental and control groups. Intervention lasted 4 months. Neuropsychological assessment was administered before and after the intervention. Non parametric tests were used for the statistical analysis. **Results:** Experimental patients had better cognitive and functional performance than controls at the end of the intervention (MMSE,  $p = .032$ ) (RBMT,  $p = .009$ ) (RAVLT,  $p = .009$ ). **Conclusions:** The proposed combination of cognitive and psychological interventions was beneficial for patients with mild and moderate dementia.

## FP-185: Discipline issues I

### The making of prolific faculty researchers in the Philippines: A grounded theory model

**Valencia, Marshall** *Dept. of Psychology, De La Salle University, Manila, Philippines*

This study explores variables and socialization processes involved in the shaping of prolific researchers in the context of a developing country. Narrative interviews of six exceptionally productive male scholars were analyzed to come up with a data driven model of pathways to prolific publishing in the context of Philippine realities. Categories and relationships that emerged from the analysis cross-validated previous quantitative investigations on research productivity. Two significant insights are highlighted in the model: the role of a "cognitive contrast" dimension, and the transformations that a set of "core characteristics" undergo throughout critical periods in a scholar's life.

### Trends of psychology in a non-Western country

**Khaleefa, Omar** *Dept. of Psychology, University of Khartoum, Khartoum, Sudan*

The present study examined trends of psychology in Sudan. Multiple methods were used in collecting data from 21 departments of psychology, 15 centres for special education and 12 psychiatric hospitals. It showed the following trends: (a) psychology is applied and social not pure and biological (b) most psychological services are concentrated in Khar-



toum State (83%) compared to (17%) to all other 25 ones (c) domination of educational psychology by (39%), (d) majority of students were females (79%), therapists (88%) and in pre-education (100%), (e) 20% of psychologists were trained abroad, however, they have tremendous contribution (84%) compared to those trained locally (16%).

**Becoming a science?: Humboldt University Berlin's Institute for Psychology between World War Two and the construction of the Berlin Wall**  
**Ebisch, Sven** Inst. für Psychologie, Humboldt-Universität zu Berlin, Berlin, Germany  
After World War II the Institute for Psychology of what was to become Humboldt University Berlin had been largely destroyed. This presentation describes the circumstances of the Institute's post-war reformation and development in the Soviet allied zone and its change, marking the disciplinary direction it was to take, from the Philosophical to the Science Faculty under Kurt Gottschaldt. Based on primary sources, this overview uses Ash's interactive resource-oriented approach to describe the development of psychology at Humboldt University between political upheaval in immediately postwar Berlin and the construction of the Berlin Wall in 1961.

### FP-186: Culture and cognition I

**Embodied cultural cognition: Psychological perspective and physical body comportment as carriers of culture**

**Leung, Angela Ka Yee** School of Social Sciences, Singapore Management University, Singapore, Singapore  
**Cohen, Dov** Psychology, University of Illinois, Illinois, USA

Our body is one carrier and perpetuator of culture – cultural assumptions can be embodied in the way we psychologically represent ourselves in mental models (soft embodiment) and the way we physically comport our body (hard embodiment). One study examined the perspective that people embodied as they mapped out time and space metaphors. Euro-Americans were more likely to embody their own (vs. friend's) perspective whereas the reverse was true for Asian-Americans. In another study, Asian-Americans assuming an upright posture endorsed universalistic moral values more strongly whereas those assuming a hugging posture endorsed particularistic values more strongly. We discuss how culture can be implicitly embodied in our imagined and actual actions.

**Quizshow knowledge and cultural literacy**  
**Grabowski, Joachim** Inst. für Psychologie, Pädagog. Hochschule Heidelberg, Heidelberg, Germany  
**Kiel, Ewald** School Pedagogy, University of Munich, München, Germany

Quizshows comprise of scholastic and popular knowledge, which serves as a mirror of cultural participation in a society and allows for some equal opportunity across educational levels. The German and American party game editions of "Who wants to be a millionaire?" (1960 questions each) were classified according to the topic they are drawn from. It turns out that the distribution of questions across topics and the assigned difficulty differs between the two games, supporting existing intercultural stereotypes. Differences are interpreted in terms of the roles of popular knowledge and its composition in the respective cultures.

**Conceptualization and measurement of self-efficacy in Malaysian children and young adults**  
**Mohd Zaharim, Norzarina** School of Social Sciences, Universiti Sains Malaysia, Malaysia

The study explored sense of self-efficacy in Malaysian children and young adults facing everyday stress. The construct of self-efficacy was reoperationalized into three components: general (across

domains), external (over external events), and internal (over one's self). Consistent with previous research on Asians' versus Westerners' self-efficacy and Asians' stress and coping, the present study found moderate general, external, and internal self-efficacy and higher internal than external self-efficacy across stressful situations. A new conceptualization and measurement of self-efficacy was proposed, taking into account that efficacy beliefs may operate differently in Malaysian and Asian cultures than in Western cultures.

### FP-187: Child health I

**Sociocultural factors and eating disorders in adolescence: Evaluation of a school-based prevention program**

**Warschburger, Petra** Inst. für Psychologie, Universität Potsdam, Potsdam, Germany  
**Helfert, Susanne** Psychology, University of Potsdam, Potsdam-Golm, Germany  
**Bonekamp, Eva** Psychology, University of Potsdam, Potsdam-Golm, Germany

Studies indicate a high percentage of adolescents with disturbed eating patterns, which are at risk of developing an eating disorder. To counteract this trend, prevention programs are needed that focus on specific risk and protective factors. The school-based prevention program POPS was developed to improve adolescents' general life skills like coping strategies and stress management techniques as well as to brace them for dealing with appearance-related social and media pressure. Program effects were tested in a random control group design including 1100 high school students from grade 7 to 9. Results from the 3-month follow-up will be reported and discussed.

**Health education methods for achieving stable normoglycemia during an educational camp for youth with type 1 diabetes mellitus (DM1)**

**De Loach, Stan** México City, Mexico

Aim: For young persons (age 8–17) with recent-onset DM1 to quickly learn to safely achieve normoglycemia and glycemic stability, through the use of self-directed learning methods, group and individual psychological support, and self-monitored blood glucose (SMBG) levels. Method: 5 international multidisciplinary team members responded to educational and emotional needs of 9 Campers during a 3-day residential diabetes camp. SMBG values furnished statistical data. Results: Mean arrival and departure glucose levels were significantly different ( $P < .0025$ ). Mean 3-day euglycemia was uncharacteristically stable. Conclusion: Self-directed diabetologic education and psychological support rapidly and safely produced normal glycemic levels and stability.

**A "Children's Hospital of the Future" from the perspective of architectural psychology. A user-needs analysis**

**Walden, Rotraut** Inst. für Psychologie, Universität Koblenz, Koblenz, Germany

Children's hospitals contribute often to experiences of fear in "little patients". A "Little Patients" Association worked to remove the negative effects of conventional hospital design at the Oldenburg Hospital through targeted improvements. The goal of this study, consisting of 59 patients, 65 employees, was to see how hospital design can impact patients' recovery. A questionnaire's "virtual walk-through" gave the observers an overall impression of the building. A five-point rating scale was applied to 171 items by 39 observers. The methods of Building Performance Evaluation, t-tests, and regression analyses were used. In conclusion: child-friendly design gives children's hospitals a competitive advantage. "Quality architecture will give the image of quality care".

### FP-188: Clinical / counseling psychology I

**Crisis management: How prepared are Australian schools?**

**Knowles, Ann** Dept. of Psychology, Swinburne University, Melbourne, Australia  
**Trethowan, Vicky**  
There is increasing recognition that traumatic events impact on school communities. This study aimed to develop a school-based crisis management model for traumatic events and to identify the role of school counsellors in managing trauma. One hundred and twenty school counsellors (psychologists and social workers) were surveyed to determine current levels of crisis management training. Results showed 85% of the respondents wanted further training in dealing with traumatic events impacting on their school community. Based on these data a school crisis management training model was developed. It is argued that this model could be applied in school jurisdictions beyond Australia.

**Homeostatis reality therapy: A psychological intervention for human welfare**

**Gairola, Lata** Dept. of Psychology, H.N.B. Garhwal University, Srinagar, India  
**Chimbakam, Sebastian** Psychology, c/o Dr. Lata Gairola, Srinagar (Garhwal), India

The present study aims to determine the effect of Homeostatis Reality Therapy as a Psychological Intervention for suicidal ideation. It is a model of health and disease based on the Indian Psychology and Culture, developed by Dr. Berkman Koyical in 1992. The study was conducted on 50 males and 50 females aging 15-30, who had suicidal ideation came to the clinic for the Psychological help. Everyone was administered Homeostatis Reality Therapy individually and found that it was a very effective Psychological Intervention. The study reveals that the major cause for suicidal ideation is the unwanted pregnancy.

**Dental fear - and how to talk it away. Effects of a training course for dentists.**

**Hagenow, Frank** Hamburg, Germany

Research shows that at least 10% of the population suffer from dental fears. Dental fear, whether justified or not, often hinders medical efforts and desirable compliance. A German study from the University of Hamburg among 42 dentists and 168 patients shows a significant reduction of dental anxiety. Their dentists have been trained before in client-centered-counseling. Patients were classified concerning their fear by the Dental-Anxiety-Scale of Corah. It was found that even phobic patients were able to reduce their fear significantly by talking to their dentists before treatment. These effects were not to be found within the group of control.

### FP-189: Culture and human development II

**Omani teachers' job commitment: Comparisons of personal and organizational variables**

**Aldhafri, Said** Dept. of Psychology, Sultan Qaboos University, Alkhodh, Oman

This study investigated Omani teachers' job commitment. A sample of 450 Omani teachers participated in the study from different school grades. The participants responded to a group of measures related to personal (e.g., teachers' sense of efficacy) and school characteristics (e.g., school climate). The participants also completed a demographic questionnaire. Regression analyses showed that teachers' job commitment could be better predicted using personal characteristics than using school characteristics. I elaborate these findings within the educational and cultural Omani context using a Western framework of job commitment and effi-

cacy beliefs. Implications and suggestions for future research are provided.

# The attitude to work and to free time in Poland: The Polish adaptation of the multidimensional work ethic profile

**Chudzicka-Czapala, Agata** *Inst. of Psychology, Silesian University, Katowice, Poland* **Grabowski, Damian** *Inst. of Psychology, Silesian University, Katowice, Poland*

The research is a part of the work on Polish adaptation of the Multidimensional Work Ethic Profile by Miller, Woehr and Hudspeth (2002). The method is a 65-item inventory that measures seven conceptually and empirically distinct facets of the work ethic construct: centrality of work, self-reliance, hard work, leisure, morality/ethics, delay of gratification and wasted time. We collected data from a student sample and a nonstudent working sample. The research results describe the attitude of the members of Polish society to such values like hard work and free time and they show similarities and differences between Poles and other nations.

# The personality of circus actors of various ethnic groups as the subjects of creative activity

**Dementeva, Kapitolina** *general and social psychology, Mechnikov State University, Odessa, Ukraine*

Objective is to study circus actors' personality regarding a genre in which they create scenic images, analyse a circus artist attitude to circus action and national archetype reflection in it. Methodological base: the works of V.Diltey, E.Shpranger, G.Oliort, K.Rogers, A.Maslow; K.K.Platonov's "Personality profile" methodology, biographic method and symbolical interpretation by K.G.Jung. The results show interrelation of actor's personality with genre and creative activity orientation. The belonging to ethnic group is important at the creation of an image. Conclusion: personality features, both typological and ethnic, should be taken into account in individualization of art activity management of a circus actor.

# The myth of Chinese modesty: The effect of personal relationships on attribution for achievements

**Han, Kuei-Hsiang** *Division of General Education, Tamkang University, Tamsui County, Taiwan*

Using scenario experimental method, this study found that when the achievement was not a threat and the interacting target was an intimate, Taiwanese (people in a Confucian society) would not be modest. On the contrary, they attributed their achievements to ability and efforts. When the achievement would be a threat to others, though Taiwanese would attributed their achievement to luck. The main concern was not modest social norm but empathy. Only when the target was not familiar would Taiwanese be affected by social norm of modesty. Genereally speaking, the results of this study suggested that Chinese (Taiwanese) were not always be modest to their achievements, when situation allowed, Chinese would also be self-enhancing, just like people in Western society.

## FP-190: Family issues

# Relationships among dimensions of family communication patterns and Iranian children's level of anxiety and depression

**Kouroshnia, Maryam** *university, Shiraz University, shiraz, Islamic Republic of Iran* **Latifian, Morteza** *university, shiraz university, shiraz, Islamic Republic of Iran*

Maryam Kouroshnia Morteza Latifian Shiraz university, Shiraz, Iran ABSTRACT The purpose of this study was to investigate the relationships among dimensions of family communication patterns (conversation orientation and conformity orientation) and children's level of anxiety and

depression in Iran. In this study 326 (161 female and 165 male) highschool students completed the Revised Family Communication Patterns Instrument and the short form of Depression Anxiety Stress Scales. The results of multiple regression analysis indicated that family's conversation orientation was a meaningful predictor of children's anxiety and depression and negatively predicted their anxiety and depression. Family's conformity predicted children's anxiety meaningfully and positively but not their depression.

# Validity and reliability of the revised family communication patterns instrument in Iran

**Kouroshnia, Maryam** *university, Shiraz University, shiraz, Islamic Republic of Iran* **Latifian, Morteza** *university, shiraz university, shiraz, Islamic Republic of Iran*

Maryam Kouroshnia Morteza Latifian Shiraz university, Shiraz, Iran ABSTRACT The validity and reliability of the Revised Family Communication Patterns (RFCP) instrument were evaluated in a sample of 326 Iranian highschool students. Findings showed that there was a positive relationship between RFCP and Parent-child Bonding Instrument (PBI) which provided evidence to support the criteria validity of the RFCP. Principal component factor analysis was also used to evaluate the construct validity of the instrument. The results showed that two factors of conversation orientation and conformity orientation could be extracted. The RFCP showed a good internal consistency and acceptable test-retest reliability as well as Cronbach alpha coefficient.

# The long-term effects of the PREP program: A 10 year follow-up

**Markman, Howard** *Dept. of Psychology, University of Denver, Denver, CO, USA* **Stanley, Scott** *Dept. of Psychology, University of Denver, Denver, CO, USA* **Rhoades, Galena** *Dept. of Psychology, University of Denver, Denver, CO, USA* **Whitton, Sarah** *Dept. of Psychology, University of Denver, Denver, CO, USA*

There is a growing interest at National levels in delivering relationship education programs to couples in order to prevent relationship distress and divorce and strengthen marriages, yet very few long-term evaluations of these programs. We present 10 year follow-up data on the long-term effects of the Prevention and Relationship Enhancement Program (PREP) in a sample of 253 couples who received the intervention premaritally and were followed at yearly intervals. We present a new model of relationship health (communication/conflict management, positive connections, commitment, satisfaction, stability) and outcome data on each dimension as couples are entering the highest risk period for divorce and distress. Implications for wide spread dissemination of research-based couples interventions are discussed.

# Relationship between childhood attachment quality, adult attachment and attachment to God with family functioning

**Shahabizadeh, Fatemeh** *Birjand Branch, Islamic Azad University, Korasan-Kashmar, Islamic Republic of Iran* **Ahadi, Hasan** *psychology, Allame Tabataba'ee University, Razavy Khorasan-Kashmar, Islamic Republic of Iran*

This study investigated role played by God attachment, adult and childhood attachment in Muslim reported family functioning. 193 high school students in kashmar, completed questionnaires measuring God attachment, childhood attachment, adult attachment and family adaptability and cohesion (FACES-IV). Results showed at insecure childhood attachment, secure respondents to God had higher mean on family adaptability, cohesion and communication than their insecure counterparts. Also at insecure adult attachment, secure respondents to God had lower mean on family

disengaged and chaotically than their insecure counterparts. Family functioning and adult attachment predicted God attachment. Also parental and adult attachment influenced on Family functioning subscales.

## FP-191: Education and advanced training I

# Instruction monitoring: Implementation of new curricula within a video-based quality circle

**Gaertner, Holger** *Inst. für Schulqualität, Freie Universität Berlin, Berlin, Germany*

This study introduces the concept of instruction monitoring (IM) as a way to implement new curricula. IM centres around a content-focused quality circle in which teachers co-operate and discuss videotapes of their own lessons. During one school year, fourteen mathematics teachers took part in two quality circles. Within a quasi-experimental pre-post test design, questionnaires were used to estimate the effects of IM compared with traditional professional development at teacher and student level. The results show that various aspects of instruction changed and that teachers' beliefs shifted towards a cognitive constructivist orientation. At student level, self-assessed subject competence increased.

# Assessing beginning teachers: peer to peer teaching and groups of educational reflection in secondary education

**Mayoral, Paula** *Psychology, Ramon Llull University, Barcelona, Spain*

Research has shown the main beginning teachers (BT) problems are discipline, behaviour, student's motivation, time and social relations management. Consequently, advice should be pluridimensional and addressed to promote the reflection on practice. The methodology includes the participation of five peer-tutoring in an on-line foro, a tutor observation and groups of educational reflection across five topics in a school year adopting a qualitative approach. The BT problems concern adaptation to school culture and lack of experience, in addition to those mentioned above. The mentors' problems were communication, lack of time and role delivery difficulties. Definitely, classroom tutor observation favours reflective practice in BT and benefit mentors, helping them think about their teaching practice and rethink teaching issues.

# The characteristics of deliberate practice in teaching expertise development in China

**Hu, Yi** *Psychology, East China Normal University, Shanghai, People's Republic of China* **Zhou, Ruyang** *Psychology, East China Normal University, Shanghai, People's Republic of China* **Luo, Jiao** *Psychology, East China Normal University, Shanghai, People's Republic of China*

The study aimed at exploring what kinds of teaching activities can be judged as deliberate practice, and how instructional situations influence them. Ten secondary-school teachers rang from 7 to 30 years teaching experiences were individually at semi-structured interview for 2 hours a week, which last two months. Through protocol analysis, it shows that the time spending on planning and reflective activities in teaching is strongly positive relative to teaching expertise, and which are affected by the academic subject matter and student's achievement level. Then deliberate practice theory is an appropriate way to comprehend the nature and development of teaching expertise.

# Effective schools: Evaluation from students, parents and teachers

**Koutsoulis, Michalis** *Dept. of Education, University of Nicosia, Nicosia, Cyprus*

The purpose of the research is to define school effectiveness through students, parents and teachers



in five schools. The research conducted in two stages. In the first stage participants were asked to define school effectiveness in focus groups. On the second stage participants evaluated their school through questionnaires. Results show that students place attention on the affective domain of school life, parents focus on the buildings and the facilities of the school, while teachers are concerned about the results of the educational process.

### FP-192: School counseling

#### A qualitative investigation on ethical and professional issues of school psychological counselors in Turkey

**Cetinkaya, Evrim** Dept. of Educational Sciences, Middle East Technical University, Ankara, Turkey **Erdur-Baker, Ozgur** Educational Sciences, Middle East Technical University, Ankara, Turkey

This study aimed to investigate the ethical/professional issues that Turkish school psychological counselors encounter. The three themes that emerged from semi-structured interviews with twenty school counselors were professional issues (e.g., limited collaborations with other personnel, crowded schools, inadequate physical environment), ethical issues (e.g., confidentiality, multiple relationships, mandatory counseling, and professional competency), and the solution strategies used by psychological counselors. The results indicated that Turkish school counselors were facing with somewhat similar problems as described in the literature of school psychology but with different nature and severity. The results are discussed based on the existing literature and the cultural and economical context of Turkey.

#### Counseling the culturally different student in the Arabian Gulf region

**Hassane, Sofoh** Psychology and Counseling, United Arab Emirates University, Al-Ain, United Arab Emirates

The number of foreign students from diverse cultural backgrounds enrolling in schools and colleges in the Arabian Gulf Region is growing rapidly. However, no or very little cross-cultural studies focusing on the needs and attitudes of these students and how they could be effectively helped have emerged in the counseling literature. This presentation will focus on how school counselors can help them adjust to new school climate and culture and develop their learning potentials optimally. It will also focus on the types of concerns they are most likely to bring into counseling and suggest intervention strategies in working with them.

#### The study of peer counseling effect at school in enhancing the students' level of mental health

**Jam, Zahra** Tehran, Islamic Republic of Iran **Saleh Sedghpoor, Bahram** Educational Sciences and Psych, Shahid Beheshti University, Tehran, Islamic Republic of Iran **Khoshkonesh, Abolghasem** Educational Sciences and Psych, Shahid Beheshti University, Tehran, Islamic Republic of Iran

The present research studies the effect of peer counseling in increasing the mental health level of the studied statistical society, including 171 female students of high school. After a mental health pretest, they are classified into 3 groups: disorder-free, mild disorder and high disorder; each group is randomly put in the control and experimental groups. Using manova, the results show firstly dependent variables (physical signs, anxiety, disorder in social function and depression) are independent to each other; secondly the mild disorder group, among all the other groups, is affected just in the variable of anxiety.

#### Teachers' understanding of children's depressive symptoms

**Klefaras, George** Dept. of Special Education, University of Thessaly, Volos, Greece **Didaskalou, Eleni** Special Education, University of Thessaly, Volos, Greece

The present research aimed at a) estimating the proportion of primary school children experiencing depressive symptomatology and b) exploring teachers' ability to recognize their pupils presenting depressive symptoms. Participants were 323 pupils, aged 10-13 years and their classroom teachers. Pupils completed the Children's Depression Inventory, while teachers a questionnaire concerning their perceptions about their pupils' depressive symptoms. A considerable percentage of pupils reach high scores of depressive symptoms especially (negative self-esteem, mood and interpersonal problems). However, teachers identify and report more often behavioural problems and tend to underestimate the incidence and severity of depressive symptoms in their pupils.

#### Moscow Department of Education: Psychological rehabilitation of younger schoolchildren with delayed psychic development in situation of joint productive activity

**Prudnikova, Marina** Center, Diagnostics and Consulting, Moscow, Russia

Objective : analysis of factors and conditions ensuring effectiveness of correctional work to improve life standard and restore normal development of families having schoolchildren with psychological impairments. Methods: Neuropsychological diagnostics, Roven's matrixes, projective methodology, parents' questionnaire, mathematical data processing, independent expert evaluation. Results: reorganization of content and direction of interaction between psychologist, family as subject of rehabilitation activity is caused by processes of participation, co-creativity and co-development of all participants of entire system "Rehabilitation-Specialist-Child-Family-Society", ensures family functioning and wholeness as natural and permanent rehabilitation-and-development environment. Conclusion: Quality of Psychologist-Child-Parent interaction in education and rehabilitation process ensures continuous socialization of child on maximal level of his abilities.

#### Identifying subtypes of career indecision among Portuguese secondary school students: A cluster analytical approach

**Santos, Paulo** Faculdade de Letras, Universidade do Porto, Porto, Portugal

Career indecision is a complex phenomenon and an increasing number of authors have proposed that undecided individuals do not constitute a group of homogenous characteristics. However, there is some controversy about the different types of career undecided individuals. This study examined career indecision subtypes among a sample of 362 12th grade Portuguese students. Using a battery of scales assessing career and personality dimensions, a cluster-analytic procedure was employed. Several groups of career decided/undecided were identified. Implications for career intervention are discussed.

### FP-193: Selective attention

#### Is sensory processing necessarily affected by exogenous cues?

**Niedeggen, Michael** Experimentelle Psychologie, Freie Universität Berlin, Berlin, Germany

A visuospatial cueing paradigm was used to examine whether a sensory gain control mediates the effect of covert attention on the appearance of visual stimuli. A short coherent motion signal was embedded in two dynamic random dot kinematograms (RDK) presented left and right of a fixation. Subjects had to decide which RDK was defined by

a higher level of coherence. A short reduction in luminance in one RDK served as a cue. Event-related brain potentials (ERPs) did not indicate that the behavioral effects of valid and invalid cueing are determined by a corresponding modulation of the sensory motion processing system.

#### Conflict-monitoring and reaction time distributions

**Davelaar, Eddy** USA

The conflict-monitoring hypothesis of attentional control assumes that conflict is monitored during one trial and affects the attentional control during performance on the next trial. Recently, this hypothesis has been challenged on the grounds of data showing that the sequential dependencies observed in studies using the Eriksen flanker task may be in part due to stimulus or response priming. I will present new data regarding response time distributions that falsifies some possible resolutions to the debate (and produces new questions). I will argue that detailed reaction time distributions should feature more prominently in models of attentional control.

#### Attentional capture, cueing and the attentional blink

**Coltheart, Veronika** MACCS, Macquarie University, Sydney, Australia

The attentional blink refers to limits on dual target identification when targets are embedded in a sequence of distractors visually presented for approximately 100 ms per item. The second target (T2) is frequently missed when it follows shortly after the first. Recent research has demonstrated evidence for attentional capture by distractors similar to targets. However, similar distractors can also ameliorate the blink by functioning as cues for T2. Two experiments investigated the conditions in which cueing or capture effects occur in single and dual target search. The implications concerning the Temporary Loss of Control and Delayed Engagement accounts are considered.

#### A dual-phase model of selective attention

**Hübner, Ronald** Fachbereich Psychologie, Universität Konstanz, Konstanz, Germany **Steinhauser, Marco** Fachbereich Psychologie, Universität Konstanz, Konstanz, Germany **Lehle, Carola** Fachbereich Psychologie, Universität Konstanz, Konstanz, Germany

Selective visual attention is an important mechanism of behavioral self-control. First it was thought that selection takes place early in the stream of information processing. Later, it became clear that selection can also occur at later stages. Here, we propose that selection takes place simultaneously at early and late stages. We implemented this idea in a formal dual-phase model and applied it to the Flanker task. By varying spatial uncertainty, we modulated the relative contribution of early and late selection processes. As expected, these modulations were nicely reflected by the variations of the corresponding parameter values of our model.

#### Crossmodal extinction in neurologically-normal participants: The Colavita effect revisited

**Spence, Charles** Dept. of Psychology, University of Oxford, Oxford, United Kingdom

Colavita (1974) reported that presenting a light at the same time as a suprathreshold auditory target resulted in people failing to respond to (or be aware of) the sound (a sound that participants were always aware of when presented in isolation). I will describe a number of recent studies on this little-studied, but fascinating, crossmodal phenomenon. I will highlight the spatiotemporal constraints on the Colavita effect and its sensitivity to manipulations of attention/perceptual load. I will highlight the important similarities that exist between the Colavita visual dominance effect and the crossmodal



extinction sometimes experienced by stroke patients suffering from neglect.

#### Attention to graphic cigarette warning labels in non-smokers, smokers and ex-smokers

**Hollier, Tanya** Dept. of Psychology, Southern Cross University, Orange, Australia **Provost, Stephen** Psychology, Southern Cross University, Coffs Harbour, Australia

New graphic warning labels form part of a 'fear appeal' strategy to reduce smoking behaviour in Australia. Strength of orientation and disengagement of attention towards warning labels was examined in smokers, ex-smokers and non-smokers ( $n=48$ ). Non-smokers were not influenced by the warning labels in terms of orientation or disengagement relative to control stimuli. Smokers and ex-smokers showed evidence of both greater orientation to the warning labels, and facilitated disengagement from them. These results suggest either generalised increases in speed of responding following warning label presentation, or the presence of an avoidance response, in both smokers and ex-smokers.

#### FP-194: Risk, accident and accident prevention

##### The social representation of traffic accident in Romania: Connections with emotions and decision-making in driving

**Holman, Andrei Iasi, Romania Havarneanu, Cornel** Psychology, "A. I. Cuza" Universi, Iasi, Romania **Havarneanu, Grigore Iasi, Romania Dumitru, Marian** Psychology, "A. I. Cuza" Universi, Iasi, Romania

Our research is multi-phased: the first step was aimed at contouring the structure and content of the social representation of traffic accident in the Romanian population, using the method of associative network on various components of this representational object: causes, involved actors, development, consequences, and also emotional determinants and associations. The second stage employed the multidimensional scaling procedure, thus revealing the main dimensions which underpin the social representation of traffic accident. Finally, our results are integrated in an empirical analysis of risk perception, inter-temporal choice and emotional involvement in these decision mechanisms in driving.

##### Study of mental profile of drivers with hard accident road with use of NEO-PI-R

**Aghaei Jeshvaghani, Asghar** Khorasgan Branch, Islamic Azad University, Isfahan, Islamic Republic of Iran **Abedi, Mohamadreza** Psychology, ISFAHAN UNIVERSITY, Isfahan, Islamic Republic of Iran **Kanani, Kobra** Psychology, University Khorasgan-Isfahan, Isfahan, Islamic Republic of Iran

The objective of this study was to identify mental profile of drivers with hard accident road. The results are based on NEO-PI-R out among a sample of Iranian drivers in year 2006 and 2007 ( $n=40$ ). Respondents involved in experienced near-accidents and crashes leading to injuries. The questionnaire included big five factor of personality. Results showed that those who scored high on neuroticism ( $p<.05$ ) and those who scored low on openness ( $p<.05$ ), agreeableness ( $p<.01$ ) and conscientiousness ( $p<.000$ ) were more involved experienced accidents. KEY WORDS: Mental Profile, Drivers, hard accident road, NEO-PI-R

##### Unrealistic optimism, impulsiveness and self-construal of Chinese drivers and their relationship to risky driving behaviors

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The aim of the study was to investigate the effect of impulsiveness, self-construal and unrealistic optimism on the risky driving behavior. 108 Chinese drivers were measured their impulsiveness, independent-interdependent self, and self-evaluated their risky driving behaviors as well as their ticket records gotten from policemen. Confirmatory factor analysis testified the constructs of impulsiveness, self-construal and driving behaviors developed in western culture. Results indicated that Chinese drivers also showed significant unrealistic optimism about driving accident; unrealistic optimism mediated the relationship between motor impulsiveness and aggressive driving violations. Implications of the results for traffic safety and future research are discussed.

##### The influence of cognitive biases on inexperienced, young drivers' risky task performance

**Havarneanu, Grigore Iasi, Romania Havarneanu, Cornel** Psychology, "A. I. Cuza" Universit, Iasi, Romania **Holman, Andrei** Psychology, "A. I. Cuza" Universit, Iasi, Romania **Dumitru, Marian** Psychology, "A. I. Cuza" Universit, Iasi, Romania

We analyze different types of driver's illusions sketching out the difference between drivers' social and cognitive biases, with the focus on the latter. On this recent theoretical base, we conducted an experimental study to assess the adaptation of some young, inexperienced Romanian drivers to a risky task performance. In the second part we also deal with methodological issues, empirical data analysis, main advantages and limits of the study, and draw the main conclusions. Some practical implications are discussed, in particular young drivers' training with regard to the importance of individual differences and feedback during the task.

##### Effectiveness of warning signs in reducing speed at rural road curves

**Weller, Gert** Verkehr und Transport, Technische Universität Dresden, Dresden, Germany **Voigt, Jana** Traffic and Transportation Psy, TU Dresden, Dresden, Germany **Schlag, Bernhard** Traffic and Transportation Psy, TU Dresden, Dresden, Germany

Inappropriate speed is the most important contributing factor to fatal accidents on rural roads. With the upcoming of the self-explaining road concept (e.g. Theeuwes, 2000) signs that are traditionally used to convey otherwise missing information on the road ahead, seem to lose their attraction. In a simulator study ( $N=50$ ) we tested different road designs and compared them to the effectiveness of warning signs. A subsequent collection of subjective ratings revealed that the positive effect of signs on reducing speed was due to the respective curves being rated as more dangerous and demanding. These findings have important implications concerning rural road design.

#### FP-195: Quality of life

##### Testing a model of health-related internet use and disease coping among individuals living with HIV/AIDS

**Mo, Phoenix** IWHO, University of Nottingham, Nottingham, United Kingdom **Coulson, Neil** Institute of Work, Health and, University of Nottingham, Nottingham, United Kingdom

Objectives: To examine factors associated with disease-related Internet use and its effect on disease coping among HIV+ individuals. Methods: 640 HIV+ participants completed an online survey. Measures included: demographic and medical information, HIV-related Internet use, health-related QoL (MOS-SF36), coping (Brief COPE), and physical symptoms (Symptom Checklist). Results:

SEM showed that physical symptoms and disease stage predicted worse health-related QoL, which predicted Internet use. Internet use in turn predicted problem-focused coping and more active discussion about health problems with health professionals. The model achieved a satisfactory fit,  $CFI=.95$ ,  $IFI=.93$ ,  $RMSEA=.06$ . Conclusions: Health-related Internet use might offer some benefits for HIV+ individuals.

##### Influence of stigma on quality of life of HIV Positive individuals

**Kohli, Neena** Psychology, University of Allahabad, Allahabad, India

This study attempts to bring out the influence of stigma on quality of life of 100 HIV positive individuals. Semi-structured interview was used to elicit data on socio-demographics, stigma and quality of life. Results showed a) significant negative correlation between stigma and quality of life and b) age and stigma emerged as significant predictors of quality of life. Findings suggest that PLWHAs should be encouraged to rise above stigma and live a better quality of life and it also cautions health providers and caregivers to help PLWHAs live a life of dignity by being gender sensitive, caring and supportive.

##### The mediational effect of resilience in relation between emotional intelligence, general intelligence and life satisfaction

**Jowkar, Bahram** Dept. Educational Psychology, Shiraz University, Shiraz, Islamic Republic of Iran **Abstract** This study investigated mediation role of resilience in relationship between Emotional and cognitive intelligence and life satisfaction. Participants were 557 higher education students. Participants completed the Conner-Davidson Resilience scale, Shutte emotional Intelligence Scale, Satisfaction With Life scale, and Scale 3 of Cattell Culture Faire Intelligence test. Results showed that (a) emotional and cognitive intelligences directly, were weak predictors of life satisfaction, (b) emotional intelligence in comparison to cognitive intelligence was strong predictor of resilience and (c) resilience was mediator between both kind of intelligence and life satisfaction. Findings also revealed that the relationships between model's variables in girls weren't completely consistent with whole group. Implications and suggestion for future studies are discussed.

##### Quality of life, self-efficacy, coping and adherence in patients with chronic kidney disease on haemodialysis treatment

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The purpose of this study was to identify the psychological variables that can predict the adherence to treatment in chronic kidney disease patients. The Stress Coping Questionnaire (CAE), Spanish versions of SF36 and Generalized Self-efficacy (EAG) was used to assess the coping, quality of life and self-efficacy respectively. The treatment adherence was estimated through biochemical indicators and attendance of haemodialysis sessions. The results indicated that the coping style was the best predictor to adherence and its predicting capacity was improved when interacted with some dimension of quality of life. The implications of these findings are discussed.

##### Depression and quality of life in cancer patients with and without pain

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**Objectives:** To compare depression and quality of life among Iranian cancer patients with and without pain. **Methods:** A sample of gastrointestinal cancer patients attending to Tehran Cancer Institute were entered into the study. two standrd instruments were used to measure quality of life (EORTC QLQ-C30), and depression (HADS). **Results:** 142 patients were studied. Cancer patients with pain (n = 98) reported significantly lower levels of global quality of life and higher levels of depression than patients who did not experience pain (n =44). **Conclusions:** The findings showed that cancer pain could affect patients' quality of life, and emotional status.

### FP-196: Regulation of emotion

#### A dimensional model of adaptive emotional functioning

**Schutte, Nicola** Dept. of Psychology, University of New England, Armidale, Australia **Malouff, John** Dept. of Psychology, University of New England, Armidale, NSW, Australia

**Objectives:** This theoretical paper presents a multi-dimensional model of adaptive emotional functioning that holds that ability and trait conceptualizations of emotional functioning are complementary dimensions. This multi-dimensional model further posits that emotional self-efficacy, states related to positive emotional functioning, and situations that facilitate emotional functioning contribute to adaptive emotional processes. The model sets out how these different dimensions may influence one another and examines how the interaction between dimensions of emotional functioning may lead to positive life outcomes. Some preliminary empirical evidence supports aspects of the multi-dimensional model.

#### An event-related potential study of implicit attitude to emotion regulation influence on emotional attention performance

**Sang Biao, P. R.** Dept. of Psychology, East China Normal University, Shanghai, People's Republic of China **Liu, Junsheng** Department of Psychology, Shanghai Normal University, Shanghai, People's Republic of China

Previous research has shown that implicit attitude to emotion regulation could influence emotion regulation without the cognitive costs. However, little is known about how to achieve this. In this study, ERPs were recorded from 15 participants with different implicit attitudes to emotion regulation. The participants were presented slides of International Affective Picture System posing 25 negative and 25 neutral pictures, and the P1 component of the event-related brain potential was used as a proximal index of attention allocation to valenced stimuli. The results indicated that the P1 amplitudes and latencies differ between two different groups, which suggested that implicit attitude to emotion regulation could modulate the early emotional processing.

#### Getting ready for emotional events: A new paradigm to investigate anticipatory coping

**Kazen, Miguel** Inst. für Psychologie, Universität Osnabrück, Osnabrück, Germany

Most studies on emotion regulation deal with psychological repair effects after negative events whereas people sometimes are able to psychologically prepare to cope with certain and impending negative and positive emotional events. Does advance warning of an emotional event help or interfere with subsequent task performance? Two studies are reported in which participants were presented with an emotional or neutral prime word shortly before an unrelated imperative cognitive

task occurred, under advanced warning about the type of prime (anticipatory coping) or without it (retrospective coping). Results showed that advanced warning influenced coping with emotional events, as indicated by subsequent performance.

#### Emotional intelligence and its relation to humor styles

**Pasupuleti, Subhashini** Dept. of Psychology, Osmania University, Hyderabad, India

The purpose of the present study was to examine the relationship between emotional intelligence and humor styles. The study was carried on 200 working professionals from different organizations in India. Standardized questionnaires were used for collecting data. The results of the study showed that emotional intelligence is positively correlated with affiliative humor and self-enhancing humor while it is negatively correlated with aggressive humor and self-deprecating humor. The results also showed that job tenure had an impact on emotional intelligence and certain humor styles. Implications of the study along with suggestions for further research have also been discussed in this study.

#### The processes of emotional regulation on love dissolution

**Sánchez Aragón, Rozzana** Dept. of Social Psychology, UNAM, México City, Mexico

When a romantic relationship is finished, its members experience a particular emotional process of mourning. Gross & Thompson (2007) propose five processes in charge to identify the emotional regulation strategies (from selection of situation to action) used for the individual when he/she cope with an emotion. Considering their ideas, the current research was oriented to: a) develop and validate a measure of the processes in the context of romantic relationship dissolution, and b) identify the specific ways to regulate the emotions involved (i.e. sadness, fear and anger). Data from 100 Mexican males and females will be discussed at light of the theory and actual research.

#### Mindfulness, acceptance, and "meta-emotions": Differentiating processes in experiential avoidance in non-clinical and clinical samples

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Three studies illuminate the role of facets within the mindfulness/acceptance-spectrum for psychological well-being (PWB): experiential avoidance, mindful awareness, "meta-emotions". **Method:** Study1 assessed medical students (n=334/n=222) for the development of the Meta-Emotion-Scale. Study2 compared 134 expert paramedics with 105 novices for changes in mindfulness/acceptance with accumulating experience of potentially traumatic incidents. Study3 assessed changes on mindfulness measures in 293 patients in a psychosomatic clinic which were used to predict changes in symptoms and PWB. **Results and conclusions:** The facets explained large amounts of variance on PWB (52% to 60%). Inclusion of meta-emotions allowed for the identification of important processes in emotion regulation.

### FP-197: Psychology and national development I

#### Scientific disciplines developmental patterns: Psychology in Mexico, 1950-2005.

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Center for Knowledge Systems., Tecnológico de Monterrey ITESM, Monterrey, Nuevo Leon, Mexico

To describe Psychology development in Mexico, and to identify developmental patterns, a systemic science of science approach, holding interbehavioral theory for interpretation, was achieved. A concurrent triangulation method design was conducted, which included a quantitative methodology (scintometrics), and two qualitative ones (historiography and semi structured interview). 1130 indexed abstracts, authored by Mexican psychologists were analyzed. Nineteen prominent Mexican psychologists were interviewed. Results show five differentiated periods, explained according to historic, economic, political, sociological and psychological dimensions, as well as several patterns related to science development. Data allow planning for better future. Psychology of science double reflexive role is emphasized.

#### Crisis in psychiatric care in low and middle-income countries: The role to be played by psychology and allied health services

**Tsang, Hing** Singapore, Singapore

"Every year up to 30 % of the population worldwide has some form of mental disorder, and at least two-thirds of those people receive no treatment, even in countries with the most resources" (Lancet, 2007). The situation is much worse in low and middle-income countries. Psychiatric treatment is not available. While a range of psychological and allied health interventions have been found to be beneficial in improving mental health, focusing on the Lancet Global Mental Health Series 2007, this paper discusses the value of non-medical approaches to mental disorders such as psychological interventions in low and middle-income countries.

#### A comparative study of historical and philosophical contexts of experimental psychology; philosophical history of psychology in Iran

**Hatami, Javad** Psychology, University of Tehran, Tehran, Islamic Republic of Iran

modern psychology in Iran is more than eighty years old. In his relatively long period of existence, Iran's psychology couldn't get a worthy position in society of world psychologists. There are different educational & sociological explanations for this failure. In this article we emphasis on historical & philosophical aspects. The aim of this study is comparing philosophical and cultural foundations of modern psychology with philosophical history of psychology in Iran.

#### 30 years of psychological practice in the power industry of Moldavian Republic: Facts, difficulties, goals

**Zolotova, Natalia** Dept. of Human Resources, GE, Chisinau, Moldova **Podshivalkina, Valentina** General and Social psychology, Odessa State University, Odessa, Ukraine

In this work the history of psychological evolution in the power industry, through the prism of it's historical development, is observed. In 1976 when the power industry was intensively developing psychologists appeared in it. Different types of work where conducted in the following directions: o Personnel selection o Specialist adaptation o The formation of personnel reserve o Sociological survey. This was the period of information gathering. Later the period of stagnation began which consisted in perfection of usable technologies. The power industry was separated in the early 90's. Main tasks these days are: o Use of experience from American and European schools of professional selection. o Work In harmonization of collective and the personality of a specialist.

# **Promoting school achievement and the renewal of teaching methods and educational policies: Recent developments in Portuguese educational psychology**

**Viegas-Abreu, Manuel** Dept. of Psychology, University of Coimbra, Coimbra, Portugal **Paixao, Maria Paula** Dept. of Psychology, University of Coimbra, Coimbra, Portugal

Contributing to the eradication of school underachievement continues to be one of the most important themes in Educational Psychology, both at a theoretical and at a practical level. Several research and intervention programmes were thus developed in Portugal during the second half of the 20th century, namely those funded by the Foundation for Science and Technology that were carried out under our supervision at the University of Coimbra. In line with our main results, promoting strategies of learning motivation, the renewal of teaching methods and, mainly, new directions for educational policies are the main roots proposed for the required developments in this area.

## **A series of studies on Chinese farmers' career choice consideration**

**Zheng, Quanquan** Psychology, Zhejiang University, Hangzhou, People's Republic of China  
Study 1 The Study of Contemporary Farmers' Work Value and Its Influential Factors The present research made a systematic analysis of farmers' work value, work value structure and the influence of different variables on farmers' work value. Study 2 The Study of Contemporary Farmers' Social Support Using the survey method, taking 1607 farmers coming from Zhejiang and other 14 provinces as the sample, made a systematic analysis of farmers' social support. Study 3 The Influence of Career Cognition and Social Support on Chinese Farmers' Career Choice Consideration The hypothetical model of influences of career cognition and social supports on Chinese farmers' career interest and choice consideration was developed, based on data of 1247 farmers.

## **FP-198: Progress in creativity research**

### **Investigate the effects of family demographic factors on children creativity development**

**Khoshnevis, Elaheh** Dept. for Psychology, Islamic Azad University, Tehran, Islamic Republic of Iran  
**Ahadi, Hassan** Psychology, Allame Tabataba'ee University, Tehran, Islamic Republic of Iran  
Using the stratified random sampling, 300 high school students were selected. To evaluate investigated variables, Abedi Creativity Test and 16question researcher made questionnaire were used. The investigation showed: \* Creativity mean for the first child was higher than the other children. \* Creativity mean for girls was higher than boys. \* A significant relationship between fathers'/mothers' education level and children creativity score. \* A significant relationship between family economic situation and children creativity score. \* A reversed significant correlation between number of children and their creativity score. \* A reversed significant correlation between mothers' age and children creativity score. \* A direct significant correlation between fathers' age and children creativity score.

### **A review on psychological research on inventors**

**Wolf, Katrin** Hans-Sauer-Professur, Humboldt-Universität, Berlin, Germany **Mieg, Harald A.** Hans-Sauer-Professur, Humboldt-Universität, Berlin, Germany  
In this lecture we provide a comprehensive review of the international psychological literature concerning the following issues: 1. What is an inventor like? What are personal characteristics of inventors? 2. How can the inventing process be described? 3. What are promising cognitive inventing strategies?

4. Which factors determine the inventor's success? 5. What are differences between inventor experts and novices? 6. How can the performance of an inventor be assessed? We searched PsycINFO and the Psynex-database from 1990 onwards. The literature on inventors respectively inventing was reviewed with a primary focus on empirical research. An integrated psychological model of invention has been developed and will be presented. It also includes results and data from our own research.

### **Correlates of creativity in research and development scientists**

**Misra, Nishi** Dept. of Psychology, DIPR, DRDO, Delhi, India

Objectives: Present study was conducted to (i) determine age, discipline and gender differences in scientific creativity, (ii) determine a profile of creative scientists. Method: Sample comprised 100 R&D scientists; aged 25 to 55 years. 'F' ratios and multiple regression analysis were computed. Results: Non-significant differences on gender and age and significant discipline-wise differences were obtained. Creative scientists scored average on neuroticism and extraversion, high on internal locus of control, used a mix of intuitive and systematic cognitive style, scored high on personal accomplishment, were moderately motivated and encountered less workplace barriers. Conclusions: Factors promoting creativity in R&D scientists are discussed.

### **Fluency, originality and flexibility: Does the scoring method affect the relationship of creativity, intelligence and personality?**

**Gelleri, Petra** Inst. für Psychologie, Hohenheim Universität, Stuttgart, Germany **Winzen, Julia** Psychology, Universität Hohenheim, Stuttgart, Germany **Schwarzinger, Dominik** Psychology, Hohenheim University, Stuttgart, Germany **Görlich, Yvonne** Psychology, Hohenheim University, Stuttgart, Germany **Schuler, Heinz** Psychology, Hohenheim University, Stuttgart, Germany

In a variety of creativity tests, scoring only accounts for ideational fluency, whereas originality and flexibility of answers are neglected. Preliminary research supports the thesis that fluency can be seen as a sufficient measure of divergent thinking (e.g. Runco, 1986). Indeed, our findings support that there are high correlations between the three measures (ranging from  $r = .85$  to  $.92$ ,  $N = 91$ ). However, our results indicate that, depending on scoring method, correlations with other constructs like intelligence and Big Five-factors may vary. Thus, we argue that scoring method has to be accounted for in analyzing relationships to other constructs.

### **Two paradigms are two vectors of creating the new**

**Bogoyavlenskaya, Diana** Lab. of Diagnostics, Psychological Institute, Moscow, Russia  
A comparative analysis of creativity theory has been made in different paradigms. The testological paradigm where vector of development points toward "breadth" and divergent thinking as a creativity factor is represented by the principal "more-or-less." Based on distant associations divergent thinking does not guarantee gaining of a new knowledge. It only provides some possibility for it. The paradigm "process-activity" where we single out the phenomenon based on an identification of the unit of creativity analysis by our method "Creative field". This phenomenon is a result of cognition developing "in depth".

## **FP-199: Psycholinguistics**

### **Synesthesia and language: Sound/concept and grapheme/concept adequacy evaluation of linguistic signs**

**Grantyn, Rosemarie** Entwicklungspsychologie, Institut für Neuropsychologie, Berlin, Germany  
**Grantyn, Inga** Inst. für Romanistik, Humboldt-Universität zu Berlin, Berlin, Germany **Betances, David** Developmental Physiology, Institute for Neurophysiology, Berlin, Germany **Knauer, Gabriele** Institute for Romance Studies, Humboldt University Berlin, Berlin, Germany

A central principle of linguistics (Saussure 1916) assumes that the connection between a concept ("signified") and the spoken/written representation of the latter ("signifier") is entirely arbitrary. We have developed a set of tests to address this hypothesis and obtained evidence suggesting that, in contrast to Saussure's principle, an iconic relation between the signifier and the signified may on some occasions exist. We refer to this phenomenon as "iconic synesthesia". Our results lead to the question to what extent iconic synesthesia contributes to early language acquisition, especially in the case of concrete, simple linguistic signs with obvious sensory characteristics.

### **The shape of words in the brain**

**Kovic, Vanja** Experimental Psychology, Oxford University, Oxford, United Kingdom

Here we present new neurophysiological and behavioural evidence for the psychological reality of sound-symbolism which implies some naturally-biased mappings between linguistic signs and their referents. We designed a categorisation task which captures processes involved in natural language interpretation and found that undergraduate students were faster to categorise novel objects when label-object mappings are sound-symbolic than when they are not. Moreover, early negative EEG-waveforms indicated sensitivity to sound-symbolic label-object associations. This sensitivity to sound-symbolic label-object associations may reflect a more general process of auditory-visual feature integration where properties of auditory stimuli facilitate a mapping to specific visual features.

### **Idiom syntax: Idiosyncratic or principled?**

**Tabossi, Patrizia** Dept. of Psychology, University of Trieste, Trieste, Italy **Wolf, Kinou** Psychology, University of Trieste, Trieste, Italy **Koterle, Sara** Psychology, University of Trieste, Trieste, Italy  
Idiom syntax may be represented in superlemmas. Alternatively, one may assume that speakers' competence suffices to constrain the use of an expression. The predictions of these alternatives were tested. In Experiment 1 non-native speakers were better at judging the acceptability of familiar than invented idioms, whereas Italian speakers performed equally well. In Experiment 2, native speakers performed equally well in judging the acceptability of idioms, whether familiar or unfamiliar. In Experiment 3 idiom acceptability increased in pragmatically appropriate contexts. Experiment 4 showed that general rules of Italian limit idiom passivization. The results were interpreted as supporting the competence hypothesis.

### **What eye-tracking tells about role-name processing**

**Irmen, Lisa** Inst. für Psychologie, Universität Heidelberg, Heidelberg, Germany

Two eye-tracking studies assessed the effect of grammatical gender and gender role typicality on role-name processing. Participants read passages about representatives of social groups (e.g., soldiers, florists) whose gender was later specified through an anaphoric noun phrase (these men/women). A mismatch between the role-name's gender-typicality



and the anaphor (florists - men) slowed reading before and after the anaphoric noun. A mismatch between the antecedent's grammatical gender and the anaphor (masculine - women) slowed reading the anaphoric noun itself. These results indicate an effect of gender-cues in early stages of processing and differing time-courses for using grammatical versus conceptual cues.

## FP-200: Physical activity

### The effects of antenatal exercise on psychological well-being during and following pregnancy and childbirth

**Rankin, Jean** Health, Nursing and Midwifery, University of the West of Scot, Paisley, United Kingdom

Effects of regular exercise during/following pregnancy were investigated with healthy primigravida women (2 separate studies - RCT and self-selected). Aim: Note differences in psychological variables between 2 groups - 1. Control - Routine antenatal care 2. Intervention - Adjunct, structured exercise programme. Psychological variables (early, late, after pregnancy) included positive/negative well-being. Tools: Psychological well-being scale, maternal attitude/adaptation to pregnancy, EPDS. Statistical tests: Repeated measures ANOVAs, follow-up multiple comparisons procedures (95% CI), PPM coefficient of correlations. Findings (both studies): Early pregnancy - No difference; Late/postpartum - significant differences in outcomes - significantly positive findings on all psychological variables for exercising women.

### Psychosocial factors associated to physical exercise in undergraduate Mexican students

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**OBJECTIVE:** To study the association of psychosocial variables to self-reported physical exercise (PE). **METHOD:** 696 random-selected first-year students answered a questionnaire containing scales to measure Self-efficacy, Readiness to Change for the accomplishment of PE, Attitude, Decisional Balance, and Subjective Norm. Self-Reported PE was estimated in METs. Anthropometric variables were also measured. **RESULTS:** Men reported practicing significantly more PE than women. On a multivariate logistic model ( $\chi^2(9) = 216.59, p = 0.00$ ), volitional stages, self-efficacy, and subjective norm were significantly associated to PE. **CONCLUSIONS:** Advantages of interventions based on readiness to change are discussed. Limitations of the study are commented also.

### Psychosocial determinants are related to exercise adherence during 3-year follow-up of a lifestyle intervention

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We sought to identify patterns of exercise adherence and associated psychosocial determinants in participants of a lifestyle counselling intervention based on Health Action Process Approach. Based on physical activity diaries from baseline, and 1-year and 3-year follow-ups, participants ( $N=260$ ) were grouped into never-exercisers, decliners, late adopters, early adopters and always-exercisers. We found differences in self-efficacy, self-regulation and motivation that predict adherence in ways consistent with theory. BMI of never-exercisers was higher than that of decliners both at baseline and at

3 years. Tailoring of interventions could be useful both in the beginning and during the process.

### Development and evaluation of a computer-based counseling system (CBCS) to promote physical activity for patients with chronic disease in general practice

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**Objectives:** This study shows the effects of a Computer-Based Counseling System (CBCS) for health promotion on patients with chronic diseases (Murray et al., 2005) in Germany. **Methods:** In an interdisciplinary team (psychologists, general practitioners, software engineers) we developed a CBCS. In a pre-post design with  $N=50$  patients (coronary heart disease or diabetes type 2) we investigate acceptability and effects on attitudes and self-efficacy. **Results:** Qualitative results show good acceptability and usability. Quantitative data regarding attitudes (Kiviniemi et al., 2007) and self-efficacy are being evaluated. **Conclusion:** Effectiveness assumed the CBCS should be tested further for the impact on behavioral and clinical outcomes and cost-benefit

### A biopsychosocial analysis of a health study in children and youth from Luxembourg

**Lämmle, Lena** München, Germany

A biopsychosocial model was developed to find out the reasons for health and subjective wellbeing. 1253 Participants were assessed in motor skills, health parameters and health behaviours in 2004. The model was analysed using structural equation modelling. The analysis yielded a good model-fit. A higher social standing leads to better eating habits, more reference persons being active and less sport motivation. Active reference persons enhance sport motivation and both affect positively the physical activity which itself enhances fitness. Fitness leads to better health and less health complaints. A moderator effect of age can be seen as well as biopsychosocial interactions.

## FP-201: Positive health psychology

### Health psychology and health promotion in settings: The development of a setting-based Sense of Coherence scale (U-SOC)

**Graeser, Silke** Gesundheitswissenschaften, Universität Bremen, Bremen, Germany

This study aimed to develop a theoretically based scale following classical guidelines for test construction. The University Sense of Coherence (U-SOC) scale is based on the concept of salutogenesis (Antonovsky, 1987), operationalized and adapted to a setting perspective. In a German university two surveys examined test-criteria of the U-SOC. Correlations and the comparison of means proved statistically significant differences between the U-SOC score and health status, mental health and psychosomatic complaints. The results of reliability analysis showed a Cronbach's Alpha of 0.90 for the U-SOC. Additional factor and cluster analysis indicated that the scale differentiates between groups. The results of the study underline the relevance of health psychological factors in settings.

### Health behaviors: The roles of social integration and ethnic self-identity

**Davis, John M.** Dept. of Psychology, Texas State University, San Marcos, USA

Social integration (SI) and ethnic self-identity (ESI) both relate to health disparities but the underlying processes are unclear. We hypothesized that interpersonal evaluative processes link SI, ESI, and health behaviors. Participants completed measures of health behaviors, SI and ESI. Then, in a 2 X 2 experiment they interacted with a stranger that was attitudinally and ethnically either similar or dissimilar. Finally they evaluated the stranger. Results showed significant effects for attitudinal and ethnic similarity on evaluations, and significant links among SI, ESI, and health behaviors. The present study identified underlying factors linking SI, ESI, and disparities in health behaviors.

### Enhancing mental health in youth: Role of positive cognitive states viz. self-efficacy, optimism and hope

**Farokhzad, Pegah** Psychology, Panjab University, Tehran, Islamic Republic of Iran **Askari, Amir** Psychology, University of Mysore, Mysore, Islamic Republic of Iran

**Objective:** This study has been conducted to know whether positive cognitive states influence the development of mental health among youth. **Method:** Sample consisted of 100 males and females in age range of 20 to 25 years who were taken from university students of Tehran, Iran. Participants were given General Self-Efficacy Scale, Life Orientation Test, Hope Scale and psychological Well-Being Scale. **Results / Conclusion:** Results revealed a positive relationship between psychological well-being and positive cognitive states viz. self-efficacy, optimism and hope among the subjects. Therefore, by enhancing positive cognitive states through various techniques, we can improve mental health.

### Spirituality, psychological well-being and subjective well-being among yoga practitioners

**Askari, Amir** Psychology, University of Mysore, Mysore, Islamic Republic of Iran **Farokhzad, Pegah** Psychology, Panjab University, Tehran, Islamic Republic of Iran

**Objective:** This study investigated spirituality, psychological well-being and subjective well-being among yoga practitioners. **Method:** Sample consisted of 30 advanced practitioners of yoga and 30 yoga amateurs in age range of 20 to 60 years. They were 37 males and 23 females from the SVYASA (Deemed University), Bangalore, India. Subjects were given The Psychological Well-Being Scale, Subjective Well-Being Scale, and The Spiritual Transcendent Scale. **Results / Conclusion:** Significant difference between advanced practitioners of yoga and yoga amateurs was found in Psychological well-being. They do not show significant difference in the level of subjective well-being and spirituality.

### The relationships of role ambiguity, role conflict, role overload and mental health with respect to type A and sense of coherence as a moderator variables in employees of a steel company

**Neissi, Abdolkazem** Dept. of Psychology, Shahid Chamran University, Ahvaz, Islamic Republic of Iran This study was carried out to investigate the simple and multiple correlation of RA, RC, RO and mental health in employees of a steel company in Ahvaz, Iran. The sample consisted of 196 employees who were selected randomly from the population of the company. RO and RC scale, RO scale, TAQ, SOC scale and GHQ were used to measure the research variables. The results indicated that there are negative correlation between Role Ambiguity, Role Conflict and mental health. Role Ambiguity and Role conflict were the two independent predictors of mental health. Sense of

coherence and Type A personality had crucial moderating influence.

# The effect of cognitive and metacognitive training on self-esteem of high school female students in Isfahan City

**Esmaili, Maryam** Psychology, Isfahan University, Isfahan, Islamic Republic of Iran **Moradi, Azam** psychology, isfahan university, isfahan, Islamic Republic of Iran **Mahdavi, Saeideh** medicine, azad university of najafabad, isfahan, Islamic Republic of Iran

Aim of this research was to determine the effects of cognitive and metacognitive strategies training on self-esteem of the high school female students. Subjects were high school female students in Isfahan who were assigned in two groups randomly. The experimental group was under 10 sessions training of cognitive and metacognitive strategies and evaluated by coopersmith's self-esteem questionnaire. The results of covariance analysis showed that there were significant differences between experimental group and control group regarding to self-esteem ( $P=0/00$ ). The Results show that training of the strategies effects on self-esteem of female students; therefore teachers must try for training these strategies.

## FP-202: Cross-cultural approaches in psychology I

### Process trust: A new concept and its application in intercultural business settings

**Clases, Christoph** School for Applied Psychology, UAS Northwestern Switzerland, Olten, Switzerland The conceptual part of the paper will develop our understanding of "process trust" as a new approach to understand the relation between trust and collaborative processes in intercultural settings. Core differences to existing concepts (generalized trust, inter-personal trust, system trust, etc.) will be discussed allowing us to argue for the scientific and pragmatic value of the concept. With "process trust" we focus on the dynamic cognitive-affective evaluation of collaborative processes that may not be grasped with existing approaches. The empirical part will report on outcomes of a study on process trust in Sino-Swiss business settings.

### A cross-cultural study about cultural self-efficacy in the preference of acculturation strategies at work

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Every day, organizations are more competitive and cultural diverse which necessities the development of new skills. From a social cognitive perspective, cultural self-efficacy is defined as a person's perception of their own capability to function effectively in situations characterized by cultural diversity. The present study analysed the role of cultural regulatory and dispositional variables such as self-efficacy, leadership and intelligence to determine acculturation strategies across four experimental scenarios created with fictitious newspaper articles. A long sample from different cultural backgrounds participated. Results showed the interactions between three regulatory variables and ethnocultural origin within an ANOVA. Cultural self-efficacy played a main effect on the acculturation strategies adopted.

### Attitudes of Chinese commercial pilots toward voluntary reporting systems

**von Thaden, Terry** Human Factors Division, University of Illinois, Savoy, USA **Li, Yongjuan** Inst. of Psychology, Chinese Academy of Sciences, Beijing, People's Republic of China

Objective: We compared Chinese pilots' attitudes toward their airline's safety reporting system and a possible anonymous reporting system controlled by their airline, or a third party. Method: We surveyed airline pilots regarding reporting attitude and motivation. Results: Pilots display significant concern about airline peer pressure and punishment. Captains were more reserved about anonymous airline reporting than copilots. Both would utilize a third-party system. Conclusion: Cultural influences and potential biases to reporting cannot be overlooked. Chinese pilots require assurances which can be enhanced by policy not currently present. This will support receiving information from all pilot ranks, consequently promoting system safety.

## FP-203: Psychological disorders V

### Fibromyalgia and burnout: Same or different types of health problems?

**Andersson, Sven Ingmar** Dept. of Psychology, Lund University, Lund, Sweden **Hovelius, Birgitta** Department of Family Medicine, Lund University, Lund, Sweden

Objective. To find out in what ways fibromyalgia and burnout differ or are similar. Methods. Questionnaire study of subjects' cognitive and emotional appraisal, coping intentions and coping, participants ( $n=300$ ) absent from their jobs for 60 days or more with burnout or fibromyalgia type of diagnoses, the findings related to sociodemographic and medical data. Results and Conclusion. Fibromyalgia and burnout may represent culturally bound ways of dealing with situations that the individuals involved experience as overwhelming. Health-care workers, psychologists included, can serve to reinforce a biomedical perspective on the patients' part, resulting in medicalization, surgery or heavy use of pharmaceutical drugs.

### Test anxiety in university students: Harmless tension or disabling mental disorder?

**Fehm, Lydia** Institute of Psychology, Humboldt-Universität zu Berlin, Berlin, Germany **Prieue, Jennifer** Institute of Psychology, Humboldt-Universität zu Berlin, Berlin, Germany

Studies on test anxiety are often hampered by selection biases. The present study provides data about symptoms and the extent of test anxiety and associated impairments in an unselected student sample ( $N = 489$ ; response rate: 93%). The mean score of the university students on the Test Anxiety Inventory (German version) was comparable to those of high school students. Three percent of the sample reported being significantly impaired by their anxiety, thus indicating a possible mental disorder. The participants ask for more information on test anxiety as well as for effective coping strategies, e.g., learning strategies.

### Experiential avoidance and eating pathology in a sample of college students in Cyprus

**Karekla, Maria** Dept. of Psychology, University of Nicosia, Nicosia, Cyprus **Kapsou, Margarita** Psychology, University of Nicosia, Nicosia, Cyprus

• The present study examined whether higher levels of experiential avoidance are linked to higher rates of eating pathology. Sixty four first year students at University of Nicosia, completed a packet of eating related measures, the Acceptance and Action Questionnaire (AAQ-49), and the Beck Depression Inventory (BDI-II). Multivariate analysis of variance indicated, as predicted, that participants classified as high in emotional avoidance reported higher levels of eating pathology, more uncon-

trolled eating behavior, and higher levels of depression compared to their low avoidance counterparts. Interestingly, individuals high in experiential avoidance reported levels of eating pathology and depression within the clinical range.

### The role of superstitiousness on obsessive-compulsive symptomatology

**O, Jiaqing** Singapore, Singapore **Catherine So-kum, Tang** Psychology, NUS, Singapore, Singapore

Few studies have elucidated the relationship between superstitiousness and Obsessive Compulsive disorder (OCD), and none has yet explicated the specificities of this relationship. We hypothesized that superstitiousness mediates the relationship between a person's external locus of control and resulting OCD symptoms. Further, the higher the score on "avoiding" aspect (as compared to "achieving" aspect) of superstitiousness for an individual, the higher will be the corresponding incidence of reported obsessive-compulsive symptoms for that individual; vice versa. We expect to observe these phenomena in college students by means of questionnaires, analyzed using factor analyses. Preliminary findings will be presented in the conference.

## FP-204: Development in adolescence and young adulthood I

### Striving for multiple personal goals: What makes the difference on success in goal management?

**Schnelle, Jessica** Motivation, Volition and Emoti, University of Zurich, Zurich, Switzerland

**Brandstaetter, Veronika** Motivation, Volition and Emoti, University of Zurich, Zurich, Switzerland People are generally striving for multiple personal goals. On the basis of theories of self-regulation, we analyzed the antecedents and consequences of goal conflict between work- and private-life goals. Longitudinal field studies with students ( $N = 283$ ,  $N = 59$ ), cross-sectional ( $N = 102$ ,  $N = 129$ ) studies and an experiment ( $N = 30$ ) with employees were carried out. Results indicate that goal-conflict is associated with avoidance goal orientation. Additionally, goal-conflict impairs performance and psychological well-being. The generalizability of the outcomes and theoretical implications with respect to conflict in personal goal striving will be discussed.

### Occupational aspirations as a device to study Mexican adolescents' development and understanding of socioeconomic organization

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In recent research on social cognitive development, children's and adolescents' understanding about work and employment has been considered as part of socioeconomic knowledge. Students' development of occupational aspirations through different school levels allows an appreciation of their comprehension of social organization and economic expectations and should be considered by developmental psychologists. Occupational aspirations were used as a model of studying Mexican adolescents' comprehension of socioeconomic aspects related to social organization and occupational hierarchy. Questionnaires and individual interviews were conducted with 360 adolescents sampled from 6th, 9th and 12th grades in public and private schools. Results show developmental and socioeconomic differences.



### Representation of future profession: Change in professional representation of students from incoming to outgoing in a higher institution

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**Donati, Mario** Scienze dell'Educazione, Alta Scuola Pedagogica, Locarno, Switzerland  
**Losa, Franco** Scienze dell'Educazione, Alta Scuola Pedagogica, Locarno, Switzerland

Teacher education is a debated issue, especially in the current period in which teachers' public representation is getting a gradual weakening. In order to improve our academic programs, it is extremely important to investigate the representation that future teachers have of their job, and how the educational curriculum affects this vision: these were the two goals of our study. We used an "ad hoc" questionnaire, validated in process, and informal interviews. Results show that after three years training, students have modified some aspects of their representation, while others remain unchanged. Several dimensions of this representation show incoherence with reality.

### Psychological technologies for businessman potential development

**Guseva, Larisa** of Business, Ural-Siberian Institute, Ekaterinburg, Russia

The problem of potentiality has always attracted the most rapt attention of those, who deal with human being, behavior and activity. Some natural individual features, capabilities and inclinations, orientation and power of a person are referred to the field of potentiality. The development of potentialities has an overwhelming practical meaning in the context of business undertakings. A businessman is one who takes resources, labor, energy and other assets and combines them in different ways in order to increase their initial costs. At the same time he conducts some changes, makes a new order of activity and develops a new social context etc. The latest achievements in the realm of psychology allow us to mark out the businessman potential as a complex of typical and natural traits of a person and also help us to stimulate its development by means of authentication psychotherapy and leadership education. Applying of these psychological technologies to the practice of psychological consultations and education allows many young businessmen to satisfy their intention to perceive their natural potential, to learn how to manage their lives, to reveal their capabilities and, eventually, to make their dreams come true.

### FP-205: Psychotherapy - Research and treatment methods VII

#### Group psychotherapy for gay men across addictions utilizing gradualism: Theory and practice

**Greene, Darrell** Darrell Greene, Ph.D., New York, USA

This paper advances a model of addictions treatment called gradualism (Kellogg 2003; Kellogg and Kreek, 2005) within the context of group psychotherapy for gay men. Gradualism attempts to synthesize harm reduction and abstinence-oriented treatment perspectives. A discussion of the benefits of group participation across varying addictions, levels of treatment experience, periods of non-use and psychological commitment to abstinence or behavioral management will be explored according to Yalom's (1995) eleven therapeutic factors. The final section will present illustrations of the model from the author's group experience.

### The effectiveness of MBCT group therapy on prevention of relapse in depression

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Evidence indicates that the risk of depressive as the illness becomes more highly recurrent. MBCT (mindfulness based cognitive therapy) is a meditation based psychotherapeutic intervention designed to help reduce the risk of relapse of recurrent depression. In order to study the effectiveness of MBCT in reducing the relapse, an 8week course set out for a longitudinal investigation with 1year follow up. The analyses of data indicate that relapse had accrued 6.6% in experimental group, and 75% in control group. So it can be concluded that development of mindfulness as a life style can hold a key role in reducing relapse.

### The effect of cognitive group therapy and spiritual therapy on depression of teachers training university

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**Aim :** The main Objective of this study is comparison of effect of two (CGT) and (SGT) among Female depressed students of teachers training university. **Method:** The sample of the study 24 girls student randomly selected through advertisement. Their depression was confirmed with Beck Depression Inventory BDI and Psychiatric Interview. Subjects divided to three groups randomly: group 1 and 2 experimental groups and the three (3) comparing group. They were retested with BDI again. The two groups participated in ten sessions of CGT and SGT. After doing group therapy BDI test was done, then the data was analyzed with (ANOVA). **Results:** CGT and SGT were effective significantly in Reduction of depression ( $p < 0.01$ ).

### Experiential / Interpersonal group therapy for chronic pain: An extension of functional analytic psychotherapy

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Pain- and stress-related daily-life difficulties experienced by chronic pain patients were identified to also occur during the in-session interactions between participants in group therapy. **Aim:** Exploring therapeutic possibilities of working in-vivo with these occurrences. **Method:** In three groups Functional Analytic Psychotherapy (Kohlenberg & Tsai, 1991) strategies were used to ensure in-vivo learning experiences during in-session occurrences of clinically relevant difficulties. Difficulties were categorized and changes monitored. **Results:** In-vivo occurring difficulties were frequent and diverse. Improvements in Experiential avoidance (trying to avoid feelings), catastrophizing talk and trying to control the behavior of the other were related to changes in reported pain-levels.

### FP-206: Issues in priming

#### Prime retrieval of motor responses in negative priming: Findings in a Go/NoGo task paradigm

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The prime-response retrieval model of negative priming assumes that the transfer-inappropriate prime response is retrieved in ignored repetition (IR) trials. In three auditory identification experiments, a cue in the prime signaled whether participants were to respond (Go) or not (NoGo). Go/NoGo cues were either simple cues presented before or after the prime stimuli or selective cues necessitating a motor discrimination in order to decide upon response execution or suppression. Negative priming was found for all trial types, but an increase in prime response errors to the probes of IR trials was found only when the prime response had been executed. This implies that execution of the prime response is a precondition for prime-response retrieval.

### Neural basis for priming of pop-out during visual search revealed with N2pc: An Event-Related Potentials (ERP) study

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Repetitions of target-defining features facilitate later reaction times in visual search tasks to discriminate the singleton target among distractors. The effect, termed as priming of pop-out, was proposed to reflect an implicit transient short-term memory, which is essential in focusing attention rapidly. The present study aimed to identify the corresponding event-related potential (ERP). The N2-posterior-contralateral (N2pc) component, which is sensitive to attentional selection, was proposed to reflect priming of pop-out. N2pc latencies corresponded to the behavioural effects. The N2pc onset was delayed in change trials relative to repeat trials, suggesting that priming of pop-out affects target selection.

### Viewing static images with implied motion primes action-related stimulus dimensions

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Observing grasping or a reaching actions improves the processing of action-related stimulus dimensions (size or location information, respectively). Here, we investigated whether the possibility to predict the course of such actions modulates the dimensional priming effect. Subjects saw static images showing either implied motion or the end state of the actions before discriminating size- or location-defined stimuli. As predicted, the dimensional priming effect was only evident after observing images with implied motion, suggesting that the possibility to infer the further course of the action plays a critical role for directing visual attention.

### An ERP investigation of the modulation of subliminal priming by exogenous cues

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Marzouki et al. (2007) demonstrated that masked repetition priming of letter identification is affected by the allocation of spatial attention to the prime location by an exogenous cue. The present ERP study provides a further investigation of such exogenous influences on masked priming. The

electrophysiological data showed a significant modulation of the amplitude of the P3 component generated by target letters as a function of priming and cue validity. Results confirm the influence of exogenous cues on the processing of subliminally presented prime stimuli, and furthermore show that such effects can be obtained in the absence of any eye movements.

## FP-207: Dietary behavior II

### Adaptation and evaluation of an internet-based prevention program for eating disorders in a sample of women with subclinical eating disorder syndromes

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Women, reporting initial eating disorder (ED) symptoms are at higher risk for the development of an eating disorder. Preventive interventions should therefore be specifically tailored for this subgroup. Accordingly, the aim of this study was to adapt and evaluate the effects of the Internet-based prevention program "StudentBodies®" for women with subclinical ED syndromes. 90 women, reporting subclinical ED symptoms were randomly assigned to the intervention or a waiting-list control condition and assessed at pre-intervention, post-intervention, and 6-month-follow-up. Results: In a pilot study medium to large effects were found. Pre-post results of the randomized controlled study will be available next year.

### Language acculturation and health behaviors in Mexican Americans

**Singelis, Theodore** *Dept. of Psychology, California State University, Chico, USA*

This study investigates the effects of acculturation on health promoting behaviors, well being and health in Mexican American adults in California, USA. Participants (N=253) were interviewed by telephone and completed the Bi-dimensional Acculturation Scale, the Health Promoting Lifestyle Profile II, and other measures. Data were analyzed with a series of hierarchical general linear models with education and income as covariates. More than assimilated or separated respondents, biculturals reported better health and performed better on some health behaviors. The high performance and characteristics of the bicultural group are discussed. Supported by a Grant from the National Institute on Aging (#1R15AG19141-01)

### Family environment and self-regulation in cardiac patients

**Kalavana, Theano** *Nursing Dept., Cyprus University, Lemesos, Cyprus* **Fteropoulis, Theodora** *Clinical Health Department, LONDON COLLEGE LONDON, London, United Kingdom*

The present study examined the family environment of Greek-Cypriot cardiac patients (N=55, X=60.4), and their self-regulation cognitions in their attempt to improve their health. ANOVA and Regression analyses indicated that the presence of self-regulation cognitions was the most important parameter for their health improvement. Additionally, family factors (cohesion, expressiveness and organization) facilitate self-regulation. In conclusion, this study points out that intervention programs aiming at helping cardiac patients to improve their health should focus on the development of self-regulation and that is of great importance to include family members and/or intimate partners in the whole effort.

## FP-208: Dimensions of personality II

### Ambivalence phenomenon: Measuring and studying the properties

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This work is devoted to the study and characterization of the personality and social properties of ambivalence toward various concepts. Three groups of subjects were considered: with "creative" (1)/ "noncreative" (2) professions, and those who are currently diagnosed with schizophrenia or depression (3). Several indices of ambivalence were compared. Three aspects of ambivalence are considered: personality, linguistics, and social (concerning human values). The results showed that individuals with "creative" occupation are characterized by a high degree of ambivalence. The high degree of ambivalence is accompanied by the high degree of tolerance to uncertainty but also the high degree of personal anxiety.

### Taxonomy and structure of Persian personality-descriptive adjectives

**Farahani, Mohammad Naghy** *Dept. of Psychology, Tarbiat Moallem University, Tehran, Islamic Republic of Iran*

This paper describes the development of a comprehensive taxonomy of Persian Personality-descriptive terms, organized in two studies. In the first study six judges searched through a standard dictionary of the Persian language for person-descriptive terms. In the next stage, personality-descriptive adjectives were classified by six Judges into different categories of descriptions. In the second study, the 126 adjectives rated for self-descriptions by 2400 students. Self ratings were factor analyzed and were interpreted to be similar to the Big-Five factors: Agreeableness, Extraversion, Conscientiousness, Intellect, and Emotional Stability.

### Using the CPI260 for assessing the personality typology of law enforcement personnel

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The California Psychological Inventory has been used in law enforcement settings since 70's for assessing both police cadets and police officers. Our study uses the 3-vector model of personality from the CPI260 in order to investigate the typology of both managers and incumbents working in different law enforcement agencies. The study has three main purposes: (a) to analyze how the Romanian version of CPI260 is working in high stake setting, (b) to compare the typology of semi-military and military personnel with that of civil employees and (c) to perform a latent class analysis on the vector scales. Preliminary results obtained from 250 subjects revealed that the most frequent types are Alpha (54%) and Beta (29%).

## FP-209: Disability and rehabilitation II

### A systems approach to working with persons with disabilities: A model from the USA

**Schiro-Geist, Chrisann** *Memphis, Tennessee, USA*

This will be a demonstration of a systems approach to the adult development of persons with disabilities in the USA. It will be a system that can be applied to moving from dependence to independence, especially in the world of work, but also in independent

living. The model is being re-evaluated in other countries, including China and India by cooperating psychologists. Hopefully, it will also apply to countries such as Germany. It has been used in Ireland. The instrument which has evolved from the model has reliability at the .88-.93 level and might be replicated in other societies.

### Health cognitions in Parkinson disease

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**Objectives:** To find out relations between patients' concepts and efficiency of rehabilitation. **Methods:** 40 patients with PD and their caregivers were assessed through Luria battery; Wylie Self-concept test; Spilberger, Depression, Quality of Life and Inner Representation of disease scales. **Results:** Patients with less cognitive disturbances, lower depression and anxiety, and balanced type of inner representation of disease show better results in rehabilitation. Internal representation of defects correlates more with emotional disturbances than real motor deficit. Interdependence between quality of life of the patient and his caregiver is revealed. **Conclusions:** Health concepts should be one of the main orientations in psychological rehabilitation.

### Evaluation of the implementation of Corporate Integration Management and the benefit for occupational rehabilitation in Germany

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**OBJECTIVES AND METHODS** Corporate Integration Management (CIM) is an early intervention specifically at work to guarantee tailor-made rehabilitation measures instead of pensions and in order to prevent further work related injuries. The project investigates structures and measures for work related prevention and CIM. There are 630 participants in the nationwide survey. Data has been subjected to univariate as well as multivariate statistics. **RESULTS** CIM has been applied in 49% of the participating companies. Some of the integration measures are directly connected to a successful return to work, which could be attained in nearly 50% of the CIM-Cases. **CONCLUSIONS** The results indicate that CIM is an appropriate early intervention for occupational rehabilitation.

## FP-210: Child health II

### Dental health care and dental anxiety in school children

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**Objectives:** Children with regular attendance to health care programs before suffering caries and decayed teeth should show less dental anxiety than children visiting the dentist only for treatment reasons. **Methods:** 300 children aged 6,10, and 12 years were participants of a research program to evaluate the effectiveness of a dental health prevention campaign, 300 received only basic instructions. Dental fear via questionnaire and actual dental health care status were registered. **Results:** 3x2 analyses of variance revealed lower anxiety levels in children participating the prevention campaign. Further investigations showed interaction effects between sex, anxiety levels and dental status. **Conclusions:** Regular and intense



dental health instructions may reduce dental anxiety levels as a consequence of training to cope with dental tasks.

#### **Coping strategies and quality of life of patients with asthma**

**Kausar, Rukhsana** Applied Psychology, University of the Punjab, Lahore, Pakistan

Study aimed to examine relationship between Coping Strategies (CSs) and Quality of Life (QOL) of asthmatic children. It was hypothesized that: children would use more avoidant CSs; avoidant coping has negative and active coping has positive relationship with QOL. Fifty children with asthma were recruited from a specialized hospital. Pediatric asthma quality of life questionnaire and coping questionnaire were used for assessment. It was found that children employed more CSs and avoidant coping had negative relationship with QOL. There were gender differences in QOL and use of CSs. Findings highlight importance of coping strategies in improving diseased children's QOL.

#### **Stress levels of parents and siblings of disabled children**

**Rauf, Nefar** Dept. of Psychology, Quaid A Azam University, Islamabad, Pakistan **Gillani, Nighat** Psychology, NIP, Quaid A Azam University, Islamabad, Pakistan

The purpose of the study was to assess stress levels of parents and siblings of disabled children. Moderate and severely mentally retarded children were taken as a sample. Results indicate that stress level of parents of mentally retarded children was high as compare to parents of non-disabled children. Mothers of mentally retarded children were more stressed as compared to the fathers. Siblings of non-disabled children feel less stress as compare to siblings of mentally retarded children. Their was no significant difference in stress between sisters and brothers of mentally retarded children. Results also revealed that with increase in family size and income parental stress decreases.

#### **FP-211: Clinical / counseling psychology II**

##### **The roles of sensitivity to reward and alcohol expectancies in the relationship between social anxiety and alcohol use**

**Hasking, Penelope** School of Psychology, Monash University, Victoria, Australia **Booth, Catherine** School of Psychology, Psychiat, Monash University, Victoria, Australia

Objectives To examine whether sensitivity to reward and alcohol outcome expectancies moderate the relationship between social anxiety and drinking behaviour. Methods 454 university students completed an online questionnaire. Results Students with a tendency to avoid social situations drank less even if they held strong tension reduction expectancies and were sensitive to reward. However students whose anxiety was characterised by fear were more likely to drink if they held strong outcome expectancies. Conclusion The relationship between social anxiety and drinking may be better understood by examining different forms of anxiety, and by considering trait characteristics and alcohol-related cognitions.

##### **Nonverbal emotion recognition biases in dual-channel emotion context in the depressed patients**

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This study aimed to empirically investigate the possible nonverbal emotion recognition deficits in dual-channel emotion expression context in the depressed patients. Thirty depressed patients and 39 normal controls completed diagnostic interview, self-report symptom scale, intelligence assessment (WAIS-III-short), and computerized Diagnostic Analysis of Nonverbal Accuracy 2-Taiwan version (DANVA2-TW). Results revealed that, after controlling for IQ, the depressed patients exhibited more accurate for sad and happy emotions in emotion-congruent dual-channel contexts, but displayed positive bias toward happy and negative bias toward fear emotions in emotion-incongruent contexts. Association of depression and potential deficits in nonverbal emotion recognition will be discussed accordingly.

##### **The investigating of effectiveness of cognitive-behavioural group therapy based on Heimberg's model on social anxiety**

**Melyani, Mahdiyee** Clinical Psychology, Shahed University, Tehran, Islamic Republic of Iran **Shairi, Mohamad Reza** Clinical Psychology, Shahed University, Tehran, Islamic Republic of Iran **Ghaedi, Gholam Hosain** Psychiatry, Shahed University, Tehran, Islamic Republic of Iran **Bakhtiari, Maryam** Clinical Psychology, Shahid Beheshti University, Tehran, Islamic Republic of Iran **Tavoli, Azadeh** Clinical Psychology, Shahed University, Tehran, Islamic Republic of Iran

Objectives: The aim of this study was to examine the effectiveness of cognitive behavioural group therapy (CBGT) with Heimberg's model on social anxiety (SA) among female students. Methods: At first, Social Phobia Inventory (SPI) was administered to 205 female students of Shahed University. In the second phase of these 24 students, 16 students were randomly allocated to control (8 subjects) and experimental (8 subjects) groups. After that, experimental group was attended in 12 treatment sessions while control group didn't attend in any treatment session. Finally, experimental and control group were examined by SPI. Result: CBGT with Heimberg's model has been found to be effective on SA among Iranian female students and the effectiveness could be stable after 1 month

#### **FP-212: Interindividual differences in the experience of emotion I**

##### **The achilles' heel of hedonic well-being: Life satisfaction predicts happiness when life is easy, but not during demanding tasks**

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Argues that satisfaction is typically felt in effortless (hedonic) situations, but not during demanding tasks. Hypothesized that life satisfaction (LS) is biased towards easiness, making LS a strong predictor of mood in trouble-free situations, but a weak predictor of mood during effortful tasks. Hypothesized that individual tendencies towards personal growth (PG) operate in the opposite direction. Norwegian students (107) completed measures of LS, PG, and then solved a problem. Participants reported mood before and during the task. Path analyses showed that LS predicted mood before, but not during the problem-solving task. PG predicted mood before and during the problem-solving task.

##### **Anxiety trait and death anxiety as predictor variables of student's anxiety reaction in human cadaver dissection**

**Castano, Gloria** Differential & Work Psychology, Universidad Complutense Madrid, Madrid, Spain **Casado, Isabel** Basic Psychology (Cognitive P), Complutense University, MADRID, Spain **Arraez, Luis** Human Anatomy & Embriology, Complutense University, MADRID, Spain

The aim is to analyze student's anxiety response to human cadaver dissection and their relationship with general (trait anxiety) and/or specific individual characteristics (death anxiety). Participants are 325 students enrolled for the first time in the subject of Human Anatomy. The measurement's instruments are State-Trait Anxiety Inventory, Situations and Responses Anxiety Inventory and Death Anxiety Inventory. STAI-E are completed at the moment just before and immediately after of the first and last dissection of a compulsory course. ISRA and DAI are given a week before the first dissection session. Results show individual differences which leads us to detect students with a propensity to suffer a strong emotional reaction to dissection and to do a preventive intervention.

##### **Does experiential avoidance mediate the relation between anxiety sensitivity and alexithymia?**

**Pennato, Tiziana** Psychiatry, University of Pisa, Pisa, Italy **Bernini, Olivia** Psychiatry, University of Pisa, Pisa, Italy **Berrocchi, Carmen** Psychiatry, University of Pisa, Pisa, Italy **Guazzelli, Mario** Psychiatry, University of Pisa, Pisa, Italy

Objective: to test a model in which Experiential Avoidance (EA) mediates the relation between Anxiety Sensitivity (AS) and Alexithymia (AT). Methods: participants included undergraduate students and non-student adults (N=177, males and females, 18-65 yrs.). Measures of AS, EA, and AT were obtained from standardised, self-administered questionnaires. Regression analyses were performed to test for mediational models. Results: while AS significantly predicts EA scores, the effect of AS on AT is not significant when controlling EA scores, whereas the latter predicts AT. Conclusion: EA mediates the relation between AS and AT.

#### **FP-213: Cognitive information processing and learning II**

##### **Effects of a cognitive training program for entire school classes**

**Tiedemann, Joachim** Inst. für Pädagog. Psychologie, Universität Hannover, Hannover, Germany **Billmann-Mahecha, Elfriede** Phil. Fakultät, Universität Hannover, Hannover, Germany

It has been shown that training of inductive reasoning by means of an analytical solving strategy results in transfer effects on intelligence and scholastic achievement in reading and mathematics. As part of the reading literacy program (KOLIBRI) of the Hanover Primary School Study, a five-week cognitive training program for entire school classes was developed for use in a cooperative learning setting. A classroom experiment involving 300 third- and fourth-grade students demonstrated that training to reason inductively results in substantial gains in (CFT-)intelligence in entire school classes. Further evaluation shows high acceptance of the program by both students and teachers.

##### **The effect of distractors on adults' numerical estimation with field independence and field dependence**

**Si, Ji Wei** School of Psychology, Shandong Normal University, Ji Nan, People's Republic of China **Xu, Ji Hong** School of Psychology, Beijing Normal University, Bei Jing, People's Republic of China  
This paper aims to investigate the effect of different disturbing stimulus on adults' numerical estimation with FD and FI cognitive styles. The results showed

: 1) The RT of FIs' was significantly different with that of FDs under the condition of only targets stimulus, 2) The accuracy of FIs' estimates was also significant different with that of FDs' estimates when distractors number was twice as targets, 3) On the reasonableness of estimates, there was no difference between FIs and FDs among three disturbing conditions and between large and small number groups, respectively, 4) As the distractor number increased, FIs altered their representation ways from linear representation to logarithmic representation, but FDs stuck to exert logarithmic representation.

#### The influence of learning-to-learn on teachers and students' self-assessed academic successes

**Sadzaglishvili, Shoren** Assessment, National Curric & Assess Cent, Tbilisi, Georgia **Janashia, Simon** Assessment, National Curric & Assess, Tbilisi, Georgia **Berdzenishvili, Tea** Assessment, National Curric & Assess, Tbilisi, Georgia **Tsereteli, Mzia** Assessment, National Curric & Assess, Tbilisi, Georgia

The purpose was to assess "LTL" – whether teachers and students grouped by their self-assessed level of success differ according to their LTL components and to reveal the most influential LTL factors; Our sample comprised of 166 teachers and 1007 students of Georgia. Specially designed likert type questionnaires measured the different components of LTL. Analyzing results by factor analysis, non-parametric measures and regression proved that students as well as teachers having better performance on LTL are disposed to have better self-assessment. The most influential LTL components were revealed. These results show of high importance of evaluation of LTL in school assessment system;

#### FP-214: Education and advanced training II

##### Implementation of the project active learning in teachers' pre-service education

**Marinkovic, Snezana** Faculty of Teacher Education, Uzice, Serbia

Implementation of the original Active Learning (AL) model (developed in Serbia) during the teachers' pre-service education is investigated in this paper. The goals: 1. analysis of the AL model implementation in teaching on the faculty of teachers' education; 2. program evaluation in two directions – to explore the students' understanding of the AL ideas and students' implementation of the AL in teaching. This is an action investigation: it's performed in real social situations; learning practice is realized through the process of change. The sample: the students of Faculty of teachers' education in Uzice, Serbia. The research indicates the possibility of Active learning implementation in university teaching, as well as its effects and problems while being implemented.

##### Investigating the effectiveness of the short-term educational courses from middle class managers point of view

**Sabbaghian, Zahra** Education and Psychology, Shahid Beheshti University, Tehran, Islamic Republic of Iran

This research investigated the effectiveness of short-term educational courses. The samples were randomly selected and their knowledge, attitudes and performance were evaluated. Data were analyzed by ANOVA and T- test. The result showed: 1- the short –term courses for middle- class managers increased their knowledge ( $t=4.38$ ), 2- It increased the manager positive attitudes ( $t=5.34$ ). 3- It improved their performance ( $t=10.48$ ). 4- Managers attitudes had significant influence on the improvement of their performance ( $F=56.59$ ). There was no difference in the effectiveness of courses, consider-

ing the managers individual characteristics such as gender, education, employment and management background ( $F=1.31$ ). It can be concluded that short-term courses for managers were effective.

##### Adaptive design as training wheels for less-experienced, older adults

**Bruder, Carmen** Inst. of Aerospace Medicine, DLR German Aerospace Centre, Hamburg, Germany **Wandke, Hartmut** Inst. für Psychologie, Humboldt-Universität zu Berlin, Berlin, Germany **Blessing, Lucienne** Campus Limpertsberg, Université du Luxembourg, Luxembourg, Luxembourg  
Lifelong learning 'just in time' gains in importance. Complex electronic devices require permanent learning. Older users with little experience in using electronic devices need support. Adaptive training application turned out to be promising. Two adaptive principles are researched: the adjustment of complexity to users' experience with electronic devices and adaptive suggestions through program control. In a training study both principles are tested to their effect on older learners' training success. The results show a positive effect of the adjustment of complexity to users' experience. Program control does not affect the learners' success and reduces their self-efficacy.

#### FP-215: Expression and experience of emotion

##### Approaching toward or removing from an observer: Is stimulus significance modulated by distance related dynamic contexts?

**Neumann, Roland** Universität Dortmund, Dortmund, Germany **Mühlberger, Andreas** Psychologie, Universität Würzburg, Würzburg, Germany **Wieser, Matthias** Psychologie, Universität Würzburg, Würzburg, Germany **Pauli, Paul** Psychologie, Universität Würzburg, Würzburg, Germany

We test the assumption that changes in the perceived distance towards emotional charging pictures affect the emotional significance of these stimuli. In our experiments the illusion was induced that IAPS pictures either moved toward or away from the participant. The intensity of the emotional response startle probe and subjective intensity measures were assessed. In two experiments negative IAPS pictures that move toward the observer elicited enhanced arousal ratings and startle responses compared to neutral or positive pictures. Moreover, pictures that seem to remove from the observer or are unmoved exert no influence on subjective arousal or startle responses. These findings replicate earlier reports that movement of emotional pictures enhances their emotional significance.

##### Emotional coordination in spontaneous infant-father interactions during early infancy

**Kokkinaki, Theano** Dept. of Psychology, University of Crete, Rethymnon, Greece

This naturalistic study aims to investigate fathers' and infants' emotional expressions in the course of spontaneous paternal infant-directed speech and the preceding / following pauses across infant gender. Microanalysis of infant and paternal facial expressions of emotions of 11 infant-father dyads – within well-defined units and sub-units of analysis – and chi-square analysis (significance level 1%) provided evidence that, in the course of paternal infant-directed speech, but not during preceding / following pauses, fathers and infants (girls and boys) match their emotional states and attune their emotional intensity. This evidence will be interpreted in the frame of the theory of Innate Intersubjectivity.

##### The expressions of emotion in different relationships

**Chu, Ruey-Ling** Institute of Ethnology, Academia Sinica, Taipei, Taiwan

This study aims to investigate the "normative" and "ideal" expressions of emotion in different relationships. Study 1 examined the normative expression of emotion of Taiwanese college students in five relationships: parent, sibling, close friend, teacher, and acquaintance. Study 2 investigated the "ideal" expressions of positive/negative, and engaging/disengaging emotions in five relationships. Both results of study 1 and 2 showed that the expression of emotion and the quality of relationship were positively associated, which means the expressions of emotion should be more manifest in a good relationship. In addition to the quality of relationship, this study found that collectivism and interdependent self could predict the expressions of emotion to the family. The cultural moderating effect of emotion is discussed.

##### Spontaneous facial expressions of emotion: Data on surprise, disgust and anger

**Reisenzein, Rainer** Inst. für Psychologie, Universität Greifswald, Greifswald, Germany **Bördgen, Sandra** Fakultät für Psychologie, Universität Bielefeld, Bielefeld, Germany **Stüttgen, Markus** Institut für Psychologie, Universität Greifswald, Greifswald, Germany **Weber, Hannelore** Institut für Psychologie, Universität Greifswald, Greifswald, Germany

Results of three sets of studies concerned with, respectively the spontaneous facial expression of surprise, disgust, and anger are summarized. The main findings are: (a) spontaneous facial expressions are rare, even when people are alone and inhibitory display rules are thus presumably less important; (b) if facial expressions occur, they are typically only partial; (c) people typically overestimate their facial expressivity. The findings put into question the affect program theory of facial expressions.

#### FP-216: Cross-cultural comparisons II

##### Proverbs we work with: Using proverbs in cross-cultural research on the culture of work: A methodological approach

**Wolonciej, Mariusz** Inst. of Psychology, Catholic University Lublin, Lublin, Poland

Proverbs are pervasive in everyday speech and in human thoughts. The article introduces paremiology – the study of proverbs – as a way to investigate work culture and explore how proverbs can reveal work culture traits of different social groups in the context of features imprinted in about 1900 Polish and German proverbs concerning work. The article describes the operationalisation process of the theoretical term work culture entailed in the brief presentation of the concrete empirical research method. Despite some limitations, necessary to be considered, application of paremiology in work culture research appears to be as a promising field in cross-cultural research.

##### Dynamic constructivist approach to culture

**Hong, Ying-Yi** Psychology, University of Illinois, Champaign, USA

The dynamic constructivist approach contends that cultures can be understood as shared knowledge (meaning) among group members, and cultural influences are results of the shared knowledge being (chronically or temporarily) accessible and applicable in certain social contexts. In this talk, I will discuss how this approach (1) sets the stage for a paradigm change in studying cultural influences – from trait-like descriptions to process explanations of cultural similarities or difference; and (2) provides a roadmap to study cultural influences



on behaviors. Empirical results from four studies will be used as illustrations.

### Does similarity or complimentary bring more satisfaction to Chinese couples?

**Lu, Xiaowei** Department of Psychology, University College Berkeley, Berkeley, USA **Peng, Kaiping** Department of Psychology, UC Berkeley, Berkeley, USA **Gonzaga, Gian** eHarmony Labs, eHarmony Labs, Pasadena, USA **Wang, Lei** Department of Psychology, Peking University, Beijing, People's Republic of China Results of the researches on matching and marital satisfaction done in West were mixed. But the main patterns seem to be that similarity could probably bring more satisfaction. However, in Eastern Asian cultures (e.g., China), dialectical duality is more appreciated hence complimentary in dyadic relation is more prominent. From the perspective of cultural psychology, the current study explored the impact of matching of Chinese traditional values, personalities, thinking styles and other culture factors to 569 Chinese couples' marital satisfaction. We found that the effect of similarity or complimentary between couples were domain specific dependent on variables that are concerned.

### Situated ethnic identity in first and second generation immigrants to Canada

**Noels, Kimberly** Psychology, University of Alberta, Edmonton AB, Canada **Clement, Richard** Psychology, University of Ottawa, Ottawa ON, Canada **Saumure, Kristie D.** Psychology, University of Alberta, Edmonton AB, Canada

This study examined the hypothesis that acculturative change in ethnic identity occurs first in public domains and eventually penetrates intimate domains. Consistent with this hypothesis, the results of a questionnaire survey indicated that, for first-generation immigrants to Canada ( $N = 266$ ), heritage identity was stronger than Canadian identity in the family and friendship domains, but Canadian identity was stronger than heritage identity in school and public domains. For second-generation immigrants ( $N = 248$ ) this pattern was attenuated, and in the friendship domain Canadian identity was stronger than heritage identity. A theoretical model of situated ethnic identity is presented.

### Social inequality and psychological characteristics: The psychological gap hypothesis

**Brenlla, Maria Elena** Observatorio Deuda Social, Universidad Católica Argentina, Buenos Aires, Argentina

This research tries to evaluate if socioeconomic inequality affects the auto-perception of psychological characteristics, suggesting the existence of a psychological gap. For this purpose, a questionnaire was applied annually to 1500 persons living in different urban areas of Argentina from 2004 to 2007 (panel study). Brief versions of tests were included in order to assess locus of control, personal projects, psychological distress and verbal comprehension. The results show significant differences between the people belonging to lower classes and the people belonging to the upper classes. This information would indicate the presence of a psychological gap depending on the socioeconomic level. Key words: Social inequality-Psychological characteristics-Psychological gap

### FP-217: Conscious and unconscious processes II

#### Why good thoughts block better ones: The pernicious "Einstellung" effect

**Bilalic, Merim** Inst. für Neuropsychologie, Medizin, Universität Tübingen, Tübingen, Germany **McLeod, Peter** Department of Experimental Psy, Oxford University, Oxford, United Kingdom **Gobet, Fernand**

School of Social Sciences, Brunel University, Uxbridge, United Kingdom

Experts solve problems quickly because familiar features trigger a pattern of thought that leads to a solution. We show that a good solution that comes to mind can prevent chess experts finding a better one. The experts said they were looking for alternatives but their eye movements showed that they were looking at information relevant to the solution they had already found. The ability of a thought pattern to direct attention to information relevant to itself and away from information relevant to alternatives explains why experts can find it difficult to assimilate information that might make them change their mind.

### Playing chess unconsciously: Subliminal priming of conjunction stimuli is restricted to experts

**Kiesel, Andrea** Inst. für Psychologie, Universität Würzburg, Würzburg, Germany **Pohl, Carsten** Department of Psychology, Lehrstuhl für Psychologie III, Wuerzburg, Germany **Kunde, Wilfried** Universität Dortmund, Institut für Psychologie, Dortmund, Germany **Berner, Michael P.** Department of Psychology, Lehrstuhl für Psychologie III, Wuerzburg, Germany **Hoffmann, Joachim** Department of Psychology, Lehrstuhl für Psychologie III, Wuerzburg, Germany

Experts in a field process task relevant information more efficiently than novices (Reingold, Charness, Pomplun, & Stampe, 2001). Here we investigated if chess experts are able to detect unconsciously whether a briefly presented chess situation entails a checking configuration. Thereby, check detection required integrating two features – identity and location – of the chess figures. In a subliminal priming experiment, chess experts but not novices revealed unconscious priming effects. We conjecture that experts acquired templates, that is, visual memory episodes for chess configurations in which the respective features are already bound. These templates enable complex visual processing outside of conscious awareness.

### How does meditation affect cognition, emotion, behavior and personality?: A meta-analysis

**Sedlmeier, Peter** Inst. für Psychologie, Techn. Universität Chemnitz, Chemnitz, Germany **Jaeger, Sonia** Psychology, TU Chemnitz, Chemnitz, Germany **Kunze, Sonja** Psychology, TU Chemnitz, Chemnitz, Germany **Drechsler, Doreen** Psychology, TU Chemnitz, Chemnitz, Germany **Haarig, Frederik** Psychology, TU Chemnitz, Chemnitz, Germany **Schenkel, Markus** Psychology, TU Chemnitz, Chemnitz, Germany

Numerous studies have examined the effects of meditation. Surprisingly, there exist only a few summaries that looked at specific techniques (TM) or isolated variables (anxiety). The current meta-analysis ( $n = 136$  studies) attempts to give a comprehensive overview of the impact of meditation on psychological (non-physiological) measures in the (non-clinical) adult population. The effect sizes are rather large for all groups of variables showing that meditation can be a powerful means to change aspects of cognition, emotion, behavior and personality. However, different methods of meditation yield different effects and there is a tendency that effects increase with decreasing methodological quality.

### "Tell it and you know it – don't tell it, don't know it!": Verbal representation as determinant of conscious knowledge acquisition

**Eichler, Alexandra** Inst. für Sozialpsychologie, Universität zu Köln, Köln, Germany **Haider, Hilde** Inst. f. Allg. & Sozialpsy, Universität zu Köln, HF, Köln, Germany

Learning need not necessarily include intention or even awareness. Whereas most studies focus on implicit learning, we consider the development of

conscious knowledge as an important quality of incidental learning. To identify factors that benefit explicit learning, we concentrated on verbal representation by manipulating stimulus type or presence of either articulatory suppression or metronome tones in the serial reaction time task. Reaction times and explicit verbal knowledge were assessed. Results suggest that verbal representation leads to more explicitly expressible knowledge. Furthermore, only subjects with abstract verbal knowledge were able to use their knowledge efficiently and decrease reaction times dramatically.

### Intentionality of cognition: A systems-theoretical approach

**Tschacher, Wolfgang** Psychiatrische Dienste, Universität Bern, Bern, Switzerland

Psychology is frequently confronted with mind-body issues—is there a way by which mentalist and physical approaches to cognition can be integrated? The theory of nonlinear complex systems may offer steps towards a solution to this conundrum: An essential property of self-organized pattern formation lies within its functionality, this being the ability to respond and adapt 'meaningfully' to environmental constraints. Patterns become functional because they consume in a most efficient manner those gradients, which cause their evolution, thereby making synergetic pattern formation appear 'intentional'. We therefore posit that self-organization phenomena may afford basic explanations for the intentionality and purposive behavior.

### FP-218: Emotions in interpersonal contexts

#### Can children's heart rate be used as a marker of differential responsiveness to others' varying emotional states?

**Anastassiou-Hadjicharalambous, Xenia** Psychology, University of Nicosia, Nicosia, Cyprus **Warden, David** Psychology, University of Strathclyde, Glasgow, United Kingdom

This study examined whether children's Heart Rate (HR) can be used as a marker of differential responsiveness to others' varying emotional states. Experimental induction was utilised. Children ( $N=50$ , aged 7-10) watched a series of filmed emotion evocative episodes (i.e. sadness, anger, fear, happiness) while their HR was recorded. HR was higher in response to others' fear relative to others' anger ( $p<.01$ ) but no other differences across emotions were significant. Present data suggest that children's HR cannot be used as a consistent marker of differential responsiveness to others' varying emotional states, but rather as an index of unidimensional vicarious affective arousal.

#### Interpersonal emotion regulation in the dyad: How do couples deal with each other's affective states in daily life?

**Horn, Andrea B.** NCCR, Clinical Psychology, University of Fribourg, Fribourg, Switzerland **Molina, Louella** NCCR, University Fribourg, Clin.Psy., Fribourg, Switzerland **Rieder, Stefan** NCCR, University Fribourg, Clin.Psy., Fribourg, Switzerland **Wilhelm, Peter** NCCR, University Fribourg, Clin.Psy., Fribourg, Switzerland **Reicherts, Michael** NCCR, University Fribourg, Clin.Psy., Fribourg, Switzerland **Perrez, Meinrad** NCCR, University Fribourg, Clin.Psy., Fribourg, Switzerland

Emotion regulation is related with individual health and social functioning, especially in close relationships. This study looks at interpersonal emotion regulation strategies and their effect on one's own and the partner's affective state in couples' everyday life. To assess these constructs couples answered a computer-based diary simultaneously 4 times a day in the run of one week. Emotion regulation strategies are related with affective states of the regulating as well as the perceiving partner, how-

ever sometimes in opposite directions. Including actor and partner effects studying health- and relationship-related functional aspects of emotion regulation strategies seems to be highly relevant.

#### Should I be nice or bad? Effects of discrete emotions on negotiation outcomes

**Volmer, Judith** *Inst. für Sozialpsychologie, Universität Erlangen-Nürnberg, Erlangen, Germany*  
Emotions are central in social interaction. In two laboratory experiments, we tested the interpersonal effects of discrete emotions (i.e., anger, happiness, surprise, sadness) on negotiation outcomes. In Experiment 1, participants were confronted with an angry, happy, surprised or sad opponent. Results showed that participants interpreted the opponent's emotion and used it strategically. In Experiment 2, we also explored the effects of information on future interactions on negotiation outcomes. Showing negative emotions in single negotiation settings does not pay off in terms of concession making and participants' satisfaction with the negotiation. Implications for strategic display of emotions in negotiations are discussed.

#### Self appreciation and affective temperaments in psychiatric nurses

**Cordeiro, Raul** *CESM, Escola Sup. Saude Portalegre, Portalegre, Portugal*  
Self Appreciation and Affective Temperament, have crucial importance, because this fact will influence many phenomena's in nursing practice, like the capacity of develop relationships. 47 nurses, with average age of 38,57 years, working in Mental Health and Psychiatry, were inquired through a Questionnaire of direct application, were introduced measures like: TEMPS-A Scale (Akiskal, 1998), and Scale of Self Personal Appreciation Scale (Ribeiro, 2006). Results indicate a Hyperthymic Temperament. It was verified that women presents a higher Self Personal Appreciation. Affective temperament of nurses seems to be a good predictor of leadership capacity in violence situation at psychiatric services.

#### Emotional labor and emotional exhaustion: Meta-analysis

**Sinambela, F. Christian** *Dept. of Psychology, University of Surabaya, Surabaya, Indonesia*  
**Supriyanto, Agus** *Sport Faculty, Jogjakarta State University, Jogjakarta, Indonesia*  
This study examined the relationship between emotional labor and emotional exhaustion by performing a meta-analysis on research studies that present findings on relationships between emotional labor and emotional exhaustion. Twelve studies involved as a based data in this study. Result indicated that there was a positive correlation between emotional labor and emotional exhaustion ( $\rho = 0.394564$ ; 95% confidence interval,  $CI = 0.140265 - 0.64886$ ). However we can not do moderator analysis because numbers of studies are limited. Thus, this study can not explain moderator variables that influence effects size variation.

#### FP-219: Cognition in the business world

#### Personality and profits of foreign exchange traders

**Oberlechner, Thomas** *Inst. für Psychologie, Webster Universität, Wien, Austria*  
This study explores the role of personality in the performance of professional traders in the currency market. It explores strategies used by foreign exchange traders to generate profits and determines connections between personality characteristics and trading performance. 416 traders at leading banks in North America provided survey answers regarding their personality and mechanisms used to generate profits. Dependent variables included

objective and subjective measures of trading performance. Results show two main factors of profit generation. Considering subgroups of traders using different profit strategies yields significant connections between personality and trading performance. Personality plays an important role in the decisions taken by actors in financial markets.

#### Emotions and financial investment decision-making

**Wranik, Tanja** *Psychology, University of Geneva, Geneva 4, Switzerland*  
Most investors experience strong negative emotions when they lose money, and many overreact to short-term losses and consequently sacrifice long-term gains. We tested the idea that low levels of earnings feedback will lead to fewer subjective losses, fewer negative emotions, and consequently more long-term earnings. Examination of the underlying emotional processes showed that both earnings feedback frequency and individual differences such as personality and emotion regulation skills play a role in predicting emotional experiences, risk-taking behaviors, and long-term investment decisions and earnings. The implications for emotion research and personalized investment strategies will be discussed.

#### Medical decision making: Contextual and team factors in emergency care departments

**Guglielmetti, Chiara** *Social and Political Studies, State University Milan, Milan, Italy*  
**Gilardi, Silvia** *Welfare and Labour Studies, State University Milan, Milan, Italy*  
**Pravettoni, Gabriella** *Social and Political Studies, State University Milan, Milan, Italy*  
**Vago, Gianluca** *Medicine - Clinical Sciences, State University Milan, Milan, Italy*  
The presentation illustrates the results of a multi-methods study of four Emergency Care Departments, based on the Naturalistic Decision Making approach. The aim was to explore the characteristics of decision-making processes in E.C. departments and to identify the socio-organizational factors that can influence them. Different strategies can be observed in daily work practices with regard to how this task is approached. Where the EC team (physicians/nurses) achieves a shared representation of the role distribution, the continuity and preservation of the patient's safety is guaranteed. Furthermore, interpersonal trust is a critical factor in the process of information sharing, integration and utilization.

#### Perceived inflation: The impact of experienced frequency of price changes in individual goods

**Huber, Odilo W.** *Psychology Department, University of Fribourg, Fribourg, Switzerland*  
Perceived inflation refers to the subjective experience of general price development. In contrast to expenditure-weighted official indices, recent models propose the frequency of personal experience with price changes in purchase of goods as determinant for perceived inflation. Three experiments investigate environments with falling, stable, and increasing prices. Different price changes are assigned to two groups of products with identical overall expenditures but different frequency. Products are presented sequentially and prices are compared to learned past reference prices. Final judgments of total expenditure change revealed that in all experiments perceived inflation was dominated by price change of the high frequency group.

#### FP-220: Cognition and emotion I

#### Emotion processing stages and variations of EEG theta activity

**Leue, Anja** *Faculty of Psychology, Philipps-Universität Marburg, Marburg, Germany*  
**Chavonon, Mira-Lynn** *Faculty of Psychology, Philipps-Universität Marburg, Marburg, Germany*  
**Wacker,**

*Jan Faculty of Psychology, Philipps-Universität Marburg, Marburg, Germany*  
**Stemmler, Gerhard** *Faculty of Psychology, Philipps-Universität Marburg, Marburg, Germany*

Objectives: Self-amplification (i.e., activation of emotional processing) has been suggested as one stage in Lewis' (2005) dynamic emotion processing model. A decrease of theta activity is expected to mirror self-amplification. Method: By conducting repeated measures ANOVA this assumption was assessed in 40 students using pleasant, unpleasant, and neutral pictures. Results: A significant decrease of theta activity occurred 2048 ms after picture presentation. This decrease was significantly larger in high- than low-anxious individuals for unpleasant pictures. Discussion: The results provide evidence for the operationalization of self-amplification and suggest the beginning of the self-stabilisation phase indicating the onset of an emotional appraisal.

#### Vocabulary Emotion Test (VET): Ability measure of emotional intelligence

**Taksic, Vladimir** *Dept. of Psychology, University of Rijeka, Rijeka, Croatia*  
**Mohoric, Tamara** *Dept. of Psychology, University of Rijeka, Rijeka, Croatia*  
Emotional intelligence is usually defined as a four-level set of abilities (Mayer & Salovey, 1997). Among these, ability to understand emotions is one that can be best measured with ability test. Vocabulary Emotion Test (VET) was constructed consists of 102 adjectives (short version has 35 items) describing emotional states and mood, and has correct answer, based on a solution from Croatian dictionary (Anić, 1994). Both versions have satisfactory psychometric properties, with reliability coefficient  $\alpha=0.91$ . Convergent-divergent validity was assessed compared TRE with several traditional intelligence tests showing it has 44% of unique variance. VET was translated in English and Swedish.

#### Emotion knowledge: Structure and temporal organization chosen post-cognitive emotions

**Jasielska, Aleksandra** *Inst. of Psychology, Adam Mickiewicz University, Poznan, Poland*  
This study is based on the conclusion, that representations of emotions can be temporarily manifested in autonarratives. The subjects of this exploratory study are two self-conscious emotions: shame and pride. The participants ( $N=72$ ) were asked to describe autobiographical emotional episodes. Then the subjects' accounts were categorized by coders and submitted to hierarchical cluster analysis. The result was a prototypical description of these emotions. Derived, exploratory results provide mainly: 1) the descriptions of complex emotions as emotional scripts, 2) the structural characteristics of autonarrative emotions, 3) arbitrate the issue of "potential synthesis" in the field of postcognitive emotions.

#### Affective interference in temporal perception

**Constancio Fernandes, Alexandre** *Laboratório de Psicologia, ISPA, Lisboa, Portugal*  
**Garcia-Marques, Teresa** *Laboratório de Psicologia, ISPA, Lisboa, Portugal*

The presence of an emotion in a human face increases its perceived duration (Droit-Volet et al., 2004). Our study extends this effect to a new set of emotions (happiness, fear, anger) and test the impact that familiarity may exert on it. Participants estimated the duration (between 400-1600 ms) of neutral and emotional faces by comparing them to the extreme durations (short and long) previously learned. The analysis of bisection-points and psychophysical-functions suggest a replication of general overestimation of emotional faces. As expected, familiarity moderates this effect, not because it influences emotional estimations, but



because it bias estimations of neutral-faces durations.

#### Applying regulatory fit in education setting: The mediating role of prospective and retrospective feeling

**Fok, Hung-Kit** Division of Social Science, HKUST, Hong Kong SAR, China, People's Republic of : Hong Kong SAR **Yik, Oi-yee Michelle** Division of Social Science, HKUST, Hong Kong SAR, China, People's Republic of : Macao SAR

The present study applied regulatory fit theory to an education setting to demonstrate the ecological validity of the theory. In particular, we test if students experiencing regulatory fit would achieve higher marks in final examination than those who do not experience regulatory fit. Moreover, the present study also investigates the mediating mechanism for regulatory fit effect. Positive prospective feelings and positive retrospective feelings mediated the regulatory fit effect on academic performance.

#### FP-221: Clinical aspects of cognition I

##### Automatic processing of familiar and unfamiliar emotional faces on Down syndrome

**Morales, Guadalupe** Dept. of Psychology, UANL, Monterrey, Mexico **Lopez, Ernesto** Psychology, UANL, Monterrey, Mexico

Down syndrome individuals (DS) were required to recognize familiar (DS faces) and unfamiliar emotional faces (non DS faces), by using an affective priming paradigm. Pairs of emotional facial stimuli were presented with an SOA of 300 ms and an ISI of 50 ms. The goal was to test the hypothesis that recognition deficits on negative information reported by literature on this population includes automatic emotional processing but not necessarily to meaningful negative information. Results showed that not all of the participants have a recognition deficit on negative stimuli and interestingly, positive familiar faces could not be primed by other valenced facial stimuli but they were recognized faster than neutral faces.

##### Facial expression: The recognition of basic emotions in cocaine dependents: Empirical study with Portuguese

**Magalhães, Freitas** Facial Emotion Expression Lab., Faculty of Health Sciences, Porto, Portugal **Érico, Castro** Facial Emotion Expression Lab, Faculty of Health Sciences, Porto, Portugal

This research presents the effect of cocaine in the identification and recognition of the basic emotions (joy, sadness, anger, surprise, disgust, fear and contempt). The sample involved 70 Portuguese participants (25 women,  $M = 30.5$ ,  $SD = 4.2$ ; 45 men,  $M = 36.7$ ,  $SD = 5.6$ ) diagnosed with Induced Disturbances for Cocaine (American Psychiatric Association, 2000). The results confirm that the cocaine dependents present difficulties in the identification and characterization of the universal basic emotions with exception of the sadness and colera. The results confirm, still, that the women are more spontaneous in the identification and characterization of the basic emotions than men.

##### Passivity associated to depression protects individuals from the illusion of control

**Matute, Helena** Dept. de Psicología, Deusto University, Bilbao, Spain **Blanco, Fernando** Psicología, Deusto University, Bilbao, Spain **Vadillo, Miguel A.** Psicología, Deusto University, Bilbao, Spain Depressive realism consists of the correct identification of null response-outcome contingency by depressed participants whereas nondepressed participants usually show an illusion of control. In Experiment 1, we replicated the depressive realism effect with anonymous internet users in an instru-

mental paradigm, and showed that dysphoric participants (who scored higher in the Beck Depression Inventory) gave less responses during the training phase. In Experiment 2, we manipulated the participants' activity level, finding that individuals with lower probability of responding were less affected by the illusion of control. Our results suggest that activity level could explain part of the depressive realism effect.

##### Emotion understanding deficits and children with learning disabilities

**Tong, Yuehua** Dept. of Psychology, Jinan University of Shandong, Jinan, People's Republic of China

The present study was to compare emotion understanding in children with and without learning disabilities (LD). Participants were 90 children with LD and 90 children without LD in primary school. Emotion vignettes were used. Children with LD demonstrated significantly lower level of emotion understanding than children without LD. The emotion understanding deficits in children with LD included: (a) poor recognition of facial expressions, (b) delayed recognition of self-conscious emotion, (c) poor understanding of multiple emotions, (d) limited understanding in the causes of emotion, (e) inadequate understanding of hidden emotion, and (f) insufficient development of knowledge about emotion change.

##### Implicit associations among undergraduate students who self-injure

**Cumming, Steve** Faculty of Health Sciences, University of Sydney, Lidcombe, Australia

Of 106 students enrolled in an Undergraduate Psychology course, 62 were found to participate in deliberate self-injury. Comparisons between the self-injuring and the non self-injuring group suggested differences in emotional regulation, alexithymia and coping resources, although not its coping style. The implicit evaluation of injury-related terms as assessed by the Implicit Association Task (Greenwald et al, 1998) suggested that frequent self-injurers have a slightly more positively valenced view of terms related to injury.

#### FP-222: Attitudes, beliefs and values

##### Age differences on attitudes to over 50 workers

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Workers in different life stages live together in organizations. The object of this study is to detect the attitudes to Over-50 workers. The instrument is an on-line ad hoc questionnaire administered to 2,762 Tertiary Sector professionals and managers. A significant relationship with age was found. The older (more so than younger) workers think: competency curves are not linked to age, it is "stupid" to dismiss Over-50 managers, the companies must highlight over-50 competencies, many Over-50 managers are dismissed when they are still valuable workers, and they do not agree that they are in the "waning phase" of their professional lives.

##### Perception of the potential enemy: How Israeli and Palestinian students see each other's values

**Eicher, Véronique** Dept. of Psychology, University of Fribourg, Fribourg, Switzerland **Wilhelm, Peter** Department of Psychology, University of Fribourg, Fribourg, Switzerland

In situations of escalated and open conflict the other group tends to be seen as deficient in moral virtue and different from the ingroup in basic values

(Struch & Schwartz, 1989). In order to test these assumptions, we used the Schwartz Value Survey and asked 283 Israeli and 225 Palestinian students to rate the importance of different values from different perspectives (own, typical member of their own nation and typical student from the other nation). Preliminary analyses show, that Israeli and Palestinian students perceive each other to be more different than they really are.

##### Do age, achieved level of education and demands on personal time influence values, motivation and approaches to learning?

**Matthews, Bobbie** Dept. of Education, Flinders University, Adelaide, Australia **Hall, Margaret M.** School of Nursing and Midwifery, Flinders University, Adelaide, South Australia, Australia **Darmawan, I Gusti Ngurah** School of Education, Adelaide University, Adelaide, South Australia, Australia

The changing demographic characteristics of students in higher education are of concern to educators. This is particularly evident in the professional education of nursing students where the practical and theoretical aspects are combined in the pursuit of an academic qualification. A longitudinal study has been initiated to measure values, learning approaches and motivation that are extant in undergraduate nursing students at an Australian university. A pilot study has shown that there are two distinct age groups; mature-aged students are more highly motivated despite their lower level of prior learning; universal part-time employment leaves little time for academic endeavour; and older students show a greater incentive to succeed in the program.

##### The role of appearance and sociocultural models in eating disorders

**Santos, Isabel** Dept. of Psychology, Universidade Lusófona, Lisboa, Portugal **Simão, Ana** Psychology, ULHT, Lisboa, Portugal **Baptista, Américo** Psychology, ULHT, Lisboa, Portugal **Esteves, Francisco** Psychology, ISCTE, Lisboa, Portugal

The relationship between appearance sociocultural models, eating disorders and body dissatisfaction was studied in sample of 284 young male and female adults. The measures were the Appearance Magazine Exposure, Appearance Culture Among Peers Subscales, Social Cultural Attitudes Toward Appearance Scale-3, Eating Disorder Examination Questionnaire and the Contour Drawing Rating Scale. In general, women are more exposed to magazines, have more conversations with friends about appearance and feel a greater sociocultural pressure and internalization. Appearance culture between peers was positively related with eating disorder symptoms in both sexes, and with body dissatisfaction only in women.

##### Meaninglessness in Indian context: An existential perspective

**Upadhyay, Ishita** Department of Psychology, University of Allahabad, Allahabad, India **Dalal, Ajit K.** Department of Psychology, University of Allahabad, Allahabad, India

The mainstream psychology has looked upon meaninglessness as detrimental to one's mental health. The present study is an attempt to trace the nature and occurrence of meaninglessness, as manifestation of an existential crisis. Narratives were taken from the individuals ( $N=25$ ), belonging to metropolitan cities, who despite being successful, failed to find meaning in what they did/ had been doing. The initial reflection upon the data through the grounded theory approach reveals that meaninglessness paves the ground for a self-enquiry, initiating a search for meaning. This search of meaning begins from looking within playing a pivotal role in resolving the existential crisis.

### FP-223: Attachment to the organization: Psychological contract, ownership and organizational identity

#### Psychological contract and its' formation under the collective culture

**Hu, Ping** Public Administration School, Renmin University of China, Beijing, People's Republic of China  
**Liu, Jun** Educational School, Tsinghua University, Beijing, People's Republic of China  
This study examined the Chinese teachers' psychological contract context and formatting process (N=308). Results indicated: (1) The generalizability of 3 psychological contract forms: transactional, relational, and balanced was confirmed, (2) The relational obligation was more important than the transactional obligation, (3) Compared to the exchange idea as only mediator in West, career value was playing a significant role in forming Chinese psychological contract, (4) The teachers' perceptual relational support were more positively relative with the psychological contract than the perceptual performance support. The authors discuss the implications of these results for the meaning of psychological contracts under the traditional culture profiles in China and raise issues for future research.

#### Can self-commitment compensate for communication media effects?

**Wittchen, Marion** Inst. für Psychologie II, Universität Würzburg, Würzburg, Germany  
Computer-supported group work can complicate the development of team trust due to members' physical and temporal separation, thereby reducing individual motivation and performance. Two laboratory studies (N=210) examined whether negative effects of electronic communication on trust, motivation and performance can be prevented by explicit (verbal) self-commitment to team goals. Beyond trust-mediated effects, direct effects on motivation were examined. In line with the assumptions, regression analyses and planned contrasts reveal that trust predicts motivation and performance, and that trust level during electronically-mediated communication resembles trust level during face-to-face communication only if the team partner expressed explicit self-commitment prior to group work.

#### Antecedents of psychological ownership: Results of a qualitative study with financial traders

**Handy, Stephan** Frankfurt, Germany  
**Martins, Erko** Organizational Psychology, University of Rostock, Rostock, Germany  
**Nerdinger, Friedemann** Inst. für Psychologie, Universität Rostock, Rostock, Germany  
Interviews with 36 financial traders were conducted to shed more light on antecedents of psychological ownership (PO) as feeling of possession towards the organization (cf. Pierce et al., 2001). PO has recently been discussed as a decisive state explaining employees work behavior. On the basis of self-assessments of the PO-degree by the interviewed traders we split the interviewees at the median into two groups with high and low PO. Comparisons of the interviewees' expressed implicit theories of how their PO was aroused or not between both groups of traders are discussed to expand and detail the existing models of PO-emergence.

#### On the nature of the organisational sense-of-identity

**Van Tonder, Chris** Dept. of Industrial Psychology, University of Johannesburg, Johannesburg, South Africa  
The research endeavoured to reaffirm the structure of the organisational Sense-of-Identity instrument that has been used in two previous studies. A convenience sample of 674 respondents hailing

from 27 organisations (different industries) completed the questionnaire. Principal factor analysis surfaced four primary factors with good to excellent scale reliabilities. These relate to the relative health, unity, distinctiveness, and development status of the organisation's identity. Results are reviewed in light of other recent studies that used the instrument, and which considered the relevance of the sense-of-identity construct. The implications of the findings for further research and applied organisational management are indicated.

#### Towards an Eriksonian theory of organisation identity

**Van Tonder, Chris** Dept. of Industrial Psychology, University of Johannesburg, Johannesburg, South Africa  
The purpose of the paper is to consolidate preliminary empirical progress in respect of the Organisation Identity Theory (OIT), proposed by Van Tonder (1999). This theory, which is differentiated from social identity theory and psycho-analytic approaches to organisation identity, is strongly premised on an Eriksonian view of identity. An overview of five empirical studies premised on OIT and completed between 2000 and 2007 are provided. The findings of these studies, which involved both qualitative and quantitative research approaches, converged substantially and provided support for several facets of Organisation Identity Theory. The (significant) implications for organisations are briefly considered.

### FP-224: Attachment and relationship from childhood to adulthood

#### The new criteria of attachment measurement

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**Stojkovic, Irena** Psychology, University of Belgrade, FASPER, Belgrade, Serbia  
**Djuricic, Milica** Psychology, University of Belgrade, FASPER, Belgrade, Serbia  
Exploring the set of changes on the level of global child behaviour in two different contexts of adult-child interaction, the new criteria of attachment have been defined, i.e. "level of activity", considering as the developmental derivation of the baby's complex of vigilance, described in Russian child psychology. Analysis of camera recorded data reveals the main indicators of high level of activity (during the mother-child interaction) and low level of activity (during the child interaction with the stranger), measured by: motor activities engagement, speech production and prosodic features of speech, social participation and social distance.

#### Attachment and change in adolescence

**Podolskij, Andrei** Dept. of Developm. Psychology, Moscow State University, Moscow, Russia  
**Hautamäki, Airi** Swedish School of Social Sciences, University of Helsinki, Helsinki, Finland  
Attachment theory represents a developmental study of the interaction between many individual and contextual systems and their influences on one another. Change in the individual's working models of attachment concerning the relationship of self to significant others is a developmental process of qualitative stage reorganization. Thus, the working models of attachment are qualitatively reorganized as function of both maturation and context. Normative adolescent development in regard to attachment is analyzed. The attachment patterns represent qualitatively different ways of processing attachment-relevant information. The analysis of adolescent socio-emotional wellbeing is elaborated with the help of Marcia's identity status approach, and Blois' theory of adolescence, paralleling Mahler's work on self-differentiation in infancy.

#### Partnership and personality in young adulthood

**Lehnart, Judith** Personality Psychology, University of Potsdam, Potsdam, Germany  
**Neyer, Franz J.** Personality Psychology, University of Potsdam, Potsdam, Germany  
**Eccles, Jacquelynne** Personality Psychology, University of Michigan, Ann Arbor, MI, USA  
Finding a long-term partner during emerging adulthood is- according to the "social investment principle" of personality development -expected to be related to personality maturation. Using data from the Michigan Study of Adolescent and Adult Development, we compared personality development over 8 years of N=161 "partnership beginners" and N=64 "singles". Transition to a romantic relationship was related to a decrease in depression, whereas self-esteem development was differentially related to relationship experiences for males and females. The predictions of the "social investment principle" could be partly confirmed and implications of the effect of de-investment are discussed.

#### A cross-cultural typology of antisocial behaviour development during adolescence

**Morales, Hugo** Faculty of Psychology, San Marcos National University, Lima, Peru  
Several causes of the adolescent antisocial behaviour seems to respond to the combination of many risk located along the different levels of human development. This lecture revises the main explicative theories about adolescent antisocial behaviour and tries to reflect them, emphasizing on the Taxonomic theory of the antisocial behaviour proposed by Terrie E. Moffitt (1993, 2003) on two antisocial behaviour main profile among adolescents: i) Life Course Persistent and ii) Adolescence Limited. Some studies are mentioned due to the fact that they confirm the cross-cultural validity of Moffitt's theoretical model and its contributions to the design of treatment programs against youth delinquency.

### FP-225: Applied social psychology

#### The social inclusion of people with severe mental disorder through labour insertion processes: designing an integral assessment model from a particular case

**Farre, Albert** Social Psychology, UAB-FDR, Barcelona, Spain  
**Pla, Margarida** Chair in Qualitative Research, UAB - Dr. Robert Foundation, Barcelona, Spain  
**Crespo, Ramon** Chair in Qualitative Research, UAB - Dr. Robert Foundation, Barcelona, Spain  
**Gonzalez, Inmaculada** Chairmanship, Laboris, Barcelona, Spain  
**Cardona, Angels** Chair in Qualitative Research, UAB - Dr. Robert Foundation, Barcelona, Spain  
This project aims to design and implement an integral assessment model of social inclusion of people with Severe Mental Disorder through labour insertion processes, by analysing the working and intervention method carried out by "Laboris" in Barcelona, Spain. A participatory methodology is implemented throughout its phases in order to achieve its main goals: (a) Contrast systematically the ground principles of the Laboris tasks with the reality and their intervention strategies. (b) Assess the processes that occur in the context of their actions (efficiency, etc.). And (c) Assess their results (effectiveness, impacts, etc.) waited or not, in terms of social inclusion.

#### Transformation of functions of disaster volunteers in Japan: Action research projects

**Atsumi, Tomohide** CSCD, Osaka University, Osaka, Japan  
Since the 1995 Kobe earthquake, disaster volunteers have become a part of Japanese society. However, their functions drastically changed at the end of the 1st decade due to the 2004 Niigata Chuetsu earthquake. The present study describes the transformation of functions of disaster volun-



teers based on my own long-term action research projects both in Kobe and Niigata. Ethnography reveals that the roles of disaster volunteers changed from efficient disaster response as in Kobe to empowerment toward revitalization of survivors' life as in Chuetsu. Implications of this collective movement are analyzed from the perspectives of group dynamics of the post-industrialized society.

#### **Music to live: Children and young people Venezuelan orchestral system as a constructive space for a citizen ethic**

**Urreiztieta Valles, María Teresa** *Ciencias y Tecnología del Comp, Simón Bolívar University, Caracas, Venezuela* **Hernández, Marisela** *Ciencias y Tecnología del Comp, Simón Bolívar University, Caracas, Venezuela*

The case of Children and Young People Venezuelan Orchestral System is presented as a culture movement that creates opportunities for musical, professional and social-labor development. From a phenomenological perspective, we explored the experience of participating in the orchestral system and its impact on personal, family and socio-educational settings. This movement is guided by values that emphasize conviction ethic -based on merit culture and social commitment-. The meaning of the orchestral system is highlighted as a new social actor that suggest the construction of a different type of leadership, a renewed citizen culture that recreates and challenges the current Venezuelan scenarios.

#### **How AIDS in Africa is framed in the U.S. media: A missed opportunity for agenda-setters to shed light on the link between AIDS and global security, ultimately liable to affect even U.S. citizens**

**Tobias, Jutta** *Washington State University, Pullman, USA*

The paper's purpose was to examine U.S. media framing of the AIDS epidemic in Africa. Its main hypothesis was that leading U.S. papers significantly under-report the link between AIDS, poverty, social unrest, and ultimately global security. A content analysis of articles on this topic was conducted. Statistical analyses confirmed that reporters rarely cushion AIDS within its larger socio-economic context. This constitutes a missed opportunity for agenda-setters to educate the public about this pandemic, as public attitude change is necessary to generate general support for more effective anti-AIDS policies. Recommendations are provided to re-frame the AIDS crisis in the media.

#### **FP-226: Space, shape, and motion II**

##### **Adaptive focusing of spatial attention in the flanker task**

**Wendt, Mike** *Fachbereich Psychologie, Universität Hamburg, Hamburg, Germany* **Luna-Rodriguez, Aquiles** *Institut für Kognitionsforschung, Helmut-Schmidt-Universität, Hamburg, Germany*

Current models of cognitive control assume that frequent conflict evoked by processing irrelevant stimuli results in adaptive focusing on target stimulus information. Consistently, conflict frequency is negatively related to interference elicited by processing irrelevant stimulus features. We investigated whether in the Eriksen flanker task conflict-frequency-related interference reduction reflects focusing of spatial attention. To this end, we intermixed a visual search task and flanker task trials. Search times increased with the distance from the flanker task's target location and this gradient was more pronounced with frequent than with rare flanker-target conflict, thus supporting the idea of conflict-induced focusing of spatial attention.

#### **Towards a unified theory of 3D shape perception**

**Fleming, Roland** *MPI for Biological Cybernetics, Tübingen, Germany*

Objectives. Unifying theoretical analysis of visual 3D shape cues, including texture, shading and highlights. Experiments test whether we experience illusions of shape predicted by the model. Methods. Model uses the population response of filters tuned to different image orientations (cf. V1 cells). Subjects viewed rendered images of 3D objects and adjusted 'gauge figure' probes to report perceived surface orientation. Results: Model correctly predicts both success and failures of human 3D shape estimation across variations in texture, lighting and surface reflectance properties. Conclusions: For the early stages of 3D shape estimation, seemingly different cues may have more in common than previously believed.

#### **Linear systems investigations of the neural basis of motion perception**

**Wallisch, Pascal** *Center for Neural Science, New York University, New York City, USA*

The neural basis of motion processing is already well understood in terms of its basic anatomy and physiology. We are using methods from linear systems theory - specifically reverse correlation - to characterize neural responses in area MT. We show that this approach is adequate to evaluate a quantitative model of the MT population response and suggest it as a suitable method for psychological investigations into the neural implementation of computational principles underlying cognitive processes more generally.

#### **FP-227: Children with mental retardation, autism or Down's syndrome I**

##### **Assessment and treatment of self-injury in one student with mental retardation**

**Tang, Jung-Chang** *Chia-Yi, Taiwan* **Wang, Ming-Chua** *Special Education, National Taitung University, ChiaYi, Taiwan* **Lee, Shu-Hui** *Special Education, National Kaohsiung Normal Univ, ChiaYi, Taiwan*

The purposes of this study were to detect the function of self-injurious behavior (SIB) and to reduce such behavior in one student with mental retardation. An analogue functional analysis was used to assess the function of the student's SIB (Iwata, Dorsey, Slifer, Bauman, & Richman, 1982/1994). Results indicated that the student's SIB was maintained by positive social reinforcement. Attention was further provided noncontingently via an ABAB reversal design to compete with the consequence of reinforcement from SIB. Results demonstrated attention could be successfully used to decrease the SIB of this student. Keywords: self-injurious behavior, functional analysis, mental retardation

##### **The effects of goal setting on performance of a motor skill of persons with borderline intelligence and mild mental retardation.**

**Askita, Maria** *Thessaloniki, Greece* **Kokaridas, Dimitris** *Physical Education and Sport S, University of Thessaly, Trikala, Greece* **Theodorakis, Yannis** *Physical Education and Sport S, University of Thessaly, Trikala, Greece*

The purpose of this investigation was to examine the effects of goal setting on performance of an unfamiliar motor skill in people with borderline intelligence and mild mental retardation. The empirical studies review lean towards the assigned goals condition. Participants (N = 36) were assigned to one of three goal setting conditions: a) control group, b) assigned group and c) self set group. After the baseline, the groups were provided with different instructions and tested again. Wilcoxon's analysis indicated a significant improvement on the performance in the assigned goals group ( $p < .05$ ).

These findings suggest, that expert assigned goals increase performance, in beginners with MR. Relevant methodological and theoretical aspects yielded new research directions.

#### **Steps of social information processing (SIP) in mild intellectually handicapped students across three school levels: based on Crick and Doge' model (1994).**

**Bashash, Laaya** *Special Education, Shiraz University, Shiraz, Islamic Republic of Iran*

The present study investigates the steps of social information processing (SIP) in mild intellectually handicapped students across three school levels: based on Crick and Doge' model (1994). A sample of 120 students (age 10-18 years old) were randomly selected from the exceptional schools (Shiraz, Iran), and interviewed individually using Tur-Kaspa and Bryan (1994) social stories. The result showed that with increasing school grades, students demonstrated more skills in areas of representing, interpreting social cues, clarifying positive goals and improvement in linking between goals and selected solutions. No significant difference was observed between boys and girls in SIP.

#### **FP-228: Creativity and culture I**

##### **How to improve design problem solving?**

**Hacker, Winfried** *Inst. für Psychologie, Techn. Universität Dresden, Dresden, Germany* **Winkelmann, Constance** *AG, Technische Universität Dresden, Dresden, Germany*

Significant improvements of solutions in engineering design problem solving by the application of a question-answering technique (QAT) had so far been shown only for students without any training in engineering design. Therefore, we asked for the effects of this technique used from professional designers (job beginners: N = 42; experts: N = 33). The participants were asked to explain, justify and evaluate their design solution by means of this QAT. The results show significant improvements also for professional designers with significantly higher effects for job beginners. The effects may be explained by processing semantic relationships in answering interrogative questions. Consequences for studies in engineering design are implemented.

##### **What makes bilinguals creative?: A discussion of bilinguals' development factors influencing their creative cognition**

**Kharkhurin, Anatoliy** *International Studies, American University of Sharjah, Sharjah, United Arab Emirates*

The tested hypothesis is that bilingualism encourages divergent thinking and cognitive flexibility, which together facilitate creative thought. Farsi-English bilinguals from UAE and Farsi monolinguals from Iran were tested on Abbreviated Torrance Test for Adults (ATTA), Invented Alien Creatures (IAC) task, and culture fair intelligence test (CFIT). Bilinguals were classified by their age of English acquisition (AoE) and linguistic proficiency (PNT). A series of correlational analyses, ANOVAs, and regression analyses showed bilinguals' significant advantages on ATTA's innovative capacity, IAC's invariant violation, and CFIT's intelligence. Bilinguals' AoE and PNT had a significant influence on ATTA's generative capacity. The results are discussed in terms of how the specific structure of bilinguals' memory can facilitate their creative thinking.

##### **How does mood influence creative performance**

**Cervai, Sara** *Dept. of Political Sciences, University of Trieste, Trieste, Italy* **Borelli, Massimo** *Gen. Surg. Int. Care Sciences, University of Trieste, Trieste, Italy*

Aim of the research is to explore if and how mood can be associated to creative performance. A sample of students (50% male and 50% female) between 20 and 30 years old were involved

answering to POMS – Profile of Mood State (McNair, 1981) and to a paper and pen brainstorming activity. Results show that no strict influence between the two constructs arises in their whole; conversely there is a strong association between the self perception and the creative performance. A more sophisticated model has been created to explain which and how the factors explored through POMS are related with creativity.

### FP-229: Culture and human development III

#### Why Taiwanese students are quiet in class? A cultural analysis of student response to teachers' questions in Chinese classrooms

**Fwu, Bih-Jen** Center for Teacher Education, National Taiwan University, Taipei, Taiwan

Chinese students are often described by Western academics as quiet and compliant learners. This study intends to investigate why they seldom answer questions in class. A questionnaire of 4 scenarios of answering questions in class was administered to 250 college students in Taiwan. The results show that (1) individuals answering questions voluntarily care more about gaining knowledge, whereas those assigned to answer questions are more concerned about appropriate behaviors in social context; (2) compared with students who answer questions voluntarily, students assigned to answer questions are more likely to be regarded as being humble, a virtue in Chinese culture. The social-cultural mechanisms of these behavioral patterns are discussed.

#### The study of relation between creativity and social development in adolescents in Tehran

**Shafaroudi, Narges** Occupational Therapy, School of Rehabilitation Science, Tehran, Islamic Republic of Iran  
**Rezvan, Zinab** Occupational Therapy, School of Rehabilitation Science, Tehran, Islamic Republic of Iran  
The purpose of this study was to examine the creativity and social development in adolescents in Tehran. This paper concerns a descriptive study of creativity and social development in a group of 100 female adolescents of 14-18 years old from high-schools in Tehran. Data were gathered using a demographic questionnaire, Abedi questionnaire and Witzman questionnaire. The data were analyzed by ANOVA, t-test and Chi-square. Results showed a positive correlation between creativity and social development ( $P < 0.05$ ). Moreover there was a significant correlation between mother employment and adolescence social development ( $P < 0.05$ ). The female adolescents have higher creativity as well as having higher social development.

#### Remembering in child's play: Historical and cultural perspectives in Istomina's experiment and its replications

**Yasnitsky, Anton** CTL/HDAP, OISE/UT, Toronto, Canada  
**Falenchuk, Olesya** Education Commons, OISE/UofT, Toronto, Canada  
**Ferrari, Michel** HDAP, OISE/UT, Toronto, Canada

This paper presents a critical review of the numerous attempts to replicate the classical experimental study conducted by Istomina (1947). Specifically, the objectives of this theoretical review were two-fold: 1) to discuss potential failures and successes in replicating the results of the original study; and 2) to present a hypothesis of historical and cultural development of mnemonic processes. To support this hypothesis, we use studies reporting on replications of Istomina's experiment in different cultural settings as well as successful replications of the original experiment at different historical time points but in similar cultural settings (Istomina, 1967, Ivanova & Nevoennaia, 1998).

### FP-230: Dysfunctional social behaviors in school: Aggression, anger and violence I

#### A model of the personality and situational factors in school microviolence

**Cocorada, Elena** Psychology, University Transilvania, Brasov, Romania  
**Cliniciu, Aurel Ion** Psychology, University Transilvania, Brasov, Romania  
**Luca, Marcela Rodica** Psychology, University Transilvania, Brasov, Romania  
**Pavalache-Ilie, Mariela** Psychology, University Transilvania, Brasov, Romania

Studies focused more on general school violence and less on micro-violence occasioned by educational assessment. This study tested a model of assessment-related micro-violence. The participants were 629 students, average age 15.9. Personality variables and assessment-related climate variables were measured. Annual assessment grades were also collected. The statistical method used was regression analysis. A set of variables - intelligence (Bonnardel53), dominance, sociability (CPI), rebel spirit (Cliniciu), and assessment climate (Cocorada & al.) and annual grades were included into a hierarchical regression model with  $R = .67$ . Personality variables and assessment climate were found to influence 45% of the level of annual grades.

#### How to cope with anger in school context?

**Maccabez-Arriola, Mónica** Dept. of Psychology, University of Fribourg, Fribourg, Switzerland

**Retschitzki, Jean** Department of psychology, University of Fribourg, Fribourg, Switzerland  
The study analyses changes of anger mental representation after the application of the cognitive Anger Control Program (ACP) in school. Pupils with behavioural problems were compared to ordinary pupils ( $N=31$ ) age 8-11. Changes were measured by the TEC (Pons & Harris, 2000) and the Program Questionnaire. Results show age differences concerning the improvement of anger comprehension, and gender differences. Mental representation scores in Program Questionnaire (score maximum=12) were observed among three groups: ACP group  $m=8.2$ ; placebo program group  $m=5$ ; and control group  $m=5.5$ . Teaching how to cope with anger in school is possible.

#### Teachers sense of efficacy mediating the relationship between teachers attributions of bullying and their behaviors towards aggressive students

**Stavríndes, Panayiotis** Psychology, University of Cyprus, Nicosia, Cyprus

Research has documented how causal attributions predict human behavior in various settings. In this study ( $N = 216$ ) we examined how teachers explain bullying and the behaviors they adopt in order to deal with the problem. Results have shown that even though causal attributions predict teachers behavior, this relationship is mediated by the teachers sense of efficacy. Specifically, hierarchical regression analysis has shown that both internal and external attributions are mediated by the levels at which teachers believe they can manage their classroom, their instructional strategies, and how well they can engage students in classroom activities.

### FP-231: Emotional expression and experience in clinical populations I

#### Training program in emotional skills for persons with Asperger syndrome

**Sixto, Olivar** Personality Dept., Valladolid University, Valladolid, Spain

The aim of this study was to show the improvement of the emotional skills of a group of children and teenagers diagnosed with Asperger syndrome, after making use of a specific treatment program. They

were assessed via pre- and post- intervention with several questionnaires. The results show an increase in the recognition and expression of emotions, self-regulations and empathy between the pre- and post-test and a decrease in the depression and anxiety. The training program may be adequate for the evaluation and intervention of the emotional needs of individuals with Asperger syndrome.

#### Comparison of changes in mood: Cartoons vs. mood induction paradigm

**Kohn, Nils** Department of Psychiatry, UK Aachen, Aachen, Germany  
**Falkenberg, Irina** Department of Psychiatry, UK Aachen, Aachen, Germany  
**Schöpker, Regina** Department of Psychiatry, UK Aachen, Aachen, Germany  
**Habel, Ute** Department of Psychiatry, UK Aachen, Aachen, Germany

Anhedonia can be seen as a major component of depression and describes the decrease or cessation of feelings of pleasure. Thus different moods and a feeling of mirth should be hard to induce in these patients. We compared patients with depression and healthy participants regarding their ability to get into certain moods via an established mood induction paradigm (Habel et al., 2000, Schneider et al., 1994) and humorous stimuli, by recording electrodermal activity and facial expressions. Preliminary results point to harder induction of positive emotional states in patients, patients show less autonomic responses and changes in facial expressions.

#### Association between postpartum depression and emotional changes after delivery

**Viegas, Lia Matos** Instituto de Psicologia - PSE, Universidade de São Paulo, Cotia, Brazil  
**Andrade da Silva, Gabriela** Instituto de Psicologia - PSE, Universidade de São Paulo, São Paulo, Brazil  
**Otta, Emma** Instituto de Psicologia - PSE, Universidade de São Paulo, São Paulo, Brazil

To investigate emotional correlates of Postpartum Depression (PPD), 92 Brazilian women screened for PPD using the Edinburgh Postnatal Depression Scale answered questionnaires about their feelings and worries at two days and 2-4 months after delivery. Repeated Measures GLM yielded differences ( $p < .05$ ) between the two periods. Both depressed and nondepressed mothers increased their worry scores about themselves, their newborns, their other children, and partners. In addition, depressed mothers had more negative feelings regarding the partner and lower scores on emotional welfare. These findings indicate that emotional changes are common after delivery and depressed mothers are more likely to have negative feelings.

### FP-232: Families in stress I

#### Impact of implementation variables on outcome measures in a German application of the family-based primary prevention program FAST (Families and Schools Together)

**Fuchs, Irene** Lehrstuhl Klin. Psychologie, Universität Siegen, Siegen, Germany  
**Fooken, Insa** Lehrstuhl Klinische Psychologie, Universität Siegen, Siegen, Germany

The universal prevention program FAST is a multi-family group intervention that works with the whole family and aims at the improvement of intra- and inter-family relations. FAST is evidence-based and experimentally evaluated in the USA and is implemented in five other countries. This study relates implementation data from about ten program sites in three German cities to target recruitment and/or conduct judgements with about 60 pre-post measurements (including child behaviour or family climate data) under the hypothesis of a moderate implementation influence. Due to lack of program implementation studies the results will



have implications for further German prevention research.

#### **Children of parents with acute central nervous system injuries. Specific mental health risks and protective factors**

**Stanescu, Dan Florin** Communication and PR, SNSPA, Bucharest, Romania **Romer, Georg** Klinik für Kinder- und Jugendp, Universitätsklinikum Eppendorf, Hamburg, Germany

To identify factors linked with emotional and behavioral problems in children (4 - 18 year-old) of parents with acute CNS injuries. Instruments: CBCL, YSR, FAD, SF-8, BDI and Karnofsky Index. Risk of problems in children was linked with high levels of family dysfunction, low affective responsiveness, parental over-involvement and depression. Severity of the disease was not associated with child problems. The set of variables, which could predict children problems are health related quality of life (physical), parental depression and affective over-involvement. Targeted treatments, which focus on parental depression and family communication may benefit the children and enhance quality of life.

#### **Protective factors, adaptability and child abuse: An ecological study**

**Gaxiola, Jose** Hermosillo, Mexico **Frias, Martha** Derecho, Universidad de Sonora, Hermosillo, Mexico The aim of the study was to analyze the buffering effects of protective factors over risk factors associated with child abuse using the ecological Bronfenbrenner's theory. It is proposed an alternative measure to resilience in parenting called adaptability. 183 mothers living in northwestern Mexico agreed to participate in the study. The data were analyzed with structural equation modeling and indicate that protective factors have negative relation with risk factors; also, the risk factors predict positively the child maltreatment and negatively the construct adaptability. The results confirm the indirect effect of protective factors and the cumulative risk model.

#### **FP-233: Gender differences in work and academic achievement I**

##### **Gender differences: Profiles of men and women successful in engineering education**

**Halpin, Glennelle** Auburn University, Auburn, USA **Halpin, Gerald EFLT**, Auburn University, Auburn, USA **Benefield, Larry** Engineering, Auburn University, Auburn, USA

That a new generation of problem solvers will be needed is obvious as the world looks for solutions. Among them must be both women and men. The purpose of this study was to identify differential profiles for males and females predicted to succeed in engineering education who did compared/contrasted with those predicted to succeed who did not. From the multivariate and univariate analyses of cognitive, personality, and social variables for >5,000 participants in a longitudinal study in the USA, these profiles emerged. Comparisons and contrasts were made with conclusions leading to a better understanding of differential factors related to success.

##### **Relationship between learning styles and gender**

**Castano, Gloria** Differential & Work Psychology, Universidad Complutense Madrid, Madrid, Spain

The aim of this study is to show the relationship between Learning Styles and gender. Given the diversity of learning styles assessment instruments we choose the Learning Styles Inventory (Kolb, 1985). The results show the existence of individual differences between males and females, though these differences are small. On the one hand, in females the accommodating learning style whereas in men it is predominant the assimilating learning

style. On the other hand, males present a preference to focus the learning from an abstract focus whereas women prefer to get completely involved in new experiences. Moreover females present more active character at the time of learning, this is, they prefer to employ the theories to make decisions and solve problems.

#### **Gender and negotiation: An empirical study of gender differences in negotiation behaviour**

**Mura, Giulia** Quasi, Università Milano-Bicocca, Milano, Italy **Diamantini, Davide** Sociologia e Ricerca Sociale, Università Milano-Bicocca, Milano, Italy

This research evaluates the effect of gender in negotiation behaviour, within a working situation. We investigate the: • overbidding; • speed of concessions and log rolling; • impact of an emotional variable. The research was realised in both private and public organizations in Torino on a sample of 73 subjects, using specifically built scenarios simulating a negotiation. The analyses made (T-Test, Anova) show differences in negotiation behaviour between men and women, with women opening the negotiation with lower requests, conceding more during the interaction and reacting more strongly when facing an aggressive counterpart.

#### **FP-234: Memory processes V**

##### **Metamemory judgements for faces, nameable pictures and abstract art**

**Chalmers, Kerry** School of Psychology, University of Newcastle, Callaghan, Australia **McKay, Phyllippa** School of Psychology, University of Newcastle, Callaghan, Australia

Fifty eight undergraduate psychology students gave metamemory judgements for three classes of non-verbal stimuli both prior to study and after completing memory tasks. Pre-study judgements were higher than post-test judgements and the difference between pre-study and post-test judgements was greater for faces than for either nameable pictures or abstract art. Positive correlations between metamemory judgements and performance (including correct identification of studied items and false recognition of nonstudied items) suggested that participants who judged their memory as being better were more likely to indicate an item had been studied, whether or not it had been presented during the study phases.

##### **The effects of repression on memory: Are encoding processes involved?**

**Davis, Penelope** Psychology, Griffith University, Brisbane, Australia **Harnett, Paul** Psychology, University of Queensland, Brisbane, Australia **Jovicic, Vedrana** Psychology, Griffith University, Brisbane, Australia **Krishnamoorthy, Govind** Psychology, Griffith University, Brisbane, Australia **McClelland, Fiona** Psychology, University of Queensland, Brisbane, Australia **Walmesley, Karen** Psychology, University of Queensland, Brisbane, Australia

Repression is associated with difficulty accessing unpleasant autobiographical memories but the processes underlying the effects of repression on memory remain unclear. This research used the item-method directed forgetting procedure to examine the proposition that repressors are particularly adept at suppressing unwanted material during encoding. Directed forgetting effects for repressors were apparent on both explicit and implicit memory tasks but the intentional forgetting abilities of repressors were no better than those of nonrepressors. These results suggest that autobiographical memory deficits in repressors reflect a greater propensity to use their avoidant encoding skills rather than an enhanced ability to do so.

#### **Ease of recall in memory judgments: How detailed recall undermines the confidence of eyewitnesses**

**Hellmann, Jens** Dept. of Psychology, University of Aberdeen, Aberdeen, United Kingdom **Kopietz, René** Psychology, University of Bielefeld, Bielefeld, Germany **Echterhoff, Gerald** Psychology, University of Bielefeld, Bielefeld, Germany

People often use the ease of recalling past events to derive memory judgments, which may lead them to judge their memories as worse despite recalling more. In two experiments we investigated if such an effect can also be found for eyewitness memory. After watching a video depicting a burglary, participants who recalled as many details as possible judged their memory as worse than participants who recalled only a few central details. This effect was mediated by experienced ease of recall and occurred even when attributions to task difficulty were encouraged. Thus, well-intentioned recall attempts may ironically undermine eyewitnesses' confidence.

#### **Head-mounted video cued recall for object- and order memory**

**Acker, Felix** Dept. of Psychology, LaTrobe University, Bundoora, Australia **Omodei, Mary** Psychology, LaTrobe University, Bundoora, Australia

A set of three studies examined the effect of watching video taken from one's own visual perspective while carrying out naturalistic tasks with respect to recall success. All studies used student populations, one had a between-groups and two had a within-groups design. Confidence intervals and a meta-analytic summary of the studies suggest that watching one's own video enables people to not only remember qualitatively better but also quantitatively more relevant information than comparative video cues. This complements existing results showing head mounted video utility in decision making research. It is a powerful research tool well suited for naturalistic contexts.

#### **FP-235: Issues in attention**

##### **Retinotopically independent processing of saliency signals in the near-absence of attention**

**Bogler, Carsten** Attention & Awareness, Max-Planck-Institut, Leipzig, Germany **Haynes, John-Dylan** Computational Neuroscience, Bernstein Center for, Berlin, Germany

It is assumed that a dedicated neural map encodes salient positions in the visual field. According to most models this saliency map is based on integration of feature gradients across multiple feature dimensions. Here we investigated the neural correlates of orientation and colour saliency in humans using fMRI. BOLD activity was significantly increased for the salient positions in early visual cortex and a trend was apparent in intraparietal sulcus. Furthermore the increase in BOLD signals in V3a and V4 was monotonic with increased pop-out. The results point to an independent processing of pop-out signals in the absence of attention.

##### **Modulation of distribution of dots number on strategies and spatial attention allocation during two sequential arrays integration**

**Ren, Yanju** Dept. of Psychology, Shandong Normal University, Jinan, People's Republic of China **Xuan, Yuming** Institute of Psychology, Chinese Academy of Sciences, Beijing, People's Republic of China **Fu, Xiaolan** Institute of Psychology, Chinese Academy of Sciences, Beijing, People's Republic of China

In this study, empty cell localization task was employed to investigate the information integration between two sequential dot arrays in two experiments. In the first experiment, the distribution of dots number between two arrays was manipulated to test the image-percept integration hypothesis and

convert-and-compare hypothesis. In the second experiment, spatial attention allocation was explored by recording participants' eye movement behavior during the process of integration to further test these two hypotheses. It was found that distribution of dots number between two arrays modulate the participants' strategies and spatial attention allocation during the process of integration.

#### The impact of heterogeneity along the task-relevant and the: Irrelevant dimensions on feature search

**Wei, Ping** Dept. of Psychology, Peking University, Beijing, People's Republic of China **Müller, Hermann** Department of Psychology, LMU München, Munich, Germany **Zhou, Xiaolin** Department of Psychology, Peking University, Beijing, People's Republic of China **Objective:** To investigate the impact of heterogeneity along the task-relevant and -irrelevant dimensions on feature search. **Method:** Participants were required to carry out color (or orientation) search while the heterogeneity along the task-relevant and -irrelevant dimensions were orthogonally manipulated. **Result:** The search times were longer when the task-relevant dimension was heterogeneous than when it was homogeneous. The variation along the task-irrelevant color dimension had an impact upon the efficiency of orientation search, while the variation in orientation had no impact upon color search. **Conclusion:** The variability of feature values and the relative bottom-up perceptual saliency between dimensions determines search efficiency.

#### Memory effects in repeated visual search

**Körner, Christof** Inst. für Psychologie, Universität Graz, Graz, Austria **Höfler, Margit** Institut für Psychologie, Universität Graz, Graz, Austria **Memory effects in repeated visual search** In a recent experiment Körner and Gilchrist (in press) had participants search the same ten-letter display consecutively for two different target letters. Using eye movement measurements they found a memory recency effect: A distractor item that was a target during search 1 was found faster in search 2 if it had been fixated more recently. In the presented experiment we introduced retention intervals of 400 ms and 800 ms between searches in order to determine if search information decays in memory. Our results indicate no substantial memory decay. This suggests that search information may be preserved across short intervals.

#### FP-236: Social support at work

##### What do expatriates need?: The role of social support networks for successful foreign assignments

**Spieß, Erika** Psychology, University, München, Germany **Gasteiger, Rosemarie** Psychologie, PricewaterhouseCoopers, München, Germany **Stroppa, Christina** Universität München, München, Germany **Woschke, Ralph** Psychology, University, München, Germany

The aim of the presented research is to shed light on the impact of social support networks on expatriates' success. Based upon a model by Caligiuri and Lazarova (2003) several predictive components affecting cross-cultural adjustment like social interaction and social support were researched. Data were collected from employees working for small and medium-sized enterprises and large-scale enterprises shortly before, during, and after their foreign assignment. Differences and similarities found for employees working for small and medium-sized companies versus major enterprises will be presented. Implications for future research and practical considerations for multinational organizations sending employees abroad will be discussed in the presentation.

#### A study of the relation between emotional intelligence and leadership styles (Bernard Bass model) of department chairs at University of Isfahan

**Mokhtaripour, Marzieh** Education, University of Isfahan, Isfahan, Islamic Republic of Iran **The purpose of this study was to investigate the relation between emotional intelligence and leadership styles of department chairpersons at university of Isfahan based on multifactor Bernard Bass model. Research method was descriptive – correlative. Statistical population included all 33 chairs and 454 faculty members whom from was chosen 113 as statistical sample, respectively. Findings showed that: 1) There was significant relation emotional intelligence and transformational leadership style  $r=0/347$  at  $p<0/05$  level., 2) There was a correlation between emotional intelligence and transactional leadership style  $r=0/269$  which was not significant at  $p<0/05$  level., 3) There was no significant correlation between emotional intelligence and laissez-faire leadership style  $r=0/044$  at  $p<0/05$  level.**

#### Social identity, personal identity and social support among working and non-working women

**Bhatti Ali, Razia** Islamabad, Pakistan **ABSTRACT** The current study investigated social identity, personal identity and social support among working and non-working women. Working and non-working women ( $n=80$ ) were purposively selected and assessed on the 2 variables social identity and personal identity. The Aspects of Identity Questionnaire IV (Cheek, 1989) was used to measure social identity and personal identity and the Social Support Scale by Gul & Najam (2001) was used to measure social support. The results of the analysis showed significant differences in personal identity, social identity and social support in working women compared to non-working women. The study illustrates that employed women's personal and social identities are different and stronger compared with non-working women.

#### Mental health status and social support of young female workers in a joint venture

**Han, Buxin** Inst. of Psychology, Chinese Academy of Sciences, Beijing, People's Republic of China **Liu, Ying** Dept. of Psych., Beijing Univ., Chaoyang Maternity & Child, Beijing, People's Republic of China **Objectives:** Mental health and social support of female workers in joint-venture. **Methods:** SCL-90 and Social Support Inventory were distributed to 672 workers (mean age  $25.18 \pm 6.35$  years) in a joint venture at Beijing. **Results:** Young female workers score significantly higher than national norms on each factor of SCL-90, specifically on obsessive-compulsive, anxiety, and interpersonal sensitivity. Those with younger age, shorter working period, middle level of education and income, had poorer mental health status and lower social support which correlated negatively. **Conclusion:** Young female workers in the joint venture had poorer mental health status correlating with social support negatively.

#### FP-237: Socio-economic status

##### Discourse analysis of photographs produced by people living in poverty in Ciudad Juarez, Mexico.

**Luna Hernandez, Jesus Rene** Dept. de Psicología Social, Univ. Autónoma de Barcelona, Cerdanyola del Valles, Spain

Most studies on poverty rely on descriptions provided by social scientists of how the poor live, interact and construct their reality. However, such approach denies the opportunity of understanding the poor's version of reality from their perspective. This study aims to get a glimpse on how people

living in poverty interact with each other and with others and their environments by providing them with disposable cameras, analyzing the discourse such images produced with the help of Atlas-ti, a software for qualitative analysis. Main topics were family, social problems in their neighborhoods, and empowering strategies for people and communities.

#### Psychosocial and structural interventions on self constructed slums: the experiences of their inhabitants

**Martín, Yuraima** Facultad de Arquitectura, Universidad Central, Caracas, Venezuela **Urreizieta, María Teresa** Ciencia y tecnología del comp, Universidad Simón Bolívar, Caracas, Venezuela

The objective of this research was to explore and analyse the meaning of psychosocial and structural interventions on self constructed slums located in Caracas, Venezuela, from the experiences of their inhabitants. Between the contributions of Environmental Psychology and the New Dialogic Architecture, the research is oriented by the notion of "place" as "crossroads between human event and structure" developed by Muntanola. Following the procedures proposed by qualitative methodologies, a study case is presented, based on in-depth interviews. The results allowed the understanding of perceptions, cognitions and meanings which guided the behaviour of the subjects involved in those intervention processes.

#### Perceived risk and public preferences for governmental management of social hazards

**Zheng, Rui** Social & Economic Behavior, Institute of psychology, CAS, Beijing, People's Republic of China **Shi, Kan** Social & Economic Behavior, Institute of psychology, CAS, Beijing, People's Republic of China **Li, Shu** Social & Economic Behavior, Institute of psychology, CAS, Beijing, People's Republic of China **Risk perceptions are important to the policy process because they inform individuals' preferences for government management of social hazards. A public sample of Chinese (N=524) rated the levels of threat of 20 social hazards. We further use a structural equation model to analyze the influence and effect mechanism of risk perception. It was found that: 1) older participants, less educated and lower-income individuals found the hazards to be more threatening than others 2) Individual character and trust will influence risk perception. Then, greater perceived risk generally produces lower SWB and greater government support. Social support will moderate this relationship.**

#### Intergenerational relations in rural and urban Indian families

**Verma, Sunil** Department Of Allahabad, University Of Allahabad, Allahabad, India **Satyanarayana, Alturi** Department Of Allahabad, University Of Allahabad, Allahabad, India

This study is directed to comprehend the nature of intergenerational relations and their behavioural manifestations in three socio economic categories (upper class, middle class and lower class) of Indian families. 48 families were taken from Gorakhpur city and Reotipur village in U.P (India). Narratives on day-to-day intergenerational interactions were collected from father and son, mother in-law and daughter in-law. Content analysis reveals that intergenerational relations are affected by changes in terms of power, authority and variations in terms of values and attitude. Results show that intergenerational relations are manifested in terms of conflict, solidarity and ambivalence and the coping mechanisms varied along socio economic categories.



## FP-238: Teaching of psychology I

### Addressing globalization with feature foreign films

**Meiners, Mary** Social and Behavior Sciences, San Diego Miramar College, San Diego, USA

Globalization invites many changes in teaching psychology and presents opportunities to prepare students to interact with those different than themselves. Current classrooms often reflect the diversity of world cultures. To acknowledge this diversity and attempt to reduce xenophobia, foreign films have been introduced into the classroom. They are used to illustrate various concepts during class. An additional assignment requires students to view a feature film from a pre-approved list and identify psychological concepts illustrated in the film. The student responses collected in a post assignment survey have been overwhelmingly positive.

### Technical support for interactive education in psychology

**Vylegzhnin, Vasily** IEAP, Moscow, Russia

Interactive laboratory for psychology education will be demonstrated. Technology aspects of education such as unified data collection and processing, scalability, usability, Internet support, data protection will be discussed. Predictor based system supports adaptive curricula for every student just as for groups and courses. This flexible technology makes possible to convert many important themes such as color sense, hearing etc. from text-based lectures to laboratory workshop. Interactive technology supports many classical psychometric procedures and trainings included in personality and social psychology course. Interactive training support is implemented as a form of Internet videoconference.

### Psychological types of students and methods of education in psychology

**Nedospasova, Veronika** Dept. of Clinical Psychology, IEAP, Moscow, Russia

Main methodical issue of psychology teaching is the place of perception theory and cognitive psychology in curriculum. Several variants of curricula for psychology education were compared. The first one is constructed in accordance with the history of discoveries in psychology. Two variants of curricula reflected conceptual sequence, one starts with theory of perception and advances via cognitive process to personality, the other starts with personality and perception theory appears to be lateral in this case. The 4th variant starts with practical studies and theoretical knowledge is introduced in process of experience accumulation. Different variants were more acceptable by different psychological types of students.

### Adaptive curricula for interactive education in psychology

**Druzhinin, Georgy** IEAP, Moscow, Russia

All the potential and actual students in psychology may be divided into 4 main groups. This classification is based on the predictors of their professional interests, social attitudes and mental possibilities. The criteria, methods and technology of such selection and the preliminary income control just as related statistics will be discussed. The optimal variant of curricula for education in psychology and the optimal collection of trainings and interactive components of education technology can be constructed based on the predictors of the future professional success. Some variants of optimal curricula supported by interactive tools will be demonstrated.

## FP-239: Teachers' health and well-being: Burnout, professional identity

### Burnout differences between primary and secondary education teachers

**Merino Tejedor, Enrique** Dept. of Psychology, University of Valladolid, Segovia, Spain **Rigotti, Thomas** INSTITUTE OF PSYCHOLOGY II, UNIVERSITY OF LEIPZIG, LEIPZIG, Germany

Prior empirical studies have shown that teaching is a stressful activity; particularly teachers are prone to suffer from the syndrome of burnout. In this study we will compare the experience of burnout between 106 teachers from primary schools and 181 teachers from secondary schools in Spain. We employed the Brief Burnout Questionnaire to assess antecedents of burnout, the main symptoms, as well as further consequences. Secondary school teachers showed to give higher ratings than teachers from primary schools did. Differences in strain conditions responsible for this result, as well as further actions to prevent teachers from "burning out" are discussed.

### Teachers' basic need satisfaction, occupational well-being and adjustment

**Kunter, Mareike** Zentrum für Bildungsforschung, Max-Planck-Institut, Berlin, Germany **Klummann, Uta** Center for Educational Research, MPI for Human Development, Berlin, Germany

Drawing on self-determination theory, two studies investigated whether teachers' feelings of autonomy, competence, and social relatedness at school were associated with better work adjustment. A cross-sectional study with 124 teachers found substantial correlations between satisfaction of teachers needs and their occupational well-being and maladjustment (i.e., stronger quitting intentions and poorer health). A longitudinal study with a 1-year repeated measurement of 134 teachers showed that teachers' need satisfaction influenced their exhaustion and job satisfaction and even had positive effects on their students' motivation (regression analysis). Teachers' basic need satisfaction thus plays a crucial role in both their professional experience and their performance.

### Testing a model of school quality features for promoting and maintaining teachers' health

**Altenstein, Christine** Inst. für Medizin. Psychologie, Universität Greifswald, Greifswald, Germany **Wiesmann, Ulrich** Western-Pomerania, Institute of Medical Psychology, Greifswald, Germany **Möbius, Kati** Western-Pomerania, Institute of Medical Psychology, Greifswald, Germany **Hannich, Hans-Joachim** Western-Pomerania, Institute of Medical Psychology, Greifswald, Germany

We developed an inventory for the assessment of school resources and deficits from the teachers' point of view. Main objective was the replication of a four factor structure in a representative sample of 556 teachers. Using Confirmatory Factor Analysis, we compared two structural models differing in the number of indicator variables for the latent factors. Both models showed substantial fit; the more parsimonious model was slightly superior. We preferred this solution because it makes the inventory more concise.

## FP-240: The development of emotional regulation in adolescence

### The development of internalizing problems from age 2 to age 12

**Fanti, Kostas** Dept. of Psychology, University of Cyprus, Aradippou, Cyprus

The study investigates the development of internalizing problems from age 2-12 using Latent Class

Growth Analysis, and tests how temperament, home environment, and cognitive functioning, forecast the differential trajectories of internalizing problems using multinomial logistic regression. The sample consisted of 1232 children (53% male) and was derived from the NICHD Study of Early Child-Care. Groups exhibiting low, moderate, and chronic internalizing problems were identified. The chronic group was characterized by lower cognitive abilities, and a more negative home environment. Findings suggest that interventions need to start early in life and that both personal and environmental characteristics need to be considered.

### Adolescents' psychological well-being and memory for life events: Influences on life satisfaction with respect to temperamental dispositions

**Siddiqui, Anver** Dept. of Psychology, School of Social Sciences, Växjö, Sweden **Garcia, Danilo** Psychology, Karlstad University, Karlstad, Sweden

The aim of the present study was to explore how the number of recalled life events (positive and negative) predicts psychological well-being (PWB) and how PWB predicts life satisfaction (LS). One hundred and thirty five high school students participated in completing the SWLS (LS), PWB (short-version), PANAS (to create AFT) and the life events recollection task. Results indicated that adolescents with high PA also indicated high PWB. In addition adolescents with low affective profiles had high PWB. Positive and negative life events predicted PWB for self-destructive temperaments; positive life events predicted PWB for low affective temperaments. PWB predicted LS for all temperaments except for the self-actualizing group.

### Assessment of self-assertion training in the treatment of stage fright among the Nigerian university girls.

**Shobola, Adeola** Human Resource Development, Covenant University, Ota, Nigeria

Objectives: This experimental study assessed the efficacy of Self Assertion Training (SAT) in the treatment of stage fright among the Nigerian university girls. Methods: 600 girls were selected from two universities using purposive sampling. Self Assertive Training lasted four weeks of four group sessions of 45 minutes was accorded the 315 as experimental group and the rest 285 as control group. Hypotheses were tested with multiple regressions and t-test. Result: Participants exposed to SAT overcame stage fright. Mono sex siblings and course of study of participants had significant effect on the treatment. Conclusions: Self-Assertion is relevant in treating stage fright.

### The development of adolescents' implicit attitude to emotion regulation

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**Sang, Biao** Department of Psychology, East China Normal University, Shanghai, People's Republic of China

Previous research has shown that implicit attitude to emotion regulation, as an important aspect of automatic emotion regulation, could influence emotion regulation without the cognitive costs. However little is known about the development of the implicit attitude to emotion regulation. Two hundred 12-18-year-olds were administered the emotion regulation-implicit association test (ER-IAT). ANOVA analyses showed that the older hold much more positive attitude to emotion regulation than the younger, and there is no significant difference between boys and girls. The findings suggested that the emotion regulation practice can help adolescents form more positive implicit attitude to emotion regulation.

## FP-241: Substance abuse and addiction II

### Illicit drug-consumption: Measuring two cognitive-behavioral risk-factors

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 Risk- and protective factors play an important role in the consumption of illicit psychoactive substances. Knowledge of and behavior around illicit substances are ignored in the context of psychometric diagnostics. An inventory based on cognitive-behavioral theories containing ten substance-specific modules was constructed to record these two factors. The substances focussed upon were cannabis, amphetamines, ecstasy, hallucinogens and cocaine. The inventory was set up as a web-based record-tool and tested on a sample of 2400 subjects. Scale-reductions have been conducted by means of various statistics. The primary test-theoretical quality-criteria have been calculated and judged as very good.

### Onset of tobacco use and transition to other drug use among college undergraduates in north of Iran-2006.

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**Doostdar Sanaye, Mehraz** Community Medicine, Guilan University, Rasht, Islamic Republic of Iran  
**Jafari Shakib, Abbas** Rasht Health Center, Guilan University, Rasht, Islamic Republic of Iran  
 Background: To estimate the cumulative probability of occurrence of first use of tobacco and the risk of transition to illegal drugs. METHODS: We conducted a cross sectional study of 3958 college students in 2005. Data were collected by using a validated self-applied questionnaire. Results: 722 students (19.5%) were current smokers. The most prevalent substances were Ecstasy (4.3%), opium (2.7%). Tobacco users were at greater risk of starting drug use than nonusers (OR=14.42; 95 % [CI] = 10.62-19.74). Conclusions: The innovative method used in this study yields epidemiologic evidence relating early use of tobacco with initiation of illegal drugs in youth.

### Male at-risk and heavy episodic drinkers and their motivation to change drinking

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**John, Ulrich** IES, EMAU Greifswald, Greifswald, Germany  
**Hapke, Ulfert** IES, EMAU Greifswald, Greifswald, Germany  
 Objective: At-risk drinkers with heavy episodic drinking (ARHE) have a more problematic drinking style than at-risk drinkers only or heavy episodic drinkers only (AR,HE). With respect to brief interventions, little is known about their motivation to change drinking. Methods: A proactively recruited sample of 425 male general hospital inpatients was used. Results: A lower proportion of ARHE was not ready to change drinking compared to AR,HE (36 vs. 53%). Groups did not differ regarding openness to counseling. Conclusions: Every second male with ARHE and AR,HE is open for counseling. Brief intervention should be tailored to motivation to change drinking.

### Female frequent internet gamblers: A qualitative study of their gambling, its impact and their views on treatment and policy

**Corney, Roslyn** and Counselling, Greenwich Psychology, London, United Kingdom  
 Aims: to study the gambling history and stories of participants, motivations, impact and helpseeking. Method: Details were advertised on websites and newspapers. 30 frequent gamblers were interviewed over the telephone for approximately one hour. Verbatim transcriptions were analysed using NVI-VO and grounded theory. Results/conclusions: Not all women had gambled before. However, internet accessibility meant prolonged periods were spent gambling to the neglect of other life areas. Some were originally motivated by excitement but others gambled to escape from current difficulties. Depression, anxiety, panic attacks and suicide ideation were common. The women were ambivalent towards their gambling and receiving help.

## FP-242: Altruism and helping behavior

### The emergence of evolutionary altruistic behavior through multilevel selection

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**Suminaga, Tetsushi** Dept of Civil Engineering, Tokyo Institute of Technology, Tokyo, Japan  
 This study is aimed to investigate social conditions where an evolutionally altruistic behavior emerges while referring the idea of multilevel selection in the evolutionary theory. For this purpose, we developed a mathematical model describing the evolutionary process of altruistic behaviors, which indicated the theoretical hypothesis that group selection could be an important force in the emergence of altruistic behaviors. To test the hypothesis we implemented a questionnaire survey targeting at 300 employees in companies in Japan. The result supported the hypothesis, that indicated that the pressure of group selection was positively correlated with tendency of the emergence of altruistic behaviors.

### Pro-social behavior and causal attribution in Brazil

**Pilati, Ronaldo** Dept. of Social Psychology, University of Brasilia, Brasilia, Brazil  
**Leão, Mariana** Social Psychology, University of Brasilia, Brasilia, Brazil  
**Neves, Julianna** Social Psychology, University of Brasilia, Brasilia, Brazil  
**Fonseca, Marcus** Social Psychology, University of Brasilia, Brasilia, Brazil  
 Pro-social behavior is any act that benefits another person or group. This research tested the influence of causal attribution and helping cost on pro-social behavior intention in a Brazilian cultural context. Simulation experimental design was used with 300 participants. It was developed six scenarios in a factorial design of 2 (controllability X uncontrollability) X 3 (cost: low, medium and high). The data were analyzed through ANOVA and structural equation modeling. The preliminary results indicated that interaction between perceptions of uncontrollability and low helping cost was significantly related to high levels of helping intention ( $F = 13.11$ ;  $p \leq 0.001$ ).

### Alter-altruism

**Poddiakov, Alexander** Dept. of Psychology, Higher School of Economics, Moscow, Russia  
 Aim of the study is elaboration of egoism vs. altruism opposition by introduction of a new concept, i.e., alternative altruism, or alter-altruism (AA). It is selfless defense of others' interests by doing damage to their competitors, rivals, etc. Classification of various AA types is presented, and cases of AA behavior in various areas are

analyzed. Moral dilemmas of AA are discussed. Experiments, in which children successfully made ethically justified AA decisions to prevent negative characters of a tale and help positive ones, are described. General conclusion is that the concept of alter-altruism creates more differentiated opportunities to analyze social reality.

### Civil courage and helping behaviour: Differences between real and anticipated behaviour

**Voigtlaender, Denise** Inst. für Psychologie, Universität Göttingen, Göttingen, Germany  
**Schulz-Hardt, Stefan** Institute of Psychology, University of Goettingen, Goettingen, Germany  
**Schroeder, Sylvia-Maria** Institute of Psychology, University of Goettingen, Goettingen, Germany

We conducted three experiments comparing anticipated and real behaviour in situations requiring either help or civil courage. In the civil courage situations participants observed a norm violation (e.g. stealing). In the corresponding helping situations participants perceived a confederate requiring help. Participants either experienced the situation in reality or received a description of the situation and reported their anticipated reactions. While for the help requiring situation anticipated intervention rate was similar to real intervention rate, participants overestimated the intervention rate in civil courage requiring situations. These findings support a theoretical distinction between helping behaviour and civil courage.

### Motivations for helping: The moderating role of group membership

**Stürmer, Stefan** Inst. für Psychologie, Fern-Universität in Hagen, Hagen, Germany  
**Snyder, Mark** Psychology, University of Minnesota, Minneapolis, USA

A group-level perspective on helping suggests that salient ingroup/outgroup distinctions play a crucial role in moderating the motivational processes underlying helping (e.g., Stürmer et al., 2005). Common group membership should increase the likelihood of empathy-based helping. When people contemplate offering help to members of outgroups, however, they often may do so in a more systematic and controlled mode of information processing (including cost-benefit analyses). The results of a coordinated series of studies employing different research methodologies (field research vs. controlled experimentation), involving participants of different cultural backgrounds, different helping situations, and different helping criteria provide clear support for these predictions.

## FP-243: Self-regulation

### The role of spontaneous social comparisons in automatic goal pursuit

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**Mussweiler, Thomas** HF, AG Sozialpsychologie, University of Cologne, Köln, Germany

Automatic goal pursuit has been shown with many goal contents. Despite the importance of these findings, however, little is known about the mechanisms mediating these effects. Drawing upon research showing that representations of significant others and personal goals are strongly related, we suggest that social comparison is a mechanism contributing to goal priming. We assume that the direction of spontaneous social comparisons triggered by goal related stimuli affects the direction of goal pursuit. In internet and laboratory experiments, we found that procedurally priming similarity comparisons before neatness or achievement primes lead to behavioral assimilation, while dissimilarity comparisons resulted in contrast.



### Three dimensions of self-regulation

**Bak, Wacław** Dept. of Personality, Catholic University Lublin, Lublin, Poland

The paper presents the main thesis of a new theoretical proposition concerning the structure and regulative functions of the self-system. Based on conceptions of Higgins, Markus, and Ogilvie, the self-system is defined as a cognitive structure, composed of different self beliefs (e.g. ideal-self, ought-self, undesired-selves, can-self, impossible-self) and discrepancies between them. It is hypothesized that the self-system one can describe in terms of three dimensions: "negative-self-standards", "positive-self-standards", and "can-self-standards". It is proposed that they can be useful in explaining different aspects of psychological functioning, such as goal realization, self-esteem, and identity. Preliminary results of the research testing the model are presented.

### Can self-regulation be truly collective?:

#### Regulatory focus and intergroup behavior

**Sassenberg, Kai** Institut für Wissensmedien, Tübingen, Germany

Self-regulation approaches such as regulatory focus theory have recently been introduced into the field of intergroup behavior. Research has considered self-regulation as moderator as well as an outcome of intergroup processes. The current presentation gives an overview of intergroup research applying self-regulation approaches from the other's own and other laboratories. Moreover, it answers the question whether self-regulation can be collective. This question is answered by applying the following four criteria: the relevance of group based input (e.g., appraisals), the relevance of group relevant output (e.g., benefits), the impact of social identification, and social sharedness within a group.

### Motivational balance at different levels of social complexity: From intrapersonal level to intergroups level

**Mamali, Catalin** Dept. of Psychology, Loras College, Dubuque, USA

At the core of the model are the relationships between motivational balance - MB (Mamali, 1981) and levels of social complexity (Hinde, 1979). At the intrapersonal level MB is measured vectorially as a relationship between the intensity and quality of motives (intrinsic/extrinsic) within and across activities. The interaction valence-expectancy-instrumentality (redefined as locus of control) accounts for MB intensity. At dyadic level MB includes also the hierarchical differential between the motives satisfied by each side and varies between co-regressive and co-developmental motives. Empirical results suggest that for each activity there is a certain optimal balance between intrinsic and extrinsic motives.

### FP-244: Psychological disorders VI

#### The automatic and controlled information processing in persons with major depressive disorder

**Ghamari Kivi, Hossein** Psychology, University of Mohaghegh Ardabi, Ardabil, Islamic Republic of Iran  
Objectives: To investigate automatic and controlled information processing and the effects of antidepressant drugs on these variables in major depressive disorder. Methods: 30 persons with major depressive disorder who have been received antidepressant drugs and 30 patients without medication and 30 normal persons have been randomly selected and answered to beck depression inventory, word competition test and words association subscale. data were analysed by one way analysis of variance. Results: there was not significant difference among two participant groups and normal group in automatic processing but there was significant difference ( $p < 0.05$ ) in controlled

processing. Conclusion: automatic processing has underlying components that are resistant against psychopathology but controlled processing is very sensitive.

#### Interpersonal problem-solving and depression in parents with disabled children

**Fotini, Grigoriou** Special Education, University of Thessaly, Volos, Greece  
**Kleffaras, George** Dept. of Special Education, University of Thessaly, Volos, Greece

Depression seems to be one of the most frequent psychological problems of parents with disabled children. Recent research has revealed that the ability of an individual to solve its social and interpersonal problems is associated to various psychopathological conditions. Based on this evidence, the relationship between problem-solving ability and depressive symptomatology of these parents is investigated. 80 parents with disabled children presenting physical/intellectual disabilities participated in this study and were administered: a) Pichot-Questionnaire-of-Depressive-Symptoms and b) Heppner-Social-Problem-Solving-Questionnaire. Significant correlations were found between depressive symptoms and problem-solving ability and specifically problem-solving-confidence, active effort to find alternative-solutions and self-control in problematic situations.

#### Outcome of postnatal depression screening using Edinburgh Postnatal Depression Scale

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**Leung, Cynthia** Department of Educational Psych, The Hong Kong Institute of Edu, Hong Kong, China, People's Republic of : Macao SAR  
**Lee, Dominic T S** School of Public Health, The Chinese University of Hong, Hong Kong, China, People's Republic of : Macao SAR  
**Chan, Ruth** Department of Medicine & T, The Chinese University of Hong, Hong Kong, China, People's Republic of : Macao SAR  
Objectives: To evaluate the effectiveness of a postnatal depression screening programme using Edinburgh Postnatal Depression Scale (EPDS), relative to usual clinical practice. Method: 462 mothers with 2-month-old babies attending routine child health service were randomized into postnatal depression screening by EPDS or usual clinical practice. Follow-up counselling was provided by nurses to participants in need. Results: At 6 months postnatal, there was a significant difference in mental health outcome favouring mothers under the EPDS screening programme. Conclusion: The implementation of a postnatal depression screening programme using EPDS, compared with usual practice, resulted in better mental health among the former.

#### Shame and guilt relationships with depression and anxiety

**Motan, Irem** Psychology Department, Ondokuz Mayıs Uni., Samsun, Ankara, Turkey  
**Gencoz, Faruk** Psychology Department, Middle East Technical University, Ankara, Turkey

The aim of the present study is to underline the relationship of shame and guilt with depression and anxiety. Participants were administered Test of Self-consciousness Scale-3, State Shame Guilt Scale, Beck Depression Inventory, State-Trait Anxiety Scale. Consequently, shame-proneness, state shame, and lower levels of state pride emerged as common factors for depressive symptoms and trait anxiety. This study addresses the nature of the relationship between self-conscious emotions and depression, anxiety symptoms. Findings of the study are discussed in the frame of Tripartite model. Guilt-proneness and gender factors were interpreted as the differentiating predictors in the light of the literature.

### FP-245: Sensory-motor interactions II

#### Coordination of eye and head movements during visual perception

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**Raub, Ulrich** Dept. Psych. Neurophysiology, University Hosp. of Psychiatry, Bern 60, Switzerland  
**Thomke, Christa** Dept. Psych. Neurophysiology, University Hosp. of Psychiatry, Bern 60, Switzerland  
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As a prerequisite for emotion processing – as a sender or a receiver – one has to use a perceptual apparatus that includes eyes and head. For sending and hiding emotional cues to the environment one has to direct the face to other persons in a way that they can recognize the facial activity. For receiving stimuli out of the environment a distinct orienting is needed if the oculomotor range of about  $\pm 55^\circ$  is exceeded. Additionally, for this analysis three-dimensional head movements are involved. Based on the lack of knowledge concerning the perceptual interrelations, several experiments are done to investigate eye-head coordination especially in emotion recognition.

#### Being conscious of what is reachable in the peripersonal space

**Coello, Yann** Dept. of Psychology, University of Lille, Villeneuve d'Ascq, France  
**Bartolo, Angela** psychology, URECA-University of Lille, Villeneuve d'Ascq, France  
**Amiri, Bastien** psychology, URECA-University of Lille, Villeneuve d'Ascq, France  
**Bourgeois, Jeremy** psychology, URECA-University of Lille, Villeneuve d'Ascq, France  
Perceptually judging what is reachable in the peripersonal space requires integrating information about visual objects with information about the action system. Neuroscientific evidences will be reviewed that suggest that the possibility to anticipate sensory consequences of simulated action might represent the mechanism that provides the perceptual system with information on the limit of peripersonal space. Modifications of the perception of what is reachable when recalibrating the visuomotor system, in the presence of pathological peripheral deafferentation, or when inhibiting the motor cortex using TMS provide evidences for such mechanism and suggest that motor representations contributes in the perceptual categorisation of external space.

#### Individual differences in pointing movements under rotated visual feedback

**Hellmann, Andreas** Inst. für Psychologie, Universität Oldenburg, Oldenburg, Germany  
**Huber, Jörg W.** School of Human & Life Sci, Roehampton University, London, United Kingdom  
We studied the effects of changes of visual feedback on pointing movements of the hand. Participants ( $n=12$ ) carried out a pointing task using information available on a video display system. Results show systematic spatial errors dependent on the extent and direction of rotation of visual information available to them, supporting and extending our earlier results. The detailed analysis of the performance of individual subjects over repeated trials shows strong individual differences which we interpret as an indication of different abilities and strategies in carrying out precise movements under conditions of altered visual information.



# Motor simulation in the observation of tool-use actions

**Massen, Cristina** *Inst. für Psychologie, Max-Planck-Institut, Leipzig, Germany*  
Visually perceiving others' actions may activate corresponding motor programs in the observer. We investigated the observation of others' tool-use actions. Two participants were taking turns in acting, observing the tool-use action of another person in trial n-1 and executing one in trial n. Previous results indicated that the action rule of the observed action is automatically activated. This study addressed the question, whether these effects are due to the observation of the movement of a human body rather than to the observation of the tool's movement. The results show, that the effects depend on specific characteristics of the human movement.

## FP-246: Clinical / counseling psychology III

### Triangulation supports a comprehensive understanding of patients' views of their obesity

**Metz, Ulrike** *Inst. für Allgemeinmedizin, Charité Berlin, Berlin, Germany*  
**Dieterich, Anja** *Institut für Allgemeinmedizin, Charité Berlin, Berlin, Germany*  
**Heintze, Christoph** *Institut für Allgemeinmedizin, Charité Berlin, Berlin, Germany*  
The present study combines quantitative (locus of control, self-efficacy, attribution tendencies) and qualitative (audio-taped preventive consultation in general practices) data as a multi-method approach of examining patients' (N=120) attributions of etiology and therapy regarding their overweight. Significant correlations between physical status (risk score, BMI) and patients' attributions could be found: Patients with BMI between 25 and 35 (kg/m<sup>2</sup>) differed from patients with BMI>35 (kg/m<sup>2</sup>) in attributing internally vs. externally. Additionally, differences related to the perceived relevance of support (family, partner, GP) were found. Content analysis of consultations supported and extended quantitative results and maximized validity.

### Implicit self-esteem in recurrent depression

**Risch, Anne Katrin** *Klin.-Psych. Intervention, Universität Jena, Jena, Germany*  
**Buba, Astrid** *Psychologie, Friedrich-Schiller-Universität, Jena, Germany*  
**Steffens, Melanie** *Psychologie, Friedrich-Schiller-Universität, Jena, Germany*  
**Stangier, Ulrich** *Psychologie, Friedrich-Schiller-Universität, Jena, Germany*  
Negative self-relevant cognitions, activated by negative mood, is suggested to play an important role in the recurrence of depressive episodes. Therefore, we investigated implicit self-esteem before and after negative mood induction in patients with remitted depression. We measured implicit self-esteem using the Implicit Association Test. 15 patients, currently depressed, 15 patients, remitted recurrent depressed and 15 controls with no history of depression participated in the study. The results do not support the hypothesis that implicit self-esteem is impaired after negative mood induction in remitted patients. The discussion will focus on the importance of the findings for theories emphasizing cognitive vulnerability factors and implications for maintenance treatment in recurrent depression.

### How does empathy influence emotion regulation skills?

**Schenkel, Katia** *Faculty of Psychology, University of Geneva, Genève 4, Switzerland*  
**Wranik, Tanja** *Faculty of psychology, University of Geneva, Genève 4, Switzerland*  
**Kaiser, Susanne** *Faculty of psychology, University of Geneva, Genève 4, Switzerland*  
Empathy has both an affective and a cognitive component. We investigated the difference between these two in relation to emotion regulation. We

hypothesized that people who use affective empathy are less skilled in regulating own emotions and emotions of others. To investigate links between empathy, emotion regulation, and burnout, we conducted a web experiment with helpline volunteers. We found that people who are high in affective empathy have difficulties in emotion regulation and use more maladaptive strategies that people who are high in cognitive empathy. Cognitive empathy is related to more adaptive emotion regulation strategies and less burnout.

## FP-247: Social cognition II

### Investigation on 340 drug addicts who resume drugs after receiving compulsory treatment

**Chen, Zhongyong** *University, Inner Mongolia Normal, Huhhot, People's Republic of China*  
In sample of 340 drug addicts who resume drugs after receiving compulsory treatment in the reeducation through labor centers, followed for 2 years, the result showed that slightly more than 50 percent of them relapsed after free from laborer form within one year. The reasons for relapse were drugs available; unable to get rid of psychological dependence on drugs and same social environment as before. A comprehensive, precautionary and controlling measure should be used to control drugs. We should educate the drug abusers through psychological ways and push the whole society to be concerned with the prevention of drug abuse.

### The relationship between personality, cognitive and religious with happiness

**Khoshkonesh, Abolghasem** *Education and Psychology, Shahid Beheshti University, Tehran, Islamic Republic of Iran*  
Abstract The aim of the present research was an investigation on simple and multiple relationships of personality, cognitive, and religious antecedents with happiness feeling: the relationship between happiness feeling, mental health, and academic performance among Shahid Chamran University students, in Ahwaz. A sample of 569 students were selected by stratified ratio random sampling. A variety of measurements including NEO-FFI, cognitive aspects: Psychological Hardiness Inventory, Self-esteem, Life Orientation Test-Revised (LOT-R) by Scheier & Carver et al (1994), Oxford Happiness inventory (OHI) by Argyle (2001), GHQ-28, were applied and Grand Total Score (GTS) was taken as index for academic performance and all data were analyzed.

### Perceptions of progress towards goal: Can the eye fool the mind?

**Kwong, Jessica Y.Y.** *Marketing Dept., Chinese Univ. of Hong Kong, Hong Kong, China, People's Republic of : Hong Kong SAR*  
**Wong, Susanna Y.N.** *Marketing, The Chinese University of HK, Hong Kong, China, People's Republic of : Macao SAR*  
**Ho, Candy K.Y.** *Marketing, The Chinese University of HK, Hong Kong, China, People's Republic of : Macao SAR*  
Perceived progress plays a critical role in people's motivation to persist toward a goal. This research demonstrates that the same progress when presented in different formats would alter the perceptions and hence induces different levels of motivation. Using laboratory experiments, we demonstrate that while figure displays exert dominant influences over corresponding numerical displays, this effect is dependent on the relative ease (fluency) in processing the two different modes of information. In addition, perceptions are biased to different degrees when different figures are used. This paper connects our knowledge about the processing of different types of information with goal motivation.

### Implementation intentions and artificial agents

**Pelta, Carlos** *Madrid, Spain*  
**González Marqués, Javier** *Basic Psychology II, Universidad Complutense de Mad, Madrid, Spain*

We have developed a computer simulation comparing the behavior of two artificial agents (A0 and A1), both of which imitate the use of implementation intentions for achieving a goal R. However, A0 is more balanced for obtaining the goal intention "I intend to achieve R" while A1 is more balanced for obtaining the implementation intention "I intend to do R when situations L are encountered" (Gollwitzer, 1996). We have taken as a reference the parameters introduced in (Gollwitzer and Sheeran, 2004). We have accomplished the statistical analysis (including confidence intervals) and A1 improved the global performance of A0. Our simulation confirms partially the results of Gollwitzer and other authors in humans.

## FP-248: Stress, coping, and social support

### The eustress/distress reaction characteristics influenced by the organizational adult age

**Moise, Annemari** *Dept. of Psychology, Bucharest University, Bucharest, Romania*  
Many researches reveal the stress in a negative way, but Seyle talked about stress insisting on satisfaction that a person is able to obtain after an out-side tension. We define in a unique manner the concept of eustress/distress and we proposed one specific classification for stress reaction. The hypothesis was: every segment of organizational adult age is having a specific reaction to eustress/distress. We made a complex analysis on the characteristics of eustress and distress on each stage of organizational adult age and we realized the correlation between the two variables. The conclusions are discussed in terms of practical relevance.

### The structure of well-being

**Musek, Janek** *Dept. of Psychology, University of Ljubljana, Ljubljana, Slovenia*  
Multivariate analyses of twelve psychological constructs representing two most integrative theoretical models of well-being (hedonistic and eudaimonic) clearly established a robust hierarchical structure both on the scale as well as on the item level of data. The analyses yielded a very strong highest-order factor (gWB), two higher-order factors (broad factors of happiness and meaning) and five first-order factors (satisfaction, negative emotionality, positive emotionality, relatedness, and growth). The results also confirmed substantial relationships between the dimensions of well-being and dimensions of personality. The gWB is highly correlated with the general factor of personality (gP).

### Innovative stress

**Nourkov, Valery** *Dept. of Sociology, RSII, Moscow, Russia*  
Safety and stability is the most common dream for people living in unstable society. Under such circumstances any social innovations meet counteraction and fears. We term it as "innovative stress". Innovative stress leads to social passivity and interferes social development. From our theoretical perspective, traumatic component of innovative stress may be effectively overcome by psychological intervention. The main aim of intervention might be reinterpretation of values underlining innovative processes.



## FP-249: The impact of goals, goal-orientation, and volitional processes on learning II

### Volition, trait procrastination and motivational interference in university students

**Jorke, Katrin Birte** Educational Psychology, University of Karlsruhe, Rheinbach, Germany **Fries, Stefan** Educational Psychology, University of Karlsruhe, Karlsruhe, Germany **Winter, Claudia PA** Consulting Group, PA Consulting Group, Frankfurt, Germany

Trait Procrastination and the Tendency to Experience Motivational Interference (TMI) are both failures in self-regulation that can have a negative impact on the efficiency of self-regulated learning as well as on students' well-being. In a questionnaire study on 1253 university students Trait Procrastination and TMI were placed in a broader framework of volitional problems. The resulting model demonstrates that insufficient self-regulation (e.g. low persistence, distractibility) in a specific learning context can be caused by the interplay of direct and mediated effects of volitional strategies. Trait Procrastination and TMI. Implications for the development of interventions will be discussed.

### Investigating the casual relation ship between perfectionism, motive achievement, text anxiety and academic achievement

**Kheradmand Mard Del, Khatereh** Tehran, Islamic Republic of Iran

**Abstract** The objective of this research is specifying the existing relation among the perfectionism, motive achievement, text anxiety and academic achievement sampling method is random proportional classified The data was studied, using the Pierson correlation and the Regression analysis, with the following results: The positive perfectionism with the mediation of the motive achievement has a direct relation with the educational development. The negative perfectionism with the mediation of the test anxiety has an indirect relation with the motive achievement. The negative perfection with the mediation of the motive achievement indirectly has an indirect relation with the academic achievement.

### Can measures of students' motivation help predicting school achievement when intelligence and previous knowledge are already known?

**Vock, Miriam** Inst. IQB, Humboldt-Universität zu Berlin, Berlin, Germany

Former studies showed contradicting results concerning the role of motivation in predicting school achievement when cognitive abilities are controlled. In this study, we analyze the unique contribution of students' motivation beyond intelligence and previous knowledge on school achievement. Cross-sectional and longitudinal data of N = 5,261 high school students from grades 5, 7, and 9 are presented. Measures are several scales assessing motivation (self-efficacy, domain specific self-concept, interests), intelligence (figural and verbal reasoning), standardized achievement tests (maths and German) and grades. Results from classical multiple regression analyses and multi-level analyses (accounting for class and school effects) will be presented and discussed.

### Students' and schoolmates' motivation on academic achievement: School-, and student-level analyses in Hong Kong

**Zeng, Xihua** Educational Psychology, The Chinese University of HK, Hong Kong, China, People's Republic of : Hong Kong SAR

This research examines how schoolmates' motivation moderates the effect of individual students' motivation on academic achievement. Mathematics test scores of 4478 fifteen-year-olds as well as

questionnaires responses in Hong Kong were analyzed via multi-level analyses (School-, and student-level analyses). Despite their grade and family SES, Students scored higher when they had higher interest in mathematics, and when they were in school context with higher mean interest in mathematics. However, the significantly negative effect of individual students' instrumental motivation on mathematics scores was only detected in school contexts with higher mean instrumental motivation.

## FP-250: Sexual behaviour

### Casual sex: Why and why not?

**Vrangalova, Snezana** Human Development, Cornell University, Ithaca, USA

Casual sex (CS) is prevalent among university students. The reasons to engage and not engage in it, however, remain unknown. Two hundred students will be asked to list all the reasons they have for (not) engaging in CS. Preliminary measures of motivation for and against CS will thus be constructed. A random sample of 3500 students at a large US university will be invited to participate in an online survey rating their reasons for (not) having CS. Factor analysis will be used to develop a typology of motivations for and against CS. Implications for application of such instruments in future research will be discussed.

### Sex puts you in gendered shoes!

**Hundhammer, Tanja** Inst. für Psychologie, Universität zu Köln, Köln, Germany **Mussweiler, Thomas** Department of Psychology, University of Cologne, Köln, Germany

A cultural double standard for the sexual experience of women and men prescribes the enactment of different sexual roles. Women's sexual role is submissive-expressive, men's agentic-dominant. We assume that activating the concept of sexuality renders one's own gender and the respective gender stereotype more salient. This should lead to consistent automatic behavior and self-perception. We showed that sex-priming leads to a more gender-stereotypic self-description (Exp 1), a stronger gender identification (Exp 2) and to subservient behavior for women and dominant behavior for men (Exp 3). Sex-primed females hesitated longer before interrupting, indicating a more other-centered social interaction tendency (Exp 4).

### Attachment and love: Their influence on sexual behaviour

**Garcia Rodriguez, Georgina** Mexico City, Mexico **Diaz Loving, Rolando** Facultad de Psicología, UNAM, México, D. F., Mexico

Attachment and love are both theoretically and empirically linked to sexual behaviour (Fischer, 2004; Bogaert & Sadava, 2002; Frey & Hojjat, 1998). In the context of collectivistic cultures, sexual behaviour is strongly associated to affective aspects of interpersonal bonds (Giraldo, 2000). The purpose of this research was the prediction of sexual behaviour through attachment and love styles. 209 Mexican adults with different relationships status completed three quantitative measures. Multiple regression analysis showed that the frequency of seduction, physical contact, sexual contact and self-eroticism, and the number of life time sexual partners, are reliably predicted by attachment and love styles.

### Psychological processes of BDSM: The players perspective

**Lopez, David** Sociology, California State University, Northridge, USA

This research explores psychological processes associated with BDSM (Bondage and Discipline/ Dominance and Submission/Sadomasochism) based on-depth informal discussions with active

participants in BDSM. In addition, observations were conducted at public venues where BDSM is practiced. Results suggested processes can be categorized at two levels. One, dominant-submissive relationships vacillate in degree of role assumed (Master/Slave or Top/Bottom). Two, emotional responses to BDSM activity are similar to those associated with chemical use/abuse. It is suggested that clinicians be familiar with these processes especially when working with clients addressing dependency, cross-addiction, self-esteem, and self-concept issues.

## FP-251: Psychotherapy - Research and treatment methods VIII

### ADHD-profile-study in France: First results concerning diagnosis and therapy of ADHD

**Jelen, Anna** Heidelberg, Germany **Huss, Michael** Clinic of Child Psychiatry, Charité Berlin, Berlin, Germany **Lehmkuhl, Ulrike** Clinic of child Psychiatry, Charite Berlin, Berlin, Germany

**Objective:** The goal of this study is to gain an overview of the current method of care in France for ADHD affected children and adolescents as well as their families. Similar studies have been undertaken in various European countries, inviting comparisons. **Method:** Until now 54 Questionnaires of 47 boys and 7 girls have been evaluated. The parents were retrospectively questioned about the diagnostics and therapy of the ADHD affected child. **Results:** The foremost preferred therapy of ADHD is the intervention with psychostimulant medication. Treatments focusing an family, school or behavioral psychotherapy, has been used only in very few cases. An early detection of ADHD and treatments involving school and family are requested from the parents.

### Psychocorrection in the context of drawings integral analysis.

**Polyanychko, Olena** Physical Education, IAPM, Kyiv, Ukraine

The present abstract deals with the specific character of using graphical methods within the framework of theoretical and methodical principles of active socio-psychological training (ASPT) and possibilities of integral vision of the interpretation of the complex of drawings made by one and the same author. While prof. T.S.Yatsenko analyzing drawings, guided by phenomenological approach which stipulates orientation of the understanding of a drawing by the author herself. The diagnostic-correction procedure is made up of concentration attention on systematic characteristics of the unconscious which direct the personality programs of an individual and these are expressed in the tendencies of behaviour.

### Dialectical behavior therapy versus cognitive behavior therapy in the treatment of Anorexia and Bulimia Nervosa in adolescents

**Salbach-Andrae, Harriet** Kinder- und Jugendpsychiatrie, Charité Berlin, Berlin, Germany **Bohnekamp, Inga** Child and Adolescent psychiatrist, Charité, Berlin, Germany **Klinkowski, Nora** Child and Adolescent psychiatrist, Charité, Berlin, Germany **Pfeiffer, Ernst** Child and Adolescent psychiatrist, Charité, Berlin, Germany **Lehmkuhl, Ulrike** Child and Adolescent psychiatrist, Charité, Berlin, Germany

**Objectives:** Few randomized, controlled trials have examined the efficacy of treatments for eating disorders in adolescents. The aim of the ongoing study is to evaluate the effectiveness of Dialectical Behavior Therapy (DBT) and Cognitive Behavior Therapy (CBT) in adolescents suffering from eating disorders. **Methods:** Patients with anorexia or bulimia nervosa are randomly assigned to a CBT, DBT or a control treatment including nonspecific supportive clinical management (NCM). **Results:** CBT and DBT are superior to NCM, while no

significant differences between CBT and DBT were found. Conclusions: CBT and DBT can be effective therapies in the treatment of eating disorders in adolescents.

#### **Learning implementation of exposure therapy for Posttraumatic Stress Disorder: Student perspective and implications for outcome**

**Meeke, Heidi** Professional Psychology, Pacific University, Portland, USA

Exposure to caustic events is an all too common human experience, and many go on to develop posttraumatic stress disorder. Treatment markedly shortens suffering but exposure therapy is too often underutilized, leaving many patients chronically impaired. Objectives: "Live" training surmounts obstacles to effective implementation of exposure therapy. Methods: Real-time training with real patients was received. End-state functioning was assessed using clinical significance and reliable change, and treatment adherence was monitored. Results: Patients met "recovered" status and utilization of exposure therapy by student remains high. Conclusions: "Live" training does not interfere with outcome, and may be strongest form of true dissemination.

#### **FP-252: Posttraumatic stress disorders**

#### **The scars we can't see: Reducing the onset of Post Traumatic Stress Disorder (PTSD) following traumatic event**

**Maffia, Anthony J.** Jamaica Hospital, New York, USA

This presentation will contribute to the evaluation debate by exploring the conceptual and theoretical underpinnings of traumatic stress reactivity and its implications for the development and administration of interventions designed to assist recovery in populations affected by traumatic stress by briefly reviewing the evidence for the effectiveness of psychological debriefing as a means of reducing psychological morbidity following traumatic exposure. Psychological and social influences on response are identified and used to tentatively offer explanations for the differential effectiveness of critical incident stress management in reducing the onset of psychological morbidity.

#### **Development and evaluation of a status quo measuring instrument to assess posttraumatic growth**

**Barskova, Tatjana** Clinical and Health Psychology, Technische Universität Berlin, Berlin, Germany

**Schubbe, Oliver** Traumatherapie, Institut für Traumatherapie, Berlin, Germany  
Processes of Posttraumatic Growth reflect beneficial psychological adjustment in persons with traumatic experience. The objective of the study was to develop and to evaluate a status quo measuring instrument of posttraumatic growth, the PGSI. The analysed samples comprised subsamples of 229 adult persons with traumatic experience and 114 parents of disabled children. Exploratory and confirmatory factor analyses revealed a 7-factors solution, corresponding to the following subscales: Relationships to Others, New Possibilities, Personal Strength, Appreciation of Life, Spiritual Changes, Generosity, Openness. Results showed sufficient degrees of reliability, convergent and discriminant validity. The PGSI is recommended particularly for use in longitudinal studies.

#### **The role of posttraumatic growth following terrorism from a terror management perspective**

**Hall, Brian** Dept. of Psychology, Kent State University, Stow, USA  
**Hobfoll, Stevan** Psychology, Kent State University, Kent, USA

We conducted a study of terrorism in Israel via telephone surveys that included a national sample

of 1,136 Jewish adults. We examined the relationship between posttraumatic growth (PTG) and posttraumatic stress disorder (PTSD) symptom severity, out-group biases against Arabs, and the support for political violence. Findings indicated that PTG was related to greater PTSD symptom severity. PTG was also related to greater threat perception of and exclusionism of Arabs, supporting the mortality salience hypothesis posited by terror management theory. This study suggests that PTG may be a form of defensive coping.

#### **Dependency, self-criticism, social support and posttraumatic stress disorder symptoms in Peruvian university students**

**Gargurevich, Rafael** Lima, Peru  
**Luyten, Patrick** Psychology, University of Leuven, Leuven, Belgium  
**Corveleyn, Jozef** Psychology, University of Leuven, Leuven, Belgium

We studied the relationship between Dependency and Self-criticism personality dimensions, social support and posttraumatic stress disorder (PTSD) symptomatology in a sample of 562 Peruvian university students. Results showed that, as expected, Self-criticism was positively associated with PTSD symptoms, and negatively associated with both received and perceived social support. Dependency was associated with intrusion and hyperarousal symptoms, but not with avoidance nor with sleep disturbance symptoms. Dependency was positively associated with perceived social support, while Self-criticism was negatively associated with social support. Results are discussed in light of the differential vulnerabilities for PTSD related symptoms associated with Dependency and Self-criticism.

#### **Psychological reactions and social support in female burn survivors**

**Gul, Iram** Dept. of Behavioral Sciences, Fatima Jinnah Women University, Rawalpindi, Pakistan  
**Idrees, Samreen** Behavioral Sciences, Fatima Jinnah Women University, Rawalpindi, Pakistan

The study identified the relationship between post burn psychological reactions and social support in female burn survivors. Sample consisted of 35 female burnt patients (age=18-40 years) with first and second-degree accidental burn injuries. Patients with pre-morbid chronic physical and psychological disorder, serious trauma exposure, intentional burn injuries were not included. Psychological distress, PTSD symptoms and Social Support were assessed with GHQ-12, PTSD Checklist-Specific and Social Support Scale respectively. The results revealed a significant negative relationship between psychological reactions and social support among female burn survivors. The study highlights the importance of psychological assessment of burn victims and role of social support in the rehabilitation programs for these survivors.

#### **Existential trauma: Theoretical novum in psychology of health**

**Mamcarz, Peter** Dept. of Health Psychology, Catholic University of Lublin, Lublin, Poland  
**Popielski, Kazimierz** Health Psychology, Catholic University of Lublin, Lublin, Poland

Scientific knowledge of the traumatic impulses consequences has its top discovery in the PTSD. Since in a case of post-trauma a person is reduced by stress to psychophysical functioning, a new attempt of overcoming the old paradigm appeared in defining the new idea on the basis of noopsychosomatic multidimensional model of existence. Moreover the new approach enabled to grasp the temporality of man more broadly, and to change the level of sensitivity to a negative impulse. The new method was arrived Existential Trauma Questionnaire (KTE): (7 factors, 5 grade scale, 139 questions + 4 quality questions) The goal is an attempt to broaden the actual knowledge concern-

ing traumatic impulses consequences, pathological to the subject-personal being of a person.

#### **FP-253: Personality assessment II**

#### **Construction and validation of a resiliency scale for Mexican students with low achievement**

**Esquivel Alcocer, Landy A.** Dept. de Educación, Universidad Autónoma Yucatán, Mérida, Mexico  
**Góngora Coronado, Elias A.** Psicología, Universidad Autónoma Yucatán, Mérida, Yucatán, Mexico

The objective of this study was the design and validation of a Scale Resilience for Mexican students with low achievement. The participants were 428 students, 214 males and 214 females, with ages between 11 and 17 years old, belonging to a Public High School in Progreso, Yucatan. Exploratory factor analysis resulted in a 10 factors that explains the 41.684 of the total variance. The Alpha Cronbach Reliability Coefficient of the scale was .931. Besides the fact that the scale is psychometrically appropriate for its application, it was identified that the factors agree with the theoretical principles.

#### **Measurement estimation: A coherent construct?**

**Hogan, Thomas** Dept. of Psychology, University of Scranton, Scranton, USA

Measurement estimation (ME) involves the rapid, noncalculated estimation of measures (e.g., length, weight, volume, time) of common objects in the environment. Despite ME's long history in psychological assessment and pedagogical practice, our studies call into question its coherence as a construct. In contrast to two other types of quantitative estimation (computational and numerosity), ME shows relatively weak internal consistency; and ME shows no meaningful relationship with a variety of other tests which would be expected to correlate with any quantitative ability. We review this evidence and suggest possible ways to conceptualize several subskills which may possess sufficient internal consistency.

#### **The adequacy of the Irrational Beliefs Inventory (IBI-50) to Arab culture according to psychometric properties**

**Mohaisen, Khalaf** Psychology, United Arab Emirates University, Al Ain, United Arab Emirates

This research aimed at investigating the adequacy of the IBI (Koopman, et al., 1994) to Arab culture. The researcher was intrigued with the cross cultural findings of the IBI. Sanderman (2002) indicated similarities between American and Dutch samples. Plessis et al (2004) found the IBI is adequate to the white but not to the Black South African students. Findings of this research on 299 university students, using correlations and factor analysis, indicated that IBI is not adequate for Arab culture, since its subscales are not independent from each other and its factor structure is not similar to the original study.

#### **Construct validity of the practical and regulation skills inventory**

**Rascevska, Malgozata** Dept. of Psychology, University of Latvia, Riga, Latvia

The aim of this study was to determine the latent structure of Practical and Regulation Skills Inventory (PRSI) in a sample of 209 adults with age  $M=30.30$ ,  $SD=13.47$  (50% female and 50% male). Principal component confirmatory factor analyses was performed to test hypothetical model previous broached within the framework of qualitative study. The 9 factors were yielded from 195 items: Computer Using, Sports, Household, Foreign Language, Social, Information Interchange, Art and Hobbies, Repair Work, and Regulation Skills (Cronbach's alphas for all scales were above .89). The results support the construct validity of PRSI.



### Bradberry-Greeves Emotional Intelligence Test: Norming-process on the high school students in Iran

**Seirafi, Mohamad Reza** Dept. of Psychology, Islamic Azad University, Karja, Islamic Republic of Iran **Sabet, Mehrdad**

The purpose is due inspecting the validity, reliability, and finding the norm(totally normig) of the Bradberry-Greeves EQ test on the high school students in Iran. The sample volume was 600 students (girl&boy), who were studying in the 2006-2007 academic year. This research performed in 2Phase. The statistical analysis was performed using the computer and the software package of spss14. The research findings assured reliability and validity in the Bradberry- Greeves EQ test, then the general norm tables were prepared, which may be used in the field of clinical diagnosis in Iran. Key words: Norming, Test, Emotion Intelligence

### FP-254: Perspective taking and joint attention in childhood

#### Family context and Theory of Mind development in 5-year-olds in the Basque autonomous community

**Galende, Nuria** Basic Psychological Processes, Basque Country University, San Sebastián, Spain **Arranz, Enrique Bernardino** Basic Psychological Processes, Basque Country University, San Sebastián, Spain **Sánchez de Miguel, Manuel** Basic Psychological Processes, Basque Country University, San Sebastián, Spain

The main focus of this study was to analyze the influence of the family context in Theory of Mind development (ToM) in 150 preschoolers. The data was collected through directly interviews with the children at school, interviews with their parents, systematic observation in the home and questionnaires completed by the parents and school counselors. The results showed a significant relationship between some variables within the family context and the children's performance on ToM tasks. Given that intervention can improve the family context, these results have important educational implications.

#### Comparison of traditional and modern games in Turkey

**Dincer, Caglayan** Preschool, Ankara University, Ankara, Turkey **Gurkan, Tanju** Curriculum and Instruction, Ankara University, Ankara, Turkey **Sen, Muge** Preschool, Ankara University, Ankara, Turkey This study aims to show to what extent the traditional games are reflected in the modern ones in Turkey. The data were collected through "Traditional Game Form and Modern Game Form" developed by the researchers for this qualitative interview focused study. Traditional Game Form has been created to gather information through interviews from different regions; whereas, Modern Game Form has been filled in with the interview data on the games children play collected from parents of 0-12 year olds from the same region. 50 traditional games from a variety of regions are compared to the modern ones in Turkey.

#### Joint attention and intersubjectivity in the relation mother-baby

**Vieira, Nadja** Dept. of Psychology, Univers. Federal de Alagoas, Maceió, Brazil

The statement that "joint attention points out the baby's ability to infer mental estates" was the main problem of this research. Our objective was to analyze the reorganization of activities in the communication mediated by objects, between mother and baby. The analysis was carried out utilizing fifty videos of interaction mother-baby (babies between five and thirty weeks old), in weekly sessions. The baby's comprehension about

the mother's meaningful acts was captured through hierarchical changing in the history of each relation mother-baby. We have concluded that these changing exemplify the way that mental estates introduce itself in the development of the communication, with the support of the joint attention.

#### The effect of creative drama education on receptive and expressive language developments of 5-6 years old children

**Gönen, Mübcecel** Preschool Education, Hacettepe University, Ankara, Turkey

This research has been made to analyse the effects of creative drama on receptive and expressive language development of 5-6 years old children groups. 34 children from one kindergarten formed the test group, 34 children from the other kindergarten formed the control group. Language developments were tested as pre-test and post-test by Peabody picture vocabulary test and Denver screening test and then evaluated the effects on creative drama. At the end of statistical analysis, it was found that creative drama education on 5-6 years age group has positive effects on children's receptive and expressive language developments. Key words: language development, creative drama, receptive, expressive.

#### Comparing children's behavioral and verbal performances: Gender differences in level 1 perspective taking

**Zhao, Jing** Department of Psychology, Peking University, Beijing, People's Republic of China **Wang, Lu** Dept. of Psychology, Peking University, Beijing, People's Republic of China **Su, Yanjie** Department of Psychology, Peking University, Beijing, People's Republic of China

The study aimed to investigate sixty 3-to-5-year-old children's level 1 perspective-taking, and to make a comparison between their behavioral and verbal performances. A hiding game with a one-way mirror and elaborated coding principles was designed. Three-way ANOVA indicated significant interaction among tasks, age and gender ( $F(2,48)=3.55$ ,  $p=0.037$ ,  $\eta^2=0.13$ ): girl's behavioral and verbal performances increased from 3 to 5 years old, in the same pattern; boy's behavioral data was similar to girls', while their verbatim improved little across ages. These findings indicated that behavioral task had its advantages to detect more subtle differences about children's level 1 perspective-taking.

#### Effects of social cues on long-term memory in infancy: An event-related potentials study

**Kopp, Franziska** Center for Lifespan Psychology, Max-Planck-Institut, Berlin, Germany

This study tested whether the facilitating effect of social cues in infants' object processing could be observed for long-term memory processes as well. 4-month-old and 9-month-old infants were familiarized with visual stimuli while they were engaged in joint attention interactions with the experimenter vs. in a non-joint attention condition. EEG was recorded in two recognition phases (immediately vs. after one week) where familiar items were presented with novel items. Event-related brain potentials (ERP) showed a novelty effect in both recognition phases. Furthermore, 9-month-olds' ERP responses differed between the joint attention and the non-joint attention condition. Results indicate the importance of social interactions for infant learning and long-term memory.

### FP-255: Social issues: Children and youth II

#### Children's drawings reveal the "mundus operandi" of family violence

**Simopoulou, Agapi** Nursery, University of Ioannina, Rethymno, Greece **Zervoudaki, Eleni**

This paper is part of a diachronic research which started the year 2005. Studied 270 cases of abused children, in ages 6 to 12, in the island of Crete. The aim was to explore the ways of violence in the families. Information's were taken from interviews with parents, friends, teachers and relatives. The main tool was children's drawings. "Family test", was used to analyze drawings. Results are related with the seven main dimensions of family interaction: Emotional atmosphere, communication, boundaries, alliances, constancy and adaptation, family self efficiency. Also the Study showed that violence in these families has a strong relationship with cruelty experiences of parents. Key words: child abuse, Family focal evaluation, childish drawing

#### Age differences and development of prejudice among children and adolescents: A meta-analysis

**Raabe, Tobias** Research Synthesis & Intervent, University of Jena, Jena, Germany **Beelmann, Andreas** Research Synthesis & Inter, University of Jena, Jena, Germany

This meta-analysis integrates results of studies ( $N=129$ ) on age differences in prejudice among children and adolescents. Separate data analyses were accomplished concerning the type of prejudice and the method of measurement (ingroup-bias vs. out-group negativity). Several factors (e.g., legitimacy of hostility) were tested as moderators of age-related differences explaining effect size variance. The meta-analysis reveals specific developmental changes regarding prejudice toward different out-groups. Moreover, the results suggest differences between the development of in-group bias and out-group negativity. In general a need for longitudinal studies and a lack of research on prejudice in adolescents (compared to children) was identified.

#### The relationship between family communication pattern and child goal orientation

**Zare, Maryam** Dept. Educational Psychology, Shiraz University, Shiraz, Islamic Republic of Iran **Samani, Syamack** Educational psychology, Shiraz University, Shiraz, Islamic Republic of Iran

The aim of study was examining the prediction of goal orientation by family communication patterns. The sample group included 435 girls and boys students selected randomly from high schools of Shiraz. Goal orientation (Elliot, MacGregor, 2001) scale, and revised version of Koerner-Fitzpatrick Family Communication Patterns scale were used. Cronbach alpha coefficient and internal consistency showed acceptable reliability and validity of the instruments. Results of multiple regression revealed that conversation orientation was a positive predictor of Mastery approach and Performance approach and conformity orientation was a positive predictor of mastery avoidance, performance avoidance and performance approach.

#### The relationship between parental disciplinary practices and discipline, internalization, social competence and cognitive development problems of children

**Güterler, Derya** Bengi Semerci Enstitüsü, Istanbul, Turkey **Öktem, Ferhunde** Cocuk Ruh Sağlığı, Hacettepe Üniversitesi, Ankara, Turkey

In this study, disciplinary practices of Turkish parents and the relationship among these practices and some of personality features of children is examined. The data were collected from 606 Turkish families of 10-11 years old children via 2

questionnaires and Personality Inventory for Children. The results revealed that verbal methods were the most frequently used disciplinary techniques by both mothers and fathers in order to increase the positive and decrease the negative behaviors of children. Especially aggression used by fathers, removal of the reinforcers, neglecting both positive and negative behaviors were related with the problematic personality features of the children.

#### Motivation, hope, and optimism: Psychological resilience among undocumented immigrant youth in the United States

**Perez, William** Los Angeles, CA, USA **Ramos, Karina** Education, Claremont Graduate University, Los Angeles, CA, USA **Coronado, Heidi** Education, Claremont Graduate University, Claremont, CA, USA **Cortes, Richard** Education, Claremont Graduate University, Claremont, CA, USA

For many Latino youth, being an immigrant in the United States is not easy—particularly when they lack legal status. The purpose of this study is to explore the factors that influence academic success for undocumented immigrant students. One hundred and seventy two students participated in the study using snowball sampling methodology. Participants completed an online survey and an in-depth one hour interview followed. Understanding risk and resiliency among undocumented Latino immigrant adolescents will help educators, mental health professionals, and policy makers improve the quality of life of current and future generations of families.

#### FP-256: Personality and well-being

##### Attachment style as a predictor to depressive symptoms following in hassles in University students in China

**Zhu, Xiongzhao** Medical Psychological Research, Second Xiangya Hospital, Changsha, People's Republic of China **Abela, John R. Z.** McGill University, Department of Psychology, Montreal (QC), Canada **Tong, Xi** McGill University, Department of Psychology, Montreal (QC), Canada **Yao, Shuqiao** Medical Psychological Research, The Second Xiangya Hospital, Changsha, People's Republic of China Few studies have examined if attachment style would be associated with greater elevations in depressive symptoms following elevation. This study try to examine whether attachment style predict the development of depressive symptoms following increases in hassles in university students. At time1, 635 students (age 16-23 years) from Hunan, China, completed measures assessing depressive symptoms, hassles, attachment styles. Once a month for the next 6 months, participants completed measures assessing depressive symptoms and hassles. Results of hierarchical linear modeling analyses indicated that insecure attachment styles are associated with depressive symptoms, and low secure attachment styles were associated with elevations in depressive symptoms following elevation in hassles. There was a significant interaction between hassles and low secure attachment style.

##### The development of long-term orientation scale

**Zhang, Qi** Dept. of Psychology, Peking University, Beijing, People's Republic of China **Liu, Xiaoyan** Psychology, Peking University, Beijing, People's Republic of China **Yang, Qian** Psychology, Peking University, Beijing, People's Republic of China **Wang, Lei** Psychology, Peking University, Beijing, People's Republic of China **Lin, Han** Psychology, Peking University, Beijing, People's Republic of China **Zhang, Xingwei** Psychology, Peking University, Beijing, People's Republic of China **Xiao, Shanshan** Psychology, Peking University, Beijing, People's Republic of China

Long-Term Orientation (LTO) is a tendency towards future planning, influencing many life domains. By means of in-depth interview, brainstorming, and large sample testing, the current research developed a new LTO questionnaire, from a two-dimension perspective rather than from Hofstede and Bond's perspective of thrift and money saving. Significant positive correlations between LTO and criteria such as Initiativity, Self-Efficacy, Hope, and Resilience were observed, indicating the good criterion-related validity of the scale. The theoretical constructs of LTO would be further investigated and confirmed in the incoming research and the relationships of LTO with both life and organizational outcomes are discussed.

##### Coherent approach to the individual differences in subjective well-being: An investigation based on interactionistic research paradigm

**Horike, Kazuya** Humanities and Social Sciences, Iwate University, Iwate, Japan **Matsuoka, Kazuo** Humanities and Social Sciences, Iwate University, Morioka, Iwate, Japan **Oda, Nobuo** Humanities and Social Sciences, Iwate University, Morioka, Iwate, Japan

We investigated the 'coherent' patterns of individual differences (Mishel & Shoda, 1995) in subjective well-being (SWB) by analyzing the relationships among psychological, social, and emotional well-being (Horike, et al., 2006, AASP). In the present study, we asked 106 participants to rate their SWB on the interaction with the six role persons under the twelve situations. To find the coherent patterns of these ratings, cluster analysis was conducted. Three clusters were elicited. Then, we analyzed the relationships of some cognitive-affective variables (self esteem, optimism, BIS/BAS, and regulatory focus) in each cluster by SEM modeling. The results showed the relationships among these variables differed from these clusters.

##### Methodological problems if human potential phylogenesis research

**Podshyvalkina, Valentyna** General and social psychology, Odessa Mechnikov University, Odessa, Ukraine

In this paper the human potential phylogenesis is discussed. The author analyzes the intergenerational differences of attention characteristics in two ways: (1) between three age adults groups and (2) between generations of employees of the beginning of 80s and of the present days. It was shown that the highest indexes of some attention parameters (stability, distribution and concentration) have 30-39 years old employees in both generations. It was found the significant growth of modern aging people's attention indexes. The key goal is to show how the selection practice monitoring can stimulate new research of human potential phylogenesis.

##### The effect of gender and spirituality differences on SOC among united methodists

**Alexandre, Renata** Health and Human Performance, MTSU, Murfreesboro, TN, USA **Zengaro, Franco** Health and Human Performance, MTSU, Murfreesboro, TN, USA

Objectives: Using a salutogenesis framework, this study examined the relationship of gender, spirituality, and SOC to overall health. Methods: Participants were 200 United Methodists. Data were collected through questionnaires. One-way ANOVA and regression analyses were conducted to identify differences in gender, spirituality and SOC. Results: Previous studies have found conflicting results. We hypothesize that males will have a higher SOC. We also hypothesize that a high SOC will correlate with a high level of spirituality. Conclusion: SOC, gender, and spirituality are important in determining effective health care, empowering women, and assisting them in finding value in life's activities.

##### Sense of coherence, dysfunctional beliefs, automatic thoughts and self-esteem in predicting life satisfaction among Turkish university students

**Cecen, Ayse Rezan** Psychological Counselling, Cukurova University, Adana, Turkey

The purpose of this study to determine how university students' life satisfaction are predicted by their level of sense of coherence (SOC), dysfunctional beliefs, automatic thoughts and self esteem. The study was conducted on 385 university students. To analyse data pearson product moment correlations and regression analyses techniques were used. The findings of this study supported Antonovsky's theoretical frame. The results indicated that there are significant positive strong correlations between life satisfaction SOC, self esteem and, negative correlations between SOC and negative dysfunctional beliefs and negative automatic thoughts. The results of the study has also shown that all independent variables contributed statistically significant ( $p < .05$ ) in predicting life satisfaction.

#### FP-257: Memory illusion

##### The effect of perceptual similarity on false recognition

**Hutton, Samuel** Psychology, University of Sussex, Brighton, United Kingdom **Otero, Samantha** Psychology, University of Sussex, Brighton, United Kingdom **Weekes, Brendan** Psychology, University of Sussex, Brighton, United Kingdom

Participants show increased rates of false recognition to distractors that are semantically related to studied targets, but it is not clear whether this relationship holds for pictorial stimuli. We compared the effects of semantic and perceptual similarity on false recognition and found increased false recognition rates for pictures that were perceptually similar to the learned items. This effect was not observed with written words. A further experiment demonstrated a novel pupillary response to old items during recognition, and an attenuated response to falsely recognized distractors. We conclude that perceptual similarity is important in generating false recognition of pictorial stimuli.

##### Explaining false recognition in the Deese-Roediger-McDermott paradigm: Spreading, implicit, or global activation?

**Brandt, Martin** Lehrstuhl Psychologie III, Universität Mannheim, Mannheim, Germany **Buchner, Axel** Allgemeine Psychologie, Universität Düsseldorf, Düsseldorf, Germany **Schmid, Juliane** Allgemeine Psychologie, Universität Düsseldorf, Düsseldorf, Germany **Undorf, Monika** Lehrstuhl Psychologie III, Universität Düsseldorf, Mannheim, Germany

After studying semantically related words, a pronounced false memory effect for related but not studied words is usually observed. Although this effect is under active study, a commonly accepted theoretical explanation is still missing. According to spreading activation theories and implicit activation theories, the representations of critical lures are activated in the study phase, whereas in global activation accounts, critical lures elicit activation during retrieval. In a series of four experiments we test specific predictions of these theoretical accounts. We show that false recognition and false recall are dissociable and that false memories do not depend on pre-existing knowledge structures. Overall, the results favor the global activation account.



### Creating false recall and recognition of evolutionary reproduction-related non-presented lure words

**Abdollahi, Abdolhossein** Psychology, Islamic Azad University-Zarand, Kerman, Islamic Republic of Iran  
Two experiments investigated the possibility that high-testosterone adult males would falsely recall and recognize evolutionary reproduction-related lure words in a Deese-Roediger-McDermott list-learning paradigm. In Exp 1, 240 male participants with low and high levels of testosterone received 10 lists of semantically-associated evolutionary reproduction-related words all of which had a non-presented lure word. In Exp 2, another 250 participants with low and high levels of testosterone and under low and high arousal conditions received the same material as in Exp 1. Results indicated that in both experiments, high-testosterone participants falsely recalled and recognized higher levels of non-presented lure words.

### Influences of warning and time pressure on false recognition & further evidence for dual-processing theory

**Zhou, Chu** Department of Psychology, Fudan University, Shanghai, People's Republic of China  
**Jiang, Yuncheng** Department of Psychology, Fudan University, Shanghai, People's Republic of China  
**Yang, Zhiliang** Department of Psychology, East China Normal University, Shanghai, People's Republic of China

Adopting Deese-Roediger-McDermott paradigm, the mechanism of false recognition was investigated in a 2 (forewarning)  $\times$  2 (presentation time)  $\times$  2 (time pressure during recognition)  $\times$  3 (types of items) factorial design. ANOVA showed a significant main effect of forewarning, and interaction between item type and time pressure. Using signal detection theory (SDT), further analysis showed that participants had poorer discrimination under time pressure, which indicated that they have not enough time to make judgments. The SDT analysis also showed that participants used more strict response criterion when giving them forewarning. The results are deeply discussed under activation/monitoring theory.

### Age differences in the suppression of false memories

**Carneiro, Paula** Psicologia, Universidade Lusofona, Lisbon, Portugal

The DRM paradigm is one of the most powerful procedures to generate false memories by associative processes. It implies the presentation of lists of associates with the omission of their converging words, thus creating the illusion that those converging words were actually presented. The present study was concerned with the different processes used by adults and children to suppress false memories. The results of a set of experiments using this paradigm showed that although in general adults produced more false memories than children, they are also more able to use monitoring strategies to suppress them.

### Observation inflation: Your actions become mine

**Lindner, Isabel** FG Psychologie, AE Methodenl., Universität zu Köln, Köln, Germany  
**Echterhoff, Gerald** Sozialpsychologie, Universität Bielefeld, Bielefeld, Germany  
**Brand, Matthias** Physiologische Psychologie, Universität Bielefeld, Bielefeld, Germany  
**Hussy, Walter** FG Psychologie, AE Methodenl., Universität zu Köln, Köln, Germany

When people repeatedly imagine action performance, they often falsely remember having performed those actions - the imagination-inflation effect (IIE). Based on research showing that the observation of actions can create matching ("mirrored") representations in observers we examined whether a similar effect can be caused by observing someone else's actions. In an IIE-type experiment

(N=60), we found that increasing frequencies of either imagining or observing actions led to increasing false memories of self-performance, and this effect was stronger than in two control conditions. This first demonstration of "observation inflation" is discussed with reference to recent theories of simulation and mirror mechanisms.

### FP-258: Medical help seeking

#### Gender differences in subjective help seeking threshold and health care utilization: Is there an interrelation between both features?

**Glaesmer, Heide** Inst. für Medizin. Psychologie, Universität Leipzig, Leipzig, Germany  
**Brähler, Elmar** Medical Psychology, University of Leipzig, Leipzig, Germany  
**Martin, Alexandra** Clinical Psychology, University of Marburg, Marburg, Germany  
**Mewes, Ricarda** Clinical Psychology, University of Marburg, Marburg, Germany  
**Rief, Winfried** Clinical Psychology, University of Marburg, Marburg, Germany

Objectives: Women show an increased health care utilization (HCU) compared to men. We are analyzing the interaction of gender differences in HCU and subjective help seeking threshold (SHST). Methods: A German representative sample of 2511 subjects was face-to-face interviewed using a structured questionnaire. Results: Women show a significantly higher HCU within the last year (number of total/ specialist visits etc.), have a lower SHST and different patterns of complaints triggering help seeking behaviour. Both features are significantly influencing HCU. Conclusions: The meaning of both characteristics will be discussed as a possible reason of the increased HCU in women.

#### Overlapping relationships of rural and urban providers with their patients

**Johnson, Mark** Behav Health Research & Svcs, University of Alaska Anchorage, Anchorage, Alaska, USA  
**Brems, Christiane** Behav Health Research & Sv, University of Alaska Anchorage, Anchorage, Alaska, USA  
**Mills, Michael E.** Psychology, Loyola Marymount University, Los Angeles, California, USA  
**Warner, Teddy D.** School of Medicine, University of New Mexico, Albuquerque, New Mexico, USA  
**Roberts, Laura W.** Psychiatry & Behavior Medi, Medical College of Wisconsin, Milwaukee, Wisconsin, USA

Objectives: Our federally funded study is the first large-scale survey assessing degree to which multiple relationships arise for rural versus urban healthcare providers. Method: We conducted a survey with care providers in Alaska and New Mexico, analyzing responses from 1555 participants. Results: The smaller the community, the more often providers report significant challenges related to overlapping relationships, such as personal, social, and professional contacts with patients. Physical care providers engaged in multiple relationships more often than behavioral care providers. Conclusions: Avoiding multiple relationships in small communities is difficult and occurs at the expense of providers' ability to avoid social isolation.

#### Patient-doctor-interaction in rehabilitation: The impact of interaction quality on treatment results

**Dibbelt, Susanne** DRV Westfalen, Klinik Münsterland, Bad Rothenfelde, Germany  
**Schaidhammer, Monika** DRV Westfalen, Klinik Muensterland, Bad Rothenfelde, Germany  
**Greitemann, Bernhard** DRV Westfalen, Klinik Muensterland, Bad Rothenfelde, Germany  
**Fleischer, Christian** DRV Westfalen, Klinik Muensterland, Bad Rothenfelde, Germany  
Communication between doctor and patient has a key function in medical care. A new theory-based instrument (P.A.INT-Questionnaire) is presented by which 470 patients and 60 physicians rated the quality of their shared interaction due to affective, instrumental and participation level of interaction (Dibbelt, 2007). There is evidence that the quality of

interaction has influence on outcome parameters like pain, function, control and depressive symptoms.

#### Knowledge and attitude toward mental health problems as predictor of seeking professional psychological help

**Yaghubi, Hamid** Dept. of Clinical Psychology, Shahed University, Tehran, Islamic Republic of Iran  
**Melyani, Mahdiyeh** Dept. of Clinical Psychology, Shahed University, Tehran, Islamic Republic of Iran

Objectives: The purpose of this study was to investigate Iranian college students' attitudes toward seeking professional psychological help. Methods: The sample (N= 150) are divided to 3 groups: Normal Group = NG, Help Seeking Group= HSG and Non Help Seeking Group= NHSG and evaluated by the GHQ-28 and a researchers-made questionnaire as the Knowledge and Attitude Toward Mental Health Problem and Services Scale (KATMHPSS). Results: 1) NHSG significantly has more mental health problems than HSG. 2) NHSG has less knowledge and more negative attitude than two other groups. 3) HSG has more knowledge and positive attitude than NG. 4) The female students have more favourable attitudes than males.

#### The role of psychology in community heart failure services: Action research and to influence practice among health professionals

**McManus, Jim** Dept. of Public Health, Barking & Dagenham NHS PCT, Barking, United Kingdom

An action research programme implemented across East London sought to improve the use of psychological insights in clinical care for people with heart failure. This presentation will report on a multi-professional and multi-phase project to deliver organisational change and increased skills in health professionals, with the aim of preventing death and increasing quality of life in people with heart failure

#### The role of embarrassment in seeking medical help

**Fernandez de Ortega, Hilda** Psychology, UAEH, Mexico City, Mexico  
**Harris, Christine** Psychology, UCSD, La Jolla, USA  
**Reid, Lucy** Psychology, UNAM, Mexico City, Mexico  
**Guzman Saldana, Rebecca** Psychology, UAEH, Tlaxcala, Mexico

Given the importance of embarrassment in seeking medical help, and due to the lack of data about the nature of embarrassment in Hispanics/Latin populations, the specific goal this study was to examine the psychological impact that embarrassment in physician-patient has on a Latin sample. 1057 persons, females and males, completed the embarrassment questionnaire. Participant's answers were analyzed using a factor analysis with varimax rotation. Three factors with appropriate psychometric measures were revealed. First factor related with bodily embarrassment. The second factor accessing comfort with medical examinations, and the third factor indexing concern about negative social. Gender differences were found.

### FP-259: Group development

#### The potential influences of new members on their group life-course and performance

**Chang, Kirk** Dept. of Applied Psychology, University of Cumbria, Carlisle, Cumbria, United Kingdom  
Based on Social Dilemma and Group Socialization theories, this project investigated the influences of new members on group lifecycle and performance. Data were collected via virtual-reality experiments. Experiment One revealed that new members impeded group dynamic by reducing mutual trust and cooperation between members, leading to poorer group performance. Experiment Two discovered that members with higher group-commit-



ment were more likely to be accepted by the group, which encouraged other members to generate contributions to the group. Compared to the implementation of sanction policy (either reward or punishment), higher group-commitment was a better factor to predict group performance. Findings contributed to the theoretical framework of managerial theories.

#### How important is the time in teamwork: Longitudinal analysis of team members' interdependence and group potency on effectiveness

**Mena, Banesa** Dept. of Social Psychology, Complutense University, Madrid, Spain **Barrasa, Angel** SOCIAL PSYCHOLOGY, COMPLUTENSE UNIVERSITY, POZUELO DE ALARCON (MADRID), Spain **Gil, Francisco** SOCIAL PSYCHOLOGY, COMPLUTENSE UNIVERSITY, POZUELO DE ALARCON (MADRID), Spain

This paper analyzes the influence of time process in cooperative learning situations. A model on the time influence in the development of teamwork is hypothesized using a longitudinal design with 22 university work groups. Results show the different development of team members' interdependence and group potency throughout six months of work and the influence on team effectiveness (performance and satisfaction). Conclusions analyze differences between work groups at three different points of time (beginning, middle, and ending) and teamwork variables' effects during the process of collaborative work

#### When is it ok to watch over your own? Power, surveillance and social identity.

**O'Donnell, Aisling** School of Psychology, University of Exeter, Exeter, United Kingdom **Jetten, Jolanda** School of Psychology, University of Queensland, Brisbane, Australia **Ryan, Michelle** School of Psychology, University of Exeter, Exeter, United Kingdom

Previous research shows identification affects social influence. We propose that identification affects acceptance of surveillance. In two studies we demonstrate the positive relationship between identification and surveillance acceptance. Shared identity with the powerful led to perceptions of surveillance as ensuring safety, and reduced privacy-invasion, than when identity was non-shared. Paradoxically, when identity between the powerful and others is shared, imposing high surveillance backfires. In two studies, we found leaders using high surveillance while sharing identity with their followers were evaluated less positively and provoked fewer organisational citizenship behaviours and greater privacy infringement than when they used lower surveillance. These studies demonstrate that surveillance may undermine the perception that identity is shared.

#### Leadership in hospitals' teamwork: Task, relation and change-oriented leadership for different work-groups' areas

**Barrasa, Angel** Dept. of Social Psychology, Autònoma Univer. of Barcelona, Barcelona, Spain **Gil, Francisco** Dept. of Social Psychology, Complutense Univer. of Madrid, Madrid, Spain **Rodríguez-Medina, Sandra** Dept. of Social Psychology, Autònoma Univer. of Barcelona, Barcelona, Spain

In health care, teams have been seen usually as one way to redesign work and to provide better levels of quality in services. Leadership in these teams plays a key role on satisfaction and performance health care work groups' outcome. Sample comprises 406 participants, who are members of 89 healthcare teams at different public hospitals throughout Spain. Results provide parsimonious and meaningful conceptual framework of metacategories with greater explanatory power (task, relation, and change-oriented leadership). Using metacate-

gories will improve the prediction of leadership effectiveness or the explanation of why some leaders are more effective than others in a given situation.

#### Work values and team's satisfaction and commitment

**Porto, Juliana** Dept. of Psychology, Catholic University of Brazil, Aguas Claras, Brazil

This study aimed to investigate the impact of personal and perception of team's work values on team's satisfaction and commitment. 105 individuals responded a questionnaire. The intraclass correlation was not significant and analysis was done at the individual level. The results indicated Stability ( $r=0.266$ ;  $r=0.318$ ), Interpersonal relations ( $r=0.322$ ;  $r=0.375$ ) and Professional Fulfillment ( $r=0.280$ ;  $r=0.444$ ) values as positively correlated with team satisfaction and commitment. The perception of these values as the team's values also correlated positively, and perception of Prestige was negatively correlated. The multiple regression analysis yield similar results and models explained 47% and 49% for satisfaction and commitment, respectively.

#### Culturally diverse work groups as tightly-loosely coupled systems: The role of task and interpersonal social orientations in group performance

**Bachmann, Anne** Inst. für Psychologie, Universität zu Kiel, Kiel, Germany **Simon, Bernd** Institut für Psychologie, CAU zu Kiel, Kiel, Germany

Drawing on the concept of tightly-loosely coupled systems (a concept specifying the quality of interactions among system elements), social identity theory and diversity research we examined the effects on collective task performance of different combinations of task and interpersonal orientations (i.e. coupling) of the interacting group members. Our prediction was that groups composed of members with differing cultural values are most effective when a strong task orientation (tight coupling) is combined with a weak interpersonal orientation (loose coupling). Empirical analyses support our prediction. The utility of the TLCS-concept for social psychological research on diversity and group processes is discussed.

### FP-260: Multilingualism II

#### The resolution of anaphors across languages: Results from monolingual and bilingual speakers

**Hemforth, Barbara** LPNCog, Université René Descartes/CNRS, Boulogne-Billancourt, France **Scheepers, Christoph** Department of Psychology, University of Glasgow, Glasgow, United Kingdom **Pynte, Joël** CNRS/Université René Descartes, LPNCog, Boulogne Billancourt, France **Konieczny, Lars** Kognitionswissenschaft, Universität Freiburg, Freiburg, Germany

Sentences that are superficially highly similar across languages are not necessarily processed the same way. We will present a series of eyetracking experiments applying the visual world paradigm (auditory presentation of the linguistic material plus visual presentation of pictures), showing that anaphor resolution in sentences like "The postman met the street sweeper before he went home." is highly dependent on the language of the listener, in particular on the frequency of the possible interpretations in the language. We will moreover demonstrate considerable L1 to L2 interference effects for late but highly fluent bilingual French-German speakers.

#### Visual word recognition by trilinguals: Effects of orthographical, phonological and semantic overlaps in language decision tasks

**Lavaur, Jean-Marc** Dept. of Psychology, Université Montpellier 3, Montpellier, France **Aparicio, Xavier** Psychology, Université Montpellier 3, Montpellier, France **Vandenberg, Lisa** Dijkstra, Ton

This research study the role of orthographical, phonological and semantic features of French, English and Spanish translation equivalents during lexical access. We use translation equivalents ranked according to their overlap between languages. Several studies have shown that the representation of cognates in the mental lexicon is different of specific words. 24 trilinguals performed 3 language decision tasks, were french, English and Spanish were compared two by two. Results show that when the degree of overlap is strong between the languages, the response time is lower and there is more errors, according to a non-specific access to the mental lexicon.

#### Evidence for inhibitory processes in language switching?

**Philipp, Andrea M.** Inst. Verhaltenspsychologie, RWTH Aachen, Aachen, Germany

In many situations, people have to flexibly switch between languages. We examined whether such language switching goes along with the inhibition of currently irrelevant languages. To do so, we used a cued language-switching paradigm, in which subjects had to name digits or pictures in one of three languages (i.e., German, English, or French). We observed n-2 language repetition costs, indicating the persistence of inhibitory processes. Furthermore, we demonstrated that these inhibitory processes do not affect a specific stimulus or response set only. Rather, we conclude that the language-switching paradigm indeed provides evidence for the inhibition of a competing, irrelevant language.

#### Effects of semantic ambiguity in bilingual processing: Number, dominance and semantic similarity of translation equivalents

**Lavaur, Jean-Marc** Dept. of Psychology, Université Montpellier 3, Montpellier, France **Laxén, Jannika** Montpellier, France

In order to investigate the bilingual semantic memory, we tested words with one or several meanings, one or more than one translation (dominant or not) in two translation recognition experiments. Both number of meanings (which determine, in part, the semantic similarity between its multiple translations) and number of translations (and the relative dominance of the translations) increase the complexity of the representations of the words in the bilingual semantic network, and affect the speed of processing of the words. The interactions are discussed in respect of new tools in the study of the bilingual mental lexicon.

#### Languages on the screen: Effects of fluency and interlingual subtitles on film comprehension

**Lavaur, Jean-Marc** Dept. of Psychology, Université Montpellier 3, Montpellier, France **Bairstow, Dominique** Dept. of Psychology, Université Montpellier 3, Montpellier, France

The aim of this study is to analyse the role of interlingual subtitles on film comprehension. In two experimental conditions (with and without subtitles), the same sequence of a film was seen by bilinguals and monolinguals. Different aspects of comprehension were estimated (images, dialogues and understanding of the situation). The results show facilitatory effects of subtitling (in the native language) for the monolinguals and inhibitory effects for bilinguals. These effects can be extended to different aspects of the sequence. The interpretation of the results is given in the light of text and



movie frameworks of comprehension and bilingual information processing

## FP-261: Learning strategies II

### Learning strategies in the English as a second language (ESL) classroom

**Costa-Ferreira, Paula Alexandra Nunes da Carvoeira, Portugal**  
**Veiga Simão, Ana Margarida** Faculdade de Psicologia e C.E., Universidade de Lisboa, Lisboa, Portugal

The aim of this study is to examine and validate the efficiency of methodology that promotes self-regulation strategies in contextualized settings in the ESL classroom. To accomplish this goal, a case study was done on nineteen elementary school students who participated in behavioral, motivational and cognitive learning tasks in order to accomplish academic goals, such as self-regulatory competency and linguistic skill development. From the qualitative analysis obtained, results suggest that students improved their organizational and self-evaluation competencies as well as their linguistic performance. These findings serve to establish the importance of contextualized self-regulated learning settings in the ESL classroom.

### What effects do the integrated format and use of Chinese notes have on learning to read English comprehension as second language?

**Chung, Kevin K.H.** EPCL, Hong Kong Inst. of Education, Hong Kong, China, People's Republic of: Hong Kong SAR

This study investigated the effects of integrated format and the use of Chinese explanation notes on reading comprehension. One hundred of grade 7 Hong Kong students studied an integrated or a separate format with and without Chinese notes to improve performance in reading. The results showed that the integrated format improved reading comprehension. Learning was improved under the formats in which the English vocabulary was presented with the Chinese notes than it was under those with no notes. It was concluded that the integrated format and Chinese notes could be used in a way to facilitate learning to read comprehension.

### An experimental study on reciprocal teaching of seven-grade students' reading comprehension

**Yao, Jingjing** Psychology, Zhejiang Normal University, Jinhua, People's Republic of China

A mixed-design of three factorial experiment was adopted to assess the effects of reciprocal teaching on reading comprehension, comprehension monitoring and reading attitude of junior middle school students. Results: (1) There were significant differences in questioning, summarizing, reading comprehension monitoring and reading attitude between experimental groups and routine group in both expository and narrative passages. (2) There were significant differences in reading comprehension of expository passages between experimental groups and routine group, but no differences in reading comprehension of narrative passages between experimental groups and routine group except the group with reflection strategy.

### Adults' visualization strategies as a tool for text comprehension

**Koch, Babette** Department of Education, Saarland University, Saarbrücken, Germany  
**Soufert, Tina** Department of Education, Saarland University, Saarbrücken, Germany  
**Zander, Steffi** Department of Psychology, University of Göttingen, Göttingen, Germany  
**Brünken, Roland** Department of Education, Saarland University, Saarbrücken, Germany  
Text comprehension can be improved by working out global structures e.g. by constructing a picture. In two experiments we analyzed adults spontaneous picture construction for text comprehension: learners

had to make notes about texts either in any (neutral) or in pictorial (picture) form, and - based on these notes - to answer recall and comprehension questions afterwards. In both studies the picture group constructed significantly more pictures and revealed better learning outcomes. The second study additionally revealed a compensating effect of learners' spatial abilities. Thus, adults need instruction or enhanced abilities to use visualizations strategically for text comprehension.

### Making meaningful memory structure comparisons using bootstrap analysis of pathfinder networks

**Jennings, Kyle** Dept. of Psychology, University of California, Berkeley, USA

Understanding people's memory structures can unlock doors for cognitive, social, and educational psychologists. Pathfinder network scaling is a technique that extracts a network of links between concepts from proximity data, providing a close match to models of semantic memory. Unfortunately, Pathfinder networks lack confidence intervals or obvious points of comparison, making them unsuited to contrasting multiple populations. This research solves these problems by using nonparametric bootstrap analysis. It also presents simulation results that examine how literally the exact structures of the networks can be interpreted and compared. This work reintroduces a valuable tool into the psychologist's toolbox.

## Poster Session Wednesday Morning 09:00

### The role of family, relatives, and peers in Turkish late adolescents' religious socializations

**Özdikmenli Demir, Gözde** Psychology Department, Hacettepe University, Ankara, Turkey

As an initial phase of a qualitative research, religious socializations of Turkish University students were investigated. Fifty-one Muslim, middle-class, undergraduate women were asked to write down their childhood and adolescence experiences about their religious socializations with their mothers, fathers, relatives, and peers. For each of the agents, socialization types (e.g., modelling, instructions, narratives) were grouped and analyzed. It was found that mothers had a more significant role in their daughters' religious socializations compared to other agents. Among relatives grandparents had the most important role. Expanded sample will be used (50 men) in continuous part of this research and gender differences on religious socializations will be discussed.

### The concept of self in female psychiatric patients and its implications for mental health

**Abdul Wahab Khan, Rahmattullah Khan** Psychology, Int Islamic Univ Malaysia, Kuala Lumpur, Malaysia  
**Khan, Umeed Ali** Psychiatry, Int Islamic Univ Malaysia, Kuantan, Malaysia  
**Mat Zin, Nora** Psychiatry, Int Islamic Univ Malaysia, Kuantan, Malaysia  
**Ismail, Mohamed** Psychiatry, Int Islamic Univ Malaysia, Kuantan, Malaysia

The concept of self has always been an important theme in human sciences. We studied seven female psychiatric patients in whom the theme of self was significantly disturbed in their beliefs: that her physique being rudimentary at birth and subsequently completed with contributions from several male friends; chronological age beginning from the onset of puberty; the very survival of patient absolutely dependent on the male friend and complete forgiveness of her husband's infidelity for the sake of her own survival; and the clinging behavior to severely physically abusive boyfriends; and the delusion of being married to a hundred men and mothering several hundred children.

### The effect of leader member exchange (LMX) on organizational climate development

**Adibrad, Nastaran** Dept. of Counseling Psychology, Shahid Beheshti University, Tehran, Islamic Republic of Iran

In this research 60 employees who were selected randomly of University responded to Organizational Diagnosis Questionnaire which assesses seven dimensions of organizational climate (Purpose \_ Structure \_ Leadership \_ Rewards \_ Helpful \_ Attitude toward change) as a pre\_test. After 8 months all samples responded to ODO as post\_test. The management procedure between that time was Leader Member Exchange which refer to the managing style that every member was looked as an individual. The result of this research showed the kind of relationship between leader & memberships could change the Purpose \_ Structure \_ Leadership \_ Helpful \_ Attitude toward change of organizational climate.

### Consciousness: What do underwater part of iceberg hides?

**Agafonov, Andrey** Faculty of Psychology, Samara State University, Samara, Russia

Consciousness is not equal to conscious awareness. Conscious phenomena should include unconscious content of consciousness and its' mechanisms. Microgenesis of conscious awareness can be described as four consecutive steps: 1. Detection of all the incoming information. 2. Comparison of information. 3. Making decision about conscious awareness (or unawareness). 4. Execution of the decision made. At this stage the reflective mechanism joins. Function of the reflective mechanism is to include the information chosen for conscious awareness into content of consciousness that is actually aware. Execution of the decision generates effect of conscious awareness.

### Religiosity and marital adjustment

**Ahmadi, Khodabakhsh** Behavioral Sciences Research, Baqiyatallah Medical Sciences, Tehran, Islamic Republic of Iran  
**Nabipoor Ashrafi, S. Mahdi** Behavioral Sciences Research C, Baqiyatallah Medical Sciences, Tehran, Islamic Republic of Iran

This research intends to investigate the role of religiosity in marital adjustment. 660 couples from Tehran were studied. Information regarding religiosity and marital adjustment was collected using the researcher's prepared questionnaire, and ENRICH marital satisfaction scale. The results showed that couples who observe religious beliefs have higher rate of marital adjustment. Thus, there is a significant correlation between religiosity and marital adjustment. Regarding the relation between religiosity and the nine subscales of marital adjustment, Communication, Parenting and Religious Orientation account for the highest rate and Sexual Relationship accounts for the lowest rate. Thus, with the increase in religiosity, marital adjustment rate will increase and vice versa. It can be concluded that religiosity develops the grounds for marital commitment.

### The efficacy of school leadership teams in the context of the Chilean system for the quality assurance of school management

**Ahumada Figueroa, Luis Andres** Dept. of Psychology, PUCV, Viña del Mar, Chile  
**Montecinos Sanhueza, Carmen** Psychology, PUCV, Viña del Mar, Chile  
**Sisto Campos, Vicente** Psychology, PUCV, Viña del Mar, Chile

Objectives: Understand how school leadership teams manage their improvement efforts in the context of the System for the Quality Assurance of School Management that is being introduced in Chile's municipals schools. Methods: A questionnaire designed to assess school leadership team's efficacy hypothesized to be related to the capacity to manage improvement was administered to a

sample of 135 members of leadership teams from 53 publicly-funded elementary and high schools. Results: Factorial analysis yielded four factors: Trust, Competency, Team Learning, Team Inefficacy. Conclusions: Factors are related with school management in the areas of: Leadership, Curriculum, Resources, Organizational Climate and Results.

#### **HIV/AIDS in Africa: A paradigm shift in control methods**

**Aire, Justina E.** *Liberal Studies, St. George's University, St George's, Grenada*

The HIV/AIDS pandemic in Africa paints a grim picture. Sub-Saharan Africa is the epicentre where 71% of the world's infections reside. In 1989, almost two decades ago, WHO reported 150 people in South Africa afflicted with AIDS and 2,400 known to be infected with HIV. The numbers have continued to increase tremendously: year 2003, 40 million; today, about 60 million. This rise, despite years of seemingly aggressive control measures, is this researcher's concern. Discussed – Comparative demography and harboured African culture. Suggested – A paradigm shift towards Cognitive restructuring; debriefing faulty assumptions and filling the "void" with appropriate creative materials.

#### **Decision making processes for choosing package holidays to manage anticipated regrets and their resulting experience**

**Akiyama, Manabu** *Dept. of Psychology, Kobe Gakuin University, Kobe, Japan*

A survey for information requesters to travel agents in Japan was conducted to study how decision-making processes to choose overseas package holidays were linked with anticipated regrets before participating in those tours and with their resulting experience of those chosen tours after finishing them. Participants completed and sent questionnaires back before their departure of purchased package holidays and after their return. The result showed that plentiful experience of overseas tours easily made the chosen package holiday dominant over all the other ones, and that these experiences decreased anticipated regrets of the package holiday.

#### **Microadaptivity in complex learning situations: Integrating competence structures and problem spaces**

**Albert, Dietrich** *Inst. für Psychologie, Universität Graz, Graz, Austria*  
**Hockemeyer, Cord** *Department of Psychology, University of Graz, Graz, Austria*

**Kickmeier-Rust, Michael D.** *Department of Psychology, University of Graz, Graz, Austria*  
Adaptive (or personalised) systems have been a hot topic in e-Learning since a number of years. Such systems select learning objects or modify them before presentation according to the individual learner's needs and capabilities. In complex learning situations like simulations or learning games, however, we need adaptivity to the learner within the situation: microadaptivity. We present an approach integrating competence structures from knowledge space theory and problem spaces from the information-processing theory of human problem solving. The resulting system interprets each action of the learner with respect to his/her competence state and intervenes adaptively, e.g. by hinting, whenever appropriate.

#### **Categorization styles among Sudanese gifted and normal children**

**Ali, Abraham** *Islamia Unyversit, Khartoum, Sudan*  
This study investigates the categorization styles among gifted (N=200) and normal children (N=200) both males (50%) and females (50%) in primary education in Sudan by using chiu (1972) categorization task. The study shows the normal

children were more likely to categorize objects according to their relationships (holistic style) while gifted children more likely to categories objects according to their relationship (holistic) and similarities (analytic and abstract style). There is no significant difference between males and females in categorization style, however there is an interaction between abstract style and creativity among gifted children>

#### **The correlation between word familiarity and semantic word familiarity**

**Amano, Shigeaki** *Laboratories, NTT Communication Science, Kyoto, Japan*

To reveal the relationship between word familiarity and semantic word familiarity, their correlation was calculated for 9449 Japanese multiple-meaning words using a word-familiarity database (Amano & Kondo, 1999) and a semantic-word-familiarity database (Amano, & Kobayashi, in press). The correlation coefficient was 0.571 between word familiarity and the highest semantic word familiarity within each word, but it was 0.168 for the lowest semantic word familiarity. This significant difference indicates that word familiarity has a strong relationship to the most familiar word meaning but not to the least familiar word meaning.

#### **Decision making: When and to whom more information is harmful**

**Amit, Adi** *Jerusalem, Israel*  
**Levontin, Sagiv, Lilach** *School of Business Administration, The Hebrew University, Jerusalem, Israel*  
**Caprara, Vauclair, Gebauer,**

People make decisions more easily and confidently choosing from few (rather than many) alternative (Iyengar & Lepper, 2002). Two 2\*2 studies examined the effect of few/many attributes and few/many alternatives on choice overload. Findings indicate that in choosing complex products, it is attributes rather than alternatives that cause overload. In Study 1, participants (N=84) experienced more overload when choosing a digital-camera described by 9 (vs. 3) attributes, regardless of the number of alternatives. Study 2 (N=116, studying cell-phones) examined the moderating effect of Need for Cognitive-Closure. The attributes overload effect was replicated – yet only among those high on NFCC.

#### **The costs and benefits of working memory capacity on distraction and mental flexibility**

**Andres, Pilar** *School of Psychology, University of Plymouth, Plymouth, United Kingdom*  
**Packwood, Sonia** *School of Psychology, Université Laval, Quebec, Canada*  
**Parmentier, Fabrice** *School of Psychology, University of Plymouth, Plymouth, United Kingdom*  
**Barcelo, Francisco** *School of Psychology, Universitat Illes Balears, Palma de Mallorca, Spain*

The aim of this study was to investigate the hypothesis that the effect of WM capacity on distraction would depend on the status (i. e., relevant or irrelevant) of the extraneous information getting access to it. We tested this hypothesis by comparing low and high WM capacity participants on a Stroop task combining the classical interference condition with a switching condition. The results showed that participants with low WM capacity showed a greater switch cost and a smaller Stroop interference effect than participants with high WM. These results are important to understand the relationship between WM, attention and distraction.

#### **Anxiety in formal and informal caregivers**

**Aparicio, Marta** *Diferencial y Trabajo, Universidad Complutense, Madrid, Spain*  
**Sánchez-López, Pilar** *Diferencial y Trabajo, Universidad Complutense, Madrid, Spain*  
**Díaz Morales, Juan Francisco** *Diferencial y Trabajo, Universidad Complutense,*

*Madrid, Spain*  
**Fernández Martínez, Teresa** *Psicología, Residencia Villaverde-Alzheimer, Madrid, Spain*  
**Castellanos Vidal, Beatriz** *Psicología, Residencia Villaverde-Alzheimer, Madrid, Spain*  
**Tena Fontaneda, Angela** *Medicina, Residencia Villaverde-Alzheimer, Madrid, Spain*

Objectives To analyse how anxiety influences the physical health of formal and informal caregivers. Methods: Those taking part are 100 formal and informal caregivers working or with members of their family in old peoples homes. The instruments used were the ISRA (Miguel Tobal and Cano Vindel, 2002) to measure anxiety and a medical evaluation to analyse physical health. Several MANOVAS were performed to analyse differences between various health variables Results: Caregivers with the highest levels of anxiety are those with the worst measurements of physical health. Conclusions: Psychological treatment in the case of caregivers to control their anxiety would improve their physical health.

#### **Co-construction of affect regulating cognitions: The role of mother's attachment security**

**Apetroaia, Adela** *Psychology, SUNY Stony Brook, Stony Brook, USA*  
**Waters, Harriet** *Psychology, SUNY Stony Brook, Stony Brook, USA*

The co-construction hypothesis (Oppenheim & Waters, 1995) suggests that secure mothers are better at helping their children elaborate affective scripts. To test this hypothesis, 33 mothers and their 4-5 year old children discussed children's hypothetical reactions to six scenarios about positive or negative everyday events, some involving the mother, some not. These conversations were scored on three dimensions of co-construction: focusing on affective content, prompting continued elaboration, and supporting an explanatory framework. Mothers' co-construction skills were correlated with both the Attachment Script Assessment and the coherence scores of the Adult Attachment Interview, showing that secure mothers promoted better co-construction partnerships.

#### **Exploratory study of a possible intergenerational influence.**

**Aponte, Sandra** *CCIF, Inc., Guaynabo, Puerto Rico*  
**Altieri, Gladys** *Psy. D. Program, Carlos Albizu University, Guaynabo, Puerto Rico*  
**Rosabal-Silva, Ada** *Clinical Psychology, Centro de Crecimiento Gaviota, Guaynabo, Puerto Rico*

The objective was to compile information to support a possible intergenerational influence. The sample was eighteen grandparents of nine male prison inmates, who were examined with MMSE and then interviewed. Through use of genograms, results were organized and analyzed on a quantitative and qualitative basis. Quantitative results suggested that in families that existed physical or sexual abuse increased the probability of illness related to nervous central system in members of different generations. Qualitative results indicated a consistent pattern of actions with multiplying effects among their family tree. One characteristic of those families was the low incidence of Christian religious practices.

#### **Theories relating to factual findings by Japanese lay people**

**Arakawa, Ayumu** *Nagoya University, Nagoya, Japan*  
In 2009, Saibanin seido (the mixed jury system) will commence. An understanding of the processes used by lay juries will help professional judges, prosecutors, and defense attorneys to prepare deliberations or present evidence. We investigated how lay people consider factual findings using the "Saibanin game". In this game, participants discuss evidence in a manner similar to the fact-finding process undertaken in a real deliberation. The results showed that lay people use specific lay theories for decision-making. For example, lay people



consider an accused's irrational behavior in a prosecutor's claim as exculpatory.

#### Experimental induction of emotional states through music

**Arriaga Ferreira, Patricia** Dept. of Psychology, Universidade de Lusofona, Lisboa, Portugal **Franco, Ana** Psychology, UNIVERSIDADE LUSÓFONA, Lisboa, Portugal **Campos, Patricia** Psychology, UNIVERSIDADE LUSÓFONA, Lisboa, Portugal **Baptista, Américo** Psychology, UNIVERSIDADE LUSÓFONA, Lisboa, Portugal

The present study was conducted to validate musical stimuli for the induction of specific emotional states (sadness, happiness, fear, anger, and neutral). The design was a 10 X 2 mixed factorial with musical stimuli as a within-subjects factor and gender as the between-subjects. Fifty students (29 female and 21 male; 19-30 years) rated their emotions (discrete items to evaluate specific emotions and the self-assessment manikin scales to measure emotional dimensions) immediately after each of the selected musical clips. The stimuli were counterbalanced across participants. The results showed that stimuli used to induce fear, happiness, sadness, and neutral states were successful for both genders, suggesting that these musical clips may be useful for experimental studies.

#### Bimanual coordination in predicting one's own movements in motor control

**Asai, Tomohisa** The University of Tokyo, Tokyo, Japan **Tanno, Yoshihiko** Department of Cognitive and Be, The University of Tokyo, Tokyo, Japan

Previous studies have suggested that the left and right hands have different internal models for motor control. We examined motor movement accuracy, reaction time, and movement time in right-handed subjects during a three-dimensional motor control task. In the no-visual-feedback condition, right-hand movement had lower accuracy and shorter reaction time than did left-hand movement, whereas bimanual movement had the longest reaction time, but the best accuracy. This suggests that the two hands have different internal models. Thus, during bimanual movements, both models might be used, creating better planning, but requiring more computation time.

#### Managerial values in Turkey

**Askun, Duyosal** Degisim Egitim Danismanlik, Istanbul, Turkey **Guneser, Begum** Istanbul, Turkey **Askun Yildirim, Bige** Management & Organization, Marmara University, Istanbul, Turkey

The objective of this study was to explore the effects of certain organizational variables on the managerial values in Turkey. 1023 managers from 7 Turkish regions participated in the study and filled out the questionnaires. Findings were analyzed using regression and ANOVA analyses. A total of three managerial value factors emerged and it was found that organizational tenure had a positive effect on holding proper work values, the number of subordinates a manager is responsible of had a negative effect on holding the proper work values, and a positive effect on holding the improper work values. Educational level of a manager showed a difference in holding proper or improper work values.

#### Aggressive behavior of children as reflection of problem relations on family

**Avdeyenok, Lina** Borderline States Department, Mental Health Research Institut, Tomsk, Russia  
Some families seek for help regarding aggressive behavior in their children. Negative interpersonal relations occur when parents too narrowly imagine fulfillment of parental functions: to clothe, to feed, and to control the child, to punish for deeds. Condition required for establishment of firm spiritual contacts between parents and children is

a high level of information distribution to prevent a difficulty of communication between parents and children and exacerbation of interrelations, aggressive behavior, and verbal insult. Of importance is combination of knowledge of family member about each other with their mutual interest based on empathy, support, maximal benevolence, and delicacy.

#### Self-esteem and health-compromising behaviors among university students

**Büyükgöze Kavas, Ayşenur** Dept. Educational Sciences, Middle East Technical Univ., Ankara, Turkey  
The present study aims to investigate (a) the relationships between self-esteem and health-compromising behaviors related to use of cigarette, alcohol and drug and (b) the gender differences on self-esteem and health compromising behaviors among a group of university students (124 males, 119 females) using a cross-sectional survey design. Participants completed Rosenberg Self-Esteem Scale and a self-report questionnaire. The findings of the study revealed that self-esteem was negatively associated with alcohol and illicit drug use. In addition, cigarette and drug usage were more prevalent among males than females. However, results did not support any gender difference on the self-esteem scale.

#### Specific effects of attachment to father on 3-to-5-year-old children's adjustment to school

**Bacro, Fabien** Nantes, France **Florin, Agnès** Psychology, Université de Nantes, Nantes, France  
The purpose of this study is to know, in concordance with studies on fathers' role in child development, if attachment to father has specific effects on 3-to-5-year-old children's adjustment to school. Attachment quality to mother and to father was evaluated with a french adaptation of the Attachment Story Completion Task (Bretherton et al., 1990) and school adjustment with a teacher questionnaire (Florin et al., 2002). Results of multiple regression analyses show that if children's adjustment to scholastic rhythm and activities is simultaneously linked with attachment to mother and to father, some aspects of school adjustment are specifically linked with attachment to mother and to father.

#### The role of parents' religious orientation in the formation of their children's religious orientation

**Bahrami Ehsan, Hadi** Psychology and Education, University of Tehran, Tehran, Islamic Republic of Iran **Pournaghash-Tehrani, Said** Psychology and Education, University of Tehran, Tehran, Islamic Republic of Iran **Rezazadeh, Reza** Psychology and Education, University of Tehran, Tehran, Islamic Republic of Iran **Bahrami Ehsan, zainab** Psychology and Education, University of Tehran, Tehran, Islamic Republic of Iran

In order to determine the relationship between parental religious orientation and their children's, a group of 40 people including father, mother and children was selected. A questionnaire designed by Bahrami Ehsan(2006) to specifically determine Islamic religious orientation was administered to the subjects. The results of the present study showed that there was a relationship between parent's religious orientation and their children's though such relationship included different results and aspects. Specifically, our results revealed that there was no significant relationship between parent's and their children's religiosity; however, there was a significant negative relationship between parent's religiosity and children's subscale of disorganized religiosity. Also, the subscale of parent's religiosity was negatively correlated with the level of hedonism in children.

#### The role of religious orientation on child rearing styles

**Bahrami Ehsan, Hadi** Psychology and Education, University of Tehran, Tehran, Islamic Republic of Iran **Pournaghash Tehrani, Saed** Psychology and Education, University of Tehran, Tehran, Islamic Republic of Iran **Gholami Galise, Somaye** Psychology and Education, University of Tehran, Tehran, Islamic Republic of Iran

To determine the role of religious orientation in child rearing styles 180 couples, using a random clustering sample design, were chosen and were administered a revised form of Islamic religious orientation scale (Bahrami-Ehsan, 2001) and child rearing styles questionnaire pertinent to religious orientation and child rearing style. Using descriptive statistics and discriminate analysis, correlation and regression analysis, our results showed that parents with higher religious tendencies resorted to authoritative style of child rearing whereas couples with lower religious tendency adopted authoritarian and permissive child rearing style. These results indicated that religious orientation has a significant effect on the child rearing style.

#### Psychometric properties and construct validity of the Parents Preference Test (PPT®) in the Italian context

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Objectives. The principal aim of the study was to examine the psychometric properties and construct validity of the PPT in the Italian context. The instrument is a picture-based multiple-choice test with images of parent-child interactions from everyday family activities and it measures the following dimensions: Energy, Focus of Attention, Experiential Modality and Regulation Style. Subjects. The sample was composed of 100 Italian families with children between 5 and 12 years old. Results. PPT showed a good reliability and a convergent validity with different measures of family functioning. Results encourage the use of this instrument in studies concerned with the family.

#### Psychological counseling and health complaints

**Balaceanu, Gheorghe** Occupational medicine, Institute of Public Health, Lasi, Romania  
Objectives. The influence of psychological counseling on frequency decrease of health complaints. Methods. 151 employees were asked about the frequently felt health complaints, before and after receiving counselings concerning both their psychological (temperamental, motivational and of stress resistance) and psychosocial peculiarities, and significant relationships with health complaints. Results. The comparison of frequency from the start with those observed after 5 years, put in evidence a significant diminution in frequency for a great number of health complaints. Conclusions. The psychological counseling concerning the influence of psychosocial risk factors and psychological peculiarities, can contribute to a significant diminution in frequency of individual health complaints.

#### Inhibition of return: A "depth-blind" mechanism?

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**Marotta, Andrea** Dipartimento di Psicologia,  
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Four experiments investigated the Inhibition Of Return (IOR), in the three-dimensional and in the two-dimensional space. The first two experiments compared detection and discrimination tasks in eliciting IOR effects in a three-dimensional empty space. Two other experiments assessed the IOR effects in a scene that included two sets of objects (parallelepipeds extending in depth and parallelepipeds located at different depths, extending in the horizontal plane). In each experiment we compared the IOR effects in 2D (both with and without depth clues) and stereoscopic 3D conditions. Results showed IOR in 3D space, confirming that it is not a depth-blind mechanism.

#### Identity in contemporary scenario and its interaction with art

**Barbosa, Cristina Monteiro** Dept. de Psicometria, UFRJ, Rio de Janeiro, Brazil

Objectives: Identify the different forms of art, aspects of the human soul that are inscribed in our culture to express subjectivity. Method: To study each historical time with signs in order to produce art. Results: Art is a cultural heritage which is constituted by its unique production in the creative act. Restrictive forces imposed to the social norm characterize different ages. Conclusions: Traditions are at the heart of questionings and transgressions carried out by radical movements towards a new order in the modern period. Subversive styles of contemporary art point to the search for an identity in modern times

#### The impact of a mindfulness training program on managers' stages of consciousness and leadership behaviors

**Baron, Charles** Management, Laval University, Quebec City, Canada  
**Cayer, Mario** Management, Laval University, Quebec City, Canada

This study examined the impact of a mindfulness training program on managers' stages of consciousness and leadership behaviors. The stage of consciousness (Rooke & Torbert, 2005) of 25 managers was evaluated at the beginning and end of a one-year program. A multi-source feedback questionnaire (Cacioppe & Albrecht, 2000) filled out by eight collaborating observers served to evaluate behavioral changes. Compared to the wait-list control group, the experimental group experienced a greater increase in their stage of consciousness (toward the postconventional level) and their collaborating observers reported a greater increase in their visioning, directing and brokering behaviors.

#### Homogeneity and trends of subordinates' perceptions for leadership in work groups under different team members employment conditions

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**Hernandez-Garcia, Laura** Dept. of Social Psychology, Autònoma Univer. of Barcelona, Barcelona, Spain

This study tested subordinates' perceptions of their team leaders at group level. Different types of teamwork specific data (N= 239 teams, 1099 individuals) were analyzed testing intragroup leadership perceptions homogeneity by rwg(J), ICC(2), and ADM(J). Results provided evidence of aggregate data inside work groups supporting similar trends of leadership perceptions for team members with similar employment conditions. Conclusions indicate that underlying conditions like temporality or job insecurity are mediating the team members' leadership perceptions creating extreme views: higher signification for leadership tasks and idealiz-

ing leaders or lower importance and disapproving them.

#### Development of objective conscientiousness tasks for student selection

**Bath, Anja** Inst. für Sozialwissenschaften, Helmut-Schmidt-Universität, Hamburg, Germany  
**Lange, Sebastian** Social Science, Helmut-Schmidt-Universität, Hamburg, Germany  
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**Beauducel, André** Social Science, Helmut-Schmidt-Universität, Hamburg, Germany

Results of a study requirement analysis at the University of the Federal Armed Forces showed that behavior based conscientiousness is an important predictor of success. New objective paper-pencil-tasks, which measure the degree of systematic conscientious work behavior, were developed. A sample of 158 students aged between 20 and 30 years was examined. First analyses yield significant correlations up to  $r = -.24$  between task performance and intermediate exam. The corresponding structural equation model fitted well. Further results of task development, standardization, and validation are presented.

#### Drivers' risk assessment under critical driving conditions

**Bellet, Thierry** LESCOT, INRETS, Bron, France  
**Banet, Aurélie** LESCOT, INRETS, Bron, France  
**Bonnard, Arnaud** LESCOT, INRETS, Bron, France  
**Deleurence, Philippe** LESCOT, INRETS, Bron, France  
**Goupil, Céline** LESCOT, INRETS, Bron, France

This research aims at studying drivers' risk assessment cognitive processes. The method consists in combining naturalistic observations while driving, with laboratory experiments. Indeed, a set of critical situations was collected and filmed during naturalistic observations. Then, laboratory experiments were carried out by using these video sequences, and new groups of drivers had to assess their criticality level (from 0 to 100). The presentation will be focused on Laboratory experiment results: 10 car drivers and 10 motorcyclists participated to this experiment, and significant differences have been observed between the 2 groups, concerning risk awareness and the criticality assessment of driving situations.

#### Scaffolding metacognitive processes in a research environment for web based resources to improve learning quality

**Benz, Bastian** Frithjof Inst. für Psychologie, Techn. Universität Darmstadt, Darmstadt, Germany

This study investigated the effects of integrating scaffolds, which aimed at fostering metacognitive processes, in a computer-based research environment. It was hypothesized that scaffolding goal setting, planning, monitoring, (process-)regulation, reflection and modification would enhance the quality of the learning outcome. A closed hypertext environment was searched on a historical period by 24 knowledge workers for about 30 minutes. The experimental group was supported by metacognitive scaffolds. Acquired cognitive models and persisted resources were examined. As hypothesized the experimental group outperformed the control group. Additionally log files, questionnaires and interviews were used to evaluate the effectiveness of single scaffolds.

#### The effect of teaching of Islamic instructions on marital satisfaction of couples

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**Younesi, Jalal** clinical Psychology, university of social welfare, Tehran, Islamic Republic of Iran

This study was carried out based on Islamic approach for improvement of the relationships of

couples. Many instructions were collected from Islamic sources which to be related to criteria of healthy family, satisfactory relationship and behavior. There are many comments from prophet Mohammad (S) and his followers about these criteria. The techniques of intervention were extracted from the comments. 24 married couples as volunteers were involved in this experimental research. They were divided randomly into two – experimental and control groups. Using Enrich marital satisfaction scales in pretest and posttest stages, the subjects were trained by the techniques. The results showed that the use of Islamic instructions to be able to improve their marital relations and to increase the marital satisfaction.

#### Change blindness and mnesic processes

**Berberian, Bruno** Psychology, SRSC (ULB), Bruxelles, Belgium

Empirical studies have proven our inability to detect change under a variety of conditions. However, this change blindness does not seem to bias the behavioural adaptations since these adaptations may occur in the absence of conscious awareness. This unconscious change detection also seems to be present in recall tasks (Berberian & Giraudo, in preparation). In this context, we propose to investigate the relation between information structuration in memory and conscious experience of perceptual change by using a gradual flicker paradigm where subjects were asked to memorize and reproduce stimuli which present gradual change. Results and discussion are in preparation.

#### Effective management by objectives at team leader level in different European countries: The relation between motivational requirements and management related requirements

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**Gidion, Gerd** Institut f. Berufspädagogik, University of Karlsruhe, Karlsruhe, Germany  
**Font, Antoni** Basic Psychology, Autònoma Univer. of Barcelona, Bellaterra, Spain

Objectives: Compare the relationship between requirements for Management by Objectives (MbO) (leadership style, autonomy) and motivational requirements (specific, moderate goals, participation, feedback) of team leaders in different countries. Method: Hypothesis: Relationship between MbO and motivational requirements in the countries. Self-established goals will facilitate motivation. 181 team leaders of Germany, United Kingdom, Italy and Spain participated in the study. The employees valued, using questionnaires, the MbO of their superior. Results: Relationship between requirements for MbO and motivational requirements was observed in all participating countries. Conclusion: In some countries increased the participation of group members in goal setting when their autonomy level increased. Goal achievement was perceived as easier.

#### Reliability and validity of the Italian version of the Anxiety Sensitivity Index

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**Pennato, Tiziana** Psychiatry, University of Pisa, Pisa, Italy  
**Berrocchi, Carmen** Psychiatry, University of Pisa, Pisa, Italy  
**Guazzelli, Mario** Psychiatry, University of Pisa, Pisa, Italy

Objective: to study the psychometric properties of the adaptation into Italian of the Anxiety Sensitivity Index (ASI; Peterson and Reiss, 1987). Methods: participants included 177 undergraduate students and non-student adults. In addition to the ASI, subjects were requested to fill up questionnaires measuring constructs conceptually related with the scale. Statistical analyses for testing the factorial validity, internal consistency, and concurrent validity of the questionnaire were carried out. Results: the ASI is a reliable and valid assessment tool for measuring Anxiety Sensitivity. Conclusion: the



Italian ASI is a valid instrument for measuring Anxiety Sensitivity in population-based studies with Italian samples.

#### Relationship between leadership style and attitude toward working groups

**Berrios Martos, Pilar** Dept. of Social Psychology, Universidad de Jaén, Jaén, Spain **Lopez Zafra, Esther** Dept. of Social Psychology, Universidad de Jaén, Jaén, Spain **Aguilar Luzón, María del Carmen** Social Psychology, Universidad de Jaén, Jaén, Spain **Augusto, Jose Maria** Social Psychology, Universidad de Jaén, Jaén, Spain

We wanted to analyze the possible relationship between Leadership Style and Attitude towards working groups. Our sample was compound by 129 individuals (29 men and 100 women), with ages from 19 to 43 años. Our results show that individuals with a transformational leadership style have a positive attitude towards working in groups, whereas laissez-faire style individuals have a negative attitude towards working in groups.

#### Australian children's learning competence at age 4: The nature and impact of parent involvement in children's education

**Berthelsen, Donna** Centre of Learning Innovation, Qld University of Technology, Brisbane, Australia **Walker, Susan** Centre of Learning Innovation, Qld University of Technology, Brisbane, Australia **Dunbar, Stephanie** Centre of Learning Innovation, Qld University of Technology, Brisbane, Australia

This study investigated the relationship between parental involvement and child outcomes in the early years of school. The analyses use data from The Longitudinal Study of Australian children (LSAC). The analyses use data for 4464 children in the Kindergarten Cohort. The mean age of the children was 6.8 years. Regression analyses, findings support the hypothesized linkages between parent engagement and more positive child outcomes. Outcomes were moderated by family demographic factors, including mothers' education. Implications of the findings focuses on how schools can support involvement, in particular, the extent to which such efforts successfully engage less involved parents

#### Using music therapy in an intervention to enhance parent-child interaction and the social-emotional functioning of young children

**Berthelsen, Donna** Centre of Learning Innovation, Qld University of Technology, Brisbane, Australia **Nicholson, Jan** Royal Children's Hospital, Murdoch Childrens Research Ins, Melbourne, Australia **Abad, Vicky** Sing and Grow Project, Playgroup Queensland, Brisbane, Australia **Williams, Kate** Sing and Grow Project, Playgroup Queensland, Brisbane, Australia **Hart, Carolyn** Sing and Grow Project, Playgroup Queensland, Brisbane, Australia **Bradley, Julie** Centre of Learning Innovation, Qld University of Technology, Brisbane, Australia **Dunbar, Stephanie** Centre of Learning Innovation, Qld University of Technology, Brisbane, Australia

This research analyses the impact of a music therapy program on parents' interactional behaviours. The program is a short-term group parenting intervention (10 weeks) to support marginalized parents and their children aged 0-3 years. Analyses are presented for 560 parental participants. Significant improvements were observed from pre to post evaluation in parental sensitivity, engagement with the child, and acceptance of the child. These effects are attributed to the engaging nature of the music intervention and the increased confidence that parents gained through regular participation. The study provides preliminary evidence for the value of music therapy as a parenting intervention.

#### The third sector in Brazil: Struggles and progresses of program evaluation methods

**Berthoud, Cristiana** Psychology, University of Taubate, Tremembe - SP, Brazil

The Third Sector has been playing an important role in Latin America in general and particularly in Brazil by developing programs designed to ease the profound social problems related to poverty and urban violence. As the organizations evolve, the need for showing results and impacts promoted by the social interventions has grown as well. Psychology can be of great help by developing research evaluation capable of measuring personal changes and group empowerment. The author will present the results of several evaluations conducted in slums of two major cities in Brazil and will discuss the use of quantitative and qualitative methods.

#### Discounting of sequences: Form of the process

**Bialaszek, Wojciech** Dept. of Psychology, University of Warsaw, Warsaw, Poland

The experiment extends traditional research on temporal discounting of single rewards to sequences of rewards. Four models of time discounting were tested by fitting them with nonlinear regression to the sets of indifference points. Analysis of group behavior demonstrated that certain models describe data differently according to delay between rewards. At group level when the delays between rewards are relatively short or very large hyperbolic models fitted the data better than exponential, but at individual level this result is only significant in case of longest delay. Moreover there are no differences when delays between rewards are relatively intermediate.

#### Cognitive load decreases distractor interference in the Simon task

**Biebl, Rupert** Inst. für Psychologie I, Universität Nürnberg-Erlangen, Erlangen, Germany **Wühr, Peter** Psychologie und Sport, Institut für Psychologie I, Erlangen, Germany

The load theory of selective attention and cognitive control claims that cognitive load increases the impact of irrelevant stimulation on performance. We investigated the impact of cognitive load on the Simon effect, which denotes faster responses to spatially corresponding than to noncorresponding stimuli, even when stimulus position is irrelevant. The results from two experiments showed that increasing cognitive load (i.e. letters) decreases the Simon effect, contrary to the predictions of the load theory. The results suggest that the effects of cognitive load on performance depend upon whether the participants select between features of the same object or between different objects.

#### A metacognitive approach to assess anosognosia in Alzheimer type dementia

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Objectives: To explore unawareness of cognitive deficits in Alzheimer's disease (AD) by using an experimental metacognition paradigm. Methods: 48 patients with AD and 21 control participants were asked to predict their own performance at the Dementia Rating Scale (DRS). For each sub-score, the discrepancy between their subjective ratings and the effective test performance was considered. Results: Patients with AD over-estimate their performance in all dimensions of the DRS. However, they show different levels of anosognosia according to the cognitive function. Conclusions:

AD patients shows metacognitive impairments. The results support the assumption that anosognosia is not an unitary concept.

#### Visual field does not impact the influence of perception on action

**Binsted, Gordon** Health and Social Development, University of British Columbia, Kelowna, Canada **Heath, Matthew** School of Kinesiology, University of Western Ontario, London, Canada

Recent examinations have demonstrated a movement execution advantage in the lower visual field (LVF) consistent with a preferential field association to dorsal extra-striate cortex. Two experiments examined the corollary prediction that LVF should show reduced susceptibility to context effects and be less able to access memorial representations of the visual environment. Reaching movements were made after 1-10s delays and to illusory contexts. While a LVF advantage was observed (movement time, error), action was equally influenced by illusory context and memorial delay across fields. These results suggest that field associated performance effects, while present, are not underpinned by a preferential dorsal/ventral stream involvement.

#### HIV Risk Behavior among vocational school students in St-Petersburg, Russia

**Bogolyubova, Olga** St. Petersburg, Russia

The purpose of this study was to investigate HIV risk behaviors of youths attending vocational schools in St-Petersburg. The sample consisted of 310 men and women aged 18 – 25, part of the participants were raised in orphanages. Data analyses included frequencies, t tests, chi-squares and correlation analyses. Results: only 31.2% youths reported consistent condom use and 12.9% reported intravenous drug use. Significant correlations were found between various types of risk behavior. Certain differences in risk behavior were found between participants from orphanages vs family background. Further research is necessary to assess HIV risks among young Russians from socially vulnerable groups.

#### Distributed leadership and team performance in a business strategy simulation

**Boies, Kathleen** John Molson Sch. of Business, Concordia University, Montreal, Canada **Lvina, Elena** John Molson Sch. of Business, Concordia University, Montreal, Canada **Martens, Martin L.** John Molson Sch. of Business, Concordia University, Montreal, Canada

This study aimed to examine the relations between distributed leadership in teams, team processes, and performance. Forty-nine student teams participating in a business simulation game rated their team potency, trust, and team leadership styles. Team potency and trust were positively related to team transformational leadership and negatively related to passive avoidant leadership, but only the latter was significantly negatively related to performance in the business simulation game. These results suggest that teams might not always benefit from transformational leadership qualities, but that "negative" leadership styles might be detrimental to performance and to the trust and confidence in the team.

#### Effect of GPS sounds on driver's attention (Part 2)

**Boujon, Christophe** Dept. of Psychology, University of Angers, Angers, France **Guillemé, Julien** psychology, University of Angers, Angers, France

We formalized attentional model FIDI including four mental states of drivers: Focalisation, Inhibition, Distraction and Inattention (Boujon, Lemerrier, Quaireau, 2007). We suppose that distraction effect is less important when sounds are synchronous with visual cue rather than visual target, especially in the ipsilateral localization. Distraction was manipulated by lateralized presentation of

realistic sounds extracting from interior of vehicle (GPS vocal commands) while 30 subjects realized a visual cueing task, the Attention Network Test (Fan, Bruce, McCandliss, Sommer, Raz & Posner, 2002). Anova's analysis confirms our hypothesis. These experimental results are particularly fruitful when drivers utilize GPS.

#### Effect of road traffic sounds on driver's attention (Part 1)

**Boujon, Christophe** Dept. of Psychology, University of Angers, Angers, France **Fuch, Julien** psychology, University of Angers, Angers, France **Gaillard, Pascal** Linguistic, University of Toulouse, Toulouse, France We formalized model FIDI including four mental attentional states of driver: Focalisation, Inhibition, Distraction and Inattention (Boujon, Lemerrier, Quaireau, 2007). We suppose that distraction effect is more important when sounds are synchronous with visual targets rather than cues, especially in the orienting condition. Distraction was manipulated by binaural presentation of realistic sounds extracting from road traffic (fireman's truck siren, bicycle's bell, etc.) while 26 subjects realized a visual cueing task, the Attention Network Test (Fan, Bruce, McCandliss, Sommer, Raz & Posner, 2002). Anova's analysis confirms longer reaction times in this condition. These experimental results will be replicated in car driving simulation.

#### A psychometric evaluation of a measure of different prayer types among Irish adults

**Breslin, Michael J.** School of Psychology, University of Ulster at Magee, Londonderry, United Kingdom **Lewis, Christopher Alan** School of Psychology, University of Ulster at Magee, Londonderry, United Kingdom **Shevlin, Mark** School of Psychology, University of Ulster at Magee, Londonderry, United Kingdom

Objectives: Recently there has been an increased interest in the use of prayer within empirical research. This study provided a factor analytical evaluation of the Measure of Prayer Type (Poloma & Pendleton, 1991), which measures four different types of prayer. Methods: A sample of 518 Irish respondents completed the Measure of Prayer Type. Results: Three alternative confirmatory factor analytic models were specified and tested. The correlated four-factor model suggested by Poloma and Pendleton (1991) was found to be an acceptable description of the data, and better than the single-factor model and second-order model. Conclusions: Implications of the results were discussed.

#### The influence of social support in parental practices in psychosocial risk contexts

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Families experiencing negative psychosocial conditions receive many forms of social support. But it is important to know to what extent is social support effective in promoting adequate parenting in at-risk families. Participants were obtained from a sample of 1150 mothers attending a parenting program. The results of ANOVA analyses indicate that the formal sources of support have a negative effect in at-risk families; they were associated to increases in permissive practices and decreases in inductive practices. In sum, formal support providers should revise the way they convey their help, because they are affecting negatively to those families that need them more.

#### Effects of time pressure and motivation on the use of the priority heuristic

**Cüpper, Lutz** Inst. Experiment. Psychologie, Universität Mannheim, Mannheim, Germany **Undorf, Monika** Experimental Psychology, University of Mannheim, Mannheim, Germany Brandstätter, Gigerenzer, and Hertwig (2006) proposed the priority heuristic to account for violations of expected utility theory. However, evidence that people use the priority heuristic for their decisions is rare. In our experiment, participants chose repeatedly between pairs of lotteries that differed in their expected value. The priority heuristic predicted choice behavior more accurately than expected value. Additionally, time pressure increased the number of choices in favor of the priority heuristic. High motivation decreased the number of optimal choices. Although the first findings lend support to the priority heuristic, the last one needs further clarification.

#### Youth gang: COnccept of masculinity and their vulnerability to HIV and Aids

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Youth gangs in the Philippines have a critically high regard towards "pagkalalaki" or masculinity. The Study It aims to identify the knowledge, attitudes, and behaviors, and practices among youth male gang members with regards to masculinity, gender, sex, and STIs including HIV and AIDS. Specifically, this study aims to know and recognize the perceptions of young male gang members toward masculinity; identify attitudes and behaviors among gang members which directly expose them to vulnerability and risk of acquiring STI, HIV and AIDS; This study was employs a multi-stage sampling.

#### Age-of-Acquisition norms for a large set of Portuguese nouns and their relation with other psycholinguistic variables

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We collected Age-of-Acquisition estimates for a set of 916 frequent Portuguese nouns that vary in orthographic length (1 to 5 orthographic syllables). The words were divided in 11 different paper questionnaires, using a nine-point scale as first proposed by Carroll and White (1973). A total of 491 under-graduate students participated in this study (Mean Age = 20,47; SD= 2,98). Correlations between AOA and other psycholinguistic variables were analyzed. The results show that words learnt earlier in life tend to be shorter in phonological and orthographic length. They are also more frequent and have more dense phonological and orthographic neighbourhoods.

#### Child Sexual Abuse characteristics, attributions of responsibility and disclosure

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The aim of the study was to analyse the relation of CSA characteristics and attribution of responsibility for the abuse with the occurrence of disclosure. Our sample comprised 91 female College students from the University of Granada, who had suffered CSA before the age of 13. Regression analyses showed that the disclosure of the abuse in a public way was related to the relationship with the aggressor and blaming the family for the abuse, while the child telling to someone about the abuse was related also to its duration. We can conclude that the disclosure is related to the CSA characteristics and attributions of responsibility for the abuse.

#### Elementary development of perfectionism scale for Chinese college student

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By analyzing and sorting answers to the open questionnaire, the scale including 66 items were compiled. Then exploratory and confirmatory factor analysis was applied to the data. The Scale consisted of 42 items, six subscales: Perfect Expectation, Personal Standards, Concerns with Mistakes, Organization, Introspection, Parents' Expectation and Control. The six factors explain 55.71% of the variance with loading between 0.49~0.85, and had internal consistencies with split-half reliabilities 0.77~0.86, Cronbach's alphas 0.78~0.92, and test-retest reliabilities of 0.77~0.91?  $p < 0.01$ ?. The Scale for Chinese Students has satisfying validities and reliabilities.

#### A development research about the influence of endogenous and exogenous attention on number processing

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The study was conducted to investigate the stages and the distance effect of number processing with equipment of EYELINK II. Participants were children and adults in China. The findings were as follows: Perceptual representation stage on number processing was significant influenced by the exogenous cue validity rather than the endogenous cue validity; Both of two attention condition, the influence of subjects type on perceptual representation stage was significantly different; The ability of reaction execution on number processing had no significant difference between the 9 years old children and the adults; The distance effect was occurred in perceptual representation stage, and was independent of the motor execution stage.

#### Are technological tools efficient for training and update on domestic violence?

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Due to the increasing levels of domestic violence in Mexico, the need of personnel for intervention and prevention of this problem, and the increasing use of computer-based teaching modes for professional competencies formation, several tutorials have been developed to support the teaching of design and application of intervention programs for domestic violence. The presented results were obtained from students trained by VR and face-to-face training, from three tutorials that incorporate hypertext, virtual simulation and digital video for professional competencies teaching focused on diagnosis and planning for psychological intervention and prevention of: couple violence, dating violence and witness to violence.

#### Relations between parental attitudes and childrens temperament to reactive and proactive aggression

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Relations between self-reported parental reactions, childrens temperament and reactive-proactive aggression were examined. Evidence was consistent with the conclusion that relations between childrens aggression, parental reactions and childrens tem-



perament depends on both: the age of children and the type of aggression (proactive and reactive). A sample of 274 children (54% boys) whose ages ranged from 4 months to six years old, were studied. Multiple regression analysis were conducted and the results showed the existence of a specific pattern according the hypothesis proposed.

#### **Learning and students' behavior in audio conferencing versus face-to-face classroom**

**Caspi, Avner** Education and Psychology, Open University of Israel, Ra'anana, Israel

In two studies the differences between audio conferencing and traditional face-to-face learning were examined. We investigated whether the medium richness, medium naturalness, and visual anonymity determine students' learning efficacy, perception, satisfaction, participation, risk-taking, immediacy and disinhibited behavior. As hypothesized, audio conferencing was as effective as face-to-face learning. Face-to-face communication was perceived as better than audio conferencing in the emotional-experiential aspects of learning: amount of students' attention and interest, learning satisfaction, and enjoyment from the interaction. These results are explained in terms of media naturalness and as an effect of visual anonymity, and suggest a distinction between the cognitive and the emotional-experiential aspects of perceived learning.

#### **Differences in the locus of control for HIV/AIDS between the adolescent natives and immigrants**

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**Bermudez, Maria Paz** Psychology, University of Granada, Granada, Spain

**OBJECTIVE.** The objective was to compare the native Spanish adolescents and the adolescent immigrants who live in Spain according to the locus of control for HIV/AIDS infection. **METHOD.** The sample consists of two groups. One of them of 100 native Spanish adolescents and the other of 100 adolescent immigrants who live in Spain, with the ages between 14 and 19 years. The Spanish adaptation of the scale about the locus of control for the health modified for AIDS was utilized. **RESULTS.** The significant differences which depend on the country origin are presented and discussed.

#### **Peer group rules perception for HIV prevention in terms of psychopathological variables**

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**Paniagua, Freddy A.** Psychology, University of Texas, Granada, Spain  
**Buela Casal, Gualberto** Psychology, University of Granada, Granada, Spain  
**OBoyle, Michael** Psychology, University of Texas, Granada, Spain

**OBJECTIVE.** Evaluate the peer group rules perception for the adoption of HIV prevention behaviours in normal adolescents and in adolescents with psychological disorders. **METHOD.** This is an "ex post facto" study, cross-sectional type. The scales were applied of a collective way under the same conditions for the 620 participants who formed the sample. **RESULTS.** We find statistically significant differences between the normal adolescents and the adolescents with psychological disorders. **CONCLUSIONS.** Psychopathological variables of a group must be considered in order to design a HIV prevention program.

#### **Meta-platform for building e-learning environments**

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Our paper aims at building the architecture of federating e-learning environments based on the Problem Solving paradigm in order to develop

meta-cognitive abilities of the task executive control, of the cognitive components monitoring, and therefore of cognitive self-regulation. This meta-platform is equipped with all the necessary services giving life to a virtual community, and it allows the users to access, through Problem Solving model, competences and formative materials available in the network-adhering centres. This model has been tested on 146 students enrolled at humanistic and scientific faculties. Data show an improvement of students' productivity in the virtual system.

#### **Whether or not negative beliefs about worry is the mediator between intolerance of uncertainty and generalized anxiety disorder?**

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**Wang, Chun-Hui** Psychology, Soochow University, Taipei, Taiwan

Why does intolerance of uncertainty (IU) develop generalized anxiety disorder (GAD)? Many published papers have supported that the negative belief about worry (NBW) is the necessary factor for developing GAD. The purpose of the present study is to test whether NBW is the mediator between IU and GAD. Taiwanese college students (333 students) were recruited to fill out Intolerance of Uncertainty Scale, Meta-cognitions Questionnaire, and Generalized Anxiety Disorder Questionnaire. Simple regression and setwise multiple regression were used to analyze data in accordance to Baron and Kenny's mediator formula. The result supports that NBW is the mediator between IU and GAD.

#### **Psychometric validation of the Chinese version of Metacognitions Questionnaire (MCQ-30): A test of metacognitive theory of worry and obsessive compulsive symptoms**

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Metacognition is critical to the pathogenesis of emotional disorders. This study reports psychometric properties and validation of the short form of Metacognitions Questionnaire-Chinese version (MCQ-30; Cartwright-Hatton & Wells, 2004). MCQ-30 along with STAI, BDI, MOCI and PSWQ were administered to 203 college students. The results showed good internal consistency and test-retest reliability. Factor analysis replicated the original five-factor structure. Positive associations between metacognitions and measures of worry and obsessive-compulsive symptoms further confirmed the metacognitive theory of intrusive thoughts. Chinese MCQ-30 may serve as an efficacious tool in assessing metacognitive domains considered important in conceptualizing psychopathological processes.

#### **Relief of suppressed emotion in forbearance: The effect of empathy and the way to promote it**

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**Huang, Chin-Lan** Department of Psychology, National Taiwan University, Taipei, Taiwan

For Chinese, forbearance (?) has been considered as a common and valued coping tactics in interpersonal conflicts in daily lives. However, forbearance implies an unwilling or unpleasant suppression of emotions. To maintain one's psychological well-being, it is important to adopt some transforming strategies to relieve the suppressed emotions. This study examined the effectiveness of various transforming strategies. Furthermore, a revised expressive diary writing (PDDP) was used to improve participants' abilities of perspective taking. Results showed being empathetic was the most effective strategy to relieve discomfort, and PDDP increased empathy toward others. Indigenous implications were discussed.

#### **Children's grade, gender and their questions**

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The purpose of this study was to examine children's questions generated from different grades and gender. Taking a revised taxonomy of questions (twenty types) as our analytical framework, we use ANOVA with grade and gender as between-subjects variables and type of question as a within-subjects variable to analyze questions generated from eighty-nine children. The results indicated a statistically significant two-way interaction ( $F(38, 1577) = 3.95$ ,  $MSE = 8.79$ ,  $p < .01$ ). Children's questioning types were different by their grade level, whereas children's gender did not influence their questions. The results will contribute to children's questioning development.

#### **Uncovering the configurational performance with resource-based view: A test of the relationships between Board capital composition and firm performance**

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**Lin, Shang-Ping** Business administration, NYUT, Douliou, Taiwan

The BOD (board of directors) is the heart of corporate governance. Different types of capable directors not only formed different profile of BOD capital composition but also reflect different power status among BOD members. The present study proposed that: Different compositions of BOD have different effects on firm performance; the more balance composition in BOD capital, the better firm performance. 482 listing companies included in this study and the result indicated that there is not significant difference in firm's market performance in different type of BOD capital composition, but the "Balance BOD" had a highest ROA. That is, firm with the equivalent distributed type of capable directors had highest internal performance.

#### **Web-based personalized learning system, based on learner's knowledge structure**

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Personalized service is important in the context of e-learning service. However learner's ability was always neglected in previous research. The present study applied the Pathfinder Network and developed a Web-based personalized system to elicit and diagnosis learner's knowledge structure. This system also can provide learning recommendation to learner by using a modified "C" index. The experiment results indicate this Web-based personalized learning system can provide personalized learning progress based on learner's ability and learner has higher satisfaction with this personalized learning system.

#### **Ambivalent sexism, marriage, and power-related gender-role ideology**

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Using Glick and Fiske's (1996) Ambivalent Sexism Inventory, a new Gender Roles in Marriage Inventory examined the relationship of ambivalent attitudes toward women and power-related gender-role ideology about marriage. We hypothesized that ambivalent sexism influences marital power through two mechanisms: enacting male dominance at the beginning of a marriage by mate selection criteria, and maintaining male dominance during

the marriage by power-related gender-role norms for marriage. Results from Chinese and American samples indicate that ambivalent sexism relates both to male dominance and to traditional gender role ideology in mate selection criteria and norms in marriage. Cultural similarities and gender differences are also discussed. Key words: hostile sexism, benevolent sexism, mate selection, gender role marriage norms

#### The development of "Chinese Christians' Religiosity Scale"

**Chen, Yongsheng** Dept. of Psychology, Zhejiang Normal University, Jinhua, People's Republic of China  
The aim is to develop "Chinese Christians' Religiosity Scale" (CCRS). The hypothesis is that elements of Chinese Christians' religiosity are divinity belief, transcend experience, morality pursuit, and institutional participation. Subjects were 711 Chinese Christians (male 296, female 415; 12-76 years of age). The CFA supported the hypothesis of four-factor. CCRS had 19 items (divinity belief, 4 items; transcend experience, 6 items; morality pursuit, 5 items; and institutional participation, 4 items). A significant correlation was found between CCRS and Santa Clara Strength of Religious Faith Questionnaire ( $r=0.698$ ,  $p<.01$ ). The internal consistency and two-week test-retest reliability were 0.860, 0.876, respectively.

#### Time management disposition and gender differences: A study based on Chinese population

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Time management disposition reflects how individuals control and make use of their time. Time management disposition is composed of three dimensions such as the sense of time value, the sense of time control, and the sense of time efficacy. This variable is considered as a personality trait with multi-dimensions. The study aims at exploring gender differences in time management disposition. 300 university students completed the Time Management Disposition Scale. Results indicated that females scored significantly higher in all three dimensions. Implications of the findings are discussed.

#### The relationships among Chinese children's home literacy experiences, early literacy acquisition and their later reading performance at school: A longitudinal study

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In Study One, 97 first graders' (Mean age = 6.5 years,  $SD = .28$ ) early literacy acquisition (oral vocabulary, Chinese character recognition) were tested before formal school instruction began, and parents reported children's informal and formal literacy experiences at home. Results showed that only informal home literacy experiences predicted oral vocabulary significantly and only formal home literacy experiences predicted Chinese character recognition significantly. In Study Two, 64 children were followed up to the end of the first semester. Results showed that only children's character recognition predicted both of children's final Chinese exam scores and usual performance on the Chinese lessons significantly.

#### Disappointment in decision-making: Evidence from an ERP study

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Previous decision-making researches mostly focus on P300 and feedback negativity (FRN)'s sensitivity to gains-and-losses, but neglect to discuss the relationship between emotion and decision-making. In order to probe it, present study investigates the ERPs' differences between disappointment induced by losses and elation by gains in disappointment study paradigm. Research shows: 1) elation's ERPs is wholly more positive than disappointment within 200 milliseconds; 2) disappointment elicits greater FRN than elation; 3) elation elicits greater P300 than disappointment; 4) disappointment increases late positive complex (LPC)'s amplitudes during 400-800 milliseconds at anterior brain. Those results suggest P300 and FRN mainly reflect decision-making's processing, and LPC mostly reflect the relationship between emotion and decision-making.

#### Temporal cross modal capture of audition and tactile apparent motion

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In cross modal capture of audition and tactile apparent motion, asynchronous audio captures the apparent tactile apparent motion direction, change the bistable motion to be one dominant direction (left or right). We have launched three experiments to investigate the audition captures tactile apparent motion in temporal domain. In the first experiment, we use 500ms SOA and 9 levels of delay between audition and tactile stimuli. We replicated this cross modal capture in 400ms SOA condition and eliminate the initial bias with a revised method. In the third experiment, we adopted an adjustment procedure, after adjustment, the one dominant direction of tactile apparent motion is changed to be bi-stable again.

#### The development of 5-9 years old children's intuitive knowledge about horizontal projectile motion

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The present study investigated 40 5-9 years old children's intuitive knowledge about the trajectory of horizontal projectile motion through prediction, perceptual judgment, and observation tasks, and found that (1) Children's knowledge can be properly classified as four models, including straight-down model, inverted-L model, slope model, and quasi-parabolic model. (2) 7- and 9-year-olds perform significantly better on perceptual judgment task than they do on prediction task, and this superior performance can be transferred to the following prediction task; 7-year-olds benefit most from perceptual judgment task. (3) Observations of the real dynamic event do result in substantial progress of 5-year olds' performance.

#### The structure of transactional leadership in China

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Researchers in China found the different structure of transformational leadership, but have not developed the transactional leadership. This study examines data collected from 3,500 manager-subordinate paired participants. EFA, CFA, HRA and

partial correlations were used. The major findings are: firstly, inductive methods showed that transactional leadership is a four dimensions structure includes contingent reward, contingent punishment, process control and anticipated investment. Secondly, the effects of transactional and transformational leadership are different. Transactional leadership could significantly predict intention to leave controlling for transformational leadership, while transformational leadership could significantly predict in-role performance, extra-role performance, satisfaction and leadership effectiveness controlling for transactional leadership.

#### Performing a concurrent visual task enhances (not impedes) standing stability

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The effect of a concurrent task on standing stability was examined in fourteen adults who performed a visual search task while standing barefooted with feet together on a fixed or compliant support surface. The search task involved eight different set sizes. Results showed that performing the search task improved standing stability. The improvement did not vary with the set size of the search, neither with the type of foot support. The results suggest that standing as a postural task does not compete with a cognitive task. Rather, it is maintained at a level needed for performing the cognitive task.

#### A new framework for understanding concept

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Concept is not a basic unit of idea, not just representation and algorithm, and much more than categorization. Concept is a phenomenon that should be understood from perspectives like evolution, biological structure and cultural-historical background. I propose a framework attempting to integrate these perspectives, to resolve controversies between existing theories about concept, and to create bridges for these existing theories. In the proposed framework, two external sources of concept are identified, namely immediate environment and external knowledge system. Internal psychological processes are differentiated into explicit and implicit concept levels. How this framework exemplifies a new conceptualization of concept will be discussed in detail.

#### The effects of immigrant mothers' adjustment on young children's family experiences and learning behaviors

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The current study was to investigate life adjustment of immigrant mothers and its effects on family processes and children's learning behaviors. Immigrant mothers of 445 Taiwanese preschool children filled out a questionnaire. Children's learning behaviors were assessed by teachers. Structure equation modeling was conducted. The model indicated that immigrant mothers' self-efficacy in childrearing, perceived support, and cultural accommodation positively influenced the engagement of qualified parent-child interactions. However, all family factors exerted no influence on children's learning behaviors. The results manifested that mothers' adjustment to motherhood and migrant life was influential to children's family experiences. Furthermore, the discontinuity be-



tween family and school experiences deserved educators' efforts for bridging the two in order to empower minority children.

#### Factor structure and psychometric properties of the Symptom Assessment-45 Questionnaire

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Psychometric properties of the Spanish Symptom Assessment-45 Questionnaire (SA-45) were examined in a sample of undergraduates. The SA-45 is a 45-item self-report instrument of psychiatric symptomatology derived from the original Symptom Checklist-90 (SCL-90) which assesses each of the same symptom domains as its parent instrument with no item overlap across domains. As expected, exploratory factor analysis supported a structure of 9 factors which corresponds with the nine proposed subscales. Normative data, reliability (internal consistency) and validity were also examined supporting sound psychometric properties. Findings provide support for the use of the SA-45 as a measure of dimensions of psychopathology.

#### The association among self-injury behavior, emotional intensity, and cognitive processes in patients with mood disorders

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This study explored the association among self-injury behavior, emotional intensity, and cognitive processes in patients with Mood-related Disorders. Subjects completed Emotional Visual Analogue Scales and Stroop Test. Data were analyzed by T-test and Pearson Correlation. In SIB group, intensity of irritability and anxiety was significantly correlated to color interference of reading word (CIRW). In non-SIB group, intensity of euphoria was significantly correlated to CIRW and word interference of naming color. For SIB group, intensity of irritability and anxiety worse function of linguistic process. For non-SIB group, linguistic and non-linguistic processes competed with and interfered each other, following intensity of euphoria.

#### Symplified voice fundamental frequency contour as indicator of stress at work

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Voice fundamental frequency contour is (the F0 contour) plays an important role in conveying prosodic, as well as para- and non-linguistic information, and in numerous investigations was proven as an good indicator of physical and emotional state of speaker. In the present study, the simplified F0 contour of air traffic controllers' voice was presented, as a parameter of stress induced by time on duty. Multisyllabic word was chosen as a test-word, thus F0 contours for two basic syllabic nuclei has to be shown. Generally, the end of the working session is characterized by increasing F0 values, as well as ones of the contour realizations. It seems that syllable nuclei are sensitive to various duration of working session.

#### The influence of place of residence and gender on the self-concept and social skills of Portuguese middle school students

**Coelho, Vitor** Costa de Caparica, Portugal

This study analyzes the influence of gender and place of residence on self-concept and social skills of Portuguese middle school students (N = 209: 93

male, 116 female; 115 from rural settings, 94 from urban settings). Results showed that students from rural schools presented higher levels of social isolation, social anxiety and lower levels of self-control in social situations, academic, social and family self-concept. Regarding gender girls reported higher levels of consideration for others, social anxiety and family self-concept while boys reported higher emotional self-concept. These extensive differences should be taken into consideration when designing intervention programs for these communities.

#### Unwanted intrusive thoughts and daily hassles

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**INTRODUCTION :** On a phenomenological way, there are two kinds of disturbances of the mind : internal phenomena as unwanted intrusive thoughts (UIT) and external phenomena as daily hassles. On an experimental approach, each of these paradigms have been explored in their relationships with mental health and disorders. But the relationships between UIT, daily hassles and mental health have not been explored yet. It will be the aim of this communication.

#### Variations on maternal control and support practices according to the child's sex

**Contreras, Carolina** Pruebas y Medición, INEE, México City, Mexico **Reyes, Isabel** Unidad Investigaciones Psicosociales, UNAM, México City, Mexico The purpose of the study was to determine whether there are significant differences due to the sex of the children on maternal control and support practices. A sample of 302 children attending a public elementary in southern Mexico City and their mothers was evaluated using two scales with 18 items each and alphas of .77 and .92. Significant differences were found for the three factors of the supporting scale, ( $t=2.429, p=.016$ ;  $t=2.410, p=.017$ ;  $t=2.475, p=.014$ ). The control scale showed significant differences only for the inductive factor ( $t=2.343, p=.020$ ). In both cases, differences were only found in the mothers reports.

#### Parental restriction and toddlers' intake of unhealthy snacks: The moderating influence of snack food availability

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**Objective:** To examine whether snack food availability moderates the relationship between restriction and snack food intake. **Method:** Sixty-six toddlers ( $2.3 \pm 0.3$  years old) were given free access to low energy dense (LED) and high energy dense (HED) snack foods; intake (KJ) of the latter was measured. Parent report questionnaires measured restriction and availability. A hierarchical multiple regression analysis was used to test the interaction. **Results:** Restriction was a significant predictor of toddlers' ad libitum intake of HED snacks only when availability was high. **Conclusions:** Research on restriction and children's eating behaviour should examine the context in which restriction occurs.

#### Parental divorce and depression: The role of the family environment

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The study investigated the relation of the family system variables with the depression, depending on the home structure. The participants, 147 College student children of divorced families and a comparison group, completed the BDI and the FES. Pearson correlations and logistic regressions analyses were carried out. The Conflicts were related to the scores on depression in all the families. The Organization was related only in the case of children of divorced families, and the Recreational Orientation in the intact families. Explained variance was higher in the case of the divorced families. In summary, some characteristics of the family environment are related to the scores on depression of the children, although these relationships vary depending on the family structure.

#### Profiles of marital partners' agreement across various areas of the relationship

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The aim of this study was to develop an empirically derived typology of couples using the scores of partners' agreement in the evaluation of various areas of the relationship. Both partners from 183 couples completed a newly developed multidimensional inventory (UPBKO, Cubela Adoric & Jurevic, 2006), which assesses perception of the relationship along twelve dimensions. Cluster analysis of the agreement scores yielded five different patterns or types of marital couples: vitalized, balanced, traditional, disharmonious, and conflicted. In evaluating the present results, comparability with the typologies that were established in previous research programs will be discussed.

#### The consistency of grammatical gender effect in bare noun production. New evidence from the picture word interference paradigm

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The selection of grammatical gender in bare noun production is a controversy issue. In a new series of experiments with the picture-word interference paradigm we confirmed a reliable effect of gender congruency in Italian: Naming times were slower to picture-word pairs sharing the same gender. This effect was independent from the morphological transparency of the distracters, but responses were significantly slower when the distracters were transparent for gender. Overall, the pattern of results of the present study support the notion that grammatical gender is always selected when needed to access the correct nominal ending and the associate inflectional paradigm.

#### Relation between child's personality characteristics and his/her attachment to kindergarten teacher

**Cugmas, Zlatka** Slov. Konjice, Slovenia

The purpose of this study was to examine the associations between child's personality characteristics and his/her attachment to kindergarten teacher. 101 children participated in the research. Children's ages ranged from 24 to 74 months. Trained observers filled-in the Child's attachment to his/her kindergarten teacher (Cugmas, 2007) and the Inventory of child individual differences (Zupančič & Kavčič, 2004). More security expressed children, higher scores they had on the subscales considerate, positive emotion, achievement, and

compliant. More resistance they expressed, higher scores they had on subscales antagonistic and negative affect. More avoidance they expressed, higher scores they had on antagonistic-subscale.

# The role of perceived susceptibility and worry as predictors of helmet and condom use by Spanish adolescents

**Cunill Olivas, Monica** Dept. of Psychology, University of Girona, Girona, Spain

This study investigated the perceived susceptibility and concern about being infected with the HIV virus or involved in a motorcycle crash in 489 secondary students, and tested whether these were predictors of helmet and condom use. Adolescents felt more susceptible to having a motorcycle crash than becoming infected with HIV, but they felt more worried about becoming infected with the HIV virus than about having a motorcycle crash. Only the level of concern about HIV infection predicted the intention to engage in preventative behaviour. Perceived susceptibility seems to increase with the frequency of the problem, and the degree of concern increased with the perceived seriousness.

# Facts and illusions of self-presentational impact of cigarette smoking

**Czarna, Anna** Kraków, Poland

Objective of the study was to research the influence of gender and smoking status on private naïve theories of female perceptions of male cigarette smokers. The purpose behind it was to indirectly address the issue of self-presentational motives directing potentially addictive behaviours. The online research allowed to cast light upon both solid knowledge, awareness of the self-presentational impact of smoking as well as positive illusions about outcomes of cigarette smoking, held by smokers and nonsmokers. Discussion highlights those among the illusions which might be particularly motivating to enter smoking habit for each of the sexes.

# Managerial motives and transformational leadership

**Dörr, Stefan** Organizational Psychology, A47-Consulting, München, Germany **Maier, Günter** Organizational Psychology, University of Bielefeld, Bielefeld, Germany

The purpose of this study was to examine the linkage between motives of leaders and perceptions of their transformational leadership behavior. We assessed explicit achievement, power and affiliation motives of leaders (N=81) as well as perceived transformational leadership behavior, influence tactics and employee effectiveness from direct subordinates of the leaders (N=359). Results showed that power motive is positively and achievement motive is negatively related to transformational leadership. The relationship between motives and transformational leadership are moderated by the influence tactic rational argumentation. Finally, transformational leadership is a mediator for the relationship between power motive and employee effectiveness.

# The relationship between attitude toward premarital sex and marital satisfaction among married females and males in Tehran.

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The purpose of this research was survey of the relationship between attitude toward premarital sex and marital satisfaction. Four hundred forty six married persons (222 females & 224 males) were selected randomly through multistage sampling from Tehran. The instrument was premarital sex attitude scale created by researchers with Chronbach's alpha of 0.91. The second instrument was the revised short form of ENRIC (relied by Asgari & Bahmani for Iranians population in 1385) with Chronbach's alpha of 0.92. Factor analysis validity of attitude scale lead to extraction three factors: premarital simple relationship, positive & negative effects and consequences.

# Effects of nonverbal communication in social skills training

**Daibo, Ikuo** Dept. of Social Psychology, Osaka University, Osaka, Japan **Iso, Yukiko** Dep of Child Psychology, Tokyo Future University, Tokyo, Japan **Tniguchi, Junichi** Psychology and Communication, Osaka International University, Moriguchi, Osaka, Japan

Many people do not possess sufficient skills in daily communication. Therefore, they have little social support each other and have some interpersonal conflicts. They need to improve communication skills. When we encode own messages and decode others' messages in appropriate manner, those communication behaviors lead to activate not only our selves' adaptation but the high performance of many partners in own society. We examined university students' encoding and decoding skills in detecting types of interpersonal relationships in natural settings. The closed and unfamiliar relationships- strangers, best friends- than relatives and coworkers were recognized accurately. The accuracy of decoding was correlated positively with encoding skill.

# Associations between body dysmorphic symptoms, body image and self-consciousness in a representative population sample

**Daig, Isolde** Inst. für Med. Psychologie, Charité Berlin, Berlin, Germany **Albani, Cornelia** Universität Leipzig, Psychosomatic Medicine, Leipzig, Germany **Brähler, Elmar** Universität Leipzig, Institute of Medical Psychology, Leipzig, Germany

Body dysmorphic symptoms are characterized by a distressing and impairing preoccupation with an imagined or slight defect in appearance. The study investigates the association between body image and body dysmorphic symptoms by taking self-consciousness into account. A sample of 1621 persons (14-99 years), participated in a German nationwide survey. Women reported more body dysmorphic symptoms and higher self-consciousness than men. People with body dysmorphic symptoms reported a more negative body image and higher self-consciousness. Aspects of self-consciousness moderated the association between body dysmorphic symptoms and negative body image. Results are discussed towards hypotheses of affect modulation and depression tendency.

# Error-related responses supporting grammatical plasticity

**Davidson, Douglas F. C.** Donders Center, Nijmegen, Netherlands **Indefrey, Peter** Language and Multilingualism, F. C. Donders Center, Nijmegen, Netherlands

The objective of this study was to investigate whether feedback-related electrophysiological activity during language learning is related to improved grammatical discrimination. Twenty native-Dutch speakers classified German noun phrases presented with and without feedback. Without feedback, participants' classification was near chance and did not improve. During training with feedback, P600 responses appeared to declension and gender but not case violations, and classification improved.

A feedback-related negativity appeared in training and later decreased. The results show that error-related responses change during learning, suggesting that they index decision-making processes that occur during grammar acquisition.

# Parenting and socio-personal development in contexts of social vulnerability

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The aim is to assess an educational program for improving the socio-personal development of minors living in situations of social vulnerability, and the parenting skills of their parents. The sample group comprised both fathers, mothers and minors. 10 families participated in the first phase and 6 participated in the second phase. A pretest-posttest design was used, assessing the process using questionnaires and diaries. Improvements were found in the emotional and cooperation skills of the minors, as well as in parents' ability to respond to their children's needs. The educational intervention helps develop values such as 'learn to care for' in contexts of social vulnerability.

# Musical abilities and their relation to cognitive skills and self-concept in 11-to 14-year-old children

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It is assumed that musical abilities influence non-musical abilities (e.g. intelligence) positively. Our study tested effects of musical abilities on children's specific cognitive abilities and on their self-concept. 63 children (34 girls; 11.7 to 14.6 years) were tested in music perception and production, spatial sense, phonological awareness, attention, sensorimotor-functions, verbal-, visual- and auditory memory and self-concept. Significant associations were found for musical abilities and spatial ability, phonological awareness, attention, visual memory and self-concept. For sensorimotor-functions, verbal and auditory memory no significant relations could be revealed. Our results suggest that musical activity enhances specific cognitive abilities as well as children's self-concept.

# Cognitive evaluation in Parkinson's disease

**Delgado Suárez, Iván** Clinical Neurophysiology, Santiago General Hospital, Santiago de Cuba, Cuba Background: The cognitive dysfunction in Parkinson disease is still incipient and the reports have been showed contradictory results. Aims: Objective evaluation the cognitive functions in PD recording ERP P300, determining correlations between clinical and electrophysiological variables Methods: Twenty PD patients classified with eged between 40 and 65 years old, and neurophysiological evaluation by Mini Mental Test. Results: The results are compatible with delay in cognitive processing of the information, a decrease in the intensity of the processes of selective attention and asynchrony in the activation of generators of this potentials in the PD We concluded that ERP P300 is very useful test in objective evaluation of cognitive functions in PD



### The role of child care center directors in teachers' return to school

**Deutsch, Francine** Dept. of Psychology, Mount Holyoke College, South Hadley, USA **Tong, Taryn** Psychology, Mount Holyoke College, South Hadley, USA

Telephone interviews with seventy-eight childcare center directors examined their role in encouraging preschool teachers to pursue higher education. Although directors' educational values and mentoring attitudes were associated with self-reported mentoring, contrary to prediction, mentoring did not mediate teachers' enrollment in college classes. Nonetheless, logistic regressions showed that the more directors valued higher education and the more confident directors were in a targeted teacher's ability, the more likely she was to be taking college classes. Directors' impact on the educational pursuits of their teaching staff suggests that the workplace is an under-researched, critical context for the educational trajectories of nontraditional students.

### Trauma and positive health: The complete state model of health

**Diaz, Dario** Dept. of Social Psychology, Universidad Autonoma de Madrid, Madrid, Spain **Blanco, Amalio** Social Psychology, Universidad Autonoma de Madrid, Madrid, Spain

**Objectives.** The Complete-State-Model of Health (CSMH) considers mental health as a syndrome of symptoms of hedonia and positive functioning. In this study we have taken the CSMH as theoretical framework for the study of traumatic events. **Methods.** 42 victims of 11-M terrorist attack filled in questionnaires assessing PTSD and positive health. **Results.** Exploratory-confirmatory factor analyses support that PTSD and mental health form two different factors. Only one victim was diagnosed as healthy although 9 participants did not show the disorder. **Conclusion.** Rather than forming a single bipolar dimension, health and illness are correlated unipolar dimensions. The presence of mental health requires a positive personal and social functioning.

### Depression in epilepsy

**Diaz Martinez, Carina** Clinical Neurophysiology, General Hospital, Guantanamo, Cuba **Diaz Martinez, Annia** Internal Medicine Department, General Hospital, Guantanamo, Cuba

**OBJECTIVES:** Estimate the frequency of depression in patients with epilepsy and to correlate patient characteristics with the degree of depression. **METHODS:** 51 patients were asked to complete a questionnaire. Depression scores were assessed. ANOVA test was used in statistical analysis. **RESULTS:** 39% had major depression. Seizure-free patients had lower depression scores. Depression scores were not related to the number, type of antiepileptic drugs or epilepsy type. One-half of depressed patients were not on antidepressant medication. **CONCLUSIONS:** Depression is a common condition in epilepsy patients. A better diagnosis and treatment of should be reached.

### Visual-spatial layout contributes to unimanual coordination

**Dietrich, Sandra** Inst. für Psychologie, Max-Planck-Institut, Leipzig, Germany **Rieger, Martina** Psychology, Max Planck Institute CBS, Leipzig, Germany **Prinz, Wolfgang** Inst. für Psychologie, Max-Planck-Institut, Leipzig, Germany

Is unimanual coordination of movements with external events based on the actual movement or on the way movement effects are embedded in the environment? Participants coordinated their movements with a circular moving stimulus. The relation of movement effects to external events was varied by placing movement effect and stimulus trajectory either next to each other (Experiment 1) inside each

other (Experiment 2) or on top of each other (Experiment 3). In the experiments different coordination modes were of advantage. We argue that the way movement effects are embedded in the environment is crucial for unimanual coordination with external events.

### Criteria for choosing romantic partners relative to gender and relationship status

**Dinic, Bojana** Novi Sad, Serbia

The aim of this research was to examine gender and relationship status (in a relationship or not) differences considering the criteria for choosing romantic partners, which were assessed by the KIP110 questionnaire (Dinic, 2005). Combining gender and relationship status, four groups of participants were created. Two discriminant functions were singled out: 1. separates female from male participants, showing that females prefer more similar interests and competence in their partners; 2. showing that the participants who are in a relationship prefer more emotions and connivance and social status and similar origin from those who are not.

### Generalized quantifiers in natural language

**Druzhinin, Georgy** IEAP, Moscow, Russia

In any language some words reflect the idea of gradation. Such words as "almost", "most of..." etc. that express the idea of some part of any thing or group can be named as generalized quantifiers. Such words as "very", "too", "rather" etc. reflect the idea of multiplication of certain feelings or efforts. Simple experiments (made with Russian-language and bilingual subjects) show the statistically stable qualitative interpretation of such quantitative gradation values and individual trends in it under certain changes in psychological state (fatigue etc.). These results could explain the actual subjective significance and correct the evaluations by psychometric scales.

### Transformations of students; mental state in students years

**Druzhinina, Elena** IEAP, Moscow, Russia

Longitude study of Russian university students' mentality showed systematic transformations during education time. Some aspects of students' motivation to professional education under conditions of modern information and education technologies in various periods of students' years will be discussed as important factors of these transformations. Many of these transformations are caused by cognitive dissonances that appear after gained information verification with the modern information technologies. Variants of cognitive-based neurotization, its predictors and its manifestations in aberrant and deviant behavior as frequent results to certain motivation issues will be discussed just as recommendations for coping such negative consequences and after-effects.

### How social influence in leadership dyads is mediated by self-determination when subordinates are treated with consideration

**Eckloff, Tilman** Inst. für Sozialpsychologie, Universität Hamburg, Hamburg, Germany **van Quaquebeke, Niels** Social Psychology, University of Hamburg, Hamburg, Germany

The results of the Ohio Studies suggest that considerate leadership behaviour is one important source of leadership effectiveness (for recent review see Judge, Piccolo, & Ilies, 2004). Moreover, empirical research in the framework of Self-Determination Theory shows that increasing subordinates' self-determination will lead to positive outcomes, such as performance enhancement (Deci & Ryan, 2000). In the present study, we link both perspectives and, specifically in two field studies (N1 = 563 and N2 = 596), we show that the relation between consideration and subordinates' openness

towards leader influence is partially mediated by the satisfaction of subordinates' intrinsic needs for self-determination.

### Rhythmic closure in music perception

**Edelman, Laura** Dept. of Psychology, Muhlenberg College, Allentown, USA **Helm, Patricia** Allentown, USA **Kusmaul, Cliff** Psychology, Muhlenberg College, Allentown, PA, USA

A series of studies investigated the role of rhythmic patterns on the perception of closure in music. Percussive sounds were presented in patterns that varied by the number of repetitions, whether the pattern ended in a long or short note, whether each measure was begun by a dynamic accent, and the placement of a triplet within the measure. We compared the results of trained musicians with non-musicians. We found a greater degree of closure for even numbers of repetitions, for patterns ending in longer notes, and generally stronger results for musicians than non-musicians. The dynamic accent had no effect.

### Relationship between thyroid hormones and obesity in 15 to 49 years old depressed women

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**Background:** The involvement of the thyroid hormones is generally believed to be important in the aetiopathogenesis of depression and obesity. **Aim:** To investigate thyroid profile in depressed women and depressed obese women. **Methods:** A total 60 subjects (depressed women and depressed obese women) were selected. Serum samples were collected and assayed for thyroid indices. **Results:** Comparison of thyroid hormone indices revealed no significant differences between two groups. **Conclusion:** There were not any significant association between thyroid profiles and obesity in depressed obese women.

### The entry point of face recognition: The basic level and/or the subordinate level?

**Endo, Mitsuo** Dept. of Human Sciences, University of the Ryukyus, Nishihara, Japan

We addressed the entry point in face recognition. If the entry point in face recognition would not be at the basic level but at the subordinate level of unique identity, face recognition at the basic level could be achieved by a search through semantic memory. The results of experiment did not yield a significant positive correlation between naming pictures and words at the basic level for faces, suggesting that the same process was not used to name pictures and words at the basic level for faces. Thus the entry point at the basic level of faces should still exist.

### Motor learning affects neural processing of visual perception

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We investigated whether motor learning has an influence on how observed movements are later processed by neural networks dedicated to movement execution and perception. While watching artificial object movements, ten participants imitated the trajectories with their hands and ten participants solved a working-memory task. After that, the hemodynamic responses were recorded

while participants observed artificial object movements. Motor-related brain areas (supplementary motor area, inferior parietal lobe) responded more in the motor experienced than in the memory group. This shows that movement training affects movement perception, and that neural networks related to motor execution are also triggered by artificial, non-biological movements.

#### Autonomous agents with personality

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The presented work aims at enhancing an existing agent architecture with a set of basic needs in order to reflect personality differences on the level of autonomous agent behaviour. The model is implemented and evaluated in the context of a virtual learning application ("ORIENT") for small groups of users (teenagers), providing them with the opportunity to learn about commonalities and differences between cultures, about reasons for intercultural and interpersonal conflicts and how to resolve them, and thus enhancing their intercultural sensitivity. Moreover, the evaluation focuses on the cooperative learning process while interacting with the software.

#### Love styles and relationship longevity

**Erwin, Philip** *Social and Psycholog. Science, Edge Hill University, Ormskirk, United Kingdom*

Objective: to examine the relationship between love styles and the longevity of romantic relationships. Method: 82 participants provided details of their current personal relationships and completed the Hendrick et al. (1998) Love Attitudes Scale. Partial correlations, controlling for age, showed that relationship longevity was correlated with scores on the Pragma love style for males ( $r = .37, p < .05$ ) and the Mania love style for females ( $r = -.29, p < .05$ ). Conclusions: The results will be interpreted with reference to existing literature on gender differences in styles of interaction and behaviour in close romantic relationships.

#### Psychological Obstacles' contributing to recruiting female employees into managerial positions at companies affiliated to Energy Ministry of Iran

**Esbat, Zinat** *Psychology and Education, Tehran University, Tehran, Islamic Republic of Iran* **Gharavian, Ahmad** *Human Resource Development, Energy ministry, Tehran, Islamic Republic of Iran*

The purpose of present research was to ascertain the most important psychological and sociological obstacles contributing to recruiting women employees in managerial position in companies affiliated to Energy Ministry (EM) of Iran. 1180 female employees and 171 men managers from companies affiliated to EM completed Women Employees Questionnaire ( $\alpha = 0.82$ ), and Managers' Questionnaire ( $\alpha = 0.92$ ). The results indicated that women's level of being extrovert and achievement motivation were low. The results also revealed managers' negative attitude toward women's power at work, and their positive attitude toward traditional roles discrimination between men and women. The level of being extrovert and achievement motivation could be interpreted in terms of sociological obstacles.

#### Psychological wellbeing's model in the vision of Islam's prophet and holly infallibles

**Faghihi, Ali Naghi** *Human Sciences' Faculty, Qom University, Qom, Islamic Republic of Iran* Aim is, to discover psychological wellbeing's model from Islamic hadiths. Method is hermeneutic with analyzing of Islamic hadiths' content for reaching to above aim. Findings: Psychological wellbeing has some levels. First is inexistence of any disorder in his psychological system and next is, optimizing and upgrading the vision and affection, and developing of personality in all aspects related to self and Allah Almighty and people and nature. Conclusion: Each person that has more human perfection, has more psychological wellbeing.

#### The comparison of dysfunctional thoughts and social adjustment among infertile employed and unemployed women in Iran

**Fatemi, Azadeh Sadat** *family counseling, Welfare and Rehabilitation Uni, Tehran, Islamic Republic of Iran*

In this research the effects of occupation on dysfunctional thoughts and social adjustment among infertile women were explored. We chose 240 infertile women utilizing cluster random sampling method. Women filled dysfunctional thoughts and social adjustment questionnaires. MANOVA analysis was performed to analyze data. Results demonstrate that dysfunctional thoughts in infertile unemployed women were far more than those in employed women. Also social adjustment in infertile women with occupation was more than those without occupation ( $F = 42.9, P < 0.01$ ). Occupation status of infertile employed women in interaction with their education, affects rate of dysfunctional thoughts ( $F = 5.5, P < 0.01$ ), whereas it does not have significant effect on social adjustment.

#### The pride of Chinese urban poverty adolescents

**Feng, Xiaohang** *Chang Chun, People's Republic of China* **Zhang, Xiangkui** *Psychology Department, Research Center of Child Devel, Chang Chun City, People's Republic of China*

Abstract: Objectives This study aims to explore the feeling of pride and the other related factors about the Chinese urban poverty adolescents. Methods 400 Chinese urban poverty students and 334 urban common students were tested through three questionnaires. Analysis of variance and stepwise regression were adopted. Results The experiencing level on pride of urban poverty adolescents was lower than urban common adolescents. Regression analysis showed that global self-esteem, academic self-esteem and social self-esteem played significant prediction effects on pride. Conclusions The positive emotions such as pride can improve the development of mental healthy of Chinese urban poverty adolescents.

#### The dyadic regulation of closeness and reciprocity in couples living in different family types

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*Persönlichkeitspsychologie, Universität Potsdam, Potsdam, Germany* **Wrzus, Cornelia** *Persönlichkeitspsychologie, Universität Potsdam, Potsdam, Germany*

Marital relationships in middle adulthood provide a basis for differential parental care and mutual cooperation. Longitudinal dyadic approaches were used in this research to investigate the dynamics of interdependence between spouses from traditional families, patchwork-families, motivated childless and involuntary childless couples. The 171 couples were studied twice over a 12 months interval. Due to diverging necessity of cooperation and parental care the dyads showed differential relationship patterns, with couples in patchwork-families showing the highest levels of interdependence in emotional closeness and reciprocity.

#### Analysis of artificial concepts formation in children of different socio-cultural levels

**Flores, Dulce** *Dept. de Psicología, Universidad Autónoma de Puebla, Puebla, Mexico* **Talizina, Nina** *Psicología, Statal University of Moscow, Moscow, Russia*

339 mexican school children of both sexes from different socio-economic levels (6-9 years), were evaluated with The Protocol of formation of new concept (Flores 2002). The statistical and cualitative analysis shows differences. 105 children (30.97%) had acquired the action of formation of concept: 11 native children have it (15.94%), 20 rural children (22.22%), 30 lower urban children (33.33%), and 44 urban children (48.89%). The analysis of variance shows significant differences between the four groups analyzed (One way ANOVA  $F(8.048) p \leq 0.000$ ). Discussion realized on the terms of the social context, of the characteristics of each population and the intellectual development.

#### A comparison of family content and processes of families with and without handicapped children

**Fooladchang, Mahboobe** *Dept. Educational Psychology, Shiraz University, Shiraz, Islamic Republic of Iran* **Zakerian, Mojtaba** *Dept of Exceptional Children, Shiraz University, Shiraz, Islamic Republic of Iran*

The aim of this study was to compare family content and processes of Iranian families with and without handicapped children. 120 families (27 families with handicapped & 93 families without handicapped children) responded to the scales of Family Content and Processes. The results of One-way ANOVA revealed that families with handicapped children scored significantly lower than families without handicapped children on family processes. For family content, the results were the same as family processes. Overall, this study showed the effects of the presence of handicapped children on family content and processes. Keywords: family processes, family content, handicapped children's family, handicapped children.

#### EEG alpha oscillations and object recognition

**Freunberger, Roman** *Department of Psychology, University of Salzburg, Salzburg, Austria* **Klimesch, Wolfgang** *Department of Psychology, University of Salzburg, Salzburg, Austria*

In the present study, we investigate the role of upper alpha oscillations for semantic access and retrieval processes. Subjects were presented trains of distorted pictures (with decreasing levels of distortion), and were asked to respond as quickly as possible when they recognize the meaning of the picture. Preliminary results show that during the time window of picture recognition, upper alpha power decreased but inter-areal phase synchronization increased as compared to meaningless control pictures. We assume that synchronous alpha oscillations might reflect topographically specific neural network activity that is related to the access of semantic information in LTM.

#### Mental disease perception for psychotic patient families

**Frissenbruder, Sandra** *Servico Psicologia - Clinica, Feevale - UFRGS, Poa, Brazil*

Objective In Brazil, the programs regarding family support in public mental health services are not enough to provided information and emotional support. The study investigated the conceptions and the meanings about the mental disorder of the parents of patients with psychosis. METHOD This was a qualitative, descriptive study. The content of semi-structured interviews was interpreted in psychoanalytic perspective. RESULTS: The results revealed that the family conception about the mental disease is related to a problem of social and the synonym of incapacity. The cure concep-



tion is related to the recovery of productive abilities and the remission symptoms.

#### Color activation of non color words through Spanish idiomatic expressions

**Fuentes, Luis Jose** Murcia, Spain **Bretones, Carmen** Filología Inglesa y Alemana, Universidad de Almería, Almería, Spain

Perceptual symbol systems predict that perceptual information is represented in language comprehension. When referents change, their representations are affected accordingly. Here we extended the predictions of the perceptual symbol hypothesis to linguistic material whose referents do not have perceptual properties in real world but they do through association with idiomatic expressions. We used a Stroop-like task in which target words that were indirectly associated to colors (e.g., royalty is blue because its association with "blue blood"), appeared in congruent or incongruent colors. Results showed Stroop interference effects, supporting the perceptual symbol account and extending it to representation of idiomatic language

#### How do players decide rational strategies in actual games?

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We conducted two-person zero sum games which have different equilibriums and mixed strategies to explain how players decide their strategies, and to examine psychological effects of minimax and maximin strategies. Method: College students (N=352) were divided into two groups and played different games 30 times. Result: Players planned on using maximin strategies, not minimax strategies, as expected according to game theories. Conclusion: Minimax strategies are difficult to use because they depend on the opponent's payoff. The students seemed to be in conflict about using maximax and minimax strategies, and to hesitate in changing their strategies while playing games.

#### The relationship between Mobile phone mail and cognition of interpersonal relationship-Perceived social support as a mediator-

**Furutani, Kaichiro** Social and Clinical Psychology, Hijiya University, Hiroshima, Japan **Nishimura, Takashi** Dep. of Clinical Psychology, Hiroshima International Univ., Higashihiroshima, Japan

In this research, we considered the relationship between Mobile phone mail use and cognition of interpersonal relationship by mediate factor social support. Scholar discussed relationship of interpersonal relationship and mobile phone use (e.g., Furutani & Sakata, 2006). Furutani and Sakata (2006) showed mobile phone use was correlated fulfillment of interpersonal relationship. We focused on three interpersonal cognition elements (fulfillment, intimacy and trust) and cognition of received social support as mediate factor. A pass analysis showed that Mobile phone mail use intimacy and social support directly. And, Cognition of received social support mediated Mobile phone use and fulfillment and trust.

#### Relationship between PTSD symptoms, physical health and pain diagnosis: The role of hyperarousal symptoms and depression

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Three-hundred- thirteen subjects with a history of traumatic experience were interviewed (1) to explore the contribution of PTSD symptoms in the prediction of physical health and pain diagnosis and (2) to test the hypothesis that depression mediates the relationship between PTSD symptoms and physical health, likewise the relationship between PTSD symptoms and pain diagnosis. Regression analysis showed that, after controlling for depression, only hyperarousal symptoms predicted physical health. Mediation analysis indicated that hyperarousal was directly and indirectly (through depression) related with physical health. The effects of PTSD symptoms on pain diagnosis were fully mediated by depression. These results support the suggestion that in its relation with PTSD, pain seems different from other health outcomes.

#### The effects of supervisor – subordinate personality similarity and role behavior on team performance

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Aims of the study are, to examine the effect of supervisor – subordinate personality trait similarity and complementarity on team performance and test, whether role behavior mediates the relationship between supervisor – subordinate personality similarity and team performance in client service teams within a finance organization. The measures: NEO PI-R for personality traits, SYMLOG Adjective Rating Form for role behavior and organizational performance criteria for team performance. Statistical method: multilevel regression analysis. Expected results: team performance can be predicted by supervisor – subordinate complementarity on extraversion and similarity on conscientiousness, agreeableness and neuroticism. Roles mediate the relationship between personality and team performance.

#### Family context and the development of theory of mind in a sample of 5-year-old children from the Basque country

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The objective of this study was to analyse the influence of family context in the development of 50 preschoolers Theory of Mind (ToM). Data were collected through interviews with children in the school, interviews with parents, systematic observation at home and questionnaires filled in by parents and tutors. Results show a significant relationship between family context variables and performance in ToM tasks. These results have important educative implications, as far as family context can be improved through intervention.

#### Stepping out of an American context: Defining spirituality and religiousness from a French Canadian perspective

**Gall, Terry Lynn** Faculty of Human Sciences, Saint Paul University, Ottawa, Canada **Malette, Judith** Faculty of Human Sciences, Saint Paul University, Ottawa, Canada **Guirguis Younger, Manal** Faculty of Human Sciences, Saint Paul University, Ottawa, Canada

This qualitative study explored 25 French Canadians' definitions of spirituality and religiousness. Spirituality was defined in more positive, personal, "secular" humanistic terms that encompassed 5 themes: connection to God, guide to life, meaning, sense of self and sense of universality. Religiousness was narrowly confined to three aspects of organized religion: adherence to a religion, the use of religious gestures and connection to God. As such, religious-

ness provoked more negative connotations of authority, control, and oppression. In comparison to American studies, French Canadians make a clearer distinction between their experience of a personal spirituality and the "man-made" laws of religions.

#### The effect of age, gender and education on the attitude of ethnicity in Golestan Province, Iran

**Ganji Jamehshoorani, Ghorbanali** Humanity, Islamic Azad University, Azadshahr, Islamic Republic of Iran **Ganji, Mohamad Reza** Humanity, Islamic Azad University, Azadshahr, Islamic Republic of Iran

The main objective in this paper was to study the effect of age, gender, and education on the attitude of these ethnics towards one another. Distribution Tables, Chi-Square, and Z-Test were analytical tools in this paper. Cluster sampling and Cochran formula were employed in the selection of sample and sample size for each ethnic group. Major conclusions reached are as follow: 1) Age does not pose statistically significant effect on the attitude of ethnics towards one another. 2) Neither gender nor education exerts statistically significant influence on the ethnic attitudinal changes towards one another.

#### Relations between interparental discord, problem behaviors and peer adaptation in school of 7-year-old Chinese children

**Gao, Wen** Psychology School, Beijing Normal University, Beijing, People's Republic of China **Chen, Hui-chang** Psychology School, Beijing Normal University, Beijing, People's Republic of China

Few researches pay attention to occasional, moderate interparental discord's influences on children in average families. In a longitudinal study to a higher-income sample of China's urban children from 1995, 103 children's problem behaviors, peer adaptation in school and parental disagreements were investigated when they were 7 years old, separately based on parents' and teachers' reports on scales. Although less frequent and intense interparental discord in average families predicted children's internalizing and physical problems, it didn't predict children's externalizing problems and had positive relations with peer adaptation in school. These could be explained by children's limited cognition ability and specific content of interparental disagreement, and provide some implications for family intervention and peer adjustment.

#### Jealousy, relationship and infidelity: Modulated variable

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This study aims the understanding of differences between woman and men in situations of hypothetical infidelity (emotional or sexual) and how this emotion is influenced by characteristics involved in couple relationship. 372 subjects choose which of two possible infidelity situations causes a larger emotional distress. They have completed a questionnaire about their relationships characteristics too. The data show that women experienced a higher intensity of emotional distress when they think about the emotional and sexual infidelity. The results also revealed that both men and women are more worried about emotional infidelity, although these results are modulated by relationships characteristics. Keywords: jealousy, emotional infidelity, sexual infidelity, emotions

### The measurement of drivers' mental workload and physiological state: A simulation-based study

**Ge, Yan** Institute of Psychology, CAS, Beijing, People's Republic of China **Zhang, Kan** Psychology, Institute of Psychology, CAS, Beijing, People's Republic of China  
The purpose of this study was explored the probability of using physiological indices as feedback of different driving conditions. 43 drivers completed a simulated car-following task which was used to evaluate how a secondary task affected their response to a periodically braking lead vehicle. A baseline condition with no secondary task was compared to a simple and a complex secondary task conditions. The results showed some physiological indices (HRV and HR) reflected drivers' conditions. Subjective workload ratings also indicated secondary task introduced a significant cognitive load. This study provided support for developing devices monitoring drivers' physiological and psychological conditions.

### Effects of chromatic distributions and pedestal contrast on chromatic discrimination

**Giesel, Martin** Inst. für Allg. Psychologie, Universität Gießen, Gießen, Germany **Hansen, Thorsten** General Psychology, Justus-Liebig-University, Giessen, Germany **Gegenfurtner, Karl** Inst. für Psychologie, Universität Gießen, Gießen, Germany  
We investigated the interplay between the effects of chromatic distributions and adaptation on chromatic discrimination thresholds. Using a four-alternative forced-choice procedure increment and decrement threshold vs. contrast curves were measured for various pedestals along one test direction in DKL color space. The stimuli were either homogeneously colored disks, or stimuli whose chromaticities were modulated along the test direction symmetrically around the mean chromaticity of the pedestal. The results indicate that the effects of the pedestals and of the chromatic distributions are additive. We show that a model with multiple higher level chromatic mechanisms can describe the data well.

### Guilty, altruism and self-esteem in the helping behavior

**Goncalves, Gabriela** Psicologia, Universidade do Algarve, Faro, Portugal **Santos, Joana** Psicologia, Universidade do Algarve, Faro, Portugal **Gomes, Alexandra** Psicologia, Universidade do Algarve, Faro, Portugal **Viegas, Mélanie** Psicologia, Universidade do Algarve, Faro, Portugal **Boeiro, Helena** Psicologia, Universidade do Algarve, Faro, Portugal  
This study intended to observe if the manipulation of guilt has an effect on helping behaviour. It was also our interest to observe if the level of altruism and the state self-esteem have an effect in helping behaviour. It was congregated a sample of 136 participants. It was used the self report altruism scale, a task and the state self-esteem scale. The results allowed us the observation of an effect of guilt in helping behaviour. Likewise, the female participants were the one's that helped more. We observed also meaningful differences at the altruism level in state self-esteem.

### The writing superiority effect: Advantages of written knowledge recall

**Grabowski, Joachim** Inst. für Psychologie, Pädagog. Hochschule Heidelberg, Heidelberg, Germany  
The writing superiority effect says that knowledge diagnosis has higher content validity in the written than in the oral recall mode. We report on two experiments demonstrating the effect's range and strength. A group of high-performing, highly selected air-force candidates recalled the states of the U.S.A., a group of students recalled Germany's national holidays either orally or written. In both studies, written recall was superior (ANOVA:  $p < .05$ ) to oral recall, compared to a cued-recall post-

test for maximal knowledge assessment. Thus, it is generally important to consider the verbal recall mode in exams and knowledge assessment contexts.

### Dietary restraint, eating behaviour and food palatability: Implications for binge eaters

**Griffin, Tara** Toormina, Australia **Provost, Stephen** Psychology, Southern Cross University, Toormina, Australia  
200 non-diabetic participants' (26-30 yrs, SD = 2.10; 59 male & 137 female) dietary restraint and food palatability was measured by the Restraint Scale (Herman & Polivy, 1975), Three-Factor Eating Questionnaire (Westenhoefer et al., 1994) and the Food Palatability Questionnaire (Griffin, 2006). It was expected that people high in dietary restraint will have a greater finickiness to unpalatable food types, compared to low restrained eaters. The main findings from a factor analysis, were that they did not differ in the liking for the six food types, but between certain individual foods from a range of the taste types.

### Desirable leadership behaviours in Romanian gendarmerie

**Grigoras, Mihaela** Centr. for Psychosociology, Ministry of Interior, Bucharest, Romania  
The rationale of this paper was to identify perceptions of successful leadership behaviours in Romanian Gendarmerie, given the specific of the organization and the kind of service provided. The study reports and compares preferred leadership traits and traits actual exhibited by leaders in a Gendarmerie unit, as defined by responses to the Leader Behaviour Description Questionnaire XII (Stogdill, 1963). The sample consisted of 96 commissioned and non-commissioned officers. Factor scores showed significant differences ( $p < 0.01$ ) between preferred and actual leader behaviours, except for scales Role Assumption and Production Emphasis. Results indicate that Gendarmerie leaders are not perceived as generally exhibiting desired behaviours and can be used in leadership training.

### Behavioral strategy at divorce

**Grishunina, Elena** Moscow, Russia  
The goal - gender features of behavior at divorce, distinctions of strategies divorce initiator. Methods - the phenomenological analysis of personality-situational interaction, the interviewing, the content-analysis, the correlation analysis. The examinees: 105 clients of Hot line «Divorce» and medical centers'. Results (statistically significant,  $p < 0.01$ ) - the behavior of divorce initiators' differs in stability more often, consciousness of behavior is extremely high; men's strategy are socially comprehensible (acceptable), however they are not aimed at core of situation, they estimate own behavior as habitual. While women unstable strategy, the range of activity is small.

### Anorexia and bulimia nervosa in Mexican high school students

**Guadarrama, Rodalinda** CU UAEM Temascaltepec, UAEM, Tejupilco, Mexico  
The objective was to determine the anorexia and bulimia nervosa that are present in highschool students, so that, it was worked with the whole population. These were 316 people, both sex, of Mexico. The instruments: the Bulit Test, which is used to detect bulimia's symptomatology. And the Eating Attitudes Test, which is used to detect anorexia's symptoms. The results show that a considerable percentage of 17% from population presented eating disorders symptoms, predominating anorexia. This facts allows to conclude that due the expose in the literature, a considerable percentage of teenagers from exterior zones to the large cities are being prone to these kind of disorders.

### The book as mediator in the study of insult: A Mexican experience

**Guerra, Elida** Psychology, UAQ, Queretaro, Mexico  
This article suggests an empirical approach to raise awareness of the problem of bullying at schools through the use of disturbed readings. A children's tale, a wooden boy who mutilate himself in order to be accepted by others, encouraged children and teenagers from 6 to 14 years old to talk about the pressure to conform an "ideal" identity. Our findings showed that whereas insults received inside family hurt children the most, insults between peers regarding to physical characteristics and those made by teachers about students intelligence and attitudes, force individuals to change themselves in order to conform.

### Structure and measurement of Taoist personality

**Guo, Yongyu** School of Psychology, Huazhong Normal University, Wuhan, People's Republic of China  
This study proposed Taoist Personality, and explored the correlation between Taoist personality and well-being. College students were invited to grade five Taoists' characters on the revised personality adjective scale, and six dimensions of Taoist Personality were found through exploratory factor analysis. Then, Taoist Personality Inventory was compiled to further explore the structure of Taoists' typical personality. The inventory has 25 items scattered on the six factors named as wisdom, charity, maturation, sturdiness, straightforwardness and glamour. Multiple regression analysis showed a relatively high correlation between Taoist personality and well-being. Sturdiness and straightforwardness were shown to directly affect well-being.

### Teacher leadership and attitude toward education reform in Indonesia

**Hadjam, M. Noor Rochman** Psychology, Gadjah Mada University, Yogyakarta, Indonesia **Widhiarso, Wahyu** Psychology, Gadjah Mada University, Yogyakarta, Indonesia  
Teachers become more aware of and concerned about school-wide issues. They discuss possible solutions and act to make changes. All of these behaviors where teachers are going above are forms of leadership. Leadership, then, does not only refer to administration. This study was conducted to investigate relationship between leadership characteristics and attitude toward change within context education reform. A data was collected to 180 teachers from 45 province in Indonesia. Research suggest that leadership had an effect on the teacher positive attitude toward education reform and their commitment to professional learning community.

### Religious coping and adjustment to stressful life events

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The study was designed to test the hypothesis that religious coping is associated with positive adjustment to stressful life events (SLE). Eighty females aged 18-60 who had recently experienced SLE (divorce, illness, or death of a relative) took part in the study. Participants completed several questionnaires, including impact of recent SLEs, depressive symptoms, affective states, and religious coping. Results indicate that religious coping has a protective effect on self-reported depressive symptoms and on affective states in the aftermath of SLEs, such that no religious coping was associated with lower well-being than all other levels of religious coping.



### A longitudinal study for adolescents' parent-oriented self construal in China

**Haimel, Wang** Center for Deaf Children, China Rehabilitation Research, Beijing, People's Republic of China

354 junior-high-school students in grade 7 (171 male and 183 female) as the subjects were selected from two high schools in Beijing. Three waves tests have been taken in one year longitudinal study which included a series tests for the students and their teachers. Results: (1)Both the parent-oriented self-construal have the ascend trend from grade 7 to grade 8. (2)There was no significant difference between boys and girls in the two kinds of students' self-construal. (3)The developmental trend of different parent-oriented self-construal levels' students are different, which the high level group was ascending, the low level group was descending, and the middle level group keep stable development.

### How can justice conflicts be deescalated? Evaluation of two intervention techniques

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We evaluated two intervention techniques for deescalating social conflict: In a conflict about the distribution of tuition fees among two university faculties, general empathy induction was compared with a specific justice intervention aiming at reducing feelings of injustice. Ninety students filled in questionnaires on how their tuition fees should be used. Mediated by decreased anger, general and specific intervention increased the willingness to share tuition fees with the other faculty. After empathy induction, participants perceived the request to keep tuition fees for the own faculty as more unjust while after specific intervention, participants perceived the requests of both faculties as equally justified.

### The effect of abacus and mental arithmetic on intelligence development among primary school pupils in Khartoum state

**Hamza, Alya** Faculty of Arts- Psychology, khartoum University, khartoum, Sudan

This study aimed at examining the effect of abacus training and mental arithmetic on intelligence development among primary school pupils in Khartoum State. The sample comprised (3085) pupils both males and females. The number of control group is (1144). Experimental (1) (593) and experimental (2) (1340). The researcher used the standard progressive matrices test designed by John Raven. The study revealed that the controlled group obtained in pre test (16.84) and (19.84) in post test. Experimental group (1) (33.54) in the post test. While experimental group (2) obtained (16.89) in pre test and (25.05) in the post test.

### Nonverbal responses to the restriction on moving hands

**Hanaya, Michiko** Dept. of Education, Hirosaki University, Hirosaki, Japan

In this study, each of 10 subjects, 20-21 years old female students, was told to talk with a female student who was quite familiar. The experiment consisted of two parts. On one part, they talked as usual, and on the other part, the subject's movements of the hands were limited. Their movements of the head, arms, legs, eyelids, gaze directions, etc. were tape-recorded for 3 minutes in each condition. The record was analyzed and revealed that the duration of head movements and the number of blinks increased as the movements of the hands were limited.

### Music improves sleep quality

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Objectives: Investigation of the effects of relaxing classical music on students' sleep quality. Methods: We used a three group repeated measures design. 94 students (ages 19-28) with sleep complaints. Participants listened to classical music or audiobook at bedtime for 3 weeks. In the control group there was no intervention. Sleep quality was measured by Pittsburgh Sleep Quality Index. Results: Repeated measures ANOVA revealed a main effect of GROUPS ( $P=0.0028$ ) and TIME ( $P<0.0001$ ). There was an interaction between TIME and GROUPS ( $P<0.0001$ ). Post-hoc Bonferroni-test showed that music significantly improved sleep quality ( $P<0.0001$ ). Conclusion: Classical music is useful intervention for sleeping problems.

### Predictors of BII fears in people receiving intravenous chemotherapy

**Harris, Lynne** Dept. of Health Sciences, University of Sydney, Sydney, Australia **Jones, Mairwen** Faculty of Health Sciences, University of Sydney, Sydney, Australia **Catherine, Carey** NCECR, University of New South Wales, Sydney, Australia

Objectives: Previous findings concerning predictors of BII concerns have come from student samples and samples undergoing single blood draws. This study extended this work to examine predictors of BII concerns among outpatients receiving chemotherapy. Method: Outpatients receiving chemotherapy for cancer ( $n=187$ ) completed a questionnaire. Results: Fifteen percent had scores on the Mutilation Questionnaire comparable to samples with BII phobia. The predictors of BII concerns in this sample were consistent with those from general population samples and from samples with BII phobia. Conclusions: The findings have implications for understanding and reducing distress associated with provision of necessary care in oncology settings.

### The influence of self-esteem on psychological distance between self and other

**Hasegawa, Koji** Faculty of Arts, Shinshu University, Matsumoto, Japan

Sociometer theory suggests that self-esteem functions as a monitor of social acceptance. According to this theory, we predicted that low self-esteems would perceive the psychological distance between self and one's friend more far than high self-esteems. 183 undergraduates participated in the investigation. The results consisted with the prediction. Moreover, low self-esteems suffered from the dilemmas that they didn't want to approach (or part) too much though they wanted to approach (or part) their friend. To resolve the dilemmas, low self-esteems wanted to reassure whether their friend accepted them, but they had frozen to worry about evaluation from their friend.

### Dimensions of relationship quality: An international comparison

**Hassebrauck, Manfred** Inst. für Sozialpsychologie, Universität Wuppertal, Wuppertal, Germany **Fehr, Beverley** Department of Psychology, University of Winnipeg, Winnipeg, Canada **Schwarz, Sascha** Social Psychology, University of Wuppertal, Wuppertal, Germany

Based on the prototype of relationship quality (Hassebrauck, 1997) we examined the dimensions of relationship quality. In a first study with a German sample based on a principle components analysis, four dimensions – Intimacy, Agreement, Independence, and Sexuality – underlying the prototype of relationship quality were identified.

This four factorial structure was replicated with samples from Australia, Brazil, Canada, Greece, Hungary, Italy, Poland, Spain and Turkey. Scales based on the four factorial structure of relationship quality showed satisfactory reliability. Hassebrauck, M. (1997). Cognitions of relationship quality: A prototype analysis of their structure and consequences. *Personal Relationships*, 4, 163-185.

### The exploratory study on the assessment of the facilities in a Japanese campus

**Hatakeyama, Akifumi** Psychological Sciences, Health Science Univ. of Hokkai, Sapporo, Japan

This study deals with the exploratory investigation on the assessment of the facilities in a Japanese university campus. The subjects were consisted of undergraduate students. At first, they were required to discuss and give the items they thought they were necessary to use the facilities in the campus. After that, they strolled around the inside of their own campus, and assessed it in reference to the given items in their discussion. The main results showed that the students were highly assessed them, because they liked their university itself. Base upon the results, how and why they attached it were discussed.

### Silence within dyadic conversations and interpersonal affect

**Hatanaka, Miho** Tsukuba, Japan

Relationships between silence within conversations and interpersonal affect were investigated. In a questionnaire study, 214 undergraduates reported affects in three conversational settings. Results indicated that when the relationship with the partner was close, silence was not rated negatively. However, when the relationship was not close, in response to silence the participants reported more embarrassment when the conversational partner was more attractive, whereas they reported more apathy and irritation when the conversational partner was less attractive. These results suggest that the effect of silence within a conversation on interpersonal affect is different according to the relationship between the conversational partners.

### The effects of cognitions of joking relationship on joking behaviors to friend

**Hayama, Daichi** Dept. of Psychology, University of Tsukuba, Tsukuba, Japan

The purpose of this study was to examine whether cognitions of joking relationship affect joking behaviors. undergraduates ( $n = 208$ ) were examined (a) difference in their joking behaviors between the best friend and an ordinary friend, and (b) the effect of cognitions regarding the joking relationship (understanding the friend and being accepted by the friend) on joking behaviors. Results indicated that participants significantly more used aggressive jokes with the best friend. furthermore, the sense of being accepted by a normal friend promoted aggressive jokes, whereas the sense of being accepted by the best friend reduced the need for other-enhancing jokes.

### Patients' personality and spouses' ways of giving support: which contributes more to the recovery after first Acute Coronary Syndrome (ACS)?

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Objective: to explore the interaction, between the spouses' ways of giving support and the patients' attachment style, to recovery outcomes six months after first ACS. Method: 77 patients and spouses completed the Ways of Giving Support Questionnaire and the Experiences in Close Relationships scale during hospitalization. Outcomes measured at six months were: depression, anxiety, BMI, blood lipids, Hs-CRP, smoking, rehabilitation attendance and resuming work Results: Active engagement predicted decrease in patients' BMI and Over-protectiveness predicted non attendance in rehabilitation programs. Ten significant interactions were found. Conclusions: The interpersonal dynamics determining appropriate behavior following a medical crisis are complex

#### The animate/inanimate distinction in visuomotor coordination

**Hegele, Mathias** *Bewegungskoordination, Insitut für Arbeitsphysiologie, Dortmund, Germany* **Heuer, Herbert** *Movement coordination, Insitut f. Arbeitsphysiologie, Dortmund, Germany*

The present experiment aimed to elucidate some of the conditions that trigger the action observation-execution system when humans coordinate their actions with objects in their environment. Subjects performed sinusoidal movements in temporal synchrony with a human model or a dot moving in the same (congruent) or the orthogonal (incongruent) direction presented as static postures or dynamic displays of continuous motion. Results revealed visuomotor interference for simultaneously observing a human incongruent action, but only for continuous motion displays. Thus, it seems that movement information is required to be present in order to trigger specific interference effects related to the animate/inanimate distinction.

#### The effects of marriage preparation program on changing beliefs about spouses

**Heidari, Mahmood** *Psychology and Education, Shahid Beheshti University, Tehran, Islamic Republic of Iran* **Mazaheri, Mohammad A.** *Psychology & Education, Shahid Beheshti University, Tehran, Islamic Republic of Iran*

This study aims to evaluate the effects of educating cognitive skills of marital life in changing the relationship beliefs of the university students. A sample of 16 Males and 36 females approaching to get married recruited from an established marriage preparation program at the Family Research Institute. All filled a battery of questionnaires at baseline and after training. It was found that irrational relationship beliefs were significantly decreased as a result of the intervention. Details are discussed in the light of findings.

#### What neuroimaging can tell us about cognition: fMRI reveals access to syntactic gender information in German bare noun production

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Is syntactic gender information available in German bare noun production? We investigated this question with fMRI using gender priming during overt picture naming. The speech latencies showed no priming effect. In contrast, fMRI revealed priming in left BA 44 known to support gender processing. This priming effect in fMRI indicates that gender was available during bare noun production. The present study has implications for the ongoing discussion what neuroimaging may tell us about cognition. Neuroimaging data may be more sensitive than behavioural data and thus useful dependent variables providing information

for the specification of cognitive models (e.g., of language production).

#### Cognitive processes underlying simple heuristics: The recognition and the fluency heuristic

**Heister, Julian** *Berlin, Germany* **Marewski, Julian** *ABC, MPIB Berlin, Berlin, Germany*

The recognition heuristic and the fluency heuristic are prime examples of simple heuristics for inferential judgments. Inferences are based solely on recognition and processing fluency, respectively. Even though these heuristics have stirred a lot of research examining the conditions under which they are employed, surprisingly, until today the lower level cognitive processes involved in their use are unexplored. Combining eye movement data with reaction time data and outcome measures, we examine these processes. In particular, we compare situations in which people are instructed to consciously apply the heuristics to situations without explicit instructions about strategy use.

#### Identity styles, commitment, and religiosity among moslems students

**Hejazi Moughari, Elaheh** *Educational Psychology, University of Tehran, Tehran, Islamic Republic of Iran*

The purpose of this study was to investigate the relationship between identity styles (information, Normative, Diffuse/avoidance), identity commitment and religiosity (orthodoxy, external critique, relativism, second naïveté). For this, reason 419 Moslems first and second year undergraduate students were chosen randomly. 2 questionnaires were administrated :ISI(identity style inventory, Berzonsky,1992)and PCBS(post- critical belief, Duriez, and al,2000). For analyzing the data, multivariate regression was used. The result indicated that: identity styles were able to predict the religiosity, commitment had a significant relation with orthodoxy, external critique and relativism and nonsignificant with second naïveté.

#### On the influence of intention-based and stimulus-based actions on action-effect associations

**Herwig, Arvid** *Inst. für Psychologie, Max-Planck-Institut CBS, Leipzig, Germany* **Prinz, Wolfgang** *Psychology, Max Planck Institute CBS, Leipzig, Germany* **Waszak, Florian** *Psychologie de la Perception, Université Paris Descartes, Paris, France*

Humans either carry out actions to produce effects in the environment (intention-based) or to accommodate to environmental demands (stimulus-based). Until now, little is known about the functional differences between these two types of action. We investigated how the type of action influences the formation of short-term (assessed in a prime-probe stimulus-response task) and long-term (assessed in a separate test phase) associations between actions and their auditory effects. Whereas short-term bindings occurred for both types of action, long-term action-effect learning was observed only for intention-based actions. The findings suggest that intention-based and stimulus-based actions are accompanied by different types of learning.

#### Trias of trust in patients with mental disorders and its implications for the therapeutic processes

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Interpersonal trust, trust in oneself (i.e., self-efficacy) and trust in the future (i.e., hopefulness vs. hopelessness) are the central components of the salutogenetic action-theory based "Trias of Trust Model" (TTM). The present study investigated characteristic patterns in the trust trias in 143 inpatients with distinct mental disorders. Multivariate analysis methods revealed significant differ-

ences between the groups concerning trust in oneself and hopelessness. Patients with somatoforme disorders showed significantly higher trust in themselves than depressive patients. Patients with personality disorders got significantly higher scores in hopelessness compared to other mental disorders. Practical implications of these findings for therapeutic processes are discussed.

#### Bad decisions in Blackjack activate anterior cingulate cortex.

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Recently we reported on medial frontal negativities in the event related potentials in response to negative outcomes in a computer version of Blackjack. The present study examined decision making in Blackjack using functional magnetic resonance imaging. 17 participants had to decide at a certain point score whether to take another card or not at different degrees of risk (13-18 points). Participants had to get closer to 21 than a computer opponent, and had to avoid getting over 21 points. The participants showed increased activity in the anterior cingulate cortex after taking a decision which was extremely risky or extremely cautious.

#### Ethnography of science cafe: A function of a facilitator in the communication between scientists and citizens

**Hidaka, Tomo** *Dept. of Literature, Ritsumeikan University, Kyoto, Japan*

In this study I focused on the communication between scientists and citizens in Science Cafe. Discourse of the people in the field was analyzed. By using the KJ method and discourse analysis, the result was summarized into the following point. Citizens can hold a conversation with scientists more actively when a facilitator is there. The facilitator supports the conversation by "correcting" the words of the citizens. Knowledge difference between scientists and citizens can be flattened by the facilitator's support, and citizens get more chance to talk. This indicates the bidirectional communication between professional and non-professional can be achieved by the presence of a facilitator.

#### Processing and weighting of information affecting escalation of commitment

**Hiemisch, Anette** *Inst. für Psychologie, Universität Greifswald, Greifswald, Germany* **Schelske, Stefan** *Institut of Psychology, University of Greifswald, Greifswald, Germany*

Theory clearly indicates task dimensions affecting escalation of commitment. However, which dimensions do people spontaneously perceive and consider in realistic situations? Within a complex scenario 200 students choose a field of study, received failure feedback and finally decided if they wanted to continue. Commitment for the chosen topic, the cognitive representation of the decision problem as well as motivational variables were assessed. Regression analysis revealed that after controlling for commitment certain aspects of the cognitive representation (e.g. thinking about incentives of termination) explained additional variance of the probability to continue. The motivational basis for representing those aspects is discussed.



### Attentional capture and stimulus saliency in a selective reaching task

**Higgins, Laura** Dept. of Kinesiology, University of Calgary, Calgary, Canada **Welsh, Timothy** Kinesiology, University of Calgary, Calgary, Canada  
The present experiment determined the relative influences of four different dynamic stimulus properties (onset, offset, blink and motion) on attentional capture and movement organization. Participants were required to make aiming movements to a target while ignoring a distracter that was characterized by one of the other three stimulus properties. It was found that movement trajectories deviated towards the distracter. Importantly, movement deviations were only present in conditions in which interference effects in reaction time were observed - conditions in which the distracter afforded a highly salient competing response. These results have implications for current models of selective reaching movements.

### Age differences of anxiety and depression in cancer patients

**Hinz, Andreas** Inst. für Medizin. Psychologie, Universität Leipzig, Leipzig, Germany **Schwarz, Reinhold** Dept. of Social Medicine, University of Leipzig, Leipzig, Germany **Krauss, Oliver** Dept. of Social Medicine, University of Leipzig, Leipzig, Germany  
The objective of this study was to investigate the prevalence of anxiety and depression in cancer patients using the Hospital Anxiety and Depression Scale (HADS). Participants were 1529 cancer patients and 2037 persons from the German general population. In the cancer patients, the risk of psychiatric distress was nearly twice that of the general population. However, for older age groups there were only small differences between cancer patients and the general population. The results show that large sample sizes are necessary to evaluate the psychological situation of cancer patients, and that age and gender differences must be taken into account.

### Cross-modal interactions between visual brightness and image of consonants

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Voiced consonants (VC) are considered to be darker than voiceless consonants (LC). Garner's speeded classification was used to test the assumption that this effect is caused by cross-modal interactions between visual brightness and image of consonants. We adopted four pairs (VC and LC) of Japanese Hiragana letters as stimuli and manipulated their colors to either white or black. Supporting our hypothesis, results of 32 participants indicated significant differences between congruent (VC/black, LC/white) and incongruent (LC/black, VC/white) conditions in brightness and consonant discrimination. However, issue related to the formation of stimuli remains to be clarified.

### Effects of varied risk values in risk messages and the number of sources on receivers' response under ambiguity

**Hirota, Sumire** Musashi Inst. of Technology, Yokohama, Japan  
This study examined how varied risk values and the number of sources in risk communication influenced the receivers' response, using a 2nd order probability model; the 1st and 2nd being risk values and number of sources, respectively. College students participated in two experiments ( $n = 187$  and  $105$ ). Analysis performed using a general linear model revealed number of sources as the strongest factor. Persuasive effect was the largest in a low-conflict condition, where variances of risk values in messages were moderate compared to those in high-

and no-conflict. Although frequent risk format was the most effective, its size was small.

### Anxiety and perceptual load modulate the degree of attentional resources required to process emotional bimorphemic words

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Whether the threat stimuli (e.g., fearful face) drives attention involuntarily without controlled attention is a long debate. We suggest that threat detection requires controlled attention and test two hypothesis. First, perceptual load (e.g., Lavie, 1995) could modulate the detection of the threat stimuli (Chinese bimorphemic words). Namely the performance of threat detection is better in low load condition than in high load condition. Second, load-modulated threat detection is less effective for individuals with high level of anxiety. In conclusion, this study shows that the selection of the threat stimuli requires controlled attention and anxiety modulates the detection of the threat stimuli.

### Can attention shift between objects in a discrete mode?

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As early debate regarding the mode of attentional shift in space (i.e., analog vs. discrete), the mode of attentional shift between objects requires further investigation. We employed the same/different judgment task similar to Kwak, Dagenbach and Egeth (1991) to examine the mode debate. Participants judged two letters (TT, LL, or TL) that appear briefly on two of eight outlined squares with three different distances between these two squares. Result showed comparable judgment times across three distances (a discrete mode). Further, a horse racing model ensured a serial process in such task. This study has critical implications in object-based attention literature.

### Object-based attention: A between-object cost or within-object benefit?

**Ho, Ming-Chou** Dept. of Psychology, Chung-Shan Medical University, Taichung, Taiwan **Hou, Chi-Chung** Psychology, Chung-Shan Medical University, Taichung, Taiwan **Shin, Ya-Ling** Psychology, Chung-Shan Medical University, Taichung, Taiwan **Huang, Wan-Ru** Psychology, Chung-Shan Medical University, Taichung, Taiwan **Kuo, Hui-Tzu** Psychology, Chung-Shan Medical University, Taichung, Taiwan  
Object-based attention (OBA) is attributed to a between-object cost or within-object benefit. Atchley and Ho (2001) added a spatial baseline to reaction time (RT)-based OBA paradigm and found that OBA is best described in terms of the cost to switch attention between objects. The accuracy (ACC) and RT measures reflect qualitatively different aspects of processing, attentional allocation vs. decision process. By employing the ACC measure and the similar design to Atchley and Ho, we found similar patterns of attentional allocation on a display when objects were present

or absent. This result could shed some light on the debate of cost/benefit issue.

### Choice deferral arising from two different types of processing

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To explain why people often defer making a choice, we developed the Two-Stage, Two-Threshold model. It assumes that people defer choice because no option reaches an acceptable level of attractiveness or because there is uncertainty regarding which option is best. Preferential choice therefore involves two stages of processing, one that computes the absolute attractiveness of each option independently of the others, and another that computes their relative attractiveness. In our experiment, participants' self reported reasons for their deferrals depended on whether it was important to find the best alternative, or a good alternative regardless of whether it was the best.

### Shared representations in coacting individuals

**Holländer, Antje** Inst. für Psychologie, Max-Planck-Institut, Leipzig, Germany **Prinz, Wolfgang** Inst. für Psychologie, Max-Planck-Institut, Leipzig, Germany  
Common coding theory claims that perceived events and planned actions share a common representational domain. There is evidence that these representations may be shared between self and others. Investigating task sharing is one way of studying real-time social interactions. In this paradigm two individuals take care of a certain aspect of a common task. There is evidence that although no interpersonal coordination is required, the task aspect of the other agent is taken into account as well. The present study investigates the underlying neural mechanisms of co-representation in task sharing using EEG. The findings provide evidence that similar neural mechanisms are involved in monitoring one's own actions and the actions of others.

### Software features and their influence on extraneous cognitive load in a comparison task when analysing videos for the purpose of learning

**Hollender, Nina** Hochschuldidakt. Arbeitsstelle, TU Darmstadt, Darmstadt, Germany **Schmitz, Bernhard** Hochschuldidakt. Arbeitsstelle, TU Darmstadt, Darmstadt, Germany

The study tested the influence of software design on cognitive load when classifying sequences of a video and comparing own classifications with classifications made by an expert. 36 students took part, with one group being able to compare the classifications integrated within the same screen and one group having to switch between two separate screens. A control group conducted no comparisons. Cognitive load was measured by subjective rating and by means of a secondary task. Results yielded significant higher cognitive load ( $p < 0.05$ ) for the separate comparison group. However, there were no differences in the performance in a post-test.

### E-accessibility for the disabled persons in Bangladesh

**Hossain, Mahjabeen Khaled** Inst Of Hazrat Mohammad (SAW), Dhaka, Bangladesh

There is a general social stigma attached to disability, which is virtually inescapable for many religion, society and nation. Bangladesh as a third world country can not ignore this issue. Here it is estimated 3.4 million children and 10 million adults living with disabilities. Disable person face a cycle where they become the poorest of the poor. Providing e-accessibility should be required with the combined commitment & contribution of

government, non-government & private organizations. The paper will reflect the problems encountered, and the future course of action for creating access of visually impaired persons to technologies.

#### **The effects of exercise on physical fitness and cognitive function in elderly who need a care**

**Hotta, Ryo** Human Environmental Studies, Kyushu University, Kasuga, Japan

**Objectives:** The purpose of this study was to investigate the effect of regular exercise on physical fitness and cognitive function in elderly who need a care **Methods:** Subjects were 22 elderly aged 67-86 years. Physical fitness was assessed by 7-item test battery of physical performance and cognitive function was measured by Stroop task. Data was analyzed using one-way analysis of variance. **Results:** Once a week exercise made some improvements in physical fitness and cognitive function. **Conclusions:** This study indicates that some functions of elderly can be changed by regular exercise. We must consider about the reason of them.

#### **The research of emotion: EEG activation induced by musical mode and tempo**

**Hou, Jian Cheng** Psychology, Lab of Cognitive Neuroscience, Nanjing, People's Republic of China

Using Polygraph to explore the emotion induced by different music patterns. Oscillations were induced by 6 music patterns in 20 subjects. Drew out appointed oscillations and analyzed through ANOVA. The major is striking in parietal, central and frontal; minor energies are higher than major. The gender in temporal is striking and males are higher than females. Both major and gender are remarkable in parietal and central with Band  $\beta$  and  $\gamma$ —they are attributed to brain's physiological difference between genders, meanwhile reflects the differences of information conformity. Major and gender can induce widespread oscillations during musical mental activity.

#### **Analysis on family environment of the heroin addicts**

**Huang, Mei** Dept. of Social Science, Hainan Medical College, Hainan, People's Republic of China **Liu, Yumei** Dept. of Social Sciences, Hainan Medical College, Haikou, People's Republic of China

**Objective:** To evaluate family environment of the heroin addicts and investigate a novel rehabilitation therapy in psychology and society for persons who rely on opium maternal. **Methods:** By using FES CV, a comparative study was performed on 50 heroin addicts and 50 normal controls. The generalized cases of dependants were investigated. **Results:** Family environment of the heroin addicts was characterized by indifferent familiarization, cool sensibility. **Conclusions:** The methods of integrated intervention on drug addicts were provided.

#### **When she is prettier than me: A neuro-scientific evidence of social comparison**

**Huang, Xu** Management and Marketing, Hong Kong Polytechnic Univ., Hong Kong, China, People's Republic of : Hong Kong SAR **Zhang, Zhijie** Department of Psychology, South-West University, Chongqing, China, People's Republic of : Macao SAR **Yuan, Hong** Department of Psychology, South-West University, Chongqing, China, People's Republic of : Macao SAR **Lam, Wing** Management and Marketing, Hong Kong Polytechnic U, Hong Kong, China, People's Republic of : Macao SAR **Xiang, Nan** Public Administration, Sichuan University, Cheng Du, China, People's Republic of : Macao SAR **Wang, Yongli** Business Management, Zhong Shang University, Guangzhou, China, People's Republic of : Macao SAR Social comparison can occur and influence self-evaluations unconsciously, even based on information received at 90-110ms after stimulus onset. However, it is not known whether social compar-

ison occurs at 90-100ms or afterwards. We examined the amplitudes of event-related potentials (ERPs) responses to attractive and unattractive face images at 100ms using data collected from 33 participants. We found that the amplitudes of ERP responses to attractive faces were lower than unattractive faces when social comparison was not present, but higher than unattractive faces when the participants compared these face images with their own. We conclude that social comparison occurs at around 100ms.

#### **Family communication process influences adolescent attachment style: The moderating effect of self-esteem**

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The present study aimed at investigating how family communication process (including socio-orientation dimension and concept-orientation dimension) influenced adolescent attachment style. Parents reported family communication process while their adolescent children reported self-esteem and attachment style. Although concept-orientation was believed "better" than socio-orientation, results showed that concept-orientation tended to reduce the attachment avoidance and anxiety but only in high self-esteem adolescents. Socio-orientation tended to increase attachment anxiety only in low self-esteem adolescents, and it even tended to decrease attachment avoidance in high self-esteem adolescents. Self-esteem moderated how family communication process influenced adolescent attachment style.

#### **Psychological characteristics of Japanese young workers who experienced early retirement.**

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We investigated psychological characteristics of young employees who experienced early retirement. Participants were 756 Japanese young employees who had graduated a university during 2003 to 2006. Over twenty percent (21.6%) of all the participants experienced early retirement. We found no significant relationship between the experience of early retirement and a level of reality shock, which they faced at the workplace. Multiple regression analysis revealed that the person who retired early had higher anxiety during their process of deciding their jobs before their first employment, and they felt higher level of 'busyness' about their jobs after the employment.

#### **Attention effects on auditory brainstem responses during contralateral noise masking**

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Attention-related modulation of auditory brainstem response (ABR) was determined in humans during continuous and contralateral masking. Employing an oddball procedure, two tone pips (0.5 and 1 kHz) with intensity at 80 dB SPL were delivered to the left ear. Participants each conducted two tasks either ignoring sounds or attending to 1-kHz tones. When a white noise with sufficient intensity was continuously exposed to the right ear, significant amplitude differences between the two tasks were found for both tones within the ABR latency. Therefore, the intensity of contralateral masking

might be critical to reveal attention-related modulation of the ABR.

#### **Effects of self-consciousness and the feelings of guilty on the coping behaviors after being caught lying**

**Imagawa, Tamio** Psychology for Well-Being, Hokusei Gaku University, Sapporo, Japan

In this study, the author examined the effects of self-Consciousness and the feelings of guilty on the coping behaviors which people adopted when they were caught out in a lie. Self-Consciousness, the feelings of guilty and the coping behaviors were asked to 250 participants (86 male students and 164 female students). Results were obtained by path-analysis. The feelings of guilty contributed to distinguish between apologizing and the other coping behaviors and to distinguish among the settings. Self-Consciousness contributed to distinguish among the settings. Implications of these findings in the Self-consciousness literature were discussed.

#### **Change of computer anxiety in first-year students taking a course of informatics and computer training**

**Inoue, Takeshi** Cognitive Information Science, Shiga University, Otsu, Japan

The purpose of this study was to investigate the change of computer anxiety in first-year students taking a course of informatics and computer training. Two kinds of questionnaire: one is measured for information literacy and the other for computer anxiety, were executed for 29 students in April (immediately after matriculation in a university), May, June, and July. The results showed that computer anxiety was significantly higher in April than in May, June, or July, independent of information literacy of the students. This fact suggests that computer anxiety decrease rapidly after students have started to learn information literacy.

#### **Influence of state anxiety on body sway with visual target changing in size**

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In the present experiment, relationship between the body sway and the degree of anxiety was explored in 11 healthy participants while standing with a visual target changing in size. The size of visual target continuously varied between 5.34 degree and 8 degree in visual angle with a frequency of 0.3 Hz. Body sway recorded was analyzed by FFT analysis, and correlation was examined between the power and score of state-anxiety. The results indicated the significant negative correlation ( $r = -0.68$ ) between the power of the frequency band of 0.1-0.21 Hz and the degree of anxiety in the left-right axis.

#### **Family relationship in the rural areas of Bangladesh: A comparative study on Muslim and Santal community**

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This study will provide a detail perspective of family relationship pattern between Muslim and Santal communities, and explore the family relationship norms, marriage relationship and developing bond. This study also compares the sexual behaviour, marriage relationship pattern and marriage role relationship among these communities. Family relationship pattern depends on various influencing factors in Bangladeshi culture. It will try to depict factors which influence the relationship pattern among the Muslim and Santal communities in rural Bangladesh. It's based on a significant sample of



Muslim and Santal families collected through survey and participant-observation methods from selected study areas in Bangladesh.

#### **The effectiveness of listening to Al-Quran recitation to improve driver performance**

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**Mohd Nor, Mohd Jailani** School of Psychology, Universiti Kebangsaan Malaysia, Bangi Selangor, Malaysia  
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This study aimed to assess how far listening to Al'Quran recitation help drivers to concentrate while driving a vehicle. This experiment was carried out in a driving simulator where physiological changes were measured. 20 male volunteers participated in the study. They were asked to drive without time limit and they could stop when they felt tired. The result of this experiment shows that the duration for driving while listening to the Al'Quran recitation treatment is longer than driving without Al'Quran recitation condition. Subjects' reaction time when driving with Al'Quran treatment condition was also faster. This study suggested that Al' Quran recitation therapy could be implemented to increase safety and comfortness for drivers.

#### **The effect of videotape feedback of a dyadic interaction on metaperception**

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This study examined the hypothesis that observing oneself in videotape would improve the accuracy of metaperception (prediction of how others viewed oneself). Seventy female students participated in conversations with unacquainted partners twice, of which were videotaped, and estimated the metaperceptions after both conversations. Before the second conversations, two-thirds of participants observed the videotape of either themselves only or participants and partners in the first conversations. Another third observed a videotape which wasn't related to conversations. As the results, although the hypothesis wasn't confirmed, social skills correlated with improvement of meta-accuracy. We discussed the relationships between social skills and the effectiveness of videotape feedback.

#### **Transition to parenthood: A comparison between the perceptions of adolescents, emerging adults and expecting parents**

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**Moldavsky, Michal** School of Education, Tel Aviv University, Tel Aviv, Israel  
 The current study compared the perceptions regarding the transition to parenthood among three groups of Israeli Jews - (1) 94 adolescents, (2) 116 emerging adults and (3) 88 expecting parents. The participants completed questionnaire related to their level of idealization, motivation, and future parental self-efficacy. Study findings indicated that the level of idealization and the level of parental self-efficacy are higher among males than females. However, the level of motivation to parenthood was higher among females. Differences among the three study groups were found only for females but not for males. The study findings' implications will be discussed.

#### **Bimanual coordination between individuals: Do we represent the task of a coacting partner?**

**Jäger, Christina** Inst. für Psychologie, Max-Planck-Institut CBS, Leipzig, Germany  
**Holländer, Antje** Psychology, MPI CBS, Leipzig, Germany  
**Prinz, Wolfgang** Psychology, MPI CBS, Leipzig, Germany

When two individuals take care of a certain aspect of a common task they do not have a representation of his/her own task alone. Recent findings show that one takes the aspects of a coacting partner's task into account as well. Participants were required to perform symbolically cued reaching movements varying in movement amplitude. The experiment was conducted in a partial (single) and shared (joint) condition. We predicted a disadvantage in RT for dissimilar cued movement amplitudes in the shared but not in the partial condition. Results are discussed with respect to the processes of joint action and task sharing.

#### **The role of quality social support in university student achievement attitudes: A Chilean sample**

**Jacoby, Brian Eugene, USA**  
**McWhirter, Benedict** Counseling Psychology, University of Oregon, Eugene, OR, USA

The purpose of this study is to investigate adolescent social risk and protective factors, and identify variables that may influence self-evaluation and achievement outcomes. We collected surveys from 130 students (aged 18-20) attending two Chilean universities, which measured quality of communication and level of connection with family, friends, peers, and school; and educational and attitudinal outcome measures: self esteem, hope, connection to self, and attitudes toward the future. Participants also reported demographic variables, such as family cohabitants and socioeconomic status, which may play a role in positive educational outcomes and social support factors. Early evidence reveals a connection between family social support and positive achievement attitudes.

#### **Differential rehabilitation outcome in eating disorder patients**

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**Wiesnagrotzki, Stefan** Psychiatry and Psychotherapy, Medical University of Vienna, Vienna, Austria  
**Gombas, Wolfgang** Psychotherapy, Psychosocial Strategies, Vienna, Austria

Objective: Using a differential research paradigm we evaluated treatment success in eating disorder patients. Methods: Fifty-one patients were treated for eight weeks on basis of an inpatient psychoanalytic-based procedure. Four groups built on concordance or discrepancy of subjective and objective ratings of symptoms severity were compared using health-related quality of life as outcome measure. Results: Using a pre/post comparison design huge improvements could be found for two groups while no changes over time occurred for the other two. Conclusions: Results emphasize the importance of subjective ratings of symptoms as they seem to play an important role for treatment success.

#### **Categories encapsulate causal properties, influencing similarity**

**James, Nathalie** Dept. of Psychology, UCLA, Venice, USA  
**Cheng, Patricia** Psychology, UCLA, Venice, CA, USA

To demonstrate that categories form during causal reasoning, participants examined objects whose features predicted certain outcomes. The features of half the objects were confounded with an extraneous variable. Participants formed clearer categories around objects whose features were unconfounded, indicating that they took the objects' causal context into account instead of generating categories around the objects' similarity alone. Additionally, participants formed different categories to meet different goals set by the experimenter, indicating that categories are purpose-driven rather than merely descriptive. Finally, unconfounded, goal-relevant features were disproportionately weighed in similarity judgments indicating that similarity is a product of causal category formation.

#### **Effects of task parameters on individual differences in pursuit tracking performance**

**Jerneic, Zeljko** Department of Psychology, University of Zagreb, Zagreb, Croatia  
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The aim was to explore the effects of some task parameters on individual differences in tracking performance. 16 pursuit tracking tasks representing all possible combinations of four task characteristics (control dynamics, input regularity, input form, and track preview) were selected for the experiment. Factor analysis of performance data revealed three factors indicating that the extent of correlations between tracking tasks depends on whether the input function is continuous or step one, and in the case of tracking step function whether the track is displayed or not. Besides, between-factor correlations suggested the existence of a second-order tracking factor.

#### **A case study of chords and their inversions recognition by mental rotation or sound character**

**Jiang, Cong** Inst. für Musik, Universität Halle-Wittenberg, Halle, Germany

This study is an attemptable research of recognition of chords and their inversions. Music is a kind of auditory spatial art, so it is hypothesized that there might be mental rotation when we hear chord and inversions. The subject, a post-graduate major in musicology, is asked to listen to 20 pairs of triads and seventh chord with their inversions, and report that the second chord in each pair is of which inversion. The reaction time of inversions is not significantly but longer than that of original chords. It can be concluded that mental rotation plays a part in the recognition of chords and their inversions.

#### **Intrinsic, extrinsic religiosity and well-being**

**Joshi, Shobhna** Psychology, Banaras Hindu University, Varanasi, India  
**Kumari, Shilpa** Psychology, Banaras Hindu University, Varanasi, India

The terms intrinsic and extrinsic religion currently represent the backbone of empirical research in the psychology of religion. An intrinsic orientation (I) involves internal religious motives within a person whereas extrinsic orientation (E) involves external motives outside the religion, using the religion for unreligious ends. Similarly, well-being comprises people's evaluation, both affective, and cognitive, of their lives. The study of I, E and well-being, is still an emerging area in psychology and has to mature as an independent enterprise in India. Thus future work would be focused on examining the relationship between religiosity and well-being.

#### **Role of family environment in behavioural problems and self-esteem amongst Indian adolescents**

**Joshi, Renuka** PG Department of Psychology, D.A.V.(PG) College, Dehradun, India

The present study evaluates the effect of family environment on behavioural problems and self esteem amongst adolescents. 200 school children (10 - 14 years) were administered standardized Family Climate Scale, Child Psychopathology Measurement Schedule and Self Esteem Inventory. The children of unfavorable family environment (UFE) scored significantly higher on conduct disorder, anxiety and somatization than favorable family environment (FFE) subjects. On self esteem also UFE children possessed significantly low level of personally perceived self (PPS). Significant gender differences were observed on conduct disorder, depression, physical illness with emotional problems, somatization, PPS and socially perceived self amongst the subjects.

### The correspondence of the adult romantic attachment between siblings and romantic partners

**Kamenov, Zeljka** Department of Psychology, University of Zagreb, Zagreb, Croatia **Jelic, Margareta** Department of Psychology, University of Zagreb, Zagreb, Croatia

The aim of the study was to compare the adult romantic attachment of persons grown up in the same family. The prototypic perspective claims that the attachment representations formed in childhood remain stable and have the defining influence on relationships in adulthood. From the revisionist perspective, a person's attachment to a particular other could be also a function of the experiences with this particular partner. Dyadic analyses were conducted on young adults, their siblings and their romantic partners, comparing the degree of correspondence of the romantic attachment between siblings in relation to the attachment style of their current romantic partners.

### Adult attachment dimensions, emotion, and evaluation toward relationships: Similarity between mother-child dyads and romantic relationships in adolescents

**Kanemasa, Yuji** Faculty of Human Sciences, Osaka University of Human Scie, Osaka, Japan

This study was conducted to reveal the similarity between mother-child dyads and romantic relationships in adolescents, based on the relationships between adult attachment dimensions, emotion, and evaluation toward relationships. Participants were 209 pairs of late-adolescent children and their mothers and 104 romantic couples in adolescents. The main results were as follows: in both relationships, Anxiety dimension was positively correlated to own and partner's negative emotion and negatively related to own and partner's evaluation toward relationships. Moreover, the relations between Anxiety dimension and own and partner's evaluation toward relationships were mediated by own and partner's negative emotion respectively in both relationships.

### How to guarantee transfer?

**Kaps, Silvia** Christina Pädagogische Psychologie, Tech. Universität Braunschweig, Braunschweig, Germany **Juergens, Barbara** Pädagogische Psychologie, TU Braunschweig, Braunschweig, Germany

Companies invest nearly 2 percent of labor costs in trainings (State of Industry Report, 2004). But trainings are only profitable if there is successful trainings-transfer. Georgenson (1982) states that probably only 10 percent of the training-contents are effectively transferred. An internet-based support should significantly increase transfer of training. Using a social skills training and the internet-based support, a 160 participants will be tested in a 4 x 4 Design (training + internet-support, training only, internet-support only, no intervention and four measuring times). It is supposed that participants in the training + internet-support condition will significantly increase transfer of training. First results will be presented.

### Organization heads' well-balanced orientations toward personnel and task as turnover prevention

**Karamushka, Liudmyla** Organizational Psychology, Institute of Psychology, Kyiv, Ukraine **Fil, Alena** Lab. of Organiz. Psychology, Institut of Psychology, Kiev, Ukraine **Liplyanska, Oksana** Organisational Psychology, Institut of Psychology, Kyiv, Ukraine **Objective.** Investigation of organization employees' orientations toward tasks and personnel. **Methods:** The investigation was done on a sample of 248 educational organization heads using R.Blake-J.Mouton Inventory and SPSS. **Results.** 1) 77.1% of the respondents were highly task-oriented and

31.9% personnel-oriented. 2) Turnover in organizations along with material and organizational factors (low salary, uncomfortable work conditions, etc.) may be caused by personality factors (lack of managers' attention to employees' individual and professional interests, self-realization, and career promotion, etc.). **Conclusion.** The investigation findings call for organization heads' paying more attention to 'the human factor' being an important turnover preventing and performance improving measure.

### Anxiety and depression in an outpatient clinical sample in Cyprus

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The present study aimed to examine the reported levels of anxiety and depression in a sample of individuals seeking treatment in an outpatient clinic, in Cyprus. Fifty four clients (39 females, Mage = 31) completed the State and Trait Anxiety Inventory (STAIS-T) and the Beck Depression Inventory (BDI-II) at intake. The majority (61.1%) reported not receiving any psychiatric help or taking medication. This population presented high levels of anxiety, both state ( $M=50.76$ ) and trait ( $M=52.22$ ), and overall moderate levels of depression ( $M=20.02$ ). In general males and females did not differ in terms of anxiety and depression ( $p > .05$ ).

### Effects of working circumstances on processes of work-family conflicts in dual-career couples

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This study examined a model of work-family conflicts processes in which working circumstances affect depression directly and/or indirectly. The circumstances mean family-unfriendly climates, unmanageable conditions, and supports from leaders. A survey of Japanese dual-career couples covering 103 males and 186 females was analyzed. Results showed that all three circumstances increased depression indirectly, and only family-unfriendly climates and unmanageable conditions affected it directly. In consideration of indirect effects, the climates and the supports influenced depression via work-family conflicts, while unmanageable conditions influenced it via coping behaviors.

### Conflict management about cats-breeding in urban community: Case of community cats activity in Yokohama City

**Kato, Kensuke** Nobeoka, Japan

In this study, I investigated the case of community conflict caused by cats-breeding in urban area, Yokohama, Japan (case of "community cats" activity), and considered the features of this practice from the perspective of activity theory. In this activity, residents treated "cat problem" as "residents-relation problem" thoroughly to manage community conflict, and established "guideline" including two divided claims (like/dislike cats). I conducted participant observation toward this activity for 3 years, and interviewed with residents. It was considered that the activity system concerned with this practice transfigured and expanded toward other daily activities in the community through residents' narratives and activities.

### Japanese parenting through gendered lenses: Expectations and behaviors towards sons and daughters

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This study examined whether parents' developmental expectations and parenting behaviors were different with respect to their sons and daughters. Mothers and fathers of 352 children (163 boys and 189 girls) aged 4 to 6 answered the questionnaire on developmental expectations and their responses to difficult parenting situations. The results showed that both mothers and fathers expected sons to be emotionally mature earlier than daughters are. It was also found that, in general, fathers' behaviors toward daughters were gentler than those towards sons. It is concluded that parents have different expectations and behaviors toward sons and daughters.

### Lay theories of depression among Japanese undergraduates: Text mining analyses

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We examined lay theories of depression among Japanese undergraduates. It is thought that people have lay theories of depression. For example, people have their images of depressive behavior, symptoms, and the causes and remedies of depression. We investigated lay theories of causes and remedies of depression. The total of 313 Japanese undergraduates answered their images of depression in an open-ended format. We analyzed text data participants answered using text mining method. Correspondence analyses indicated that participants described causes of depression as rumination, cognitive styles, and stressful events. Also, participants mentioned remedies of depression as difficulties, positive thinking, and distractions.

### The test-retest reliability of the autokinetic illusion by tracking the appared movement

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Individuals in complete darkness, observing a fixed point-source of light, will report seeing the light move, thats known as autokinetic illusion, and its beyond of somebodys control. Everybody has an individual kind of perceived movement similarly provocable everytime. When the autokinetic illusion starts by itself the person keeps track of that movement by mouse connected with a digitizer. The investigation aims at checking the reliability of the tracks of autokinetic illusions reproduced by each person. We determine the intraindividual variation of repeated autokinetic illusions and the interindividual differences in that variation from persons who have several stress in their lifes.

### Self concept and emotional intelligence of Pakistani adolescents from orphanages and intact families

**Kausar, Rukhsana** Applied Psychology, University of the Punjab, Lahore, Pakistan **Rasheed, Asima** Behavioural Sciences, Fatima Jinnah Women University, Rawalpindi, Pakistan

Study compared adolescents from orphanages and intact families on self-concept (SC) and emotional intelligence (EI). It was hypothesized that intact family adolescents have positive SC and high EI than those from orphanage. Hundred adolescents were recruited from public schools ( $N = 50$ ) and orphanage ( $N = 50$ ). Analysis revealed that two groups of adolescents did not differ on self concept and EQ. Boys scored higher on self-concept and emotional intelligence as compared to girls and there was positive relationship between self-concept and emotional intelligence. Findings did not sup-



port the notion that adolescents in orphanage differ in self concept and emotional intelligence.

#### **The role of feedback in temporal coordination**

**Keller, Peter** Max-Planck-Institut, Leipzig, Germany  
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**Prinz, Wolfgang** Psychology, Max Planck Institute, Leipzig, Germany  
 Rhythmic actions performed alone or in concert with others (e.g., dancing) generate receptive feedback when one's own and/or others' effectors impact upon the body. To investigate the role of such feedback in temporal coordination, people synchronised with an auditory metronome by finger tapping on different regions of their own and others' forearms. Movement timing variability increased with the sensitivity of the region irrespective of forearm identity. Increased sensitivity may affect timing accuracy by attenuating receptive feedback when tapping on one's own body, while analogous effects may emerge through the simulated attenuation of feedback when tapping on another's body.

#### **Fitness to drive under the influence of psychoactive medication**

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**Kaufner, Yvonne** Lehrstuhl Psychologie 3, IZVW, Universität Würzburg, Würzburg, Germany  
**Hoffmann, Sonja** Lehrstuhl Psychologie 3, IZVW, Universität Würzburg, Würzburg, Germany  
**Krüger, Hans-Peter** Lehrstuhl Psychologie 3, IZVW, Universität Würzburg, Würzburg, Germany  
 Psychoactive medications are known to cause cognitive side effects, considered to be partly relevant for fitness to drive. However, there is only few empirical data providing information about the dangers of driving when taking psychoactive medications. An encouraging approach for testing fitness to drive under the influence of psychoactive medications is the implementation of driving tests in a high-fidelity driving simulator. Sensitivity and validity of certain parameters assessing driving performance for evaluation of driving fitness are discussed. Results are based on N=30 subjects, being treated with two different psychoactive drugs in a double-blind crossover-design.

#### **Psychometric evidence on individual differences in conflict adaptations for the Simon and the Eriksen Flanker task**

**Keye, Doris** IQB, Humboldt-Universität zu Berlin, Germany  
**Wilhelm, Oliver** IQB, Humboldt-Universität, Berlin, Germany  
**Oberauer, Klaus** Experimental Psychology, University of Bristol, Bristol, Germany  
 Conflict- and context slow-down have been proposed as indicators of a conflict-monitoring system that initiates cognitive control to resolve conflicts in information processing. We investigated individual differences in conflict-monitoring and correlates. Besides working memory capacity (WMC) and impulsivity measures, 167 adults completed a Simon and an Eriksen flanker task. We obtained conflict- and context slow-down independent of stimulus repetition. Individual differences in conflict slow-down but not context slow-down could be identified as unique sources of variance. WMC and impulsivity were not differently correlated with conflict or non-conflict trials. Costs of conflict-monitoring are discussed from a binding perspective on working memory.

#### **The relation between university student's religiosity and their demographical features**

**Khodayarifard, Mohammad** Dept. of Psychology, University of Tehran, Tehran, Islamic Republic of Iran  
 Objective: The purpose of this study was to measuring university students' religiosity and their demographical characteristic. Method: 1911 uni-

versity students were studied in a survey which used stratified random sampling. The student religiosity scale developed by Khodayarifard (2006) was used. Results: As the level of parents' education increases, the degree of religiosity increases among university students. Discussion: It can be concluded that instruction and practice of religious beliefs and acts in the family has a considerable effect on internalization of the principles and beliefs by the family members through modeling and identification with the parents.

#### **Forgiveness and its relationship with life satisfaction, mental and physical health, and family relationships.**

**Khullar, Sangeeta** Psychology, MKP (PG) College, Dehra Dun, India  
 150M and 150F Ss of age groups 18-35, 36-55, and 56-80 completed Williams Forgiveness, CMI Health, Life Satisfaction and Family Relationship Scales. Results: The two sexes do not differ on Forgiveness and Life satisfaction at any age level; middle aged females are more forgiving than younger ones. Life satisfaction increases with age. For men who enjoy greater physical health. Forgiveness correlates positively with mental health and life satisfaction. Physical health and forgiveness are not correlated. Forgiveness correlates significantly with the eight areas of family relationships. Forgiveness has important interpersonal and health implications.

#### **Parental involvement and expectations and their relationship with academic anxiety and achievement and self expectations of students of residential and day schools**

**Khullar, Sangeeta** Psychology, MKP (PG) College, Dehra Dun, India  
 200Ss each from day and residential schools completed the Parental Expectations(PE), parental Involvement(PI), Self Expectations(SE), and Academic Anxiety(AA) Scales. Percentage on last school examination constituted Academic Achievement(Ac Ach). Results showed significant differences in PE in the two schools and no difference in PI, AcAch, and AA. SE and PE correlated highly in both cases. For day schools AA was positively correlated with PE and SE and negatively with PI. For residential schools AcAch correlated negatively with PI and SE and positively with AA. Implications: day and residential schools may differ but children are still living their parents' dreams.

#### **Treasure every meeting, for it will never recur:**

##### **The effects of expectancy of an ongoing relationship on interpersonal communication**

**Kimura, Masanori** Dept. of Social Psychology, Osaka University, Suita, Japan  
**Iso, Yukiko** Child Psychology, Tokyo Future University, Adachi-ku, Tokyo, Japan  
**Daibo, Ikuo** Social Psychology, Osaka University, Suita, Japan

This study investigated the effects of expectancy of an ongoing relationship on interpersonal communication through two experiments. In experiment 1, 23 dyads unacquainted with each other were assigned to "expectancy of an ongoing relationship" or "no-expectancy" condition, and they participated in either conversation. Spontaneous motivations to continue the relationship were measured before conversations in experiment 2. Results were consistent. When participants hadn't expected the relationship to continue, participants whose social skills were high talked with partners more actively more than those who had lower skills. Social skills would make us possible to 'treasure every meeting which never recurred'.

#### **Emotional irresponsiveness toward the social events and emotions for close others.**

**Kino, Kazuyo** English and Communication, Hiroshima International Univ., Higashi-hiroshima, Japan  
 The effect of positive/negative emotions for close others on the emotional reactions toward social events, i.e. news, was investigated in this study. A set of questionnaire, about the emotional reactions toward three different kinds of social events and positive/negative emotions for close others, was administered to 249 adolescents (mostly undergraduates). It was shown that the positive emotion for others negatively correlated, but negative emotions for others had no correlation with emotional irresponsiveness toward social events. Positive concerns for close others tend to lead the emotional reactions towards the wider social world and contribute to enrich adolescents' emotional world.

#### **Advanced digital video technologies for collaborative design tasks in school classes: Empirical evidence on the conditions for effective cooperation and learning**

**Klages, Benjamin** Knowledge Media Res. Center, Tübingen, Germany  
**Zahn, Carmen** Cognitive Psychology, Knowledge Media Research Center, Tübingen, Germany  
**Hesse, Friedrich W.** Cognitive Psychology, Knowledge Media Research Center, Tübingen, Germany

We investigate the educational value of visual design tasks involving advanced digital video technologies as cognitive tools in German language and history lessons. Based on the theoretical background of "visual design as collaborative problem solving", we examine the specific conditions necessary for effective collaboration and learning in a 2x2 field study design. Results from previous lab studies suggest that student groups who are supported by advanced video technology (as compared to a control group) elaborate on video information in more detail during group interaction, thereby also acquiring more knowledge and visual literacy skills. Our current field data support this assumption.

#### **The effects of mating motivation on women's sense of humor**

**Koeppl, Julia** Inst. für Sozialpsychologie, Universität München, München, Germany  
**Greitemeyer, Tobias** Social Psychology, LMU Muenchen, Muenchen, Germany

Empirical research on mating preferences has emphasized that sense of humor is an important characteristic for both sexes. While men are attracted to women who respond appreciatively to their humor, women prefer partners who actively generate humor. Considering these findings from an evolutionary point of view, one may suggest women primed on mating to be more receptive to funny situations when the actor is male. In contrast, mating motivation should not affect a man's rating of a joke. In study 1 these hypotheses were corroborated by presenting funny caricatures. Currently the findings are replicated for real behavior.

#### **Using VEs in teaching historical chronology**

**Korallo, Liliya** Dept. of Psychology, Middlesex University, London, United Kingdom

Questionnaires revealed that people have problems with historical chronology and teachers reported that children had difficulty learning it. The current study investigated benefits of using VEs in the teaching of academic disciplines with strong chronological components. Events were sequentially displayed in a virtual fly-through that a user could navigate as though using a time-machine. The hypothesis was that more would be learned about sequences from a VE version than in control conditions – paper-printed or PowerPoint versions

– especially when challenge was incorporated. Different age groups were compared. The findings were mixed, but some supported the hypothesis for particular groups.

#### **Companionate love, passionate love and safe sex in dating relationships**

**Kordoutis, Panos** Dept. of Psychology, Panteion University, Athens, Greece

We hypothesized that type of love in intimate relationships is associated with safe sex behaviors. University students (272 men, 295 women, aged  $M=21.76$ ) rated their recent dating relationship on companionship and passion and indicated frequency of, condom-use, condom-use negotiation scripts, and reasons for non-use. Analyses of variance showed that women in passionate relationships used condoms less often and their proposal for condom-use was denied more frequently, than women in companionate ones and men generally. Non-use was attributed more strongly to relationship anxiety in passionate and to risk-denial in companionate relationships. Protective behavior, particularly women's, appears sensitive to love type.

#### **Antecedents for transformational leadership: The role of leader's task perceptions**

**Korek, Sabine** Arbeits- und Org.-Psychologie, Universität Leipzig, Leipzig, Germany **Mohr, Gisela** Work and Organizational Psycho, University Leipzig, Leipzig, Germany

The literature on contextual factors for transformational leadership suggests, that complex, changing and flexible organizational structures further the emergence of transformational leadership. Transferring this notion to leaders' task characteristics, we investigated, whether these factors are related to transformational leadership ratings of followers. Multi-level-analyses of self-report data from 134 leaders and 427 direct followers from different organizations showed, that leaders, who rated their main tasks as complex and changing, were evaluated more transformational by their followers. Results suggest, that challenging work tasks may enable leaders to show more transformational leadership behaviour, which is beneficial for personal and organizational outcomes.

#### **Rules vs. examples based learning in German noun plurals**

**Kovic, Vanja** Experimental Psychology, Oxford University, Oxford, United Kingdom

The present behavioural study examines learning morphology of German-noun-plurals based on rules, examples or on both, rules and examples. Three experimental conditions: learning German-noun-plurals based on rules, via associations or by both, rules and associations, were conducted. The results suggest that the morphological patterns are learned more easily in the form of rules and thus, seem to be more easily captured by dual-route than single-route theories. However, error patterns across the: e, -n, -er, Ü, -s rules revealed results confronting dual-route theories and suggested the existence of two mechanisms rather than one for learning regular inflection in German-plural-nouns.

#### **Organizational and psychological consequences of influence regulation: The concept of deinfluentialization**

**Kozusznik, Barbara** Pedagogy and Psychology, University of Silesia, Katowice, Poland

To answer questions about metamorphic effects of power /Kipnis/, satisfaction and effectiveness of managers in the context of new models of organizations /Handy, Peters, Drucker/ which require deinfluentialization - ability of influence regulation /Kozusznik/. 325 managers data were collected about deinfluentialization, influence tactics, self and other perception, satisfaction and effectiveness. Managers with high level deinfluentialization

have more positive perception of themselves and other people and are the most effective group. Women managers made up half of this group. Managers should enrich their knowledge about influence regulation tactics. Women managers should enrich their managerial role with deinfluentialization behaviour and make it part of their own strengths.

#### **Collaboration across distance: A management model for virtual teams in production networks**

**Kraemer, Bjoern W & O Psychology, Ruhr-University Bochum, Bochum, Germany Zimolong, Bernhard W & O Psychology, Ruhr-University Bochum, Bochum, Germany**

Virtual teams face a number of management challenges. The purpose of this study is to examine the differing effects of explicit control (process management, information management, cooperation rules) and implicit control (shared mental models, trust) on team processes (communication, cooperation, coordination) and outcomes (satisfaction, time-to-market, performance) in virtual teams. Data from a questionnaire survey show the impact of explicit control on implicit control, team processes and different outcome variables in 26 interorganizational product development teams. The results will be discussed with regard to the effectiveness of the suggested management model to improve processes and outcomes in virtual teams.

#### **Distinctive features of employees' task and personnel orientations in business organizations**

**Kravtsova, Julia** Organizational Psychology, Institut of Psychology, Kiev, Ukraine

Objectives. To find out distinctive features of employees' task and personnel orientations in business organizations. Methods. The investigation was done on 150 employees from different specialization business organizations using the R.Blake & J.Mouton Managerial grid. Results. 1. The area of organization's activity statistically significantly ( $r<0.001$ ) correlated with employees' orientation toward task (public services - 85.4%, production - 58.0%, and trade - 54.2%). 2. The area of organization's activity statistically significantly ( $r<0.001$ ) correlated with employees' orientation toward personnel (trade - 70.8%, public services - 26.8%, and production - 26.0%). Conclusion. Enhancement of organizational performance requires balancing of employees' orientations toward task and personnel.

#### **Role of visualization, gesture of the hand and verbal comments at presentation of the object**

**Kuchinskaya, Nataly** Department of Psychology, Belarusian State Pedagogical U, Minsk, Belarus **Shamal, Diana** Department of Psychology, Belarusian State Pedagogical U, Minsk, Belarus

Researches by B.Tversky, G.Gibson, V.Zinchenko at the choice of effective means for presentation of a object or idea are known. We have carried out own researches by method perception actions on specification of a role of gesture of a hands. Results of experiments have shown efficiency of gesture only if it will be with the next conditions: one-coordinate, rapid, realized without noise. Conclusion: it is necessary to add the conclusions received earlier Barbara.Tversky.- with a severe constraint which is necessary for efficiency of gesture by a hand in a direction of object at its presentation: one-coordinate, rapid, realized without noise.

#### **Anticipating distracted addressees: How speakers' expectations and Addressees' feedback influence storytelling**

**Kuhlen, Anna Katharina** Dept. of Psychology, Stony Brook University, Stony Brook, USA **Brennan, Susan E.** Psychology, Stony Brook University, Stony Brook, USA

Speakers tell better stories to attentive than distracted addressees. Is this due to reduced feedback, or to speakers' expectations about whether addressees are engaged? In 39 dyads we had speakers tell stories to addressees who were either attentive or else distracted; half the speakers in each group were told (accurately or inaccurately) that their addressee was distracted by a secondary task. Speakers with attentive addressees told more vivid stories, but only when they expected attentive addressees. We conclude that storytelling is shaped not only by addressee feedback, but also by how speakers construe a lack of addressee feedback.

#### **Gender stereotype priming on reaching and grasping actions**

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The study investigated whether gender-stereotype priming alters behavior in a reach-to-grasp paradigm. Participants ( $N=15$ ) reached towards, grasped and placed the stimulus in a concave container (Non-social condition) or the experimenter's hand (male/female - Social condition). The critical variable used as a measure of possible behavioral differences for contrasting social attitudes was the grasping aperture (Becchio, et al, 2007). The key result is that gender-priming modified the kinematics. During reach, participants displayed faster velocity with members of the opposite sex. During grasp, longer RT's for grasp aperture with members of the opposite sex were observed. These changes reflect how gender stereotypes affect motor action.

#### **Affective disorders in cancer patients**

**Kuznetsova, Anna** Psychological faculty, Northern State Medical Univers, Arkhangelsk, Russia

The purpose of study was to examine anxiety and its components in cancer patients. The participants were 120 women with breast and ovarian cancer treated by different form of therapy. They were evaluated using psychological tests. The high level of anxiety was found in patients. The most common symptoms were: fatigue, fear about future and nervousness about social contacts. Different components of anxiety were found in groups according to form of therapy. In this study the most common components of anxiety in cancer patients were found. Patients treated by different therapy need to get different type of psychological support.

#### **Attachment, alexithymia and anxiety**

**Láng, András** Dept. Educational Studies, University of Pécs, Pécs, Hungary

Rooted in early caregiver-infant relation, people with different attachment styles deal differently with emotional issues. In this study connection between attachment dimensions, alexithymia and anxiety was investigated. Correlation between avoidance and alexithymia, and between anxious attachment and anxious symptoms was expected and tested on a sample of university students ( $n=90$ ) using self-report measures. Correlational analysis partially confirmed hypotheses. Alexithymic features and anxiety correlated with both dimensions showing an expected pattern based on theory of AAI and connection between attachment styles and internalizing and externalizing symptoms revealed in several studies.

#### **Best friends: Intimacy and self-disclosure**

**López Becerra, Claudia** México, Mexico **Rivera Aragón, Sofia** Social Psychology, UNAM, México, D. F., Mexico

Specially, interactions among friends, display greater closeness, expressions of affection, pro-social



behaviour, intimacy, support, trust, so forth (Bliesner & Adams, 1992) which allow its members to be authentic and feel belongingness to the other. In order to know the amount of intimacy and self-disclosure exist among best friends we applied the Intimacy and Self-Disclosure Scales to 505 adult females and males from Mexico City. Among the main findings, we found females are more empathic, supportive and express their feelings than males and younger participants also showed more friendship (p.e. sharing activities and emotional aspects, giving affection, etc.) than older people.

#### **Relationship of adaptive behavior disorders and codependence level and parents attachment for 16-18 years old adolescents**

**Laizane, Ilona** Psychology, University of Latvia, Riga, Latvia

The research investigates relationship between behavioral disorders, codependence level and parents attachment. The observed sample includes 250 adolescents from the contemporary and professional secondary schools, age group 16-18 years. Research methods included codependency level evaluation tool "Spann-Fischer Codependency Scale" (SFCDS, Fischer, Spann & Crawford), family relationship evaluation tool "Inventory of Parent and Peer Attachment" (G.Armsden, M.T.Greenberg) and Youth Self-Report (T.Achenbach). The observation results confirmed positive correlation between behavioral disorders and codependence level and parents attachment. Behavioral disorders Withdrawal/ Depression, and Somatic Complaints correlate more in the female group, whereas Anxiety/ Depression, Aggressive Behavior and Rule-Breaking Behavior are more common in the male group.

#### **Social workers' and welfare recipients' attributions for poverty from two perspectives**

**Landmane, Dace** University of Latvia, Riga, Latvia

Objective of the study is to examine social workers' (observer) and welfare recipients' (actor) attributions for poverty from two perspectives (the explainers' own perspective and imagined out - group members' perspective). In this study the socio - demographic variables and attributions for poverty is assessed. The Attributions for Poverty Questionnaire was adapted from Nasser and Abouchedd (2001). From own perspective social workers incline to attribute poverty to individualistic factors, but welfare recipients incline to structural factors. From the perspective of out - group social workers incline to attribute poverty to individualistic and structural factors, but welfare recipients incline to individualistic factors.

#### **Empowering the practitioners in their daily educational work: Developpement and use of the AcReDi e-diary**

**Langers, Christian** EMACS, Université du Luxembourg, Walferdange, Luxembourg **Meyers, Christian** EMACS, Université du Luxembourg, Walferdange, Luxembourg **Koenig, Vincent** EMACS, Université du Luxembourg, Walferdange, Luxembourg

The results produced by a scientific research analyzing the Luxembourgian school system together with teacher's and researcher's needs led to the creation of software, helping the practitioners in their daily educational work. This cognitive tool leads to user empowerment by providing him with a methodology for doing his research as a critical and reflexive social actor. More precisely, the practitioner can rely on this tool for data gathering, its formalization and analysis. The software's underlying concepts are derived from the theories and methods of action research, ICT and the praxeology. This communication summarizes the user oriented design and in-field validation.

#### **Family stress, parenting skills and socio-cognitive competences of retarded children siblings**

**Larcan, Rosalba** Scienze dell'Educazione, University of Messina, Messina, Italy **Cuzzocrea, Francesca** Scienze dell'Educazione, University of Messina, Messina, Italy **Oliva, Patrizia** Scienze dell'Educazione, University of Messina, Messina, Italy

This study aims to verify if the presence of a child with mental retardation affects family functioning, parent and children stress, and social skills of non-disabled siblings. Twenty-four families were selected. Half of these had a mental disabled child, in the others neither child had disabilities (control group). Parents, non-disabled siblings and their teachers were asked to complete several questionnaires. Many differences were found in family functioning between groups. Parents and non-disabled child think they have more caregiving difficulties and more stress. The presence of a disabled child affects non-disabled siblings' social skills both at home and at school.

#### **Attentional capture by color in red/green color blind people**

**Larsen, Janet** Dept. of Psychology, John Carroll University, University Heights, USA **Kenner, Frank** Psychology, John Carroll University, University Heights, OH, USA

In two experiments the attention of red/green colorblind participants was affected by color in the same way as participants with normal color vision. Participants located an X in an array of nine angular or round grey letters. Across 360 trials, a colored target letter facilitated responding, and a colored distractor letter slowed responding compared to trials with no color. The effect was larger for angular than for round non target letters. In experiment one, red, green and blue had similar effects. In experiment two, green had the same effect even when non-target letters were in eight different shades of grey.

#### **Personal and dispositional predictors of nurse manager burnout: A time-lagged analysis**

**Laschinger, Heather** School of Nursing, University of Western Ontario, London, Canada **Finigan, Joan** PSYCHOLOGY, UNIV OF WESTERN ONTARIO, LONDON, Canada

This study examined the influence of effort-reward imbalance, a situational variable, and core self-evaluation, a dispositional variable, on nurse managers' burnout levels over a 1-year period. Nurse managers (n=134) responded to a mail survey at 2 time points. The results supported the hypothesized contribution of both personal and situational factors to nurse manager burnout over a one year time frame. Although burnout levels at Time 1 accounted for significant variance in emotional exhaustion levels one year later ( $B = .355$ , nurses' effort-reward imbalance ( $B = .371$ ) and core self-evaluations ( $B = -.166$ ) accounted for significant additional amounts of explained variance ( $p < .05$ ).

#### **Intrusiveness in romantic relationships: A combined qualitative-quantitative cross-cultural study**

**Lavy, Shiri** Dept. of Psychology, Univ. of California Davis, Ramat Gan, Israel **Mikulincer, Mario** Psychology, Bar Ilan University, Ramat Gan, Israel

Objectives: Intrusiveness is a core manifestation of autonomy-proximity/dependence imbalance. Definitions of autonomy, interdependence, and their "balance" vary across cultures. This study among Americans, Indians and Israelis explores intrusiveness through its cultural variations and beyond them. Methods: Sixty participants from each culture described intrusiveness. Their answers were analyzed and yielded 38 kinds of intrusive behaviors. Participants from each culture then rated the

prototypicality of these intrusive behaviors. Results and Conclusions: Cultural and gender differences that were found in ratings of certain intrusive behaviors are discussed in terms of 'core' vs. culture-specific aspects of autonomy and interdependence.

#### **Organizational retaliation behavior: The role of the authority representation on interactional justice**

**Le Roy, Jeanne** UFR SPSE, département de psych, Université Paris 10 Nanterre, Nanterre, France **Finkelstein, Remi** UFR SPSE, département de psych, Université Paris 10 Nanterre, Nanterre, France

The relationship between interpersonal injustice and hostile leadership was explored to study Organizational Retaliation Behavior (ORB). Two studies examined the influence of negative leadership on interpersonal justice feelings among a sample of 340 French students. People who had a negative leadership priming (study 1) or who had to remember a negative past leadership experience (study 2) engaged more in ORB than people in other conditions when they read a text with an unfair authority. Practical implications, limitations, and suggestions for future research will also be discussed.

#### **A new coding method of dyadic love expression and its correlations with attachment styles and relationship qualities**

**Lee, Kit Ling** Dept. of A. Social Studies, City University of Hong Kong, Hong Kong, China, People's Republic of : Hong Kong SAR **Freeney, Brook**

Expressions of love messages can be implicit or explicit. Tools available for these measurements are limited. Using existing expressive behavioral measurement, validity of a new coding method for these two forms of expressions is studied. Ninety-two married couples completed questionnaires measuring expressive behaviors, attachment styles and relationship satisfaction. Avoidant and anxious attachment ratings were negatively associated with the two forms of expressions and positively with secure attachment ratings. Explicit expression had stronger associations with relationship satisfaction and conflict than implicit expression. The result suggested that the new coding method is valid and complementary to other communication measurements.

#### **Learning styles of gifted learners on e-learning environment**

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The purpose of this study was to identify e-learning styles of gifted learners and to suggest effective e-learning environments for them. The participants were 1012 4th to 8th graders including 432 gifted students and 580 average-achieving students. Cluster analysis was performed to classify students on the basis of cognitive, affective, and behavioral characteristics on the e-learning environment. Gifted students were clustered into three subgroups which showed different learning characteristics: 'leading learner', 'individual learner', and 'passive-learner' types. The results of the study suggested guidelines for developing effective e-learning systems suited for educational needs gifted students.

#### **Romantic relationship style, coping, identity development and mental health among Chinese and Australian adolescents**

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Objective: to examine romantic relationship style, coping strategies, identity development and mental health among Chinese and Australian adolescents. Method: 102 Australian and 179 Chinese tertiary students completed a questionnaire on relationship style, coping strategies, identity development and mental health. Results: cluster analysis resulted in three clusters in terms of romantic relationship styles, identity development and coping strategies (unsure/foreclosure/avoidance strategy, secure/achievement/self-help strategy, uninterested/diffusion), with the secure group reporting lowest stress scores. There were more Chinese in the first cluster. Conclusions: there were differences in underlying personality substrata between Chinese and Australian adolescents associated with mental health.

#### **Perceived societal norms, parental socialization goals and test anxiety on Hong Kong Chinese children**

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This study (N= 141, grade six students and their parents) examined parents' perceived societal norms for academic socialization goals in relation to parenting styles, and how parents' own academic goals, or expectations, explain children's psychological well-being. Controlling IQ and SES, parents' perceived societal norms for academic socialization goals positively explained a unique 7.2 % of variance in parental styles beyond parents' own values, while academic socialization goals positively explained a unique 3 % of variance in test anxiety. These findings highlighted the importance of societal norms in parenting, and the potential negative impact of over expectation on children's well-being.

#### **Assessing the Francis Sale of attitude toward Christianity among Slovak students**

**Lewis, Christopher Alan** School of Psychology, University of Ulster at Magee, Londonderry, United Kingdom **Adamovová, Lucia** Institute of Experimental Psyc, Slovak Academy of Sciences, Bratislava, Slovak Republic **Francis, Leslie J.** Institute of Education, University of Warwick, Coventry, United Kingdom  
Objectives: To facilitate cross-cultural research in the psychology of religion, the present aim was to examine the psychometric properties of the Slovak translation of the Francis Scale of Attitude toward Christianity. Method: A sample of 151 Slovak university students completed the translated measure. Results: Support was found for the internal reliability, unidimensionality and convergent validity of the translated measure. Conclusions: These results suggest that this measure can be commended for further use among Slovak respondents. Limitations of the present study are discussed.

#### **The antecedent, process and consequence of leadership emergence in self managing teams: A quasi experimental study**

**Li, Hong** Management School, Chinese Academy of Science, Beijing, People's Republic of China **Wei, Feng** Management, CEIBS, Shanghai, People's Republic of China  
An experimental study of 52 self managing teams examines how individual's dispositional trait—core self evaluations (CSES) affects the leadership emergence and appraisal of leadership. Results show that CSES, positively relates to leadership emergence, and this correlation is not moderated by either task type or goal type but mediated by team process. And the effect of leadership emergence

behavior on the appraisal of leadership is mediated by voice behavior. The study provides empirical support for the dispositional base of leadership and explores the process of this dispositional effect.

#### **The relation of children's temperament and parenting style with children's conscience**

**Liang, Zong Bao** Institute of Developmental Psy, BeiJing Normal University, Bei Jing, People's Republic of China **Chen, Hui Chang** Institute of Developmental Psy, BeiJing Normal University, Bei Jing, People's Republic of China **Zhang, Guang Zhen** Institute of Developmental Psy, BeiJing Normal University, Bei Jing, People's Republic of China  
The current research explored the direct effect of children's temperament on conscience; the direct or indirect effect of parenting style on children's conscience. The participant sample consists of 625 children aged from 3 to 6 years old, the results were as follows: (1) Children's temperament had significant predicting effect. (2) Maternal parenting style had strong direct predicting effect on children's conscience, while father's control could only positively predict children's internalized behavior. (3) Parenting style moderated the relation between children's temperament and conscience. (4) Children's age and gender also moderated the relation of parenting style and children's temperament with children's conscience.

#### **Forgiveness of self and others as ways to improve interpersonal relationships for individuals with insecure attachment styles**

**Liao, Kelly Yu-Hsin** Dept. of Psychology, Iowa State University, Ames, USA  
The study's objective examined the relationships between attachment avoidance and attachment anxiety, forgiveness of self and other, and relationship satisfaction. Specifically, the current study hypothesized that (1) individuals with attachment anxiety style might increase their relationship satisfaction through increased forgiveness of self, and (2) individuals with attachment avoidance might increase their relationship satisfaction through forgiveness of others. Participants were undergraduate psychology students. Structural equation modeling approach was used to examine the proposed model. The results indicated that forgiveness of self partially mediated attachment anxiety and relationship satisfaction while forgiveness of others partially mediated attachment avoidance and relationship satisfaction.

#### **A longitudinal study of team processes**

**Lin, Xuanhui** School of Psychology, Beijing Normal University, Beijing, People's Republic of China **Bian, Ran** School of Psychology, Beijing Normal University, Beijing, People's Republic of China **Zhu, Rui** School of Psychology, Beijing Normal University, Beijing, People's Republic of China **Che, Hongsheng** School of Psychology, Beijing Normal University, Beijing, People's Republic of China  
Objectives To investigate changes of team process in long-term teams. Methods Totally 112 long-term self-managing teams were observed at 3 time points. The team task was problem-solving. The data were self-reported. Latent growth modeling (LGM) was used to analyze the data. Results Communication, cooperation and cohesion changed significantly along with increased time. Communication increased linearly while cooperation and cohesion increased curvilinear. Besides, high initial level of communication and cooperation contributed to their fast increase along the time. Conclusions Team processes change significantly in different patterns over time.

#### **The symptom character and predictors of post traumatic stress disorder in AIDS orphans**

**Lin, Xiuyun** School of Psychology, Beijing, People's Republic of China **Fang, Xiaoyi** School of Psychology, Institute of Developmental Psyc, Beijing, People's Republic of China **Li, Xiaoming** School of Medicine, Center of Prevention and Educa, Detroit, USA  
296 double orphans from orphanages and in kinship care, and 468 single orphans in family, 456 children affected by HIV/AIDS, 406 children from intact families were investigated their symptom of Post-traumatic Stress Disorder (PTSD) and predictors which were post-traumatic events, cognitive appraisal, disclosure. Data analysis showed that AIDS orphans had much symptom of PTSD, with that double orphans had much PTSD symptom than single orphans and then the children affected by AIDS, the children from intact families. And, post-traumatic events, cognitive appraisal, disclosure can predict PTSD symptom remarkably with disclosure had the highest coefficient in the Structure equal Model.

#### **The study of content and structure of authentic leadership and its relationships with other related variables in China**

**Ling, Wenquan** College of Management, Jinan University, Guangzhou, People's Republic of China **Ling, Fang** China Academy of Transportat, China Academy of Transportat, BEIJING, People's Republic of China **Huang, Tiejun** Beijing Branch, Mojo City.com Ltd., BEIJING, People's Republic of China  
The results shown that: (1) Chinese authentic leadership included five-factor which are orientation to subordinates; follow rules, orders, etc. docilely; leader's traits; honest and un-deceive; integrity and selfless. (2) The authentic leadership is a significant predictor of subordinate's job satisfaction, role performance, organizational identification and altruistic behavior between colleagues. (3) The subordinate's trust to leader and organization's trust atmosphere are the mediators between authentic leadership and outcome variables. (4) The leader's competency is the moderator between authentic leadership and outcome variables. (5) The content and structure of authentic leadership in Taiwan province are as same as them in mainland of China.

#### **To take or to decline: Four-year-old children know when they remember**

**Liu, Yan** Dept. of Psychology, Peking University, Beijing, People's Republic of China **Su, Yanjie** Psychology, Peking University, Beijing, People's Republic of China **Xu, Guoqing** ICNL, Beijing Normal University, Beijing, People's Republic of China  
Objective: At what age do children start to know when they remember? Method: Five experiments were conducted with nonverbal tasks adapted from Kornell, et al (2007) and Hampton (2001). Results: In Experiment 1 and 2, the 4-to 5-year olds judged retrospectively their accuracy in a serial position task. They performed almost identically to college students, and much better than 3-to 4-year olds. In Experiment 3 to 5, the 4.5-to 5-year olds and the adults could discern the presence and absence of memory before recognition; however 4-to 4.5-year olds could not. Conclusion: four-year-old children know when they know and when they don't.

#### **Research on adolescent attachment in relation to self-esteem and social adaptation**

**Liu, Xuanwen** Children's culture Institute, Zhejiang Normal University, Jinhua, People's Republic of China **Ju, Xiaoyan** Education College, Zhejiang Normal University, Jinhua, People's Republic of China  
The paper is to explore the quality and characteristic of adolescent attachment with parents and peers, and to examine the links and mechanisms between adolescent attachment and self-esteem,



social adaptation. 528 adolescents were investigated by Chinese version of Inventory of Parents and Peers Attachment. Data were analyzed by T test, F test, regression analysis and structural equation model. The result is that the quality of adolescent attachment is high; peer attachment is slightly higher than parent attachment. The findings suggested that adolescent attachment to parents and peers each serve to promote adjustment in specific domains of adolescent adaptation and they work together to impact on development of adolescent.

#### **Confident leadership and follower commitment: Moderating effects of worship to authority**

**Liu, Jun** School of Business, Renmin University, Beijing, People's Republic of China **Zhang, Haina** Chinese University of Hong Kong, Faculty of Business Administration, Beijing, China, People's Republic of : Macao SAR

The paper investigated the relationship between confident leadership (CL) and follower commitment as well as the moderating effects of follower's worship to authority on that relationship. Two major behavioral dimensions of CL, expressing self-confidence (EC-self) and expressing confidence in followers (EC-follower), were researched. Regression analyses on data collected from full-time salesmen and their supervisors showed that: follower's worship to authority enhanced the relationship between EC-self and follower commitment, however, attenuated the relationship between EC-follower and follower commitment. These findings suggested that CL behaviors should fit with follower traits in order to achieve leadership effectiveness. Theoretical contribution and implications were offered.

#### **Student-oriented paradigm: Self-determination and competence**

**Lobanov, Alexander** Dept. of Psychology, BGPU, Minsk, Belarus **Drozova, Natalia** Psychology Department, BGPU, Minsk, Belarus

A new topological model of supervised independent students' work has been worked out and implemented in the context of student-oriented approach. The model is based on the principles of activity and awareness, which accordingly extend to the constructs "determinism-indeterminism" and "condition-aim". The model agrees with Deci&Ryan theory of basic needs. It realizes mechanisms of the formation of intrinsic motivation through competence achievement, self-determination and relevant attitudes available. In such a way, supervised independent students' work is considered as an indispensable condition of specialist's preparedness for continuous education, competitiveness, mobility, critical thinking and creativity.

#### **Organizational context and a style of exercising authority in relation between a supervisor-subordinate setting: Empirical research of Polish managers**

**Loboda-Oewitzak, Edyta** Institute of Psychology, Lodz, Poland

The present study investigate the role of organizational climate and a form of firm ownership in accomplishing a defined style of exercising authority. The research was conducted in a group of 207 Polish managers of lower and middle management level. The obtained results proved that access to information and relationship with a supervisor, are determinants of cooperative versus autocratic power style. The data also indicate that managers of state firms use the autocratic influence model more often than managers of private firms when task realization occurs in conditions of higher uncertainty. Results suggest that the quality of the organizational climate, analyzed in a wider context of national culture, constitute an essential element in choosing the model of influence.

#### **Interpersonal processes in intercultural close relationships**

**Lombardi, Milena** Social and Developmental Psych, Sapienza University, Roma, Italy **Ardone, Ritagrazia** Social and Developmental Psych, Sapienza University, Roma, Italy **Chiarolanza, Claudia** Social and Developmental Psych, Sapienza University, Roma, Italy

The work shows results from an empiric research exploring relationship maintenance processes in intercultural couples living in Italy. Objectives Verifying differences in relationships processes among intercultural and mono-cultural couples. Method 90 couples (Italian, non-Italian and intercultural) answered to: - Investment model scale (Rusbult et al., 1998); - Trust scale (Rempel et al., 1985); - Inclusion of other in the self scale (Aron et al., 1992); - Dyadic adjustment scale (Spanier, 1976). Results and conclusion Results show differences between intercultural and mono-cultural couples about the role of trust in affecting dyadic adjustment. Differences are also found in levels of commitment between non-Italian and Italian couples. Results will be discussed by analyzing relational processes according to acculturation processes.

#### **Mental imagery: A question of perspective and body posture**

**Lorey, Britta** Bender Inst. of Neuroimaging, Universität Gießen, Gießen, Germany **Zentgraf, Karen** Psychology and Sports Science, Universität Gießen, Gießen, Germany **Stark, Rudolf** Bender Inst. of Neuroimaging, Universität Gießen, Gießen, Germany **Munzert, Joern** Psychology and Sport Science, Universität Gießen, Gießen, Germany

Body movements can be imagined in different ways, i.e., simulating oneself or someone else as an agent. In case imagery is embodied, posture should matter for simulation (de Lange et al., 2006). We asked 20 volunteers to imagine hand movements in a first- and a third-person perspective (1PP, 3PP), with either a compatible or an incompatible hand position lying in a functional magnetic resonance scanner. Results show stronger activation in the left supramarginal gyrus and the insulae in 1PP-imagery with an incompatible hand position. Therefore, kinesthetic information is integrated in 1PP-imagery which might lead to the human sense of agency.

#### **Hand perception actions on a visual object possessing of an elastic shape: Psychology, neuronet, algorithm**

**Losik, George** Lab. Identification System, Institute Information Problems, Minsk, Belarus **Vartanov, Alex** Department of Psychology, Moscow State University, Moscow, Russia

Four psychological phenomena, neuronet mechanism of hand-eye interaction in perception an object with elastic, flexible, plastic shape were studied. Eye-tracing, videotape recording, multidimensional scaling methods were used in experiments with normal eyesight and blind participants. A four-step hand-eye-object interaction algorithm was discovered and four psychological phenomena were studied. Conclusion: while perceiving an object with an elastic shape the scales of shape perception come into action first. They does not include the elasticity scale. It scale turn on latter, after the object recognition. It contains an unusual neuronet mechanism and interaction algorithm.

#### **Psychosomatics and religion in the Philippines**

**Lu, Jinky** Leilanie National Institutes of Health, Manila, Philippines

Religion plays a very important role in Philippine history and life. In selected personal interviews, women related ways of dealing with and managing their obstetrics health. They believe the psychosomatic effect of medicine in healing, treatment. The

ways of dealing with and managing their obstetrics and gynecological health. Living with long term illness involves coping not only with the discomfort or disability caused by the illness itself but also coping with the physical or social demands made by the medical regime prescribed by the doctors.

#### **An ERP Study of category induction**

**Lv, Yong** Tianjin, People's Republic of China **Song, Juan** Psychology and Behavior, Tianjin Normal University, Tianjin, People's Republic of China

The study concerned to adults' visual processing during category induction by ERP. Fifteen participants were required to decide if the third stimulus shared same category membership with the first two in a sequence. Using N1, P2, N300 and P400 as indexes, we found selective processing during conjunctive processing of the first two stimuli and in the comparison of different dimensional tasks. Adults prefer to use rule compared with children who lie on similarities during category induction. P400 is unspecific with category induction but play a role in completion of decision.

#### **Effects of type of modelling and categorial size on a categorization task in 3-4-years-old children**

**Márquez, Alejandra** Behavior Analysis, University of Guadalajara, Guadalajara, Mexico

We present data from an experimental study which objective was to identify the influence of the number of objects in each category and two kinds of modelling (differential and non-differential) on the adjustment to categorization criteria. Eight children between 3 and 4 years old participated. They had to solve a categorization task similar to Kleins (1959). Children had to classify several objects according to the material they were made of (plastic, metal, wood). Data were analyzed in terms of children comprehension of the categorization criteria along with the cognitive outcomes (attending, reproducing, and assigning) they attained using different linguistic modes.

#### **Chronic depression and co-occurring personality disorder: Response to medication and targeted psychotherapy**

**Maddux, Rachel** Dept. of Psychology, Lund University, Lund, Sweden **Riso, Lawrence P.** Psychology, Argosy University, Arlington, Virginia, USA

Axis-II personality disorders present in high rates among patients with chronic depression. In the current study, we examined the impact of co-occurring personality disorder on the treatment of chronic depression with medication, psychotherapy, or their combination in a reanalysis of a large clinical trial of 681 patients. The results indicated that a co-occurring Axis-II condition did not have a negative effect on treatment outcome and did not differentially impact the efficacy of psychotherapy versus the medication. These findings have important implications for the clinical management of chronic depression.

#### **Multinational teams and global competences**

**Magnus, Ellen** Barsett Dept. of Psychology, Aarhus University, Aarhus, Denmark

This project investigates the relationships between working in multinational teams and development of global competences, under the assumption that higher complexity of social interactions increases the potential for developing global competences, given certain conditions. Multinational teams are believed to provide more social complexity than local teams, mainly due to higher cultural diversity and because members are located in different national and organizational contexts. Employees with experiences from working in local and multinational teams will be interviewed to uncover which conditions can optimize development of global competences.

# Music perception and production and their relation to cognitive skills in children from 5 to 10 years of age

**Maier-Karius, Johanna** *Inst.*

*Entwicklungspsychologie, Universität Gießen, Gießen, Germany* **Schwarzer, Gudrun**  
*Entwicklungspsychologie, Universität Gießen, Gießen, Germany*

Numerous studies have dealt with the proposed connection between music and intelligence. In our study we investigated relations between musical achievement and specific cognitive skills in 5-to-10-year-old children ( $N = 100$ ). We employed tests for music perception and production, phonological awareness, auditory attention, visuospatial processing, memory and sensorimotor functions. Results show significant correlations between musical and cognitive skills ( $r = .34$  to  $.75$ ). Particularly we found significant relations between phonological awareness and musical abilities for all ages. To control for schooling-effects we currently compare same skills in 30 9-to-10-year-olds practising music for at least 2 years to children practising sports.

# Motivational empathy: The accuracy of reciprocal inferences on motives within dyads

**Mamali, Catalin** *Dept. of Psychology, Loras College, Dubuque, USA*

The study explores the inferences of laypersons about others' motives. Previous studies analyzed the relations between intrinsic motives and social cues (Cuzzolino, 2004; Deci, 1981; Woike, 2003). The motivational empathy (ME) is the ability to make accurate inferences about other's motives, and relates to motivational intelligence (Mamali, 1998). The Method of Motivational Induction (Nuttin, Lens, 1980) was administered ( $N = 144$ ). Following sociometric tests participants were grouped in dyads of reciprocal attraction (26), contradictory relation (22); reciprocal rejection (24). MIM was repeated for eliciting inferences about the motives of the dyadic partner. The reciprocal attraction dyads have the highest rate of approximating the partner's motives ( $x^2 = 18.801$   $p < .01$ ). Key words: motivational empathy, reciprocal motivational inferences

# Connecting life stories to career success: Using a career construction approach to help clients navigate transition in a developing country context

**Maree, Jacobus Gideon** *Curriculum Studies, University of Pretoria, Pretoria, South Africa*

The career construction approach (Savickas, 2007) connects differential, developmental, dynamic, and learning-based approaches in a grand theory of vocational behaviour (Hartung, 2007). I elucidate the implementation of the Career Interest Inventory (an instrument which can be used to blend qualitative and quantitative approaches to career facilitation) in school and university contexts. The collaborative relationship between client and counsellor can be utilised to help clients draw on their life stories to negotiate transitions, connect life stories to career success and ultimately design their lives in a really meaningful way, enabling them to find magic in their (career) lives.

# Alerting and orienting: Interaction or independence?

**Martella, Diana** *Dipartimento di Psicologia, Roma, Italy* **Casagrande, Maria** *Dipartimento di Psicologia, "Sapienza" Università, Roma, Italy* **Mereu, Stefania**

*Dipartimento di Psicologia, "Sapienza" Università, Roma, Italy* **Sebastiani, Mara** *Dipartimento di Psicologia, "Sapienza" Università, Roma, Italy*  
Four experiments assessed the relation between alerting and orienting under peripherally and centrally cued conditions separately, in both detection and discrimination tasks. Alerting was manipulated by presenting a warning tone before or

simultaneously with visual cue on 25% of the trials. Results indicated that alerting and orienting interact under central cuing conditions. As respect to detection, the warning selectively facilitated RTs on Valid and Neutral, but not on Invalid trials. When a discrimination was required, the warning seems to anticipate the processing of the cue. Results confirm an interaction between alerting and orienting, only when an endogenous attentional shift is required.

# Experiences in close relationships revised: A Portuguese version

**Martins, Ana** *Centre for Career Guidance and, Faculty of Psychology and Educ, Porto, Portugal*

Although in a preliminary stage, this poster intends to present the psychometric qualities of a Portuguese version of the Experiences in Close Relationships-Revised (Fraley, Waller & Brennan, 2000), a self-report attachment measure, based upon two basic psychological dimensions: Anxiety and Avoidance, allowing attachment's assessment both dimensionally and categorically regarding four key-figures for the young adult: father-like figure, mother-like figure, romantic partner and best friend. This instrument's adaptation serves a methodological purpose of a broader research project, which aims to explore the influence of attachment dynamics in the meaning young adults give to work in their existence.

# Procreation: Conflicts between culture and Christianity

**Mashamba, Tshilidzi** *Dept. of Psychology, University of Venda, Thohoyandou, South Africa*

This study focused on Christian and cultural issues relating to procreation. The aim of the study was to investigate how Christians negotiate to lead a Christian life whereas culture on the other hand expects them to behave in a contradictory manner. An exploratory research was conducted with five Christian mothers, who were selected through purposive sampling. The study was conducted in Thohoyandou, South Africa. Data was collected through semi-structured interviews and it was analysed using thematic content analysis. In this study, challenges were presented and discussed and the researcher made recommendations based on the findings.

# A fairness perspective on the use of cost information in buyer-supplier negotiations.

**Masschelein, Stijn** *Business and Economics, Catholic University Leuven, Leuven, Belgium* **Van den Abbeele, Alexandra** *Business and Economics, Catholic University Leuven, Leuven, Belgium*

**Cardinaels, Eddy** *Department of Accountancy, Tilburg University, Tilburg, Netherlands*

We challenge that high quality information improves buyer-supplier negotiations. We report the results of a 2 by 3 between subjects design in which we manipulate the buyer's purchasing information quality (high and low) and the problem under negotiation (external, buyer or supplier problem). Drawing from Attribution Theory, we show that suppliers perceive buyers in the external condition as more fair. We apply the Persuasion Knowledge Model to show that high fairness renders high quality information redundant. In the supplier condition high quality information is perceived as unfair. Only in the buyer condition, the buyer values high quality information.

# A preliminary study for the construction of a musical mood scale: Structure of moods induced by music

**Matsumoto, Junko** *Nagano College of Nursing, Nagano, Japan*

Three studies explored structure of moods related to music. Study 1 revealed that the structures of moods before listening to music and after listening to music were not particularly different. Study 2

indicated that participants felt positive or negative moods before listening to music, and after listening to music most of them experienced positive moods but some felt sadness. Study 3 showed that structure of moods after listening to music included 'anxiety and depression', 'liveliness', 'solemnity and tension', 'sadness and affinity', and 'calmness'. The finding suggests that 'solemnity and tension' and 'sadness and affinity' may be specific moods related to listening to music.

# Influence of validity and IOR effects on implicit and explicit memory

**Mayas Arellano, Julia** *Psicologia Basica II, Facultad de Psicologia UNED, Madrid, Spain* **Ballesteros, Soledad** *Psicologia Basica II, Facultad de Psicologia UNED, Madrid, Spain* **Fuentes, Luis J.** *Psicologia Basica y Metodologi, Facultad de Psicologia de Murcia, Murcia, Spain*

In this work we investigated the influence of orienting spatial attention in two long-term memory tasks. First, participants performed an orienting attention task with familiar pictures presented at valid or invalid locations at different cue-target intervals (SOAs). Later they performed a speeded naming task and a recognition task. The results showed that attention influenced both memory tasks. This influence was shown through validity and inhibition of return (IOR) effects on implicit memory (IM), and better recognition for pictures encoded at short SOA as well as a more conservative criterion (c) for pictures presented at a facilitated location.

# Functional coding of human and animal effectors is dependent on posture

**McDougall, Laura** *Faculty of Kinesiology, University of Calgary, Calgary, Canada* **Welsh, Timothy** *Faculty of Kinesiology, University of Calgary, Calgary, Canada*

The neural substrates of action observation and simulation, mirror neurons, are studied in monkeys that observe humans or other monkeys moving. Studies of simulation in humans, however, typically employ paradigms in which people observe other people or non-biological systems (robots) acting. It is not known if humans engage in simulation while observing animals. In this initial step, we found that people represented the body parts of humans and animals with respect to its' functionality in the assumed posture. Specifically, hands/forepaws were coded as hands in standing (human) postures, but were not when in "all-four" (animal) postures.

# Categorical structure of perception of painted and photo portraits

**Menchuk, Tatiana** *Dept. of Psychology, Moscow State University, Podolsk, Russia*

The aim of our study is the investigation of categorical structures in individual consciousness that mediate perception of human faces in painted and photo portraits. The method: subjective semantic space construction (Psychosemantics), based on works by Ch.Osgood (1955), G.Kelly (1955) and V.Petrenko (2005); Petrenko & Mitina, 1997). Subjects: 100 Russian-speaking men and women, 20-30-years old. The comparison of semantic spaces of perception of painted and photo portraits, built using different descriptive languages (semantic differential, poetic metaphor), allows to single out both the specificity of these languages constructs and the cognitive complexity of consciousness.

# Unconscious and symbolic cues reflect an automatic shift of attentional orienting

**Mereu, Stefania** *Dipartimento di Psicologia, Università di Roma, Roma, Italy* **Casagrande, Maria** *Dipartimento di Psicologia, "Sapienza" Università, Roma, Italy* **Martella, Diana** *Dipartimento di Psicologia, "Sapienza" Università, Roma, Italy* **Marotta, Andrea** *Dipartimento di Psicologia, "Sapienza" Università, Roma, Italy*



Peripheral abrupt onset cues induce automatic shifts of attention, even if not consciously perceived. This study would examine the relationship between endogenous spatial orienting and unconscious perception, using a spatial cueing task. Three experiments assessed predictive, unpredictable or counterpredictive cues, that were rendered invisible by object substitution masking in half of the trials. The results show a facilitation in the attended (cued) location with both seen and unseen cues (experiments 1 and 2), and for targets presented in the unattended but cued location (experiment 3), suggesting that endogenous cues could evoke automatic shifts of attention, even if not consciously perceived.

#### **Toward the public crisis leadership competency modeling and government social performance appraisal: A simulated experimentation**

**Miao, Qing** Scholl of Public Admin., Zhejiang University, Hangzhou, People's Republic of China **He, Wen-Jiong** Department of management, School of Public Admin., Zhejiang Hangzhou, People's Republic of China

This research explored the public crisis leadership competency constructs predicting high government's social performance. By presenting a society-wide paroxysmal urgency, the subjects ( $n=120$ ) were required to make a series of responsive decisions as mayors to cope with. Researchers designed 13 relative competency elements in the experimentation, including information processing, operation proficiency, time management, etc. Meanwhile, 90 subjects were required to be a citizen to evaluate such above decision-making process with 5-Likert points. The scores were regarded as the criterion-related variables. Regression analysis showed 4 elements of competency (operation proficiency, time management, mass communication, and risk bearing) have high predictability.

#### **Electrodermal activity as an indicator for instructed attention shifts between drawings of objects and abstract figures**

**Michael, Lars** Inst. für Biopsychologie, Freie Universität Berlin, Berlin, Germany **Walschburger, Peter** Biopsychologie, Freie Universität Berlin, Berlin, Germany

Pictures with emotional, attentional, or intentional content have shown to elicit event related skin conductance responses (SCRs). In the present experiment 60 participants were instructed to count either drawings of objects or abstract pictorial elements that, when an explanation was given, revealed a humorous meaning (so-called droodles). When an attention shift between objects and the explained droodles was instructed, the variance analysis showed increased SCR magnitudes for the respective task relevant stimuli. These findings illustrate that not only the meaningfulness of a stimulus but also selective attentional processes are suitable to enhance electrodermal responses.

#### **Auditory extinction deficits in chronic hemispatial neglect**

**Michalik, Romualda** Berlin, Germany **Gall, Carolin** University of Magdeburg, Inst. of Medical Psychology, Magdeburg, Germany **Frydich, Thomas** Humboldt-Universität zu Berlin, Institute of Psychology, Berlin, Germany **Sabel, Bernhard A.** University of Magdeburg, Inst. of Medical Psychology, Magdeburg, Germany

Auditory extinction was assessed in subjects with chronic neglect using three different types of auditory double stimulation (task1: finger-clicking, task2: dichotic listening of words, task3: dichotic listening of sounds). Performance of 22 subjects with chronic hemispatial neglect was compared to 45 control subjects without cerebral lesions and auditive deficits. Control subjects showed near

perfect performance in each task. Extinction rates (omissions of the left stimulus in auditory double stimulation) of the neglect subjects significantly differed between tasks, 46.2% (task2), 28.6% (task1), 12.9% (task3),  $F(2) = 8.80$ ;  $p < .001$ . Higher extinction rates in dichotic listening of words implicate deficits in mental representation of the auditory stimuli.

#### **A big five profile of young psychologists who applied for positions in law enforcement**

**Mihalcea, Andreea** Dept. of Psychology, Titu Maiorescu University, Bucharest, Romania **Lita, Stefan** Department of Psychology, Romanian Academy, Bucharest, Romania **Stoian, Bogdan** Centre for Psychosociology, Ministry of the Interior, Bucharest, Romania

The aim of the study is to present a short analysis of psychologists personality based on the Five Factor Model. The subjects are 94 practicing psychologists (mean age 29, 84% women) who applied for jobs within the human resources departments of Romanian Police. As part of a psychological screening examination, they filled in also the 50 Big-Five Factor Markers of Goldberg (1999). The results show that: (a) 40% of them used mainly extreme responses, (b) the extreme responses style has been used mostly on items from factors C and A, around 50%, (c) their mean profile is characterized by scores of 43 on consciousness, 42 on agreeableness, 41 on emotional stability, 38 on extraversion and 36 on openness.

#### **Does doctors' knowledge of inflammatory bowel disease patients' psychological status affect patients' clinical outcomes: A pilot randomised controlled trial**

**Mikocka-Walus, Antonina** General Practice, University of Adelaide, Adelaide, Australia

Objective: The aim of this pilot study was to explore whether improving gastroenterologists' knowledge of inflammatory bowel disease (IBD) patients' psychological status might impact patients' clinical outcomes. Methods: Twenty five depressed and/or anxious IBD patients were enrolled in this randomised controlled trial. Over the year, physical and psychological measures were made three monthly. A two-way repeated measure ANOVA was used. Results: Anxiety decreased significantly for the first nine months in both groups ( $p=0.020$ ). Experimental and control groups did not differ on any of the variables. Conclusion: Larger studies are needed before concluding that this intervention is not effective.

#### **Psychological status and the course of the disease in patients with chronic gastroenterological diseases: A cohort prospective management trial**

**Mikocka-Walus, Antonina** General Practice, University of Adelaide, Adelaide, Australia

Objective: The aim of the study was to observe the relationship between psychological status and medical outcomes in patients with chronic gastroenterological diseases. Methods: Overall, 139 patients were enrolled in this cohort prospective management trial. Physical and psychological measures were made three monthly for a year. A logistic regression was conducted. Results: There was no change over time in the tendency to relapse ( $p>0.05$ ). There was no significant difference between disease groups in their likelihood to relapse over time ( $p>0.05$ ). Conclusion: Longer and larger prospective studies are needed to better understand the relationship between psychological problems and relapse of somatic symptoms in these patients.

#### **English language learners mastering academic English and the content curriculum**

**Minaya-Rowe, Liliana** Storrs, USA **Calderon, Margarita** CRESPAR, Johns Hopkins University, New York, NY, USA

This paper examines the effects of a 10-component lesson template as a highly interactive professional development tool for secondary teachers of English language learners and their students' performance in literature, science, mathematics and social studies. It focuses on students' growth in academic English language acquisition and in the content curriculum, and on the effects of vocabulary, reading comprehension and writing strategies on their achievement. The technology-based observation protocol is used to determine the extent the components are present in a lesson. Results indicate gains for both experimental and control groups with significant differences correlated with the levels of classroom implementation using the protocol.

#### **Mood inductions in patients with borderline personality disorder and dysthymic disorder in a psychophysiological lab-field study**

**Miro, Alexander** Psychology, University of Hamburg, Hamburg, Germany

Patients suffering from borderline personality disorder and dysthymic disorder participated in a lab-field comparative study. In the lab, stress was induced by short vignettes of social conflict situations and pleasant valence by vignettes of positive situations. Neutral control vignettes were also included. Heart rate, electrodermal activity, electromyography (m.corrugator) and self report data have been measured simultaneously. At following days ambulatory monitoring of these biosignals and self report data has been assessed. One major aim of the study is to look for predictors from the lab to the field situation. Results of mood induction with the short vignettes will be presented.

#### **The relationship of disordered eating behaviour to femininity awareness**

**Miskinyte, Audrone** Kaunas, Lithuania **Perminas, Aidas** General psychology, Vytautas Magnus university, Kaunas, Lithuania

Objectives: The purpose of the study was to examine the relationship of disordered eating behaviour to femininity awareness in young women. Methods: Young women filled in EAT-26 and rated other women on BRSI femininity scale items. Student t-test was used in order to determine differences between the groups. Results: Women who demonstrate more disordered eating behaviour tend to be more aware of femininity and tend to attribute more feminine traits to themselves. Women who diet more attribute more feminine traits to themselves. Conclusions: Disordered eating behaviour is associated with femininity awareness and feminine trait attribution to oneself.

#### **Social well-being, big five personality factors and self-esteem**

**Mohammadi, Fatemeh** Tehran, Islamic Republic of Iran **Nosratabadi, Masoud** Psychology & Educational s, Tehran University, Tehran, Islamic Republic of Iran

The aims of this study were 1-to examine the discriminatory power of the Big Five for social well-being 2-to examine the unique contributions of Self-Esteem, and Religiosity in the explanation of Social Well-being beyond Big Five. 240 students were included in this study. All students were asked to complete social well-being, BFI, Self-Esteem & religiosity. Discriminate analysis, and hierarchical regression were used. Findings revealed that high and low levels of social well-being can be significantly discriminated by neuroticism and agreeableness in girls and by extraversion and agreeableness in boys. Hierarchical regression showed that Self-Esteem can significantly predict social well-being scores beyond Big Five.



### Coping in relation to the big five personality factors

**Morán, Consuelo** Psychology, Sociology and Ph., University of León, León, Spain

**Objectives:** To examine the relationship between coping strategies and the "Big Five" personality factors in a sample of Spanish human services. **Methods:** A descriptive study was performed with 248 participants. They completed two self-report questionnaires, Ways of Coping and NEO-FFI. **Pearson correlation analysis.** Results: Extraversion and conscientiousness were positively correlated with planning, active coping, reframing, and seeking social support. Neuroticism was positively correlated with escape-avoidance and negatively with planning. **Conclusions:** Into the association between coping and personality, extraversion and conscientiousness are the most important factors. Implications of these findings in relation to previous research are discussed.

### Big five personality factors and coping strategies in university students

**Morán, Consuelo** Psychology, Sociology and Ph., University of León, León, Spain

**Objectives:** To study the relationship between the personality five factors and coping strategies in university students. **Methods:** In a descriptive study, 334 participants completed: Ways of Coping and NEO-FFI. **Pearson correlation analysis and t-test.** Results: Extraversion, openness, and conscientiousness correlated positively with planning, active coping, positive reframing, and seeking social support, and negatively with escape. Neuroticism correlated positively with escape and negatively with planning and active coping. **Conclusions:** Into the relationship between coping and personality, in young people, extraversion, openness, and conscientiousness are the most important factors. Implications of these findings in relation to previous research are discussed.

### Maintenance of and recovery from post-traumatic stress disorder among civilian war survivors

**Morina, Nexhmedin** Department of Psychology, Friedrich-Schiller-University, Jena, Germany **Priebe, Stefan** Social & Community Psychia, Queen Mary, U. of London, London, United Kingdom **CONNECT group, The Social & Community Psychia, Queen Mary, U. of London, London, Germany**

Little is known about the factors affecting the long-term course of PTSD. The present paper describes the results of the CONNECT project (funded by Commission of the European Union) that has investigated long-term clinical and social outcomes among more than 4,000 people with war experiences in countries of Ex-Yugoslavia and refugees in Western Europe. Preliminary results of the follow-up interviewing show that a significant number of people who met criteria for PTSD at t1 have recovered from PTSD at t2 (one year later). This presentation will focus on the risk and recovery factors related to the course of PTSD.

### Means for developing spirituality: Different for classic religiosity and modern spirituality?

**Muñoz-García, Antonio** Educ. and Developm.

**Psychology, University of Granada, Granada, Spain** Although from a traditional perspective traditional means (eg reading of sacred texts), are considered goods means for developing spirituality (classical), other elements are significant when we ask people whether proposed, no traditional means (eg. see a beautiful landscape), are good means for developing spirituality. A previous study related traditional spiritual means with measures of traditional religiosity (Muñoz-García, 2007), but they were negatively related with dimensions of modern spirituality. These were positively associated with new age practices and elements of sexuality. Help-

ing behaviours were significant for persons with traditional and modern spirituality. This work will try to replicate these results including new means (e.g. arts), and doing more detailed analyses of dimensions of religion and modern spirituality.

### How do Spanish students of educational sciences perceive religion and spirituality?

**Muñoz-García, Antonio** Educ. and Developm.

**Psychology, University of Granada, Granada, Spain** The purpose of this study is to investigate how students of educational sciences perceive religion and spirituality. This topic is interesting because of the significance of spirituality in last years. The university students were asked to give their meanings of religion and spirituality and after analyzing the written expressions on them. We put attention to the result observing whether the dimensions obtained are the same that produced by Ubani and Tirri (2006): the institutional dimension, the humanistic dimension, and the supernatural dimension, and whether there are non traditional meanings of spirituality in a classical religious-cultural context.

### An exploration of leader's emotional intelligence within a top international financial institution

**Mullally, Ruth** Executive Talent Management, AIB, Dublin 6, Ireland

This study aims to explore trends and differences across Emotional Intelligence scores of AIB executive leaders. The sample consists of 595 AIB executives from Ireland, UK and Poland from 2002 – 2008 that completed the ECI (an emotional intelligence 360<sup>3</sup> instrument from Hay McBaer that looks at self, manager, direct reports and peer scores). Using SPSS, various statistical analysis was conducted to identify differences and trends within the sample. Research is presently being conducted with final results expected in early March.

### Relationship between cognitive and physical functions in the community living elderly

**Murata, Shin** Faculty of Health Care Science, Himeji Dokkyo University, Hyogo, Japan **Oyama, Michie** NPO Hukusiogonet, Non-Profit Organization, Hyogo, Japan **Murata, Jun** Graduate School of Biomedical, Nagasaki University, Hyogo, Japan **Mizota, Katsuhiko** Faculty of Rehabilitation, Nishikyushu University, Hyogo, Japan **Tsuda, Akira** Department of Psychology, Kurume University, Hyogo, Japan

The cognitive and physical functions of 192 elderly people who are living in the local community were evaluated. By simple correlation and multiple regression analyses, the educational background, finger dexterity, and time of walking in a 10-m course with obstacles were extracted as factors related to their cognitive function. Statistically, cognitive function was correlated with the duration of education, finger dexterity, and reduced walking time in a 10-m course with obstacles. These results suggest that intervention to increase finger dexterity and training to improve walking ability in different situations are Effective for the prevention of should be initiated to prevent age-related decreases in cognitive function in the elderly.

### Necessary and received social support in times of economic crisis

**Muzdybaev, Kuanyshbek** Psychology of Morality, The Institute of Sociology, St. Petersburg, Russia

Purposes of researches were to establish dynamics of necessary and received social support (SS) by representatives of different social groups during economic crisis. Results of two researches are informed. In everyone of sample were 700 persons. It is established: in the middle of 90th years over 83% of respondents were required in several kinds of SS, however, need for help less than half requiring was satisfied. Basic obstacle of a low level of granting of SS was not only scarcity of economic resources but significant disintegrations of society.

Main sources of rendering of SS were relatives and friends of respondents.

### Distinctive manifestations of innovative teamwork skills in civil servants

**Mykhailenko, Viktoria** Organizational Psychology, Institut of Psychology, Kiev, Ukraine

**Objectives:** Finding out main types and manifestations of civil servants' teamwork skills and their place among innovative skills. **Methods:** Managerial skills questionnaire, Team-building behavior questionnaire, Wetten and Cameron Orientation toward innovations Scale. The investigation was done on a sample of 118 civil servants. **Results:** Using the factorial and cluster analyses it was found that 81.9% of the respondents had basic team work skills (cooperation skills and positive self-esteem) and only 19.0% had innovative teamwork skills (orientations toward a creative team-leader and team development). **Conclusion:** Civil servants' basic teamwork skills are more developed compared to innovative skills which calls for their special innovative skills development training.

### Self-efficacy and leadership: Identifying a process variable mediating the effects of leadership on employees' performance

**Nöting, Hanna** Psychologisches Institut II, Universität Münster, Münster, Germany **Hell, Wolfgang** Psychologisches Institut II, WWU Münster, Münster, Germany **Rovold, Jens** Psychologisches Institut II, WWU Münster, Münster, Germany

Exploring the effects of different leadership styles on organisational criteria is a prominent research field. The present study compared the simultaneous effects of two leadership styles (transformational leadership and LMX) on employees' subjective performance. Followers rated these leadership styles of their respective supervisor in a sample of German non-profit organisations. Employees' occupational self efficacy was assessed as a potential mediator of the anticipated effects. Results revealed that LMX had a positive effect on employees' performance and that this effect was mediated by self-efficacy. Surprisingly, transformational leadership did not affect performance but self-efficacy. Implications for leadership theory and practice are discussed.

### Characteristics of body sway during stance in pregnant women and influences of anxiety during pregnancy on body sway

**Nagai, Masanori** Dept. of Physiology, Yamanashi Inst. Environm. Sci., Fujiyoshida, Japan **Ishida, Mitsuo** Physiology, Yamanashi Inst. Environm. Sci., Fujiyoshida, Japan **Arii, Yoshie** Nursing, Yamanashi Prefectural University, Kofu, Japan **Natori, Hatsumi** Nursing, Yamanashi Prefectural Univ., Fujiyoshida, Japan **Wada, Maki** College of Law, Nihon Univ., Tokyo, Japan

Pregnant women experience great changes in body alignment and mental state. In pregnant women, we have explored characteristics of body sway during stance and influences of anxiety on body sway. The area of body sway was greater in pregnant women than that in age-matched, non-pregnant women. There was no difference in path-length of body sway between pregnant and non-pregnant women. A fast Fourier's transform (FFT) analysis of body sway has shown that pregnant women rely on somatosensory inputs to maintain standing posture more greatly than non-pregnant women. Higher anxiety during pregnancy increased the area and path-length of body sway.

### Leadership of managers as a facilitator of good safety management: A unique contribution of the Japanese association of traffic psychology

**Nagatsuka, Yasuhiro** Niigata, Japan

**Objectives:** Current findings of a road safety campaign study commenced in 1996 by the



Japanese Association of Traffic Psychology are reported. Methods: The campaign was aimed at removing "Looked But Failed To See" (LBFTS) error because it was "LBFTS" that headed accident statistics. Company president and/or other top executives of ten companies actively participated in action research with their colleague drivers. Results: In various transportation companies group cooperation in organizations was facilitated depending on the leadership of managers. As results accidents reduced in most companies. Conclusions: The campaign was considered to be informative for developing advanced safety management in company.

#### Comparative study of memory deficits in younger and older adults

**Najam, Najma** Applied Psychology and Psychol, Punjab University, Lahore, Pakistan **Noor, Fatima** Behavioral Sciences, Fatima Jinnah Women University, Rawalpindi, Pakistan

Objectives: To assess and compare verbal and working memory, visuomotor abilities and verbal fluency of older and younger adults. Methods: A sample of 40 adults was administered Weschler Memory Scale, Benton Visual Retention Test (BVRT) Controlled Word Oral Association Test (CWOAT) Results: Older adults have deficits in working and visual memory with significant decline age. No significant difference in verbal memory were found. Conclusion: Evaluation of memory / cognitive functioning is needed for intervention

#### The influence of perceptions of retirement on psychological well-being

**Nakasu, Yuka** human sciences, Osaka University, Suita-shi, Osaka-hu, Japan

This study examined the effects of perceptions of retirement on marital relationship and life satisfaction after retirement. The questionnaires consisted of perceptions of retirement, marital companionship, marital satisfaction, and psychological well-being. They were administered to 200 retired men and women, whose ages ranged from 60 to 70 years old. Perceptions of retirement were categorized into three types (positive, neutral and negative). The results indicated that positive perceptions of retirement influenced marital satisfaction and psychological well-being mediated by marital companionship. In contrast, negative perceptions of retirement were associated with marital and life dissatisfaction.

#### Are normal narcissists psychologically healthy in stressful daily life?

**Nakayama, Rumiko** Nagoya University, Yokkaichi, Japan

This study was to examine correlation between narcissism and psychological health considering amount of daily (life event) stress. Participants were 239 undergraduates, and they completed narcissism scale at Time1, and scale of anger and depression, life event stress at Time1, 2 (Time 1: October, 2006, Time 2: January, 2007). There was noticeable difference between low stress and high stress group. That is, in the low stress group, narcissistic grandiosity lessens depression in 3 month ( $-0.20$ ,  $p < .001$ ), however, in the high stress group, such impact was not showed ( $.06$ , n.s.). Results indicate that impact of narcissistic grandiosity is situation-dependent.

#### Graphomotoric and vocal expression in the stress condition

**Nesic, Milka** DEpartment of Physiology, Faculty of Medicine, Nis, Serbia **Nesic, Vladimir** DEpartment of Psychology, Faculty of Physiology, Nis, **Cicevic, Svetlana** DEpartment of Management, Faculty of Transport and Traff, Belgrade, The aim of this investigation was to explore the effects of stress on the graphomotoric behaviour.

One hundred students of medicine participated in this study in two conditions: control condition and just before exam. They solved mental subtracting serial seven arithmetic task. The subjects had to pronounce aloud and simultaneously to write the results. The results of digitalized voice showed higher intensity of voice and longer pauses, but shorter duration of the utterance due to anticipation stress. Changes of graphomotoric expression in the magnitude and distance of written units corresponded the changes of voice characteristics.

#### Personality characters and emotional intelligent in students of distance education university

**Nikpour, Gholam Ali** Dept. of Psychology, Medical Clinic of Dr. Mosavi, Babol, Islamic Republic of Iran **Allahyari, Abbas Ali** Dept. of Psychology, University of Tarbiat Modares, Tehran, Islamic Republic of Iran **Homayouni, Alireza** Dept. of Psychology, Islamic Azad University, Babol (Amirkola), Islamic Republic of Iran **Mosavi Amiri, Seyed Jalal** Dept. of Psychology, Dr.Mosavi Clinic, Babol (Amirkola), Islamic Republic of Iran

The study investigated this research question that are there specific personality characters that related to emotional intelligent ? Method research is causative-comparative (Ex post facto).73 students of distance education university were randomly selected and Mokioly's Characterology Inventory (MCI) and Shutt Emotional Intelligent Inventory (SEII) were administered on them. The inventory assesses personality based on eight characters: sanguine, indifferent, nervous, indolent, indignant, passionate, sentimentee, amorphous. Data analyzed with ANOVA. Results showed significant differences between grades of emotional intelligent in personality characters that most of students with high in emotional intelligent are indignant and nervous. Conclusion: The finding can be used for predicting and increasing of social interaction and academic performance in university in regard to individual differences specially personality factors.

#### Incidence of anxiety in students of Azad Islamic University

**Noughani, Fatemeh** Faculty of Nursing and Midwife, Tehran University, Tehran, Islamic Republic of Iran

Introduction: Approximately so percents of adults with 15-45 years old have experienced a psychiatric problem. Methods and materials: This study is an analytic-descriptive research that examines students' anxiety of Azad University, Varamin- Pishva Branch. The samples were 400 students. Data collection tool was questionnaire including two sections: First section consist 17 questions about demographic data, Second section consist SCL-90 test anxiety. Findings: The results of this research showed that prevalence of anxiety in students were 22.2 percents. Conclusion: Because high prevalence rate of mental disorders in students of university, we recommended advices for promotion of anxiety in university such as consultation centers.

#### The relation between intolerance of uncertainty and worry about ambiguous situations in older adults

**Nuevo, Roberto** Psychiatry Service, Hospital de la Princesa, MADRID, Spain **Márquez-González, María** Psicología Biológica y de la S, Universidad Autónoma de Madrid, MADRID, Spain **Cabrera, Isabel** Psicología Biológica y de la S, Universidad Autónoma de Madrid, MADRID, Spain **Montorio, Ignacio** Psicología Biológica y de la S, Universidad Autónoma de Madrid, MADRID, Spain

Objective: to explore the relations between Intolerance of Uncertainty (IU) and Worry about Ambiguous Situations (WAS) in older adults. Method: 111 community-dwelling older adults completed measures of IU, WAS, severity of worry, trait-anxiety, and depression. Results: A hierarchical regression analysis revealed that IU explained a

significant ( $p=.004$ ) percentage of variance in WAS after controlling for gender, age, severity of worry, trait-anxiety, and depression (total adjusted  $R^2=.169$ ). IU was the only significant predictor in the final equation. Conclusions: these results highlight the potential role of intolerance of uncertainty in the explanation of excessive worry in the old age.

#### Are differences in reading performance between students with or without LD better explained in terms of IQ or reading-related cognitive deficits?

**O'Shanahan, Isabel** Didácticas Específicas, Facultad de Educación, La Laguna, Spain **Jiménez, Juan E.**

Psicología, Facultad de Psicología, La Laguna, Spain The focus of the study reported here was to explore the effects of the IQ and reading-related cognitive deficits in the explanation of differences in reading performance between students with or without LD. A sample of 443 Spanish children (264 Male, 179 female) were classified into four groups according to IQ as measured by the Culture Fair (or Free) Intelligence Tests Raven ( $<80$ , 81-90, 91-109, 110-140) and into two groups based on reading level (LD and NLD). Our findings indicate that IQ does not explain the differences between children with LD and NLD children in reading-related cognitive deficits.

#### An investigation of the source(s) of conscious awareness of action

**Obhi, Sukhvinder** Dept. of Psychology, Wilfrid Laurier University, Waterloo, Canada

Participants made judgments about the initiation times of active and passive key-presses that varied in their force. Judgments were made by reporting the position of a rotating clock hand. Results showed that awareness of action for both active and passive movements was anticipatory and identical, and that judgments of forceful movements were less anticipatory than judgments of softer movements. This suggests that the signal underlying conscious awareness of movement initiation was not pre-motor, but instead related to sensory feedback arising from the movement. Thus, the brain can use efferent and afferent information sources for conscious decisions about action timing.

#### Effects of horticultural therapy activities on mood in students of occupational therapy department

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University of H&W, Nobeoka, Miyazaki-Prif., Japan

**Koura, Seigo** Occupational Therapy, Kyushu

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**Oshikawa, Takeshi** Occupational Therapy, Kyushu

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It is usual in the student of the Occupational Therapy Department to often feel the stress by the clinical training. These researches were an investigation into changing attitudes among their students that participated in horticultural therapy activities. The 'Profile of Mood State' was used to measure changes in students' moods and emotions. Consequently, the values for negative factors decreased after the horticultural therapy activities. The benefits of horticultural activities with occupational therapy technique can be seen not only in the area of general therapeutic effect but also in the positive effects on all related peoples' emotional health.

#### Incessant unrest in Kaduna state, Nigeria: Youths involvement and its implication for their educational development.

**Ohidah, Eunice Ozavive** Education, Kaduna Polytechnic Kaduna, Kaduna, Nigeria **Kato, Rosemary** EDUCATION (TECHNICAL), KADUNA POLYTECHNIC, KADUNA, KADUNA, Nigeria **Omengala, Arikeola** EDUCATION (TECHNICAL), KADUNA POLYTECHNIC, KADUNA, KADUNA, Nigeria

Kaduna State occupies a very strategic position in the academic development of Nigerian Nation. Premiere universities, polytechnics and monotech-

nics in Northern Nigeria are located there. It is known as centre of learning. But crises of different nature have bedeviled it and distorted its prospect for fast educational development, especially among the youths. This study looked at the involvement of youths in such crises as most of the time they were blamed for the unrest. How has this affected their educational development? How can they be engaged in targeted activities towards their educational development? Samples are drawn from both Urban and Rural centers. BY: E. O OHIDAH; R. KATO AND A. A. OMENGALA KADUNA POLYTECHNIC, KADUNA NIGERIA

#### Odor identification impairment predicts cognitive decline and Alzheimer's disease

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Assessment of odor identification ability (ODID) has been proposed to improve early detection of Alzheimer's disease (AD), since olfactory structures are affected in early stages of AD. We investigated the relationship between ODID and cognitive functioning (MMSE) to AD conversion within a five-year test interval using data from the large-scale, longitudinal Betula study. Preliminary results indicate that ODID impairment is associated with AD conversion, as well as to cognitive decline in non-demented elderly, at five years post-test. The results suggest that olfactory deficits are indicative of changes in the aging brain.

#### The Road to Happiness? Car use and subjective well-being

**Olsson, Lars E.** Center for Consumer Science, Gothenburg University, Gothenburg, Sweden **Jakobsson, Cecilia** Center for Consumer Science, Gothenburg University, Gothenburg, Sweden **Gamble, Amelie** Center for Consumer Science, Gothenburg University, Gothenburg, Sweden **Gärling, Tommy** Center for Consumer Science, Gothenburg University, Gothenburg, Sweden

Are there any interactions between, on the one hand, motives for car use and access to a car, and on the other hand, everyday travel and activity patterns, satisfaction with transportation, and subjective well-being? A questionnaire containing (i) cognitive and affective evaluations of life satisfaction, (ii) transportation satisfaction, as well as (iii) different measures associated to everyday activities, will provide answers. Responses from (i) 3000 randomly selected households (autumn 2007), and (ii) 100 families agreeing to change their transport behaviour, will be analysed. The latter families will answer questionnaires repeatedly, both before their changes (autumn 2007) and after (spring 2008).

#### Epidemiology of mental disorders in urbanized areas of Natanz in Iran

**Omid, Abdollah** Dept. of Health, Kashan Medical University, Kashan, Islamic Republic of Iran  
Abstract Objectives: The present study was an epidemiological assessment of mental disorders among 15 years or older residents of urbanized areas of the Natanz. Methods: 650 families randomly were selected, then randomly one person from each family. After General Health Questionnaire 62 man and 107 women were above cut off point, evaluated by clinical interviews according to DSM-IV criteria. Results: The rate of mental

disorders is 17.2% for men and 31.3% for women. Significant correlations was between mental disorders and age, sex, education, marriage, employment, family history. The most prevalent disorders were Dysthymic disorder(5.8%),generalized anxiety(5.3%),and depression(3.3%). Conclusion: Prevalence of mental disorders is (24.2%).

#### Phonological advance planning in sentence production

**Oppermann, Frank** Inst. für Psychologie I, Universität Leipzig, Leipzig, Germany **Jescheniak, Jörg D.** Institut für Psychologie I, University of Leipzig, Leipzig, Germany **Schrievers, Herbert** NICI, Radboud University Nijmegen, Nijmegen, Netherlands

Our study addressed the scope of phonological advance planning, extending previous work on phrase production (Jescheniak et al., 2003, JEP:HPP). Participants described visual scenes by producing sentences in various formats, while ignoring auditory distractors phonologically related or unrelated to either the depicted agents or patients. Distractors related to a noun in the utterance-initial phrase consistently facilitated the naming response, while distractors related to a non-initial noun interfered with it. This interference effect was modulated by the serial position of the second noun. Overall, our findings suggest that the scope of phonological advance planning might well span over a complete sentence.

#### The development and validation of Dichotomous thinking scale

**Oshio, Atsushi** Dept. of Psychology, Chubu University, Kasugai, Japan

Dichotomous thinking is to think things as binary opposition. This thinking style is helpful for us to understand things easily. But it is also related to some negative psychological constructs such as borderline personality disorder and perfectionism. The purpose of this study was to develop useful and well-validated inventory of dichotomous thinking. Participants were 386 Japanese undergraduates. Factor analysis of Dichotomous Thinking Inventory revealed two factors; preference for dichotomy and dichotomous belief. Both subscales positively related to borderline personality disorder scale. People who score high on the inventory were rated as chary and open-and-shut person by their friends.

#### Frequency effects in reading words mixed with nonwords in the Italian transparent orthography

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When in transparent scripts words are mixed with nonwords, word frequency effects can be eliminated. Readers either de-emphasise the lexical route (route de-emphasis) or homogenise reaction times for all stimuli by adjusting a time criterion for articulation (time criterion account). With four list manipulations we assessed frequency effects in reading aloud words and nonwords in Italian. No list context effect was found, but frequency effects remained constant irrespective of list manipulation. These results pose a challenge for the route de-emphasis and the time criterion accounts. Reading nonwords may be easier in Italian than in English, therefore strategic control is unnecessary.

#### Woman and leadership: Steps towards authentication

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The aim of the work is : 1)to describe how to analyse and advice psychologically, socially and economically woman from adolescence to maturity; 2) to present the application of ontopsyhological approach to evolve female leaderistic attitude; 3)to identify and discuss concrete suggestions to facil-

itate woman leadership. In particular the following aspects will be discussed: a)partner relationship; b)woman and family; c)sexual understanding; d) strategies for woman leadership in our times.

#### Assessing the equivalence of computerized vs. face-to-face leaderless group discussion:A task-technology fit perspective

**Pan, Lushan** School of Management, Zhejiang University, Hangzhou, People's Republic of China **Fan, Wei**

This study compared the predictive validity between computerized and face-to-face leaderless group discussion (LGD) in different tasks. Seventy-two 5-person groups of university students worked in either computerized or face-to-face LGD on both cooperation and competition situation. ANOVA of test data showed that there is no significant difference between medium when applicant performed in the cooperation task. However, difference in the competition task, with computerized LGD reporting lower predictive validity. Furthermore, to investigate the effect mechanism of medium on applicant performance, this study found that socioemotional communication as well as task-oriented communication plays important mediating roles between medium and criterion.

#### The contribution of sex-role identity to vocational interests and occupational preference in Greek adolescents

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Measures of sex-role orientation, vocational interests and occupational preference are obtained from adolescents pupils. The aim of the study is to define the orientation between sex-role identity (masculinity and androgyny) and vocational interests (Holland's vocational types), as well as, the relation between sex-role identity and adolescents' occupational interests. Additionally, interaction of parents' occupation to adolescents' vocational interests and occupational preference is examined.

#### Effects of concept mapping on nursing students learning retention

**Parsa Yekta, Zohreh** Medical-Surgical Nursing, Tehran Univ. of Medical Scienc, Tehran, Islamic Republic of Iran **Parsa Yekta, Zohreh** MEDICAL-SURGICAL NURSING, TEHRAN UNIVERSITY OF MEDICAL S, TEHRAN, Islamic Republic of Iran **Taghavi, Taraneh** MEDICAL-SURGICAL NURSING, TEHRAN UNIVERSITY OF MEDICAL S, TEHRAN, Islamic Republic of Iran

Objective:determination of concept mapping's effects on nursing students learning retention.Material&Methods:a quasi-experimental research :experimental(n=106)control(n=99)was designed(lecture for case and concept mapping for control group,data collection by a questionnaire).Results:The scores of the case was considerably higher than the control group(p<0.005).There was a significant statistical difference(p<0.05)between the mean score of cumulative post-test(case=73.29/100&control=68.69/100)as well as scores of retention test(case=72.40/100&control53.30/100). Conclusion: The concept mapping as a teaching method has significant effects on nursing student learning and their retention.

#### Problem-based learning and graduates' competencies

**Patria, Bhina** INCHER, Universität Kassel, Kassel, Germany

This paper investigates differences in competencies among graduates. Two groups were compared, group of graduates who studied in higher education with a high emphasis on problem-based learning



(group 1); and group of graduates who studied in higher education institution with less emphasis on problem-based learning (group 2). CHEERS data which consist of 2000 graduates from 13 countries in Europe and Japan were analysed. The result of t-test analysis indicates that there are significant differences of competencies between graduates in group 1 and 2. Group 1 have higher competencies in Leadership, Personal working skills, Organisational skills, Interpersonal skills and Field-related knowledge.

#### **The effectiveness of the leadership: The feedback of the collaborators like element of comparison and increase for the manager**

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The aim of this research is to explore the perceptions of managers and those of their collaborators about the most-effective leadership-styles (optimal-style) to put them in relationship each others and with behaviours (really) used. The sample consists in 100 European managers and 600 collaborators. The survey instrument is a questionnaire on Leadership-style (Blake-Mouton-Manual-Grid-Model). Analysis of data highlights strong correspondences, in the two groups, about the perception of the optimal leadership-style. In both groups, however, there are significant differences between optimal leadership-style and really-used style and between self-perception of managers about their behaviours and perception of the collaborators about manager behaviours.

#### **Empirical evidence of the relationship between impulsivity and aggression**

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Introduction: There is a misconception in the literature about the impulsive aggression concept. Objective: Our aim was to provide empirical evidence of the relationship between impulsivity and aggression. Methods: BIS and AQ-R were administered to 768 healthy respondents. Pearson's and canonical correlations were then calculated. A Principal Components Analysis was also conducted to explore whether impulsive aggression can be defined phenotypically as a single component. Results: The common variance between impulsivity and aggressiveness was never higher than 42%. The PCA reveals that one component is not enough to represent all the variables. Conclusion: Our results show that impulsivity and aggressiveness are two separate, although related constructs.

#### **Socio-emotional and intellectual correlations in children's attitudes about conflict**

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The purpose of this study is two-fold: a) to study the concomitant relationships between children's attitude about conflict and different factors of their intellectual and socio-emotional development; and

b) to identify the predictive variables of positive attitudes about conflict. The sample consists of 90 children aged 7 to 9. The study uses correlational methodology. Pearson coefficients show strong relationships between positive attitudes about conflict and higher levels of intellectual and socio-emotional development. Through multiple regression analyses, the following variables were identified as predictors of positive attitudes about conflict: self-evaluation as a creative person, low aggressiveness, and high non-verbal intelligence. The ANOVA results do not reveal gender or age differences in attitudes about conflict.

#### **Does life satisfaction change over a year?: Different answer among different age groups**

**Pezzuti, Lina** Dep. Clinical Psychology, Università di Roma, Roma, Italy **Artístico, Daniele** Baruch College, The City University of New York, New York, USA **Picone, Laura** Dep. Clinical Psychology, Faculty Psychology, ROMA, Italy

Objectives: The objective of this work is to study life satisfaction among older adults. Methods: To accomplish this goal we designed a longitudinal study by recruiting 80 older adults that were tested twice (average follow-up 408 days). Life Satisfaction scores were analysed in conjunction with indices of education, health, and age. Results: After follow-up life-satisfaction scores decreased overall. However, significant interactions with age, education, and health were found to explain part of the variance. Specifically, life satisfaction did not decrease among the "young-older" adults (65-75 yrs) with a higher level of education and the "old-older" adults (76+) in good health.

#### **Prevalence of pain in veterans suffering from post-traumatic stress disorder**

**Poundja, Joaquin** Research Centre, Douglas Hospital, Montreal, Canada **Fikretoglu, Deniz** Research Centre, Douglas Hospital, Montreal, Canada **Brunet, Alain** Research Centre, Douglas Hospital, Montreal, Canada **Objectives:** To assess for the prevalence of physical pain in veterans suffering from post-traumatic stress disorder (PTSD), and to compare this prevalence to other samples of pain suffering patients. **Methods:** We administered the Brief Pain Inventory and the PTSD Checklist at a Veterans Affairs Canada PTSD clinic (N=130). **Confidence intervals** were used for pain prevalence comparisons. **Results:** Nearly 87% of these veterans were suffering from pain; these rates were similar/higher than most of those reported by populations suffering from a physical disability/illness or cancer pain. **Conclusions:** Pain is a major issue in PTSD suffering veterans and should be screened for.

#### **Nightlife leisure of people between 15 and 35 years old: A case study in a Spanish city**

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**Objectives:** Describe and analyze "Nightlife Leisure" perception of people involved in the phenomenon. Show the Generalized profile of that people. Compare the profile with other groups. **H1:** People of the generalized profile are less aware of the "Nightlife leisure" drawbacks than others **H1.1:** Women are more aware **H1.2:** Old People are more aware **H1.3:** Post-university are more aware **H1.4:** People that go out more than 8 times are more aware **H1.5:** People that spend less than 20 Euros a night are more aware **Methods:** Administration of the DSM. Factor analysis, correlations, regression, ANOVA, (SPSS14). Sample=1022 subjects. Results The hypothesis have been partially confirmed

#### **The effect of sadness and age on components of attention**

**Quaireau, Christophe** Lab. of Exp. Psychology, University of Rennes 2, Rennes, France **Lemerrier, Celine** Lab. travail et cognition, University of Toulouse, Toulouse, France **Boujon, Christophe** Lab. of Psychology -, University of Angers, Angers, France **Driver inattention** is thought to cause many automobile crashes. Inattention appears when information, non pregnant and non relevant mobilize our mind, like negative emotion and rumination. This study explore the effect of sadness and the effect of age on three components of attention (alert, orientation and executive control) measured with the attention network test - ANT (Fan 2002). Subjects are assessed by a computerized ANT task without or after a negative mood induction (Mayer, 1995) and instruction to get gloomy thoughts. Anova is used to put forward the effect of sadness and the effect of age on the three components of attention.

#### **Basic level as the pattern of activation in the conceptual system**

**Radchikova, Nataly** Dept. of Psychology, BSPU, Minsk, Belarus

It is proposed to explain cognitive privilege of some categories in taxonomy (basic level effect) by a higher activation of corresponding concepts in the conceptual system of individual. Three consequences of this explanation are experimentally checked and allow to make the following conclusions: 1. Basic level(s) could be easily shifted or added because the mechanism of activation has to be quick and efficient to serve for adaptation purposes. 2. There is no connection between basic level and typicality: both typical and atypical members of categories may show basic level effect. 3. Some abstract concepts could show basic level effect.

#### **Return to work after major depression: A 5-year naturalistic follow-up study**

**Raitasalo, Raimo** Research Department, The Social Insurance Institute, Helsinki, Finland **Toikka, Tuula** Research Department, The Social Insurance Institute, Helsinki, Finland **Salminen, Jouko** Research Department, National Public Health Institute, Turku, Finland **Saarijärvi, Simo** Department of Psychiatry, Turku University Hospital, Turku, Finland **Objectives:** Do baseline psychiatric and psychological factors predict return to work of depressive outpatients? **Methods:** The study group comprised 131 depressive outpatients, who were on sick leave due to their illness. Several psychological measures as the Beck Hopelessness Scale and WAIS-R were used. Statistical tests were Students t, chi-square and logistic regression analysis. **Results:** Return to work after five years was associated with self-efficacy and motivation to stay at work. **Conclusions:** When planning treatment for depressive patients, it is important to support their ability to sustain hopefulness and motivation.

#### **Autobiographical memory in remitted bipolar disorder**

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Memory processing and recall in bipolar disorder were studied analysing the valence and structure of evoked autobiographical memories. A group of subjects with bipolar disorder (n=15) was compared with a group without psychopathological symptoms (n=15). The individuals were evaluated using the Autobiographical Memory Task, Beck Depression Inventory, Hamilton Depression Scale, Hypomania Scale, Positive and Negative Affect Schedule, and State-Trait Anxiety Inventory. The bipolar group reported a frequent recall of negative and categorical autobiographical memories. This study sug-

gests that the predominance of general autobiographical memories maintains and increases symptoms in bipolar disorder.

#### Psychological practices in public health services in Brazil

**Rasera, Emerson F.** Instituto de Psicologia, Uberlândia, Brazil **Goya, Ana Carolina A.** Instituto de Psicologia, Univ. Federal de Uberlândia, Uberlândia, Brazil

This study aims to describe the psychological practices developed in public health services in a Brazilian city. The data was collected by semi-structured interviews with nineteen psychologists and analyzed through the constructionist perspective. The main results were: emphasis on individual psychotherapy; group activities as a response to the increasing mental health demand; absence of activities related to health promotion and prevention; lack of social-political involvement; unfamiliarity with the directions of the National Health System. These results point to the need to promote changes in Psychology training in Brazil in order to offer a better response to public health needs.

#### With a little help from my spouse...: Shared everyday-life knowledge facilitates collaboration in old age

**Rauers, Antje** Lifespan Psychology, MPI for Human Development, Berlin, Germany **Riediger, Michaela** Lifespan Psychology, MPI for Human Development, Berlin, Germany **Schmiedek, Florian** Lifespan Psychology, MPI for Human Development, HU, Berlin, Germany **Lindenberger, Ulman** Lifespan Psychology, MPI for Human Development, Berlin, Germany  
Older adults may compensate for individual losses in cognitive performance by collaborating with others. We predict that using shared everyday knowledge with a familiar partner facilitates this collaboration, especially for older adults. In an experimental paradigm based on the game Taboo, participants had to explain target words to another person using as few hints as possible. 76 younger (20-30 years), and 84 older adults (70-80 years) worked once with an unfamiliar partner, and once with their spouses. As predicted, especially older adults profited from collaborating with their spouses, and from the strategy of using shared everyday-life knowledge.

#### To identify the health status and social interaction of the elderly in earth quake areas of Pakistan

**Rauf, Nefofar** Dept. of Psychology, Quaid A Azam University, Islamabad, Pakistan **Akbar, Asma** public health trainer, Helpage International, Islamabad, Pakistan

It was a baseline study conducted in 38 IDP camps of Muzaffarabad and Hatian Bala. Results identified that Arthritis is more commonly indicated illness in IDP camps that is 497 cases were identified. While second to arthritis are eye Problems 9.9%. Out of 2190 caretakers/family members of elderly 1155 (52.7%) replied that they are aware of the illness/disease of the elderly in their home. Before earthquake most of the elderly population (63.1%) in the IDP camps daily socialize with other people in their area while after the disaster this percentage reduced to 47.6%.

#### Bimanual distractor interference

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Previous research has shown that during a bimanual selective reaching task in which the left hand responded to targets in left space and the right hand responded to targets in right space, distractors presented in contralateral space caused the greatest

amount of interference. In the present study, the left hand responded to targets in the bottom of the screen and the right hand to targets in the top of the screen to determine if the contralateral effect is based on conflict between hands or space. Results suggest that side of space is key to the effect.

#### The effectiveness of stage-matched interventions in promoting multiple health behaviours

**Remme, Lena** Berlin, Germany **Lippke, Sonia** Health Psychology, FU Berlin, Berlin, Germany **Wiedemann, Amelie Ulrike** Health Psychology, FU Berlin, Berlin, Germany **Ziegelmann, Jochen Phillip** Health Psychology, FU Berlin, Berlin, Germany **Reuter, Tabea** Health Psychology, FU Berlin, Berlin, Germany **Gravert, Christian** Gesundheits- und Sozialpolitik, Deutsche Bahn AG, Berlin, Germany

Objectives: Testing the effectiveness of a stage-matched intervention in promoting physical activity and healthy nutrition in a randomized controlled trial. Methods: Participants (N=442) were randomized to stage-matched or standard-care treatments. Multivariate analyses in a longitudinal design (1-month follow-up). Results: Physical activity: The stage-matched intervention was superior to the standard-care intervention in increasing goal-setting and behaviour. Nutrition: The stage-matched intervention was superior in behaviour promotion, and as effective as the standard-care intervention in enhancing goal-setting. Conclusions: Compared to standard-care, stage-matched interventions are effective interventions to promote a healthy lifestyle. Stage theories serve as a valid theoretical backdrop when designing interventions.

#### To be or not to be at risk: Spontaneous reactions to risk information

**Renner, Britta** Inst. für Psychologie, Universität Konstanz, Konstanz, Germany

The present study examined spontaneous responses after cholesterol and blood pressure risk feedback in South Koreans (N = 951). Most spontaneous responses were related to four types of reactions: Emotions, feedback valence, expectedness, and lifestyle change. This pattern emerged consistently across different threat levels (low, borderline high, high risk) and across different types of risk feedback (cholesterol, blood pressure). Importantly, three out of the four most often generated types of reactions (emotions, expectedness, and lifestyle change) are comparably underrepresented in previous research. Moreover, the results suggest that predominantly adaptive response patterns were generated in the face of personally consequential feedback.

#### Prideful self-reliance: older men's account of masculinity in caregiving

**Ribeiro, Oscar M.** ICBAS - UP, UNIFAI, Porto, Portugal **Paul, Constança** ICBAS - UP, UNIFAI, Porto, Portugal

Literature on older men as family caregivers has been increasing as it has the efforts in understanding later life masculinities. This qualitative study relied on a sample of 50 men aged 65+ (mean age 78 years) caring for their dependent wives, and aimed to identify their major difficulties and coping strategies used to deal with the situation. Main burdening consequences are related to changes in interpersonal relationship dynamics, the presence of sub-clinical depressive symptoms and self-negligent health behaviors. The influence of strong views of masculinity on the expression of psychological burden and on the use of community services are discussed along with its implications for professional practice.

#### Intervention-engagement and its role in the effectiveness of stage-matched interventions: Evidence from an online study on physical activity

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Objectives To test whether stage-matched treatments are superior to mismatched and control treatments in the promotion of physical activity. To investigate the relationship between intervention-engagement and the different interventions. Methods N=427 participants were randomized to a stage-matched, mismatched or control treatment. Multivariate analyses; baseline, 1- and 6-months follow-up measures. Results Stage-matched interventions were superior to all other conditions with regard to motivational and volitional variables. Intervention-engagement was a marginally significant moderator. Type of intervention had no effect on level of intervention-engagement. Conclusions Interventions are most effective in promoting physical activity when they are stage-matched and when intervention-engagement is high.

#### Integrated diagnostic and health prevention for nursing staff in elderly care

**Richter, Peter** Arbeits-, Organisationspsychologie, Techn. Universität Dresden, Dresden, Germany

The work-place situation of nurses is characterised by high work demands and vulnerability for stress-related health outcomes (Schaufeli, 2007). Risk-models require the combined analysis of psychological and physical workload. This study, consisting of 194 nurses in elderly care (response rate: 85, 6 %), intended to identify risk factors at work by use of questionnaires and objective method. Muscle pain and reduced psychological health were associated with high psychological job demands, non-permanent work contracts, and increased physical workload. In addition, poor ergonomic conditions, reduced social support, and information deficits, jointly, are correlated with higher muscle-skeletal complaints.

#### Willingness to support the elderly: The view of adult children and the elderly

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An over-ageing of European societies will have consequences in several domains especially with respect to social expenditures, health provision and education. People may live longer but this does also imply that they will sometimes be longer in need of health care. The present study picked up the notion of supporting the elderly in case of sickness and disability. In a first study on 2.175 subjects (60-90 years), the view of the elderly concerning the willingness of their offspring to support them was analyzed; in a second study this willingness was investigated in a sample of 1.208 adult children (40-50 years).

#### A behavioural intervention program to prevent HIV/STI and unwanted pregnancies among Mexican adolescents

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This paper reports a study that assessed the effectiveness of a behavioural program to prevent sexual risk behaviours among two hundred adolescents of 14.5 years mean age, with and without sexual experience. A pre-test-post-test experimental design with control and experimental groups was used. During pre and post evaluation phases participants completed self-report questionnaires assessing psychosocial (beliefs, attitudes, self-efficacy, norms, and intentions toward condom use) and behavioural (communication about sex, condom use negotiation styles, the type of partner and sexual practices, frequency of condom use and correct condom use skill) variables. The results show differences between the experimental and control groups, and among teenagers with and without sexual experience after behavioural training phase.

#### Aged people and Sense of Community (SC)

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The aim of this research is to analyze the relationship between aged people and SC. A Personal Data Questionnaire and a SC Scale were given to 350 Argentinean of different age, gender and social and economical level. Factor and Variance Analyses were used. Results suggest that some social and demographic variables considered have a statistically significant influence on the respondents' SC. Given the longevity growth and the need to maintain the quality of life, aged people's SC is a piece of information that must be taken into account when considering moving to a new neighborhood or a geriatric institution.

#### Depression and medical conditions in a probabilistic Puerto Rican elderly sample

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In PR, a Caribbean island under the government of the USA, a total of 425,137 elderly have been identified representing an increase of 11.2 percent in comparison with the 1990 Census (Hetzl & Smith, 2001). In this study, a causal-comparative, cross-sectional design was used; comparing older adults ( $n = 410$ , mean age 75.6 years) according to their depressive symptoms level in terms of the number of medical conditions reported by them. Our findings suggest that a mild moderate but significant relationship exists between depression and medical conditions ( $\rho = .31$ ,  $p < .05$ ). Public Health implications are presented and discussed

#### Frequency of word-use predicts behavior in patients with Alzheimer disease

**Rohlf's Dominguez, Paloma** Personalidad y Evaluación, Universidad de Granada, Granada, Spain We have studied the impact of the frequency effect on the word production deficit commonly manifested by patients with mild Alzheimer disease when performing an object naming task. We speculated that patients ( $N = 10$ ), would commit more errors than controls ( $N = 26$ ) and that both spanish groups would show significantly the frequency effect. The results of statistical error analysis for intergroup comparison indicated that, overall, controls performed the task better than patients, but while the

control group showed a significant frequency effect, the patients showed only a trend to a significant inverse frequency effect. Further research is needed to explain this last result.

#### Caregiving and personal growth: Two irreconcilable concepts?

**Rohr, Margund K.** Inst. für Psychogerontologie, Universität Erlangen-Nürnberg, Erlangen, Germany **Lang, Frieder R.** Inst. für Psychogerontologie, Universität Erlangen-Nürnberg, Erlangen, Germany Psychological research on caregivers of older adults focusses on burden emphasizing risks of stress, depression and loss. Only recently attention is paid to the possible rewarding aspects of caregiving tasks and the process itself. However, longitudinal studies assessing changes in the caregiver process are still rare. The current study aims at caregiving transitions using data from the German Socio-Economic-Panel (SOEP,  $N = 8804$ ). Resilient and burdened caregivers are differentiated based on indicators of personal growth and competence in everyday activities and social participation. Findings point to opportunity benefits of the caregiving situation and determinants of personal growth among caregivers.

#### Synergetic approach to integration of liberal and technical education

**Romanovsky, Aleksandre** Psychology, National Technical University, Kiev, Ukraine **Irina, Vasilyeva** Psychology, National Technical University, Kiev, Ukraine **Irina, Yuryeva** Psychology, National Technical University, Kiev, Ukraine **Olga, Ignatyuk** Psychology, National Technical University, Kiev, Ukraine **Nataliya, Uysyk** Psychology, National Technical University, Kiev, Ukraine

**Objective** To find out general laws of building individual education algorithms **Methods** The research was done on a sample of 5000 (the experimental group included 500) third- and fourth-year students of informatics department at Kharkiv Polytechnics using mathematic modelling, testing, interviewing, and a laboratory experiment. **Results** The experimental group's performance increased by 16.2% due to the application of the found algorithm of adaptation to studying the integrated arts and technical course. **Analytical correlations** between components of individual training allowed to receive data necessary for successful knowledge acquisition. **Conclusions** Analytical laws of the adaptation can be used in building self-improving intellectual computer systems. The findings can be helpful in developing various training courses.

#### Leadership relationship with unit climate and soldiers' motivation for task accomplishment in military structures

**Rozcenkova, Andzela** Dept. of Psychology, University of Latvia, Riga, Latvia

**Abstract** Leadership relationship with unit climate and soldiers' motivation for task accomplishment in military structures Andzela Rozcenkova University of Latvia Riga, Latvia The study explores transformational leadership in military structures: (1) if there is significant relationship between commanders' leadership and unit climate, soldiers' motivation for task accomplishment; (2) if there is significant relationship between commanders' self-esteem leadership and soldiers' estimate. **Methods:** Unit Climate profile (U.S. Army Research Institute, 1990), Leadership profile (Nissinen, 2001), Groups' motivation of task accomplishment (LV National Defence Academy, 2004). **Participants:** platoon officers ( $N=25$ ) and soldiers ( $N=500$ ). Theoretical and methodological implications are discussed in the research.

#### Motor bottleneck or central response monitoring in temporally overlapping tasks?

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Although there is strong evidence for a central bottleneck process in temporally overlapping reaction time tasks, recent psychological refractory period (PRP) studies indicate that bottleneck processes may also include the response execution stage, or alternatively, processes of response monitoring. This experiment was designed to disentangle these two alternatives. To this end, we manipulated the temporal demand for Task 2 execution in a PRP paradigm. A clear effect of Task 2 manipulation on Task 1 reaction time was obtained even when the execution processes of the two tasks did not temporally overlap. This result supports the response execution hypothesis.

#### Schizotypal personality and the five-factor model: Two aspects of openness make opposite predictions

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The five-factor model of personality can characterize many personality disorders, but a dimensional understanding of Schizotypal Personality Disorder (STPD) remains elusive. We hypothesized that Openness-to-Experience (OE) consists of two aspects (Openness and Intellect) that make opposite predictions regarding STPD. STPD and OE measures were administered to 233 university students and 100 psychiatric outpatients, and results analyzed with hierarchical multiple regression. In both samples, Openness and Intellect were inter-correlated, but the former was positively related to STPD ( $B = .154, .298$ ) whereas the latter was negatively related ( $B = -.170, .214$ ). This complex relation may explain previous difficulties in identifying clear personality trait correlates for STPD.

#### The emotional experiences and subjective well-being of the elderly in Korea: The Hallym Longitudinal Study of aging

**Ryu, Kyung** Dept. of Psychology, Hallym University, Chuncheon, Republic of Korea

**Objectives:** To investigate the changes of subjective well-being (SWB) and emotional experiences and analyze the effects of emotion experiences and regulations on the SWB in old age through the longitudinal study from 2003 to 2007. **Methods:** PANAS, PGCMs, and the emotion regulation scale were used and HLM, SEM were performed. **Results:** SWB was not dramatically decrease with age and the elderly experienced more positive and less negative emotions. Experiencing more positive, less negative emotions and using self-protective strategies had positive effects on the SWB in old age. **Conclusion:** Emphasis of positive aspect of aging and the meaning of emotional life.

#### Using comparison to promote young children's concepts of material kind

**Saalebach, Henrik** Inst. of Behavioral Sciences, ETH Zürich, Zürich, Switzerland **Hardy, Ilona** Inst. of Behavioral Sciences, ETH Zürich, Zürich, Switzerland The process of comparison is a crucial mechanism underlying young children's categorization of objects. We investigated children's ability to construct conceptual categories of material kind by having 73 preschoolers make inferences about the behaviour of different items in water after they had observed objects of a given material to float or sink. Objects



of extreme mass, volume, and shape served as distractors. In a 2x2 within-groups design, we prompted comparison by varying the number of observed objects and by using material labels. Both prompts significantly increased children's material choices and accompanying verbal explanations thus facilitating their conceptualizations of material kind.

#### Image of God and style of religious education

**Sadeghi, Mansoureh Alsadat** Psychology, Family Institute, Tehran, Islamic Republic of Iran **Mazaheri, Mohammad Ali** psychology, family institute, tehran, Islamic Republic of Iran

The goal of the present research is investigation relationship between style of religious education and image of God in University students. 374 students were chosen and completed questionnaires measuring image of God (rebuilt scale of Lawrence, 1997), style of religious education inventory: parenting style scale (Naghashan, 1979) and parental religiousness (Granqvist, 1998). Data were analyzed Two way anova. The results showed that parenting styles has a main effect on the scores of the total subscales of God image ( $P < 0.05$ ). Interpretation of results focouses on the parent-child relationship with regared to theories of object relations, attachment and learning social.

#### Aftereffects of response inhibition in the stop-signal task

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We conducted the stop-signal task to examine the aftereffects of the response inhibition. The participants were engaged into a choice reaction time task as the primary task, but were required to stop the reactions when stop-signals were occasionally presented after go-signals at some delays. We showed that the reaction times in the present trials became longer as the delays in the last trials increased. As for the trials after successful response inhibition, the reaction times in repetition condition of go-signals were longer than of non-repetition. These results can be explained by the priming effect.

#### Women and aging: The case of a bus driver retired

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Actually number of women working at traditional male jobs is increasing. This study claims to reveal some difficulties (i.e. reconciling family and professional life) of a women bus driver ( $n=1$ ) retired (62 year old) along his work and life history. After doing several semi-structured interviews, Interpretative Phenomenological Analysis (IPA) was conducted on full verbatim transcripts to investigate in particular the transitional experience at retirement. Driver's several reflections about his health condition, interpersonal relations and care of ill parents showed most of one dilemma concerning membership of traditional family and out of a typical male job after 40 years employed.

#### The Spatial Visualization Dynamic Test- Revised: An experimental approach.

**Santacreu, Jose** Personalidad,, Universidad Autonoma de Madrid, Madrid, Spain **Contreras, Maria Jose** Psicología Básica I, UNED, Madrid, Spain

Visualization (Vz) refers to the ability to mentally manipulate visual patterns. This work presents the Spatial Visualization Dynamic Test-Revised (SVDT-R). In this visualization task the participant must simultaneously direct two moving dots towards a given destination. The destination changes from trial to trial and, in order to direct

the two moving dots, participants must use a digital compass linked to each of them. In the SVDT-R, the moving dots disappear from the computer screen and participants must imagine their movement. Authors report that the study applied to 274 participants, shows the high validity and reliability of the spatial test considered.

#### Effects of social intention on the control of action

**Sartori, Luisa** Dipt. di Psicologia, Università di Padova, Padova, Italy **Becchio, Cristina** Dipartimento di Psicologia, Università di Torino, Torino, Italy **Bulgheroni, Maria** Dipartimento di Psicologia, Università di Padova, Padova, Italy **Castiello, Umberto** Dipartimento di Psicologia, Università di Padova, Padova, Italy

We investigated how social goals are incorporated into action plans. In Experiment 1 participants grasped an object and located it within a container (blocked trials). In 20% of trials a human agent seated next to the participant unfolded the hand to ask for the object (perturbed trials). In Experiments 2 & 3 the agent was replaced by a robotic device or performed an action not conveying a social request, respectively. Results indicate that motor response varied depending on the nature of the perturbation. Only human gestures conveying a social request modified pre-planned action by on-line integration of other's actions.

#### The relationship of gesturing, cognitive ability, and personality

**Sassenberg, Uta** Psychology, Humboldt University of Berlin, Berlin, Germany **van der Meer, Elke** Psychology, Humboldt University of Berlin, Berlin, Germany

Gestures are produced to communicate information to the listener, facilitate the speaker's thinking and learning, and regulate interpersonal relationships and emotions. Individuals differ in the frequency of gesture production. However, its relationship to cognitive ability and personality is yet unclear. High school students judged and described their strategies for geometric analogies. Frequencies of different gesture types were analysed in relation to participants' performance and pupil responses, cognitive ability, and personality. Individuals' cognitive ability and personality predicted production of different gesture types. The results are discussed in relation to theories of the functions of gesture production.

#### The relation between personality traits and reaction times to personality trait terms:

##### Personality traits of extraversion-introversion, nerves-toughness

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There was individual difference of the autonomous nerves system in the study of neurosis tendency (Eysenck, 1967). Therefore, it's difficult to examine experimentally personality traits. It hypothesized reaction times (RT) to personality trait terms would change with the personality traits in this study. We examined RT to 10 terms in each session. As a result, though RT to 10 terms in self-rating session didn't reveal personality traits, it was demonstrated that the rate of change that based on personal RT in simple session was changed by Extraversion-Introversion, Nerves-Tough. This result suggested that RT would be able to show personality traits as behavioral evidence.

#### New latent-variable approach to actual-ideal discrepancy theory: Actual and ideal appearance, physical self-concept and global self-esteem

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Actual-ideal discrepancy (AID) theory of self-concept is heuristic, dating back to William James, but has received limited empirical support. We introduce a new latent-variable methodology (structural equation models with multiple indicators on all constructs), testing gender and age invariance (adolescents and young-adults;  $N=1693$ ). In support of theoretical predictions, we confirmed the joint effect of actual and ideal appearance, we found contributions of actual (positive) and ideal (negative) appearance on Physical Self-Concept and Global Self-Esteem (partly mediated by Physical Self-Concept) that varied slightly with gender. Success of our innovative methodological approach supports AID theoretical predictions, confirming the importance of substantive-methodological synergies.

#### Influence of pursuit velocity on the enhancement of chromatic sensitivity during smooth pursuit eye movements

**Schütz, Alexander C.** Inst. für Allg. Psychologie, Universität Gießen, Gießen, Germany **Braun, Doris I.** Allgemeine Psychologie, Universität Gießen, Gießen, Germany **Gegenfurtner, Karl** Inst. für Psychologie, Universität Gießen, Gießen, Germany

Recently we showed that visual sensitivity for chromatic stimuli is enhanced during smooth pursuit eye movements. Here we investigate the influence of pursuit velocity on this enhancement. We measured contrast sensitivity for peripheral, color modulated stimuli during fixation and during smooth pursuit. We tested three different pursuit velocities: 3.5, 10.5 and 14.1 deg/sec. Results show that the sensitivity for chromatic stimuli is improved in all pursuit conditions, even for the slow velocity. Higher pursuit velocities result in stronger improvements of chromatic sensitivity. A similar relationship has been shown for the amplitude of saccades and the magnitude of saccadic suppression.

#### Age-related effects on working memory performance and P300

**Schapkin, Sergei A.** Berlin, Germany **Freude, Gabriele** Mental workload, Fed. Inst. for Occup. Safety & Health, Berlin, Germany

Elderly employees were hypothesized to involve a broader neuronal network into the task performance than younger to compensate the working memory decline. In the high memory load condition (HML) they had to memorize a letter sequence and to respond when a letter was repeated. In the low memory load condition (LML) they had to respond when the letter "X" appeared. The RT and number of errors were larger in HML than in LML, while P300 was smaller and delayed in HML. Elderly made more errors than younger in HML condition. The P300 was delayed and more frontally distributed in elderly.

#### Perceptual learning of force control in pointing movements

**Schinauer, Thomas** Inst. für Psychologie II, Universität Kaiserslautern, Kaiserslautern, Germany **Kalveram, Karl Theodor** Psychology, University of Düsseldorf, Duesseldorf, Germany **Lachmann, Thomas** Psychology Unit II, University of Kaiserslautern, Kaiserslautern, Germany

The content of motor memory is called an "internal model" and comprises both knowledge of physical properties of the body and the environment. Pointing requires conversion of perceived distance into force commands, and neural information of both vision and proprioception to be actively coordinated as well. Although the control of isometric force production cannot be generalised to the control of kinematic variability, our experiments show retention of an acquired model in such a difficult task to be satisfying when being learned visually open-loop. The results shed light on the



discussion of the force control hypothesis in motor control.

#### **A neuro-physiological model of the evolution of goal-oriented behavior based on the development of agency**

**Schmidt, Tino** Psychology, TU Dresden, Dresden, Germany **Lehmann, Hagen** Computer Science, University of Bath, Bath Spa, United Kingdom

Our cognition creates a sense of authorship for our actions to differentiate them from actions done by other agents, called "sense of agency". We describe a dynamical, neuro-physiological model, which focuses on two types of internal neural-temporal information-loops. The "forward loop" uses efference copies to predict the sensory consequences of motor commands whenever movements are made. The "feedback loop" provides the current action program with corrections of the motor commands to achieve the state desired by the action. Our model describes how the interaction of "feedback-" and "feedforward-loop" forms a "sense of agency" and shows neuro-physiological evidence for this phenomenon.

#### **Predictors of health behavior within the nutrition sector**

**Schnitzspahn, Katharina** Groß-Gerau, Germany **Scholz, Urte** Psychologisches Institut, Universität Zürich, Zürich, Switzerland **Kliegel, Matthias** Institut für Psychologie, Technische Universität Dresden, Dresden, Germany

Acquisition and maintenance of health behaviors are often poorly predicted by behavioral intentions. To close this intention-behavior-gap volitional constructs are needed. The present cross-sectional, web-based study on nutrition behavior investigates a prediction model that includes planning and action control as postintentional mediator variables. Participants were 381 women and 88 men (aged 18 to 79; BMI from 19 to 57), who took part in a web-based program. Structural equation modeling showed that only action control was a proximal predictor of the nutrition behavior assessed. Practical implications and suggestions for future research are discussed.

#### **When less is more: Negative outcomes of discrepancies between explicit and implicit self-esteem**

**Schröder-Abé, Michela** Inst. für Psychologie, Techn. Universität Chemnitz, Chemnitz, Germany **Rudolph, Almut** Psychology, Chemnitz University, Chemnitz, Germany **Schütz, Astrid** Psychology, Chemnitz University, Chemnitz, Germany

Implicit self-esteem (SE) can be used to distinguish discrepant (high explicit/low implicit or high implicit/low explicit) and congruent (high/high or low/low) forms of SE. Assuming that SE discrepancies are dysfunctional irrespective of their direction, we conducted four studies to investigate their relation to health and defensiveness (assessed by self- and observer ratings). Multiple regression analyses revealed significant interactions between implicit and explicit SE. When occurring in combination with low explicit SE, high implicit SE is related to defensiveness and impaired health. Thus, SE discrepancies can be regarded as stressors and high implicit SE is not necessarily advantageous.

#### **Family caregivers' quality of life and the impact of incontinence**

**Seither, Corinna** Grad.-Koleg Multimorbidität, Charité Universitätsmedizin, Berlin, Germany

Frail elderly persons living at home are often cared for by a family member. Despite the high prevalence of urinary and fecal incontinence in old age its impact on family caregivers has been relatively unexplored. This study investigated to what extent care receivers' incontinence affects - among other

stressors - different dimensions of quality of life of family caregivers (N=620) using multiple regression methods. Also the moderating role of social support, self-efficacy and quality of the relationship were explored. First results will be presented. Implications for interventions focussing family caregiver's quality of life will be discussed.

#### **Psychosocial variables associated to diet adherence in obese patients: A longitudinal study**

**Serrano-Alvarado, Karina** Chimalhuacan, Mexico **Rojas-Russell, Mario** School of Psychology Zaragoza, National U. Mexico, Mexico, Mexico

Objective: Study the prospective association of self-efficacy and readiness to change to diet adherence (DA) in obese patients. Method: Four measurements, one month apart, were performed in 93 patients participating in a drug trial. Self-efficacy and readiness to change related to diet, were measured. Adherence to diet was assessed through a one-month retrospective log. Results: Multivariate analysis showed a significant association of self-efficacy and volitional stages to adherence. Perceived stress and health affected adherence also. Conclusions: Interventions to strengthen DA in obese patients should take into account motivational readiness and build up perceived self-efficacy.

#### **Survey of mental health needs of Hamedanian people**

**Shamsaei, Farshid** Psychiatric Nursing, Hamedan University, Hamedan, Islamic Republic of Iran **Objectives:** The aim of this study is to identify the mental health needs of Hamedanian people. **Methodology:** This was a descriptive cross-sectional study. The participants consist of 1300 individuals who were selected by stratified sampling. **Results/Conclusions:** Results showed that the Hamedan city people believed that mental health services are inadequate (45%), they did not access services near their home (74%) and media information about services was poor (34%). The expressed needs of people were: mental health education (72%), established mental health centers in schools and factories (<50%) and expanding the comprehensive mental health centers in the city (58%). The paper provides a rationale for providing mental health service delivery that are easily accessible, to promote mental health.

#### **The relationship between mental health and quality of life of hemodialysis patients**

**Sharif, Farkhondeh** Psychiatric and Mental Health, Shiraz University, Shiraz, Islamic Republic of Iran **Vedad, Fariba** psychiatric and mental health, Shiraz University of Medical S, Shiraz, Islamic Republic of Iran

The purpose of this study was to investigate the relationship between mental health and quality of life of hemodialysis patients. **Methods:** The sample consisted of 90 hemodialysis patients. They were assessed by a demographic questionnaire, General Health Questionnaire, Short form questionnaire (SF-36). Mental Health was assessed in four domains and the SF-36 questionnaire are summed into eight scales. The data were analyzed using t-test, spearman's correlation, ANOVA. **Results:** The findings revealed that many quality of life domains were correlated significantly with mental health domains. The result of this study indicated that many quality of life domains were correlated with mental health domains and hemodialysis has effect on different aspects of patient's life.

#### **Psychological principles of foreign language teaching management in preschool**

**Sharkova, Nataliya** Dept. of Psychology, Dnipropetrovsk Nat. University, Dnipropetrovsk, Ukraine

The presentation reveals complex analysis of foreign language teaching- learning process. An

empirical study has been carried out to test with statistical methods the main principles underlying psychologically safe and pedagogically grounded conditions of foreign language teaching and learning. The evidence was found that the learning efficacy results from the activity approach where non-verbal activity covers the teaching-learning process thus leading cognitive development of children and maintaining their learning motivation. An experiment has demonstrated that specific language activities based on the young learner's actual interests and needs significantly impact on memorizing of the foreign language vocabulary.

#### **Gender effects on the activation of parent-child attachment**

**Shen, Lierong** Institute of Psychology, Chinese Academy of Sciences, Beijing, People's Republic of China **Liu, Huashan** School of Psychology, Huazhong Normal University, Wuhan, People's Republic of China

Three studies examined the gender effects of college students' working models of attachment and emotional and social loneliness on the activation of parent-child attachment. Results showed that father-child attachment activation led to higher self-models in relationships with male friends than that of mother-child attachment; mother-child attachment activation led to higher models of others in relationships with female than that of father-child attachment; same-sex parent-child attachment activation led to lower social loneliness, while different-sex parent-child attachment activation led to lower emotional loneliness, than control conditions. The findings expand attachment theory, emphasizing gender effects on the influence of parent-child attachment.

#### **Constructive study on the evaluative index system of guidance activity lesson**

**Shi, Lijun** School of Teacher Education, Zhejiang Normal University, Zhejiang Jinhua, People's Republic of China **Sui, Guang Yuan** School of Teacher Education, Zhejiang Normal University, Zhejiang Jinhua, People's Republic of China

**Objectives:** Constructing an evaluative index system of guidance Activity lessons taken in a class. **Method:** An inventory was constructed after 78 professional guidance teachers were interviewed. The explorative factor analysis method was employed and 12 mental health education theorists and experienced school guidance practitioners were conducted to discuss the validity and the distribution of relative weight. Analytical Hierarchy Process was used. **Results:** The evaluative index system was established, including three first-degree indices and nine secondary indices. Each hold respectively the relative weight. After applied into practice, it had been proved that this index system was of correspondingly high quality.

#### **Why do kindergarten teachers need to smile?**

**Shimizu, Masuharu** Dept. of Literature, Kobe Women's University, Kobe, Japan **Mori, Toshiaki** Graduate School of Education, Hiroshima University, Higashi-Hiroshima, Japan

This study investigated the developmental differences in face identification. Sixty-nine kindergarten children and 41 college students were presented with 11 pairs of woman's portrait and were asked to judge whether they are the same woman's faces or not for each pair. Three pairs had the same woman's face: two serious faces, serious face vs. smiling face, and two smiling faces. Children judged more correctly for two smiling face pair than for two serious face pair. Younger children judged less correctly for two serious face pair. These results were discussed in relation to the neuronal development and the teacher education system.

### Relationships among neuroticism, coping styles, academic stressors and reactions to stressors of male and female college students in Iran: Structural equation modeling

**Shokri, Omid** *psychology, Teacher Training University, Tehran, Islamic Republic of Iran*  
This study examined the relationships among neuroticism, coping styles, academic stressors and reactions to stressors. SEM was used to assess the relationships among latent and measured variables in the conceptual model. The MANOVA indicated significant difference in neuroticism, coping styles, academic stressors and reactions to stressors by gender. Higher levels of academic stressors were predicted by higher scores of neuroticism and emotion oriented and by lower scores of task oriented. Higher academic stressors predicted greater reactions to stressors. All of the regression weights were statistically significant, and models' predictors accounted for 75% of the variance in reaction to stressor.

### Influences of spatiotemporal conditions of feature-change on visual object representation continuity

**Shui, Rende** *Dept. of Psychology, Zhejiang University, Hangzhou, People's Republic of China*  
**Shen, Mowei** *Dept. of Psychology, Zhejiang University, Hangzhou, People's Republic of China*

Visual object representation continuity, i.e. the perception of a changed visual object as the same one, is an essential cognitive ability. Two different types of theories have been proposed: focuses on the object spatiotemporal continuity and the importance of feature change. The effects of object's feature-change were examined by 5 experiments of multiple-object-tracking (MOT) task with manipulating spatiotemporal conditions of feature-change. The results showed that feature change has great effects on the maintenance of object representation continuity when 2 collided objects exchange their features; the effects of color- and shape-change are larger than that of orientation-change.

### Parents' education predicts their school-related beliefs and practices with their children

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**Lerkkanen, Marja-Kristiina** *Department of Psychology, University of Jyväskylä, Jyväskylä, Finland*  
**Poikkeus, Anna-Maija** *Department of Psychology, University of Jyväskylä, Jyväskylä, Finland*  
**Niemi, Pekka** *Department of Psychology, University of Turku, Turku, Finland*  
**Siekkinen, Martti** *Department of Psychology, University of Joensuu, Joensuu, Finland*  
**Nurmi, Jari-Erik** *Department of Psychology, University of Jyväskylä, Jyväskylä, Finland*

This longitudinal study investigated how parents' education contributes to parental school-related beliefs and practices with their kindergarten children. A total of 1024 mothers and 713 fathers filled in a questionnaire measuring their educational level, school-related beliefs and practices. The performance in reading and math of 1024 children was also examined. The results indicated that parents with a low educational level instructed their children in reading and math more than those with a high education. By contrast, less educated parents were less involved in shared-reading and reported more negative beliefs about children's performance on academic skills, compared to higher educated parents.

### Satisfaction with friends, intimacy, family and social activities: Are there differences between women with obesity reporting distinct eating behaviours?

**Silva, Isabel** *FCHS, Universidade Fernando Pessoa, Porto, Portugal*  
**Pais-Ribeiro, Jose** *Faculdade de Psicologia e de C, Universidade do Porto, Porto, Portugal*  
**Cardoso, Helena** *Endocrinology, ICBAS-UP, HGSA, Porto, Portugal*

**OBJECTIVES:** To analyse social support satisfaction differences between women with obesity reporting distinct eating behaviours and yo-yo phenomena. **METHODS:** A cohort of 168 women with obesity answered to the Social Support Satisfaction Scale in the context of a clinical interview. **RESULTS:** Women reporting yo-yo phenomena show lower family satisfaction. Women presenting binge eating disorder show lower satisfaction with friends, family, intimacy and total social support. There are no significant differences concerning sweet/fat food craving, seasonal pattern of eating behaviour, night eating syndrome and continuous nibbling. **CONCLUSIONS:** Social support revealed to be an important variable in the distinction of women with obesity presenting distinct eating behaviours.

### The forms of the present time orientation and well-being in the context of the full time perspective

**Sobol-Kwapinska, Malgorzata** *Faculty of Social Sciences, Catholic University of Lublin, Lublin, Poland*  
**Objectives:** The objective was to examine the relationships between the forms of the present time orientation (hedonism, fatalism and active concentration) and well-being. **Methods:** The data on three time orientation measures and two well-being measures from participants aged from 19 to 65 years were analyzed using multiple regression analysis and cluster analysis. **Results:** The active present time orientation, unlike hedonism and fatalism, was associated with high well-being, positive evaluation of time, and effective realization of goals. **Conclusions:** Beside hedonism and fatalism, the present time orientation can also take the form of the active, engaging concentration on the current moment.

### The training of reading according to invariant method in Mexican children

**Solovieva, Yulia** *Dept. of Neuropsychology, University of Puebla, Puebla, Mexico*  
**Quintanar, Luis** *Neuropsychology, University of Puebla, Puebla, Mexico*

Educational system in Mexico is facing strong difficulties, especially in teaching of reading. The objective of our study is to show the possibilities of Training of Reading created on the bases of the theory of Historic and Cultural Development and Activity Theory. The Method was applied to Mexican school and pre-school children during application of programs of individual correction and in classroom groups. The results show special achievements in writing, reading and general linguistic abilities after application of method during a school year. The conclusions stress important possibilities of application of new invariant methods in modern education.

### Team orientation and attitudes towards different forms of teacher-collaboration

**Sohtau, Andreas** *FB 11 - Psychologie, Universität Bremen, Bremen, Germany*  
**Mienert, Malte** *FB 11, Psychology, University of Bremen, Bremen, Germany*  
We report on an empirical online survey conducted in 2007 with N=223 teachers from primary and secondary schools. The aim of the study is to verify the impact of the so-called "pursuit of autonomy" which the scientific literature mentions as an explanation for the absence of teacher collaboration in schools. The collected data comprises the

frequency of implementation of 15 forms of teacher collaboration; attitudes towards these forms and teachers' general team orientation. The study concludes that although ambitious forms of teacher collaboration are rarely implemented, team orientation and attitudes towards these forms are surprisingly positive.

### Perfectionism and depression: Testing the specific vulnerability and diathesis-stress model in a Chinese population

**Song, Shanggui** *Dept. of Academic Affairs, Jinan University of Shandong, Jinan, People's Republic of China*  
**Tong, Yuehua** *Dept. of Psychology, University of Jinan, Jinan, People's Republic of China*

So far, research results in testing the specific vulnerability and diathesis-stress model were inconsistent. The present study examined whether perfectionism acts as a vulnerability factor for distress in response to life events. A cross-sectional study and a longitudinal study were conducted to test these two models in 426 college students in China. The findings were that concern over mistakes and doubt about action both interacted with negative life events to predict depression symptoms at Time 1 and Time 2. No support was obtained for a perfectionism specific vulnerability model.

### Gender differences in perfectionism and type A behavior: A Chinese perspective

**Song, Shanggui** *Dept. of Academic Affairs, Jinan University of Shandong, Jinan, People's Republic of China*  
**Xu, Jun** *Dept. of Academic Affairs, Jinan University of Shandong, Jinan, People's Republic of China*

**Objective:** To investigate the gender differences in perfectionism and Type A behavior of Chinese university students. **Method:** Perfectionism Scale for Chinese College Students and Type A Behavior Personality were administered to 258 university students in China. **Results:** (1) Males scored significantly higher than females in Concern over Mistakes, Organization, Parent Expectation, and in the total score of perfectionism. (2) Type A Behavior and Type B Behavior of females manifested significant differences in dimensions of perfectionism and total score. **Conclusion:** Gender differences were identified in perfectionism and Type A behavior.

### Optimism and pessimism in relation with goal orientations in classroom settings

**Soric, Izabela** *Department of Psychology, University of Zadar, Zadar, Croatia*  
**Penezic, Zvezdan** *University of Zadar, Zadar, Croatia*  
**Vulic-Prtoric, Anita** *Department of Psychology, University of Zadar, Zadar, Croatia*

There are a number of different models of goal orientations in classroom settings that propose two general goal orientations labelled as learning vs. performance goals. The current study investigated whether students' optimism and pessimism, self-esteem, values and intrinsic motivation predict their goal orientations and academic achievement. The participants were 220 secondary school students which completed the questionnaires anonymously during a regularly scheduled classroom period. Gender, optimism and values in learning were negative predictors of work-avoidance goal orientation; pessimism and values predict performance goal orientation while values and intrinsic motivation predict learning goal orientation. Learning goal orientation was a predictor of students' academic achievement. Optimism and pessimism could have an important role in forming students' goal orientations.



### Identifying learning disabilities: Psychometric Characteristics of the McCarney Learning Disability Evaluation Scale (LDES), based on a Greek sample

**Souroulla, Andry** Dept. of Psychology, University of Cyprus, Nicosia, Cyprus **Panagiotou, Georgia** PSYCHOLOGY, UNIVERSITY OF CYPRUS, NICOSIA, Cyprus **Kokkinos, Konstantinos** PSYCHOLOGY, UNIVERSITY OF CYPRUS, NICOSIA, Cyprus

The study aimed to field test a Greek translation of the Learning Disability Evaluation Scale (LDES, McCarney, 1996) and to examine its factor structure, reliability and validity. 165 educators completed the LDES for one of their students, aged 5-14 years. Results revealed that the Greek LDES generally maintains the original factor structure (7 subscales) and high reliability. The significant associations between the LDES, the Reading Ability Test (Trigka, 2004) and school grades, supported its validity. Logistic regression analyses indicated that the LDES could identify our sample and children with learning difficulties, with an accuracy of 81.3%. Results are discussed

### Age effects on parafoveal processing in reading Kathrin Spitzer

**Spitzer, Kathrin** Coswig, Germany **Sawyer, Kathryn** Psychology, Florida State University, Tallahassee, USA **Charness, Neil** Psychology, Florida State University, Tallahassee, USA **Sachs-Ericsson, Natalie** Psychology, Florida State University, Tallahassee, USA **Radach, Ralph** Psychology, Florida State University, Tallahassee, USA

Prior research in the domains of visual search and driving has suggested that elderly adults have a smaller functional field of view. We used a sentence reading task including saccade contingent display manipulations to directly test the hypotheses that benefit from parafoveal word preview is reduced in this population relative to college age controls (Laubrock, Kliegl & Engbert, 2006). Results indicate that elderly readers are not only substantially slower but also show a more pronounced word frequency effect (Rayner et al., 2006). Critically, preview benefit was greatly attenuated in the elderly group, suggesting a significantly reduced perceptual span.

### Head movement during requesting

**Srisayekti, Wilis** Dept. of Psychology, Padjadjaran University, Bandung, Indonesia

This study was intended to see whether a difference in provided channels caused differences in the nonverbal behavior in dyadic communication. 8 persons were involved with their partners, for the face-to-face situation and the telephone situation. A video system was employed to gather the data of their head-movement during requesting. Results showed that there was more head-movement in the face-to-face situation as compared to the head-movement in the telephone situation, both for the mobility and the complexity of movement. The head-movement went in line with the whole-body movement, and went in the opposite direction of the eye movement.

### Ethnic self labels as promotive factor in the change of language usage among adolescent ethnic German immigrants

**Stößel, Katharina** Inst. für Entw.-Psychologie, Universität Jena, Jena, Germany **Silbereisen, Rainer K.** Inst. Entwicklungspsychologie, Universität Jena, Jena, Germany

This longitudinal study on Ethnic German immigrants to Germany examines whether ethnic self labeling as majority (German) or minority member (Russian or Ethnic German) relates to frequency of German language usage. Growth Curve Models on 585 adolescent first generation immigrants reveal that indeed level of language usage relates to levels of ethnic self labels, and change of language usage

to change of self labels. A higher level and a growth of self labeling as German relates to more German language usage, and vice versa for self labeling as minority member. Results reveal the interrelatedness of these change processes during acculturation.

### Neural correlates of simulation during action prediction

**Stadler, Waltraud** Inst. für Psychologie, Max-Planck-Institut, Leipzig, Germany **Schubotz, Ricarda** Cognitive Neurology, MPI Cognitive & Brain Scie, Leipzig, Germany **Springer, Anne** Department of Psychology, MPI Cognitive & Brain Scie, Leipzig, Germany **Graf, Markus** Department of Psychology, MPI Cognitive & Brain Scie, Leipzig, Germany **Prinz, Wolfgang** Department of Psychology, MPI Cognitive & Brain Scie, Leipzig, Germany

Action prediction is assumed to be a major purpose of activating the motor system during action observation. If an observed person is transiently occluded, internal models are used to predict disrupted visual action information. Accordingly, fMRI during action occlusion indicates increased activity in BA 44, premotor cortex, parietal regions and the posterior superior temporal sulcus (pSTS) which were previously associated with action simulation. Provided that the observed action is of relevance for the observer, internal simulation of disrupted actions is a highly automated process. By varying task instructions, however, activity can be modulated in parts of this network.

### Different leaderships and aspects of personality of leading politicians versus electoral success

**Stallony, Marc Oliver** Recklinghausen, Germany **Rowold, Jens** Psychologisches Institut II, WWU Münster, Münster, Germany

This empirical study follows the question to which extent leadership and different aspects of personality of leading politicians may be possible predictors for electoral success of these politicians. At first this study follows the question how far charismatic leadership (Konger & Kanungo, 1998), moral-based leadership (Yukl, 2002) and transactional leadership (Bass, 1985) take influence of the electoral success. Results show significant effects for moral-based and transactional leadership. At second this study follows the question which aspects of personality take significant influence on the electoral success. Significant results were shown and correlations between leadership and aspects of personality will be discussed.

### Optimism and self-efficacy: Psychological and psychosocial aspects

**Stanculescu, Elena** Faculty of Psychology, University of Bucharest, Bucharest, Romania

The purpose of the study was to examine the psychological correlates of self - efficacy and optimism. We supposed that self - efficacy and optimism are positively correlated with psychosocial well - being, life satisfaction, happiness, self - esteem, perceived social support. We expected that students that volunteering are more optimistic and have high level of self - efficacy. The sample consisted of 403 university students. Statistical analysis included: bivariate correlations, Mann Whitney U Test, One Way ANOVA. The hypothesis were confirmed. The results highlight that optimists and self - efficacious people have a high quality of life.

### Psychological correlates of schoolchildren loneliness

**Stanculescu, Elena** Faculty of Psychology, University of Bucharest, Bucharest, Romania

The aim of this research was to investigate some psychological aspects of loneliness. We supposed that loneliness is negatively correlated with self - esteem, optimism, social skills, perceived social support. We assumed that there are more cross -

classifications LL & LM level of perceived social support and optimism in the case of high scores of loneliness. The sample consisted of 289 school-children (7th & 8th grade). We used Multidimensional Scale of Perceived Social Support, Teacher Estimation of Social Skills Scale, Life Orientation Test, Loneliness and Social Dissatisfaction Scale. The hypotheses were confirmed. We concluded that teachers must modeling appropriate social relations.

### Psychological comorbidity and coping strategies in patients with chronic tinnitus

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Tinnitus associates with psychological distress. In the presented study, we examined psychological comorbidity and coping strategies in a population of patients with chronic tinnitus. We used established questionnaires for scoring the tinnitus symptoms, psychopathology, depression, and coping behavior. Severely affected tinnitus sufferers (decompensated tinnitus) reported higher levels of psychosocial distress and somatic impairment. Further, patients with decompensated tinnitus showed dysfunctional coping strategies like depressive coping, trivialisation, and wishful thinking. We propose the early assessment of psychological comorbidity and dysfunctional coping strategies to apply timely a psychological treatment, which, in end effect might prevent further progression of tinnitus.

### A professional evaluation scale for middle level managers

**Stoica, Mihaela** Dept. of Psychology, University Dimitrie Cantemir, Tirgu Mures, Romania

The aim this study is: to make a scale with behavioural references for managerial performance. The procedure followed in 5 steps: defining the professional dimension; obtaining the behavior references for each dimension; retro-version, all the items to be distribute at initially dimension; the experts should note the level of competence for each item and finally making the scale (Smith & Kendall, 1963). The scale's validity was achieved by comparing it to a parallel scale, the mixed standard assessment scale by accomplishing the multitrait-multimethod matrix.

### Effects of a combined nutrition and stress-management training to life-quality, coping skills and eating-behaviour of elementary school kids

**Stoll, Oliver** Inst. für Sportwissenschaften, Universität Halle-Wittenberg, Halle, Germany **Reinhardt, Christian** Sports Science, Martin-Luther-University Halle, Halle (Saale), Germany

Objectives: The aim of the study was the evaluation of a combined nutrition and stress-management training to life-quality, coping skills and eating-behaviour of elementary school kids. Methods: We used a longitudinal, randomised experimental study-design, comparing a treatment group (n=75), getting the intervention and a non-intervention control group (n=75). The dependant variables were life-quality (KINDL), stress appraisal and coping (SSKJ-R) and eating behaviour (IEG-Kind). The statistical analysis was performed using a GLM with repeated measurements. Results: We found seven significant interaction-effects group x time based on improvements of the treatment-group individuals. Conclusions: Based on these

results, we recommend to implement this intervention into future health promotion interventions of school kids.

#### **Differences among some social groups in Bulgaria in their extraversion, neuroticism, psychotocism and social desirability**

**Stoyanova, Stanislava** Dept. of Psychology, SWU, Blagoevgrad, Bulgaria

This paper presents the results from a study carried out in 2005-2006 among 378 respondents in Bulgaria by using Eysenck's Personal Questionnaire. The prisoners sentenced for theft and the secondary students were the most extraverted ones, the civil servants and the pensioners were the least extraverted ones. The social workers and the prisoners sentenced for theft were the most emotionally unstable, the teachers and the civil servants were the most emotionally stable. The university students and the policemen had the highest score on the Psychotocism, the teachers and the social workers had the lowest score on the Psychotocism.

#### **Self-efficacy, health risks and work behavior in Indian families**

**Sud, Shonali** St. Bede's College, Dept. of Psychology, Shimla, India

Self-efficacy combating health risks, initiating the desire for physical exercise and facilitating effective work behavior in a family was studied on 158 subjects (92 adults, 44 females and 48 males, mean ages=38.90 and 42.89 years, and 66 children, 36 female and 30 male, mean ages=18 years). The hypotheses that self-efficacy predicts exercise ( $r=.25$ ) as well as efficient work behavior ( $r=.67$ ) within a family stands accepted. Older males were better workers than females. Educated professionals showed greater concern for health risks and motivated for lifestyle changes, their children are linking effective work performance with good health in practically every home in India

#### **Self-efficacy, stress and interpersonal relations of employees in India**

**Sud, Shonali** St. Bede's College, Dept. of Psychology, Shimla, India

Self efficacy-stress effect on Interpersonal relations in India was examined on 155 (94 male, mean age =39.64 years, and 64 female, mean age =38.97 years) employees. The hypotheses that self-efficacy predicts good interpersonal relations ( $R=.430$ ) more for women in comparison to men as well as moderates stress ( $r=-.311$ ) stands verified in this study. Results show that self-efficacy predicted good interpersonal relations only among older males (> 48 years of age) and they therefore showed better understanding and adjustment towards their female colleagues. The stress buffering effect of self-efficacy stands verified in this study.

#### **A research on relationship among learning burnout, self-esteem and subjective well-being of college students**

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**Abstract Objective:** To explore the relationship among learning burnout, self-esteem and subjective well-being. **Method:** 446 college students were investigated. **Results:** (1) Gender difference was significant, male students were higher than female at the level of reduced personal accomplishment; (2) juniors were lower than seniors at the level improper behavior, and freshmen at the level reduced personal accomplishment; (3) Dejection had partial indirect effect on SWB mediating through self-esteem, and reduced personal accom-

plishment had absolute indirect effect on SWB mediating through self-esteem. **Conclusion:** self-esteem had a mediated effect on learning burnout and subjective well-being. (**Key words**) Learning burnout, Self-esteem, Subjective well-being

#### **Lifestyle factors, genetics and cognitive aging**

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As the population in most industrialized countries ages rapidly, a major challenge is to understand what factors enhance successful cognitive aging. A number of lifestyle factors have been associated with cognitive function in elderly people. However, less is known about whether changes in lifestyle factors late in life have an effect on cognitive aging. Therefore, the aim of this study is to examine whether changes in lifestyle factors in late life, for example social activities, and physical activities, affect cognitive aging and, furthermore, whether these factors interact with genetics (e.g. APOE). Data from a longitudinal cohort study will be used.

#### **Personal "secret ingredients" that predict satisfaction in romantic relationships**

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**Okrosa, Jelena** Department of psychology, University of Zagreb, Zagreb, Croatia **Ostovic, Ines** Department of psychology, University of Zagreb, Zagreb, Croatia Both theory and previous research suggested a link between emotional intelligence, self-esteem and success in interpersonal relationships. Romantic relationships should also benefit from mentioned personal characteristics. The aim of the present study was to examine the associations between emotional intelligence, self-esteem, Stenberg's components of love, duration of the romantic relationship and perceived satisfaction with it. Participants were 294 students from the University of Zagreb. The results of multiple regression analysis showed that predictors accounted for 38% of variance in romantic relationship satisfaction. Intimacy emerged as the best predictor.

#### **Relationship between musical abilities and foreign word pronunciation**

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The relationship between musical abilities and the ability to pronounce foreign words was examined. Musical discriminatory tasks, English and Chinese pronunciation tasks, a digit span test, and a questionnaire on the experience in music, English and Chinese were administered to 41 Japanese university students who have learned English in schools but had no experience in Chinese. Results from correlation and regression analyses showed that after controlling working memory span, there was a positive correlation between musical abilities and the ability to pronounce foreign words. People who were good at discriminating sounds were better able to reproduce sounds in foreign languages.

#### **Subjective and situational conditions of choosing coping strategies among adolescents**

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The main problem of the following research concerned subjective and situational conditionings to choose religious and nonreligious coping strategies. Situational variables are specific stressors for adolescents that are family, school, peer and personal stressors. Subjective variables are: sense of self-efficacy and intensity of religious attitude.

There is one more variable, interactive one, which is sense of controllability of stressors. The research was conducted using a sample of 451 adolescents. Multiple regression analysis and contrast analysis were conducted. Exemplary results show that adolescents with low sense of controllability more often choose religious passive deferring strategy and those with high sense of controllability – nonreligious planful problem solving.

#### **The effect of interesting introduction and interest value on children's motivation to learn**

**Tanaka, Etsuko** Dept. of Human Science, Osaka University, Kobe, Japan

This study examined whether interesting pre-activity and an emphasis on interest value positively influence their motivation to learn. In this study, experimental science lessons were administered to 4 classes (100 children, 3 grades, ages from 8 to 9). The lesson consisted of a pre-activity designed to attract students' interests and an emphasis on interest value of the subject task by the teacher. As a result, the students in the experimental classes were more motivated to learn the subject task than the students in the control classes.

#### **Which of the pathological severity of mental disorders or the state of symptoms determine a patient's subjective well-being?**

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The aim was to investigate which of mood disorders' pathological severity or its symptoms' general state influenced more upon subjective well-being (SWB). SWB was measured with the Psychological Lively Scale-revised in 61 patients having mood disorder. Each patient's pathological severity was estimated from clinical equivalency of his/her antidepressants' dosage and his/her general state of symptoms. The statistical results revealed that patients' SWB was related to his/her general state of symptoms but not to his/her pathological severity itself. The results suggested the importance for a patient's SWB to control his/her represented symptoms more than the pathological severity of mood disorder itself.

#### **Seeing how you act: Motor interference in action simulation**

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Recent findings suggest that perceiving action activates corresponding motor programs in the observer. This is ascribed to the mental simulation of observed actions. We aimed to investigate the functional relationship between action perception and action execution more detailed. Participants watched transiently occluded actions and had to predict the action course after occlusion (i.e., simulation task). While some performed only the simulation task, others received a secondary motor task or a secondary sensory task. We predicted a break-down of simulation performance only under motor task conditions. Results are discussed with respect to differentiation between perceptual and motor functions in action prediction.



### Comparative investigation for coping strategies in Islamic and modern psychology

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Stress can be assumed as one of the most important consequence of Modern period. It not only is effective on developing many kinds of Physical and Mental Disorders, but also it causes Personal and Social dysfunctions in individuals and wastes economic and humanistic recourses of individual and his family and society. Because of importance of this phenomenon, we need effective strategies to cope with it. Many of studies stated that one of the important factor in success of therapy method is accordance of it with culture of target population. So the goal of this research is comparative study of therapeutic methods in Islamic and west cultures.

### The relationship between the different dimensions of religiosity and moral identity

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**Objective:** Purpose of this research was study of relationship between the different dimensions of religiosity and Moral Identity in students of Isfahan University. **Method:** In a quasi-experiment design, a sample of 78 members (41 males, 37 females) was been selected by random sampling, then Religiosity Measure Scale (Serajzade, 1377) and Moral Identity Scale (Aquino, 2002) were administered. **Result:** The results showed that there is a significant correlation between religiosity and moral identity total scores. **Conclusion:** The significant correlations between symbolization and application and ritual in female group, and significant correlation between internalization and belief in male group, showed the differences of male and female that can be assumed as a important factor.

### Coping with distress due to locomotor disability

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The present study aims to understand the process of adjustment to disability within the framework of stress research. It promotes the idea of emotional rehabilitation. A questionnaire exploring distress, disability appraisal, coping and adjustment to disability was administered on an incidental sample of 100 individuals with locomotor disability (18-50 years) along with 10 in-depth interviews. The statistical and content analysis revealed physical, attitudinal, economic barriers and future concerns as the major domains of distress due to locomotor disability. Problem focused coping was significantly correlated with low distress and adjustment to disability (manifested in term of personal achievement and wellbeing).

### Promoting sustainable mobility: Soft policies for newcomers

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The study examines the behavioral efficacy of a soft-policy measure when applied during a residential relocation. How does habitual mode choice temporarily turn into rational mode choice due to context changes, and how do interventions at this very moment take effect? Conducted as a pre-post field experiment in Leipzig, Germany, in 2008, newcomers and habitants participate in a two-wave survey. Between the surveys, subsamples of newcomers and habitants receive information and incentives to use public transport, car sharing, or bike. With special concern to the new approach of a

pre-move intervention, we present procedure and first results of the study.

### Not only explicit self-esteem influences memory bias for self-relevant information

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To date, research on effects of implicit self-esteem on memory bias for self-relevant information is very sparse. This study assessed implicit self-esteem using Implicit Association Test and explicit self-esteem using Rosenberg Self-Esteem Scale in 184 undergraduates. Later, the participants were asked to free-recall the self-relevant words just seen before as many as possible. Stepwise multiple regressions showed that explicit self-esteem and its interaction with implicit self-esteem significantly influenced the amount of positive words correctly recalled, but did only implicit self-esteem influence that of negative words recalled. It suggests not only explicit but implicit self-esteem influence memory bias for self-relevant information.

### An idiographic study of health behavior change from insulin dependence to independence

**Toise, Stefanie C.** Dept. of Psychology, Clark University, Worcester, USA

This idiographic study examines how psychological and behavioral changes allowed a diabetic to go from insulin dependence to insulin independence in treating her type 2 diabetes mellitus. Following the process of her change with specific relevance to diagnosis and insulin use, her psychological intra-variability and dynamics for change were expressed in measurable physiological outcomes. Yoga served as an important catalyst for lifestyle changes and maintenance. Using theories of self-perception, self-compassion, family, and field theory, the participant's successful changes were examined in intraindividual contexts. Finally, use of the partnership model allowed participant and researcher to discuss the study from their perspectives.

### Faking personality measures in the setting of a traffic-psychological assessment for regaining the driving license: Explicit self-report questionnaire versus Objective Personality Test versus Implicit Association Test

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The susceptibility to faking of the explicit Inventory of Driving Related Personality Traits (Herle et al., 2005), the Objective Personality Test Vienna Risk-Taking Test Traffic (Hergovich et al., 2006) and the self-developed Implicit Association Test (IAT – Risk-Taking) was explored. The quasi-experimental design included the comparison between real-world examination-candidates of traffic-psychological assessments with a guaranteed faking-intention and a honest control group. For the statistical analysis a sequential testing design was used. While the explicit self-report measure as well as the "Objective" Personality Test were successfully faked by the real-world examination-candidates, the conscious distortion of the IAT failed. Implications are discussed.

### School resiliency building: Greek in-service and student teachers assessment

**Tsakalis, Panayiotis** Dept. of Psychology, University of Crete, Rethymno, Greece

This study aims at examining the evaluations of the resiliency-building elements (Belonging, Competence, Empowerment, and Usefulness) that Greek schools provide to teachers and students. Approximately 150 in-service and 250 student teachers participated in this survey, responding to the School

Resiliency-Building Assessment Inventory (Henderson & Milstein, 1996:114-116) adjusted in Greek (1=done, 2=enough done, 3=much to be done, 4=nothing done). Factor analysis confirms the original elements/factors and reliability analysis appears adequately high ( $\alpha > 0.73$ ) in the Greek sample. Assessment is not sufficiently positive, though in service teachers' evaluations are significantly ( $p < 0.001$ ) more favorable/school-defending ( $M = 2.2$ ) than student teachers' evaluations which appear more strict/negatively-biased ( $M = 2.6$ ).

### The Diagnostic Analysis of Nonverbal Accuracy 2-Taiwan version (DANVA2-TW): A computerized dual-channel instrument of nonverbal emotion recognition

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**Objectives:** To establish a culture-suitable instrument with Han faces and voices for assessing the accuracy and the intensity of non-verbal emotions. **Methods:** 109 college students received computerized tests presenting emotional stimuli randomly. 30 photos and 30 voice clips across 5 emotional categories (happy, sad, angry, fearful and neutral) with highest agreement level were selected from 600+ stimuli. **Results:** High agreement level in both facial (0.73) and paralinguistic subtest (0.81). The test-retest reliability among 35 college students with 2-weeks interval is also good ( $\text{Kappa} = 0.77$ ). **Conclusion:** DANVA2-TW is a culture-suitable, reliable computerized instrument for nonverbal emotion recognition in Han populations.

### Affective disorders in children with learning disabilities

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The aim of this study is to identify psychological problems in children with learning difficulties. The sample consisted of 421 children, aged 7-14, categorised into 3 groups: a) slight learning difficulties, b) dyslexia and c) mental disabilities. Children completed Beck Youth Inventory (BYI). Parents filled Ascenbach's questionnaire. According to BYI, 29% of children mentioned low self-esteem, 32.3% anxiety, 22.1% depression symptoms, 21.6% anger and 20.9% disruptive behavior. According to Ascenbach's questionnaire, 21.4% of parents mentioned: anxiety, 21.4% depression symptoms, 18.5% aggressiveness and 16.2% delinquent behaviour.

### Odours affects hand posture when grasping

**Tubaldi, Federico** Dept. of General Psychology, University of Padova, Padova, Italy **Ansuini, Caterina** General Psychology, University of Padova, Padova, Italy **Tirindelli, Roberto** Neuroscience, University of Parma, Parma, Italy **Castiello, Umberto** General Psychology, University of Padova, Padova, Italy

We investigated hand shaping kinematics when grasping large or small targets in the presence or absence of odours evoking large or small objects. We found that 'small' odours rendered hand shaping for the large targets similar to that for small targets presented in isolation. Conversely, 'large' odours rendered hand shaping for the small targets similar to that for large targets presented in isolation. When the odour 'size' matched the target size, kinematics was facilitated by the olfactory stimulus. We contend that chemosensory representations of objects contains highly detailed information about the action that the objects require.

# Later life depression: Life satisfaction, level of functioning and free time activities

**Tzonichaki, Ioanna** Occupational therapy, Techn. ed. inst. of Athens, Volos, Greece **Kleftaras, George** Dept. of Special Education, University of Thessaly, Volos, Greece **Malikiosi-Loisos, Maria** Faculty of Early Childhood Ed., University of ATHENS, Volos, Greece Quality of life is directly related to an individual's life satisfaction and is partly influenced by his/her engagement in satisfying free time activities and subjective perception of his/her level of functioning in significant life areas. The aim of the present research is to study the impact of older adults' quality of life on their depressive symptomatology. 250 community-living elderly persons fulfilled: a) the Life-Satisfaction-Questionnaire, b) the Pichot-Questionnaire-of-Depressive-Symptoms, c) the Satisfaction-from-Performance-in-Activities-of-Daily-Living-Scale and d) the Leisure-Time-Scale. Significant correlations were found between depressive symptoms, level of functioning in significant life areas (specifically the every day activities), leisure time and life satisfaction.

# Relationships between categorization tasks and the categorical structures

**Ueda, Takashi** Waseda University, Tokyo, Japan It is often said that participants in a categorization task tend to classify the exemplars based on single dimensional information. This tendency suggests there would be a discrepancy between a categorization task performance and the mental representation of categorical structures inferred from the task. So in this study I investigated the task-representation relationships by using several conceptual tasks including two-class classification, free sorting / clustering, and similarity judgment, to several natural or artificial concepts. Results and analyses re-confirmed the participants' general tendencies of one-dimensional categorical judgments, and also suggested the variety of inferred representations of categories or concepts.

# Zen Buddhist monk's meaning of life

**Urata, Yu Sakai** Minami-ku, Japan The issue of meaning of life has received more attention in recent years, and a variety of research has showed a wide variety of sources of meaning of life. Meaning is constructed within his or her sociocultural context such as religion and cultural worldview. This study examined the question about the meaning of life by analyzing the narratives of Zen Buddhist monks. Semi-structured interview were conducted with Zen Buddhist monks. Then using the Kawakita Jiro (KJ) method, the data were analyzed qualitatively, focusing on how the participants constructed their life meanings from the perspective on Buddhism.

# Central assumptions in paranoia: Do paranoid patients believe in a just world?

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We examined whether deluded paranoid patients show 'shattered assumptions' (Janoff-Bulman, 1992). Although PTSD studies (Otto et al., 2006) have convincingly shown that traumatic experiences may often negatively affect commonly shared beliefs about the world, there are no studies that have addressed that issue in paranoids. We compared paranoid, depressive, PTSD and control

subjects that completed the WAS (Janoff-Bulman, 1989) and BJW (Dalbert et al., 1997) as well as clinical measures. Clinical groups have more extreme view of world justice than normal controls. Controls have a higher sense of benevolence of the world, and together with paranoids have higher levels of self-worth and personal control. Depression and trauma was associated to a lower sense controllability of the world.

# Mechanisms of subliminal semantic priming: A meta-analysis

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The conditions under which subliminal semantic priming effects can or can not be observed remains an important object of discussion that has produced numerous inconsistent research results. Therefore, this meta-analysis was conducted to expose the mechanisms underlying subliminal semantic priming. By statistically combining the research results on subliminal semantic priming conducted throughout the years we unravelled some of the factors that significantly moderate the emergence of subliminal priming effects (for example: the task used in the experiment, the use of novel versus repeated primes, the use of number versus word primes, the category size of the stimuli, etc.).

# Aging and verbal working memory capacity

**Van den Noord, Maurits** Biological and Medical Psych., University of Bergen, Bergen, Norway **Bosch, Peggy** NICI, Radboud University Nijmegen, Nijmegen, Netherlands **Van Kralingen, Rosalinde** Foodstep, Foodstep B.V., Wageningen, Netherlands Objectives The development of verbal working memory capacity over time was investigated. Methods Four different age groups were tested with the new standard computerized version of the reading span test (Van den Noord et al., 2006, 2008). Results Compared to the young adults, the old adults showed a significant decrease in verbal working memory capacity, a significant slowing down in mental processing, made significantly more intrusion errors, and had no recency-effect. Conclusion Interestingly, the results show that there are larger age-related effects in short term verbal memory span than was expected on the basis of aging theories so far.

# Vigilance and attention defects as human failure contributing factors

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Problems relating to drivers' vigil and attentional state have a recognized incidence in accidentology, but little is known about their relative influence in accident mechanisms. This paper apprehends the various facets which these problems cover, by exploitation of an important sample of in-depth accident studies, according to a model of typical human error-generating scenarios analysis. The results show that attentional problems have a frequency of occurrence more important than problems of vigilance, among the elements which contribute to the genesis of a human functional failure. In contrast, vigilance deficits present a higher degree of impact than the defects of attention, in the cause of accidents.

# Depression, burnout and the impact of events among volunteer counsellors in South Africa

**Vawda, Naseem** Dept. of Behavioural Medicine, King George V Hospital, Durban, South Africa This pilot study assessed psychological distress among volunteer counsellors. 16 subjects completed a demographic questionnaire and the Beck's Depression Inventory (BDI), Maslach's Burnout Inventory (MBI) and Impact of Events Scale (IES). 25% reported moderate/severe Depression on the BDI. 18.75% reported high and 43.75% moderate Depersonalization on the MBI. 43.75% reported low Personal Accomplishment(MBI) while 12.5 5 reported high Emotional Exhaustion(MBI). Positive correlations existed between the BDI and Emotional Exhaustion (MBI) ( $p<0.05$ ) and the Avoidance and Intrusion subscales of the MBI with Personal Accomplishment (MBI)( $p<0.05$ ). Implications of the findings are discussed.

# Asymmetries in speech perception: Perceptual salience at lexical level?

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Perceptual salience is an important dimension in the configuration of the vocalic space during development, but its relevance in adult speech perception has been neglected. We present data from two auditory lexical decision tasks to Spanish stimuli. Non-words were generated by exchanging phonemes /e/ and /i/ from real words (ventana (window) - \*vintana; camisa (shirt) - \*camesa). Both behavioural and ERP measurements indicated an asymmetry in the processing of non-words: differences in the reaction times and in the N400 component were observed for both non-word types. The results indicate that perceptual salience effects extend into adult speech perception.

# Structure factorial of the maslach burnout inventory: A comparative study España-Venezuela

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We study the stability of the latent structures of the MBI in subsets of the overall sample and offer a comparative study of two groups of University professors, one of them Spanish (762) and the other Venezuelan (194). Overall we observed that for the subsets of men, women, not burnt out, extremely burnt out and those with two subscales with extreme values, the trifactorial structure with the factors associated with Emotional Exhaustion, Self-esteem and Depersonalisation is apparent in these collectives for both studies. However, in some cases, such as Venezuelan women, the axes do not have such a clear interpretation.

# Sleep related car crashes in young drivers: Risk perception and sleepiness at wheel coping strategies

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The aim of the study is to examine which factors are associated with the risk perception to have night-time car crash in young drivers and to evaluate the strategies most commonly used to counteract sleepiness at the wheel. 1123 young drivers with at least 6 months driving experience participated to the study. Males are less worried about night-time car crashes than females. Risk perception is



negatively related to night-time driving and positively related with the episodes of driving sleepiness. To counteract sleepiness at the wheel, the 51.47% of the participants "would continue driving but do something", whereas 48% of them "would stop driving and do something".

#### **Motor fitness is related to executive control processes in older adults**

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We analyzed the relationship between older adults' motor and cognitive performance. 116 older participants worked on a flanker task inside and outside of a 3T Siemens Headscanner and completed a heterogeneous battery of 12 motor tests. Results revealed a significant positive correlation between motor and cognitive performance. Particularly, motor balance, fine coordination, and speed showed the highest association with flanker performance. 35.1% of the total variance in cognitive performance was explained by these factors. Furthermore, participants with low motor performance showed more wide-spread brain activation patterns than older adults with high motor fitness during the flanker task, indicating compensation processes.

#### **Interaction between object characteristics and spatial language processing**

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In order to verify linguistic spatial relations, such as 'in front' or 'behind', with respect to seen object pairs, a frame of reference (FoR) has to be activated. This study examined the influence of reference-object characteristics and FoR repetition vs. contrast in successive trials. Participants decided as quickly as possible whether a sentence described a 3D picture presented simultaneously in a head-mounted display. Results reveal influences of object shape (compact, e.g. a dolphin, vs. "looking-through" objects, e.g. a bicycle), and category (animals vs. vehicles vs. manipulable objects). Most subjects switched easily between both FoRs; there were no sequential effects.

#### **Salutogenetic approach and diabetic patient**

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Salutoprotective factors of lifestyle influence the ability to manage stress and by this the course of the disease. We pay detailed attention to S.O.C. type resistance and percentage representation of the usual psychological state components in type 2 diabetic patients. Knowledge of these factors enables us to estimate the extent of vulnerability of the patient and his ability to cope with his disease, to accept a change in treatment, and to keep the treatment regimen. The possibility of strengthening the resistance of an individual by psychological means creates space for targeted psychological intervention (counselling, psychotherapy).

#### **Anxiety affects body sway during orthostatic standing in college students**

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We have examined whether anxiety affects body sway during stance in college students. Using a within-subject paradigm, we have found that anxiety level positively correlates with the area and length of body sway. A fast Fourier's transform (FFT) method was further performed in order to examine whether anxiety influences sensory processing for maintaining standing posture. In high anxiety group, percentile power of low frequency components, which is under the influence of visual and vestibular inputs, was greater and percentile power of high frequency components, influenced by somatosensory inputs, was smaller in comparison to those of low anxiety group.

#### **On the flexibility of the planning scope for lexical access in sentence production**

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A series of picture-word interference experiments explored whether the planning scope for lexical access is structurally fixed or rather flexible, depending e.g. on the cognitive load currently imposed on the system. When participants produced SVO-sentences under standard conditions, subject and object nouns were found to be lexically-semantically activated to similar degrees at speech onset, as indexed by similarly sized interference effects from semantic distractors. When the same sentences were produced in a situation requiring additional conceptual processing, the interference effect for object nouns was strongly attenuated, supporting a flexible view of lexical retrieval.

#### **Cross-language activation in bilingual processing of compound words: The effect of semantic transparency**

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Objective: We aimed to examine the effect of semantic transparency in processing compound words among adult Chinese-English bilinguals. Method: A lexical decision task in English was administered. A design of 2 (semantic transparency in English: transparent vs. opaque) X 2 (lexicity of the translated compounds in Chinese: real word vs. nonword) was employed. Twenty-five Chinese-English bilingual speakers were tested. Results: We predict a significant interaction between semantic transparency of English compound words and the lexicity of the translated Chinese compounds. Conclusion: Cross language activation of compound words in bilinguals is affected by semantic transparency of the target compounds.

#### **Age differences of prefrontal cortex activation in encoding process of item memory**

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This study aimed at examining the universality of Hemispheric Asymmetry Reduction of Older Adults (HAROLD) model of item memory indicated by cued-recall task. 25 old adults (60-78 years old) and 15 young adults (20-29 years old), who were both at same educational level, took part in

the study. The participants were required to complete cued-recall tasks at two difficult levels during fMRI scanning. Results suggested that, during the encoding process, the HAROLD model was non-universal. It was found presenting only in difficult task rather than simple task of cued-recall memory.

#### **The development of children's conflict resolution abilities**

**Wang, Lin** Dept. of Psychology, Chung Yuan University, Chung Li, Taiwan

This study traces the developmental trajectory of children's conflict resolution abilities. Four-year longitudinal data have been collected from final 130 (64 boys, 66 girls) Taiwanese children since the 3rd grade. Using correlation and ANOVA, results showed that children's abilities remained stable in each sequential year. The developmental trajectory of altruistic goal-setting and prosocial strategies declined, while its instrumental goal-setting and assertive strategies went up over the four years. The assertive strategies specially increased for girls when they were in the 4th and 6th grades. This phenomenon may reflect the assertive need in puberty, while girls reach their puberty earlier than boys.

#### **Applicability of five-kind of personality inventory for college students' personality measurement: Comparison study with 16PF**

**Wang, Aiping** Beijing Normal University, Psychology school, Beijing, People's Republic of China **Xu, Yan** Beijing Normal University, Psychology school, Beijing, People's Republic of China

Objective: Applicability of five-kind of personality inventory (FKPI, Xue, Chongcheng etc., 1988) for college students' personality measurement. Methods. Using FKPI and 16PF measured 237 college students; Results: (1) man students' mean is higher significantly than woman in Taiyong (strength) and Yinyangpinghe (equilibrium) dimensions of FKPI, and perfectionism and creativity dimensions of 16PF. But their score of warmth, privateness and tension dimension of 16PF are lower significantly than woman ones; (2) Except reasoning, abstractness, privateness, openness and creativity dimensions of 16PF, all dimensions of FKPI correlated with other dimensions of 16PF on corresponding content. Conclusion FKPI is available for measurement of college student's personality.

#### **Similarity comparisons affect children's interpretation of sentences with contrastive focus**

**Wang, Yatong** Dept. of Psychology, Kaifeng University, Kaifeng, People's Republic of China

Three experiments were designed to investigate the effects of similarity comparisons on children's interpretation of contrastive focus in sentence with "only". Experiment 1, similar to one of experiments of Paterson et al's study (2006), employed a sequential sentence-picture verification task in which subjects were asked to hear sentences and indicated whether they correctly described the events depicted in each of six pictures. The results in another two experiments showed that two-example learning by comparison rather than one-example learning can better promote children's comprehension of ambiguous focus in sentences with only.

#### **Stages and cognitions in physical activity: A theory-guided investigation**

**Warner, Lisa Marie** Berlin, Germany **Lippke, Sonia** Health Psychology, FU Berlin, Berlin, Germany **Wiedemann, Amelie Ulrike** Health Psychology, FU Berlin, Berlin, Germany **Reuter, Tabea** Health Psychology, FU Berlin, Berlin, Germany **Ziegelmann, Jochen Philipp** Health Psychology, FU Berlin, Berlin, Germany

**Objectives:** Investigating the relationship of social-cognitive predictors and stages derived from the Health Action Process Approach (HAPA) for different types of physical activity. **Methods:** Responses of N=103 blue collar-workers were analysed via regression (mediation hypothesis) and ANOVA. **Results:** Social-cognitive variables predicted leisure-time physical activity (planning mediated relations). Participants different mindsets across stages supported stage-assumptions. Physical activity due to household chores, blue-collar work or locomotion could not be explained by HAPA variables. **Conclusions:** Type of physical activity has to be considered when testing theoretical models. Both stage and continuous assumptions of the HAPA build a useful basis for designing interventions.

#### Is it me? Motor resonance effects after observation of one's own and others' actions

**Weiß, Carmen** Inst. für Psychologie, Max-Planck-Institut, Leipzig, Germany **Tsakiris, Manos** Psychology, Royal Holloway, Egham, United Kingdom **Haggard, Patrick** Psychology, ICN, University College London, London, United Kingdom **Schütz-Bosbach, Simone** Psychology, MPI CBS, Leipzig, Germany

A converging body of evidence indicates that both the execution and observation of actions activates overlapping cortical networks. This implies a shared, agent-neutral representation of self and other. We compared motor facilitation after observation of one's own and others' actions presented in an ambiguous situation to investigate whether the human motor system equates or differentiates self and other. Furthermore, subjects were required to make an explicit judgement about the ownership of the hand performing the action. The results will be discussed with respect to a sensorimotor and explicit self-representation and the possible interrelation between them.

#### Sense of coherence and healthy aging

**Wiesmann, Ulrich** Inst. für Medizin Psychologie, Universität Greifswald, Greifswald, Germany **Niehörster, Gabriele** Institute for Medical Psychology, University of Greifswald, Greifswald, Germany **Hannich, Hans-Joachim** Institute for Medical Psychology, University of Greifswald, Greifswald, Germany

We tested two hypotheses derived from Antonovsky's (1987) salutogenic model: Resources co-vary with the sense of coherence (SOC), and the SOC is a mediator of resource effects on subjective health. 387 seniors (26.6% men) filled out a comprehensive questionnaire assessing subjective health, SOC, and 19 biopsychosocial resources. The SOC was predicted by optimism, self-esteem, low depressive mood, self-efficacy, and expected social support. The SOC strongly mediated resource-effects on psychological health and symptom reporting, but not on physical health. With respect to gerontological practice and intervention, the SOC is an important estimate of idiographic strengths in health matters.

#### Older spouses' dyadic problem solving performance

**Wight, Melanie** Inst. für Gerontopsychologie, Universität Zürich, Zürich, Switzerland **Martin, Mike** Gerontopsychology, University of Zurich, Zurich, Switzerland

Collaboration with the spouse may be an important resource for successful problem solving, especially in old age. To examine individual versus dyadic problem solving performance of older adults, we present data from an ongoing study of elderly spouses (N = 50; minimum age 60 years). The comparison of individual versus dyadic problem solving abilities provides a better understanding of older couples' dyadic adaptation processes when

faced with a problem solving task. Our results suggest that older familiar dyads are expert collaborators who might be able to compensate for individual cognitive deficits through dyadic cognition.

#### Ability perceptions, perceived control and risk avoidance among male and female older drivers

**Windsor, Tim** Centre for Mental Health Res., Australian National University, Canberra, Australia **Anstey, Kaarin** Centre for Mental Health Res., Australian National University, Canberra, Australia **Walker, Janine** Centre for Mental Health Res., Australian National University, Canberra, Australia **Associations** between perceived control over driving, driving ability perception (an index of unrealistic optimism) and self-reported avoidance of high-risk driving situations were examined in a sample of 304 older drivers. Associations between perceived control over driving, ability perception and indices of well-being (life satisfaction and depressive symptoms) were also investigated. Results indicated that perceived control over driving and perceived driving ability were associated with reduced risk avoidance and increased well-being, with these associations moderated by sex. Results are discussed in terms of adaptive and maladaptive consequences of perceptual biases and the importance of effective self-regulation for aging well.

#### Companion animals, attachment and health in the elderly

**Winefield, Helen** Dept. of Psychology, University of Adelaide, Adelaide, Australia **Chur-Hansen, Anna** Psychiatry, University of Adelaide, Adelaide, Australia **The scientific literature** is equivocal regarding the possible health benefits of companion animal ownership in older people. Adults aged 60+ years (N = 314) responded to standardised scales, then qualitative interviews explored further the connections between companion animal ownership, the human-animal bond, and owner well-being. Pet ownership failed to explain variance in health after taking account of health habits such as smoking. Some older people gain the potential health benefits of pet ownership in other ways, and some with deep attachment to their pet but few other attachments may be at risk of psychological distress and other health problems.

#### What factors impact on mainstream teachers' beliefs about children with learning difficulties?

**Woolfson, Lisa** Dept. of Psychology, University of Strathclyde, Glasgow, United Kingdom **Brady, Katy** Psychology, University of Strathclyde, Glasgow, United Kingdom

**Objectives:** To explore teachers' beliefs about teaching children with learning difficulties. **Method:** Data were gathered from 199 teachers on attributions, self-efficacy and coping with learning difficulties, attitudes to disabled people, and general optimism. **Results:** Multiple regression analyses found efficacy was a positive predictor of external locus of causality attributions ( $p = .007$ ), stability ( $p = .003$ ) and controllability ( $p = .059$ ). Sympathy was a negative predictor of external locus of causality ( $p = .002$ ) and stability ( $p = .046$ ). **Conclusions:** Teachers with high self-efficacy and those whose attitudes to disabled people were not overwhelmed by sympathy used more positive attributions about the possibilities for learner progress.

#### Why some chronic disease patients felt more negatively than others? A study in Taiwan

**Wu, Chih-Hsun** Psychology (S115), National Taiwan University, Taipei, Taiwan **Huang, Yun-Hsin** Psychology (S115), National Taiwan University, Taipei, Taiwan **Huang, Yang-Wen** Psychology (S115), National Taiwan University, Taipei, Taiwan **Cheng, Yih-Ru** Psychology (S115), National Taiwan

University, Taipei, Taiwan **Wu, Yin-Chang** Psychology (S115), National Taiwan University, Taipei, Taiwan **Many studies** have found that chronic disease patients had experienced more negative emotions. However, some patients adapted well to their disease. This study aimed to explore the psychological factors that could affect chronic patients' emotion. Negative emotions, disturbed level, and subjective evaluation of health were measured by questionnaires. The results showed that chronic patients who were more disturbed by "increased daily hassles" and "changes in one's functions" reported more negative emotions. These results implied that comprehensive health education programs, especially those helped patients to change their life styles, might be useful to dealing with chronic patients emotional problems.

#### Upright Chinese characters grab attention second to faces

**Wu, Shengjun** Dept. of Psychology, Fourth Military Medical Univ., Xi'an, People's Republic of China **Zhu, Xia** Psychology, Fourth Military Medical Univ., Xi'an, People's Republic of China **Miao, Danmin** Psychology, Fourth Military Medical Univ., Xi'an, People's Republic of China

**Objectives:** To investigate whether Chinese characters have the similar ability to capture attention as human faces for native Chinese. **Methods:** Twenty-four undergraduates participated in the go/no-go and inhibition of return (IOR) experiments. **Results:** In the go/no-go experiment, upright Chinese characters significantly delayed target response times in comparison with other stimuli categories except upright faces. In the IOR experiment, delayed responding of saccade to a location that previously contained Chinese characters or faces was observed. **Conclusions:** These results supported the hypothesis that Chinese characters have the similar ability to attract attention as faces for native Chinese.

#### Risk of depressive reaction and its prevention in chronic disease patients

**Wu, Yin-Chang** Psychology (S115), National Taiwan University, Taipei, Taiwan **Chien, Liang-Lin** Psychology (S115), National Taiwan University, Taipei, Taiwan **Huang, Yun-Hsin** Psychology (S115), National Taiwan University, Taipei, Taiwan **Wu, Chih-Hsun** Psychology (S115), National Taiwan University, Taipei, Taiwan **Huang, Yang-Wen** Psychology (S115), National Taiwan University, Taipei, Taiwan

The study aimed to establish intervention programs for probable emotional and suicidal problem of chronic disease patients in primary care settings. To explore the influential psychological factors, researchers examined the interrelationships between personal disease-related construct, cognitive adjustment, self-efficacy, coping and emotional reactions by inventories. The result suggested: (1) most patients could reconstruct their cognitive appraisals to chronic diseases and reported less threatening feelings; (2) high self-efficacy related with more problem-focused coping and less depressive mood; (3) low self-efficacy increased both avoidant coping and negative mood. According to the results, we proposed tentative programs to enhance adjustment of chronic disease patients.

#### An ERP study on the time course of top-down control of visual attention

**Wykowska, Agnieszka** Inst. für Psychologie, Universität München, München, Germany **Schubö, Anna** Psychology, LMU, Munich, München, Germany **Stimuli** that are very salient might capture attention in a bottom-up manner. However, top-down control can modulate processing enabling selection of relevant input. Using ERP methodology, we examined how top-down and bottom-up mechanisms interact throughout the process of visual selection. Our paradigm combined visual search



with post-display probe presentation. Probes followed search displays with two different time delays. In line with behavioral results, ERPs locked to probes presented after a longer delay revealed effects on the P1 component likely reflecting top-down control of focal attention. We concluded that with time, top-down control guides focal attention efficiently to the relevant target.

#### Effects of driving fatigue on mental workload in real road condition

**Xu, Xianggang** Chinese Academy of Sciences, Institute of psychology, Beijing, People's Republic of China **Sun, Xianghong** Chinese Academy of Sciences, Institute of psychology, Beijing, People's Republic of China **Zhang, Kan** Chinese Academy of Sciences, Institute of psychology, Beijing, People's Republic of China

**Objectives:** Drivers' performance in driving secondary tasks, and relationship between physiological indices and subjective mental workload (MWL) were investigated between two different driver conditions. **Methods:** Ten taxi drivers were required to do oral calculations during driving in the morning and in the afternoon, respectively. Performance of secondary task, physiological indices, subjective MWL and subjective feeling of fatigue were compared. **Results:** Difference of calculation errors was significantly found, with more errors in the morning than in the afternoon. Physiological indices showed different results. The other two subjective measurements were also compared. **Conclusions:** The results shows practice effects and verified the Yerkes-Dodson Law.

#### On the relationship between the mere exposure effect and the contextual cuing effect

**Yagi, Yoshihiko** Comprehensive human sciences, University of Tsukuba, Ibaraki, Japan **Kikuchi, Tadashi** Comprehensive human sciences, University of Tsukuba, 8572, Japan

We investigated the relationship between the mere exposure effect in which previous exposures to stimuli increased participants' preference for those stimuli, and the contextual cuing effect (CC) in which visual search performance was faster for targets appearing in previously exposed configurations than for targets appearing in new configurations. Participants were asked to search T -target among rotated L-distractors. The mean reaction time showed a typical CC. Then, participants were asked to evaluate how much they like the repeated or new configurations. The results showed that the liking ratings for the repeated configurations were lower than those for the new configurations.

#### Perceived pain and anxiety before and after amniocentesis among Turkish pregnant women

**Yalcinkaya-Alkar, Özden** Psychiatry, SB Etlik İhtisas Hospital, Ankara, Turkey **Yalvac, Serdar Ethem** OBSTETRICS AND GYNECOLOGY, SB ETLIK MATERNITY HOSPITAL, ANKARA, Turkey

The main objective of this study was to examine the Turkish pregnant women's perception of pain and anxiety before and soon after the amniocentesis. A total of 294 pregnant women from the obstetrics clinics of SB Etlik Maternity Hospital who had amniocentesis performed were interviewed at hospital before and soon after amniocentesis. Demographic, obstetrics and other related variables, which may affect pain and anxiety perception, were included into the study. After descriptive statistics presented, paired samples t tests and analysis of variance conducted. The results revealed that although there was a decrease in perceived pain and anxiety after the procedure, perceived anxiety was still higher than the perceived pain level after the amniocentesis. Implications of these results were discussed.

#### Attentional Control in Visual Search with Singletons: Effects of Spatial Information

**Yamaoka, Kao** Psychology, Sophia University, Tokyo, Japan **Umeda, Satoshi** Psychology, Keio University, Tokyo, Japan

When there exists one salient stimulus (singleton) in a visual field among others, whether attention can be controlled in a top-down fashion is still controversial. Our present study investigated whether attentional control can be observed when participants have the advanced knowledge about spatial locations of the upcoming targets, by manipulating their probabilities. Our results indicated that when participants were capable of predicting the locations of the upcoming targets, the performance was enhanced and it was not affected by irrelevant singleton. Our findings suggest that advanced spatial information enables participants to ignore the irrelevant singleton and make top-down attentional control possible.

#### An event related potential study of accessing word meaning in two languages for Chinese-English bilinguals

**Yang, Runrong** teacher's college, Dalian University, Dalian, People's Republic of China

This study was to investigate the representation and processing of first and second language words of Chinese-English bilinguals. A semantic categorization task was employed, while ERPs were recorded and behavioral data were also collected. The results were: first language repetition and second language repetition produced a significant reduction than control condition respectively, between-language repetitions were different for different language order: the priming effects from L2 to L1 were larger than from L1 to L2. The results suggested within-language repetition facilitated the decision at both lexical (orthography and phonology) and conceptual (meaning) level, while between-language repetition had different priming mechanism.

#### Effect of performing arithmetic and reading aloud on memory tasks in the elderly

**Yoshida, Hajime** Dept. of Psychology, Ritsumeikan University, Kyoto, Japan **Furuhashi, Keisuke** psychology, Fukuoka prefectural University, tagawa, Japan **Ookawa, Ichiro** psychology, tukuba University, tukuba, Japan **Tsuchida, Noriaki** psychology, ritsumeikan University, kyoto, Japan **Nakamura, Yoshiro** psychology, ritsumeikan University, kyoto, Japan **Son, Kin** psychology, ritsumeikan University, kyoto, Japan **Takahashi, Nobuko** psychology, ritsumeikan University, kyoto, Japan **Ishikawa, Mariko** psychology, ritsumeikan University, kyoto, Japan **Miyata, Masako** psychology, ritsumeikan University, kyoto, Japan **Hakoiwa, Chiyoji** psychology, ritsumeikan University, kyoto, Japan

Recent studies demonstrated that solving easy arithmetic and reading aloud activated prefrontal lobe more than other cognitive tasks by using fMRI. Two experiments were conducted to examine effect of performing these tasks on memory performances such as working memory, short-term memory, or long-term memory in the elderly. A total of 70 elderly were given tasks of simple arithmetic or reading aloud over 35 sessions in Exp.1 with feedback to their responses and in Exp.2 without feedback. Results in the long-term memory task showed significant difference between Experimental and control groups in post-test. These results were discussed in terms of activation theory of prefrontal lobe.

#### The role of Islamic ceremony (Taaziyeh) on development of moral judgment among adolescents in Iran

**Younesi, Jalal** counselling, University of social welfare, Tehran, Islamic Republic of Iran **Amirjan, Sarah** counselling, University of social welfare, Tehran, Islamic Republic of Iran **Soltani Abad,**

**Mojtaba** counselling, University of social welfare, Tehran, Islamic Republic of Iran

The purpose of this research was to study the effect of Taaziyeh on development of moral judgment among adolescents. Taaziyeh is an impressive traditional Islamic ceremony in Iran for memory of grand son of prophet Mohammad (s) who to be martyred thirteen centuries ago. 75 male adolescents (15-17) participated in Taaziyeh whom to be selected randomly and answered moral judgment development questionnaire after end of the ceremony. The same number of subjects were selected as control group. Findings revealed a significant difference between two groups ( $p \leq 0.05$ ). This means that the participation in Taaziyeh can enhance moral judgment development. The results indicate the positive role of some religious ceremony on development of moral judgment of adolescents.

#### Effects of response style on the personality and self-esteem

**Yu, Yibing** Yingdong Building, Room 255, Beijing Normal University, Beijing, People's Republic of China **Hong, Zou** Inst. Developmental psychology, Beijing Normal University, Beijing, People's Republic of China **Kejia, Ou** Ins. Developmental psychology, Beijing Normal University, Beijing, People's Republic of China

Are the relationships of personality and self-esteem "real"? This study examines the response style effects on the "Little Five" Personality and Global Self-Esteem (GSE) with 1654 Chinese students. Preliminary analysis shows that the simple correlation between GSE and "Little-Five" personality or response styles are all significant at the 0.05 level above and beyond. After controlled the effects of response styles, the combined variance explanation ratio and the partial regression coefficients of personality factors on the GSE decrease for some extent respectively. It implies that the relationship between personality and self-esteem may be inflated partially.

#### The psychology of waiting

**Zakay, Dan** Dept. of Psychology, Tel-Aviv University, Tel-Aviv, Israel

Waiting is a common daily behavior. A model, based on time perception processes and on social factors like social justice, is suggested for explaining waiting behavior. The model can account for phenomena like abandoning of waiting, feelings of stress while waiting and other typical waiting behaviors. Implications of the model for the design of real and virtual waitings' environment as well as implications for marketing are discussed.

#### The correlation between social support, coping style and subjective well-being of college students

**Zhang, Jianren** Department of Psychology, Hunan Normal University, Changsha, People's Republic of China

**Objective:** To explore college students' relations among social support, coping style and subjective well-being (SWB). **Methods:** Two hundred and fourteen college students were evaluated with Index of Well-being/Affect Scales/Simplified Coping Style Questionnaire (SCSQ) and Social Support Rating Scale (SSRS). **Results:** Social support correlated with SWB significantly and positively. Positive coping style was positively correlated with SWB but negative coping style was positively correlated with negative affect. Positive coping style was positively correlative with social support and negative coping style was negatively correlative with subjective support. **Conclusion:** SWB had significant correlations with social support and coping style.



# **Tracking the time course of segmental and tonal encoding in Chinese spoken production: an event-related potential study**

**Zhang, Qingfang** Institute of Psychology, Beijing, People's Republic of China

This study investigated the time course of segmental and tonal encoding during Chinese spoken production. Participants were shown pictures and carried out a go/nogo decision based on either segmental or tonal information. The segmental decision was to determine whether the picture name started with a specific phoneme (i.e., /j/) or not. The tonal decision was to determine whether the picture name was of tone 1 (tone 2, tone 3 or tone 4) or not. Analyses of N200 effects indicated that segmental and tonal information was retrieved simultaneously. It provides evidence for Levelt et al.'s (1999) language production model.

# **How negative numbers cause spatial shifts of attention if they can**

**Zhang, Yu** Psychology, Shaanxi Normal University, Xi'an, People's Republic of China

Studies have shown that processing magnitude of positive numbers can cause spatial shifts of attention, for negative numbers, however, there's rare evidence for whether processing negative numbers can cause such shifts. The present experiments was to investigate if processing negative numbers can cause spatial shifts of attention, and whether it depends upon magnitude or absolute value. Experiment1 reveals spatial shifts of attention depending upon absolute value, whereas upon magnitude in Experiment2. The study suggests that processing negative numbers can cause spatial shifts of attention, how it does, however, seems to depend upon the inter-influence from other involving numbers on them.

# **Negative attentional set based on abstract conceptual level: Evidence from the suppressed N2pc in the attentional blink**

**Zhang, Dexuan** Department of Psychology, Hangzhou Normal University, Hangzhou, People's Republic of China **Martens, Sander** BCN Neuroimaging Center, University of Groningen, Groningen, Netherlands **Zhou, Xiaolin** Department of Psychology, Peking University, Beijing, People's Republic of China

The attentional blink (AB) is a deficit in reporting the second of two targets when it occurs 200-500 ms after the first. Here we investigate how a distractor stimulus presented prior to the first target can alter the attentional set, the amount of resources allocated as indexed by the N2pc ERP component, and behavioral performance for the second target. Suppression effects were found when the critical distractor matched the second target, either at the level of perceptual features, or the level of conceptual features. Possible implications for existing theoretical models of the AB are discussed.

# **Does saccade inhibition of return severed as a foraging facilitator: Evidence from two behavior studies**

**Zhang, Yang** Dept. of Psychology, Northeast Normal University, Changchun, People's Republic of China **Ming, Zhang** Psychology, Northeast Normal university, Changchun, People's Republic of China

Objective: The goal of current study was to determine whether saccade inhibition of return (IOR) served as a foraging facilitator or an intrinsic aspect of shifting attention (Hooge et al, 2005). Methods: Thirteen and fourteen students served as participants in experiment 1 and 2 respectively. The spatial working memory (SPWM) load was manipulated by have the SPWM load or not (experiment 1) or varying the memory set size between one and four (experiment 2). Results and Conclusions: The saccade IOR wasn't modulated by SPWM. Therefore, saccade IOR is not served as a foraging facilitator.

# **On relations between pupils, mental health, personality and parental rearing patterns**

**Zhang, Jianren** Department of Psychology, Hunan Normal University, Changsha, People's Republic of China

Objective: To explore the interaction among mental health, personality and parental rearing patterns in 6-13 years old children. Methods: 273 children aged in 6-13 years old were assessed by Egna Minnen Barndoms Uppfostran (EMBU) Scale, Eysenck Personality Questionnaire (EPQ) and SCL-90. Result: The N and P of EPQ were correlated positively with each factors of SCL-90. Negative correlation between parent's affective warmth and the scores of factors of SCL-90. Positive correlations exist between parent's punishments, overprotection, rejection and the scores of factors SCL-90. Conclusion: Parental rearing patterns may effect children's mental health through the Mediation effect of children's personality.

# **How contextual characteristics in organizations enhance employee creativity? A dynamic model**

**Zhang, Kai** School of Business, Renmin University of China, Beijing, People's Republic of China

This paper systematically reviews and integrates theoretical and empirical research on contextual characteristics enhancing employee creativity in the workplace and explores the dynamic mechanism of the effects of these ones on employee creativity. Based on a self-organizing theory of human motivation, a new theoretical model is put forward through including interest into the dynamic mechanism. It is suggested that employees' interest in work mediates the impact of the contextual characteristics on their creativity. Implications of this theoretical model for future research and management practices are discussed.

# **Cognitive development of 3-6 years old Chinese children's beliefs on the relationship between gender-role and aggression**

**Zheng, Lijun** Dept. of Psychology, Hangzhou Normal University, Hangzhou, People's Republic of China **Hu, Jun** Law School, Hangzhou Normal University, Hangzhou, People's Republic of China

Cognitive development of 3-6 years old Chinese children's beliefs about the relationship between gender-role and aggression were systematically examined via 3 personal interviews (N=376). In Interview 1, children aged from 3 have obtained the ability of reasoning out certain aggression forms across gender-role information. In Interview 2, both of preschoolers and pupils have enabled to infer gender types from given aggression behavioral labels. In Interview 3, it found out 3-4 years old children were more apt to make systematical mistakes and memory distortion. These findings suggest Chinese children aged from 3 have organized schemata about the relationship between gender-role and aggression that affect their cognitive activities, the development of such schemata patterns tends to be stable.

# **Development of internet-related behavior questionnaire for adolescents**

**Zhou, Shijie** Second Xiangya Hospital, Central South University, Changsha, People's Republic of China

Objective: To develop an instrument for assessing the internet-related behavior characteristics of adolescents. Methods: The initial questionnaire consists of 70 items, which involve the assessment of cognitive, emotional, and behavioral characteristics related to internet usage. A total of 1096 valid data samples of college students were collected. Results: Exploratory factor analysis resulted in a 9-factor solution, which can be specified as information seeking and technological mastery, cybersexual and game, and so on. 9 factors could explain 51.651% of the total variance. Confirmatory factor analysis (C-FI) showed that the 9-factor construct was across-

sample confirmed. Conclusion: The Internet Behavior Questionnaire for Adolescents had acceptable construct validity.

# **Mental health in a German teacher sample at the beginning of their occupational career**

**Zimmermann, Linda** Psychosomatische Medizin, Universitätsklinikum Freiburg, Freiburg, Germany **Wangler, Jutta** Psychosomatische Medizin, Universitätsklinikum Freiburg, Freiburg, Germany **Unterbrink, Thomas** Psychosomatische Medizin, Universitätsklinikum Freiburg, Freiburg, Germany **Pfeifer, Ruth** Psychosomatische Medizin, Universitätsklinikum Freiburg, Freiburg, Germany **Wirsching, Michael** Psychosomatische Medizin, Universitätsklinikum Freiburg, Freiburg, Germany **Bauer, Joachim** Psychosomatische Medizin, Universitätsklinikum Freiburg, Freiburg, Germany

In order to analyze how early mental health problems arise in the occupational career of German teachers, we applied several inventories (GHQ, MBI, AVEM) in 470 German student teachers (students after having completed their university studies, but teaching under supervision). With respect to the GHQ, 45 % of the student teachers sample showed values beyond the cutoff  $\geq 4$  (compared to "only" 29.8 % in teachers) reflecting a high level of job strain. One of the causes for this surprisingly high rate might be that a majority of the student teachers indicated that they felt insufficiently prepared for their job.

# **The simple and multiple relationship of personality characteristics and mental health with blood type system (ABO) in students**

**Zirak Moradlou, Hossein** Dept. of Psychology, Shahid Beheshti University, Tehran, Islamic Republic of Iran

The aim of this study was, identification and determination of simple and multiple relationship of personality characteristics and mental health with blood type system (ABO), with causal-comparative method, random cluster sampling, NEO-FFI, SCL 90-R, and confident evidence indicator blood type, in 169 students of Shahid Beheshti University. According to t-tests, one way analysis of variance and analysis of regression: 1- There is significant relationship between neuroticism with global severity index and Conscientiousness with mental health. 2- There is no causal effect between blood type system (ABO), with personality characteristics and mental health. 3- There is no effect gender on mental health, but it effects agreeableness.

## **Poster Session Wednesday Afternoon 14:00**

# **Parental perspectives on mental retardation and their interaction with their children**

**Abdurahman, Feruz** Special Needs Education, Addis Ababa University, Addis Ababa, Ethiopia

This study aimed to assess how parents understand mental retardation, and their interaction with the mentally retarded child at home. The effect of "mother-to mother" interaction program, under the support of a non-governmental organization called Medical Missionary of Mary's Counseling Center, based in Addis Ababa, was also assessed. 6 parents and 2 project coordinators from the organization were purposely selected. Semi-structured interview and were the main tools for data collection. Qualitative method of analysis was employed. The parents described mental retardation as a natural phenomenon given by God as a punishment. Further research has to be conducted in this regard and awareness of parents on mental retardation and early intervention should be enhanced.



### Socioemotional violence prevention program in Puerto Rican preschool children

**Abelleira Martinez, Mayra A.** Dept. of Psychology, University of Puerto Rico, Mayaguez, Puerto Rico  
**Hernandez, Giselle** 7066, Bo. Maria, Moca, Puerto Rico  
**Alicea Cuprill, Giselle Marie** Psychology, University of Puerto Rico, Bayamon, Puerto Rico  
**Armstrong Rivera, Nicole M.** Psychology, University of Puerto Rico, Mayaguez, Puerto Rico  
**Nunez Zapata, Mayra A.** Biology, University of Puerto Rico, Mayaguez, Puerto Rico

This investigation assessed the response of very young children to a culturally adapted violence prevention program. The "Second Step" program was adjusted according to the Puerto Rican culture and implemented with a classroom of 37 preschool children, whose social skills, along with teacher perception of the program, were evaluated. Qualitative findings indicated that the material adaptations required further alterations to make them more amenable to teacher schedules and systemic limitations within the school. Quantitative analyses indicated significant behavioral change from pre- to post-test in 46% of the participants. Implications for cultural adaptation of curricula and the implementation context are discussed.

### Emotional Labour; Job stress in call centres: Does emotional intelligence matter?

**Agrawal, Rakesh Kumar** OB&HR, Ins. of Management Technology, Ghaziabad, India  
**Misra, Renu** OB&HR, Ins. of Management Technology, Ghaziabad, India  
 Most studies available in literature implicitly or explicitly conclude that emotional labour has negative and dysfunctional consequences, such as job stress and emotional exhaustion, for workers. However, they do not examine the role of emotional intelligence in the relationship. In this study, we examine the mediating effect of emotional intelligence in the relationship between emotional labour and job stress by analysing data collected through standard instruments from 150 customer service agents in call centres in India. Since it is an ongoing research and data collection is in progress, the findings would be available only at the time of submission of full paper.

### Parents as partner: A study of problems affecting parents in training their children with intellectual deficits

**Ahluwat, Sangeeta** Dept. of Education, University of Kurukshetra, Kurukshetra, India  
 Parents play an important role in the education and training of a child with intellectual deficit. However, the scenario w.r.t. parents' participation in India is not very encouraging. The study was conducted to find the parents' problems in training their intellectually challenged wards. Parents of 50 children studying in special schools in two districts of Haryana were administered questionnaires. The parents revealed various problems; mothers reported more problems than fathers; parents of female children had greater problems; less educated endorsed more problems; low income and severity of the condition were positively related to problems faced.

### Reading difficulties among dyslexics: Efficacy of a remedial programme

**Ahluwat, Sangeeta** Dept. of Education, University of Kurukshetra, Kurukshetra, India  
 The study was planned to see the effectiveness of an intervention programme in remediating reading difficulties among children with dyslexia. The study employed pre-test post test control experimental design. Forty respondents (20 each in experimental and control group) in the age range 8-10 years and studying in public schools in Panipat district of Haryana were selected purposively. A six weeks programme comprising of different activities was administered. The programme was found to be

effective in improving sound-symbol association, phonic analysis, semantic closure, lexical processing, language internalization, grapheme phoneme association, verbal visual correspondence, listening comprehension and reading comprehension.

### Life values inventory (LVI): Studies with Portuguese college students

**Almeida, Leonor** Dept. de Psicologia, Universidade Lusofona, Lisboa, Portugal  
**Tavares, Patricia** Psicologia, Universidade Lusofona, Lisboa, Portugal  
 The use of the Life Values Inventory (LVI) – Portuguese Version (Almeida, 2006) – in the higher education context was the goal of a research with a group of 271 college students. Following a summary of the bibliography's revision about the importance of the values in the career development, it is presented the analysis of the scores obtained with the Life Values Inventory: means and standard deviations; internal consistence coefficients, by the alpha of Cronbach method; factor analysis and groups differences analysis defined by field of studies, gender, geographic area and public vs. private universities.

### Linkage of job characteristics and depression in a national health survey in the United States

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**Grosch, James** CDC/NIOSH/DART, National Institute for Occupational Safety and Health, Cincinnati, USA  
**Chen, Xiao** CDC/NIOSH/DSHEFS, National Institute for Occupational Safety and Health, Cincinnati, USA  
**Chrislip, David** CDC/NIOSH/DART, National Institute for Occupational Safety and Health, Cincinnati, USA  
**Petersen, Martin** CDC/NIOSH/DSHEFS, National Institute for Occupational Safety and Health, Cincinnati, USA  
**Muntaner, Carles** CAMH, University of Toronto, Toronto, Canada  
 Associations between depression and proxy measures for workplace psychosocial factors and work organization were examined. Job characteristics from the Occupational Information Network (O\*NET) were linked to the U.S. National Health Interview Survey. Scales were developed through factor analyses and linkage was done using occupational titles. Logistic regression showed that several O\*NET variables (e.g., guiding work of others, gaining knowledge, and positive management relations) were protective for depression after adjustment for gender, race, ethnicity, education, and age. Additional analysis using this linkage technique is warranted, and may suggest other important job characteristics associated with worker well-being.

### Can a painful stimulus induce either conditioned avoidance or conditioned approach?

**Andreata, Marta** Inst. für Psychologie, Universität Würzburg, Würzburg, Germany  
**Mühlberger, Andreas** Psychology, University of Würzburg, Würzburg, Germany  
**Kenntner-Mabiala, Ramona** Psychology, University of Würzburg, Würzburg, Germany  
**Pauli, Paul** Psychology, University of Würzburg, Würzburg, Germany

The study investigated how the timing between unconditioned stimulus (US) and conditioned stimulus (CS+) influences the valence of the CS+. A between design was used: 22 participants were forward conditioned (CS preceded US) and 22 were backward conditioned (CS followed US). Valence and arousal ratings as well as startle reflex were measured as dependent variable. CS+ was rated more negative and more arousing after conditioning compared to CS-. Furthermore, the startle response after conditioning was enhanced during CS+ presentation than during presentation of the control. In summary, CS+ acquired aversive qualities after being both forward and backward conditioned.

### Self-esteem and communication in adults

**Armas Vargas, Enrique** Person., Evaluat. & Psychology, Psychology Faculty, Tenerife, Spain  
 This study investigated the relationship between the Self-Esteem Questionnaire (CAE, Armas-Vargas, E.) with adults and the relationship with a Communication Index (father, mother, brothers, couple; friends and labor environment). 100 adults (49 men & 51 women, age 23-54 years). Factor analysis and reliability was conducted on CAE: 4 factors (58% variance): He himself (alpha=.90); Negative Comparison with Others (alpha=.90); Valuation of Ineffectiveness (alpha=.78); The Others (alpha=.73). We obtained a significantly correlation between the factors Negative Comparison with others & valuation of Ineffectiveness, and a difficult communication with brothers, couple, boss & mother. When Self-evaluation and the evaluation of the others are positive, communication with friends, brothers and boss is easy.

### Relationship of participation in decision-making, trust, and organizational citizenship behavior with organizational identity and justice from personnel's point of view in an industrial complex

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**Nouri, Abolghasem** i/o psychology, isfahan university, isfahan, Islamic Republic of Iran  
**Oreyzi, Hamid Reza** i/o psychology, isfahan university, isfahan, Islamic Republic of Iran  
**Samavatian, Hossein** i/o psychology, isfahan university, isfahan, Islamic Republic of Iran  
 This paper investigated The relationship of participation in decision-making, trust, and organizational citizenship behavior with organizational identity and justice from personnel's point of view in an industrial complex. data gathered from 200 company's employee through relative questionnaire. correlations, regressions and path analysis indicated significant relationship between variables.

### Animal-assisted play therapy for children suffering from emotional stress

**Axelrad-Levy, Tamar** Animal Assisted Therapy, David Yallin Colage, Jerusalem, Israel  
 This new intervention is derived from D. W. Winnicott's theory and has two basic objectives: 1) the animals, as represented in their life cycle, serve as intermediaries between the child's external-inner reality. 2) the child relates to his/her inner contents indirectly, through projection and transference. The therapy sessions take place in a special space called the Animal-Corner. There the child is free to choose the type of animal and the character of the relationship with the animal and the therapist. Two examples are presented, demonstrating how to work through topics such as self-identity and conflict related to mother- child bonding.

### Psychological assessment and management of lower back pain among orthopaedic patients

**Ayeni, Esther** Dept. of Psychology, University of Lagos, Lagos, Nigeria  
 This study with two phase-assessment and treatment examined the orthopaedic, social and psychological causes of lower back pain in orthopaedic and non-orthopaedic patients in Lagos, Nigeria. PSE, PRS and SCL-90 were administered on the two sets of participants, 80 patients and 90 non-patients. Independent T-test, Pearson Product Moment Correlation and, ANOVA were the statistical methods used. The study revealed; significant difference in the pain manifestation and psychopathology of patients and non-patients; psychopathology differences between female and male participants; significant correlation of pain and psychopathology. Results emphasized the need to complement chemotherapy and physiotherapy with psychotherapy

# Humiliation, embarrassment and guilt in Japanese part-time job

**Azami, Ritsuko** University of the Sacred Heart, Tokyo, Japan

In western society, shame is maladaptive and guilt is adaptive. This study is to examine whether or not shame and guilt are adaptive for Japanese. Participants were 92 Japanese undergraduates who had part-time job experiences. They were semi-structured interviewed about the degree of shame and guilt they felt when being rebuked by their boss, customer, or co-worker. Factor analysis of self-ratings on shame and guilt extracted three factors: humiliation, embarrassment, and guilt. Humiliation was related to maladaptive characteristics such as anger, while guilt was related to adaptive characteristics such as apology.

# Eco-cultural influences on pictorial depth perception

**Babu, Rangaiah** Maharaja's College, University of Mysore, Mysore, India

Influence of eco-cultural contexts on pictorial depth perception with special reference to domestication of livestock studied using Hudson's pictorial depth perception test. Five groups of tribes and non-tribes were selected for the study. It was expected that the tribes with domestic livestock would perceive more three dimensions in pictures compared to the tribes without domestic livestock. The effect of livestock domestication was not found in the present study. Men perceived significantly more three dimensions in pictures. The study showed clear trend in the scores on three-dimensional perception with urban literates on the top, followed by urban illiterates, rural illiterates and tribes (both groups) fitted the eco-cultural model.

# Repetition priming effects caused by consciously perceived versus unconsciously perceived primes are dependent on qualitatively different aspects of a visual stimulus

**Bacon, Benoit A.** Dept. of Psychology, Bishop's University, Sherbrooke, Canada **McCabe, Eric** Psychologie, Université de Montréal, Montréal, Canada **Gosselin, Frédéric** Psychologie, Université de Montréal, Montréal, Canada

Conscious and unconscious visual encoding differ in quantitative activation (threshold) but we argue that they also differ qualitatively. A repetition priming paradigm (stimuli: ten faces; half females) is used in conjunction with Bubbles, a method that partially and randomly reveals aspects of the prime (x, y coordinates and spatial frequency). We introduce two masking conditions so that primes are encoded consciously or unconsciously. Following 3072 gender discrimination trials, linear regression (bubble masks and response times) show that conscious priming depends on well defined elements of the prime whereas unconscious priming depends on qualitatively different low-frequency global aspects of the prime.

# Electrophysiological measurements indicate operation of internal forward models of self-agency in the auditory modality

**Baess, Pamela** Inst. für Psychologie I, Universität Leipzig, Leipzig, Germany **Jacobsen, Thomas** University of Leipzig, Institute of Psychology I, Leipzig, Germany **Schroeger, Erich** University of Leipzig, Institute of Psychology I, Leipzig, Germany Discriminating between the source of agency as self-generated or externally generated is an essential ability. Internal forward models of self-generated actions are assumed to underlie such processes using comparisons between motor command (efference copy) and sensory feedback (reafference) information. Using human electroencephalography, we observed attenuated responses for self-generated sounds compared to externally generated sounds. These attenuation effects occurred during early

auditory cortical processing (prior 50 ms after stimulus presentation), even for variable sound input with respect to sound's quality and onset. Our data support the existence of internal forward models, which have been proposed for other modalities, also in audition.

# The nature and outcomes of work-family enrichment amongst South African employees.

**Bagraim, Jeffrey** School of Management Studies, University of Cape Town, Cape Town, South Africa **Jaga, Ameeta** School of Management Studies, University of Cape Town, Cape Town, South Africa This study examined the nature and outcomes of work-family enrichment amongst South African employees (N = 336) who responded to a self-report questionnaire from multiple sites of a retail organization. Factor analysis was used to examine the dimensionality of work-family enrichment, its bi-directionality, and its distinctiveness from work-family conflict. Hierarchical multiple regression evidenced that work to family enrichment helps predict organisational commitment and job satisfaction, even when controlling for demographic and work variables, and that the affect component of family to work enrichment helps predict family satisfaction. The implications of the results are discussed.

# Efficacy of metacognitive therapy on maladaptive metacognitive beliefs and post-traumatic stress disorder symptoms, in Iraq-Iran war.

**Bakhtavar, Essa** Clinical Psychology, Isfahan University, Isfahan, Islamic Republic of Iran **Neshat-Doost, Hamid taher** clinical psychology, isfahan university, isfahan, Islamic Republic of Iran **Molavi, Hossain** clinical psychology, isfahan university, isfahan, Islamic Republic of Iran **Bahrani, Fateme** clinical psychology, isfahan university, isfahan, Islamic Republic of Iran

The aim of this study is examine the efficacy of metacognitive therapy on maladaptive metacognitive beliefs and PTSD symptoms. From the war handicaps were diagnosed on the basis of DSM-IV and the Mississippi Scale for PTSD, 34 subjects were randomly selected. The experimental group beside resaving drug which was performed in an identical condition with control group, underwent metacognitive therapy was carried out in 8 sessions (90 minutes) for the experimental group. Than post-test a 2 month follow-up were administered. The results showed that the experimental group scored significantly less the control group did on the maladaptive metacognitive and PTSD scale on the post-test and follow-up ( $p < 0.01$ ). Keywords: metacognitive therapy, PTSD, war handicapped.

# The study of relationships between organizational justice and organizational climate with counterproductive behaviors in one of the companies of Isfahan City.

**Barati, Hajar** I/o Psychology, Isfahan University, Isfahan, Islamic Republic of Iran **sadeghiyan, kave** I/o psychology, Isfahan University, Isfahan, Islamic Republic of Iran

The aim of this study was to investigate the relationship between organizational climate and organizational justice with counterproductive behaviors. The sample consist of 112 employees who were selected randomly from one of the Isfahan city's companies. The instruments used in this research consist of Organizational Climate Questioner, Organizational Justice Questioner and Counterproductive Behaviors Checklist. The result showed that there was a negative relationship between counterproductive behaviors to individual and climate And there was a negative relationship between counterproductive behaviors to organization and cooperative climate and, procedural Justice.

# Limits and possibilities in psychotherapeutic treatment of patients from poor communities

**Barbosa, Cristina Monteiro** Dept. de Psicometria, UFRJ, Rio de Janeiro, Brazil **de Freitas Perez, Lucia Maria** Dept. de Psicologia, UNESA / FAMATH, Rio de Janeiro, Brazil

Aim: make clear the limits and possibilities of psychotherapy in institutions that comprise social clinic care. Method: it is a clinical research that consisted of psychological treatment of patients from poor communities in Rio de Janeiro, Brazil. Result: based on patients' speech, the conclusion is that besides the scarcity due to serious social factors, we verified a significant difficulty of symbolization. Conclusion: it was verified that psychological clinic is bonded with social and cultural issues.

# The diagnoses and the intervention in the symptoms of learning disabilities

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OBJECTIVES: Present a discussion about the psychological evaluation of children with learning disabilities' complaint. METHODS: Interviews, the diagnostic hours game and a battery of psychological tests (projectives and objectives). RESULTS: The evaluations produced um effect of knowledge's construction about the hidden symptoms of learning disabilities. CONCLUSION: The psychological diagnoses has being an important field of diagnoses and intervention of learning disorders.

# The double and the cracked mirror

**Barbosa, Cristina Monteiro** Dept. de Psicometria, UFRJ, Rio de Janeiro, Brazil

Objectives: To verify a link between psychoanalysis and modern art. Method: This study intends to discuss narcissism and its relation with modern art. Results: In Cubism, Picasso and Braque represent the cracked mirror. They tear the canvas, allowing a fragmented image to be viewed, destroying the unified illusive space of the image by showing the tragic: the real. Conclusio: In psychoanalysis, the ego is constituted by an image in the mirror, whereas the other as specular image reflects a narcissistic illusion of wholeness. This imaginary reflection is "cracked" as the subject is constituted by the access to the symbolic.

# Parental acceptance-rejection, internalizing and externalizing behavior problems in children with learning disabilities

**Batum, Petek** Istanbul, Turkey

The aim of this study was to examine the levels of parental acceptance-rejection and behavior problems in children with learning disabilities (LD). Results revealed that children with LD were more rejected by their parents and showed higher levels of behavior problems than children without LD. Gender x Group interaction effect indicated that LD girls' mothers perceived higher rejection than mothers of girls without LD. Regression analyses indicated that for both groups of children, children's perception of maternal rejection predicted internalizing problems while mothers' perceptions of rejection towards their children predicted externalizing problems. Overall, findings of the study shed light to the importance of parental rejection in learning disabilities and draws attention to including parents in the treatment plan.



### Accuracy of professional evaluation

**Baturin, Nikolay** General psychology, Southern Ural State University, Chelyabinsk, Russia

The problem of the accuracy of evaluation that is made by specialists in very different fields of the social activity is highly actual. It influences the quality of managerial decisions and as well results of organization activities. Evaluation and its accuracy are observed from the position of the Evaluation Theory (1997, Baturin). The cycle of experimental researches indicated that accuracy of evaluation is a derivative of the reflection accuracy of the object evaluation; the quality of evaluation base, the adequacy of the comparison object with base and accuracy of evaluation expression. Different components of context, personal features of estimator and evaluation style also influence the evaluation accuracy. Special trainings are designed for compensation of factors that reduce evaluation accuracy.

### Psycho-social and developmental determinants of health risk behavior

**Bazillier, Cecile** Psychology, Université ParisX Nanterre, Nanterre, France **Mallet, Pascal** Psychology, Université ParisX Nanterre, Nanterre, France **Verhiae, Jean-François** Psychology, Université ParisX Nanterre, Nanterre, France

The aim of our communication is to present the first results of a longitudinal study, which is designed: (a) to measure the effects of a program intended to prevent children from smoking and eating misbehaviors; and (b) to examine several factors that are expected to mediate the effects of this prevention program. We used a pre-test, post-test and control group method. The participants are 1,000 eight-to-eleven-year-old children leaving in the suburb of Paris. The research is in progress and we will be able to communicate the first results during the congress.

### Psychological factors of diagnostic condition: students' perception of the movie "Nell"

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Interdisciplinarity is a research field in Brazil, particularly when the diagnostic condition is considered. For both, health professionals and patients, specific psychological factors take place. It is meaningful to know the perceptions involved, so a qualitative study has been conducted, in order to describe it, and the preliminary results are presented. A class of nineteen students of psychotherapy has been interviewed after watching the movie "Nell"; their perceptions and attributions to the meaning of the normality were recorded, as well as the ethical issues observed on the interactions between professionals and patient shown in that movie.

### The role of cognitive appraisals in elderly population with chronic pain

**Beja da Costa, Ana** Santiago do Cacém, Portugal **Ros, Antónia** Psicologia, Universidade do Algarve, Faro, Portugal **Martins, Ana** Psicologia, Universidade do Algarve, Faro, Portugal

The aim of this study is to understand the relationship between one's experience of pain, cognitive appraisals, some emotional variables and coping strategies. The participants (36 elderly subjects suffering from chronic pain) were asked to answer to the MPQ (Melzack, 1975), the HADS (Zigmond & Snaith, 1983), CAD (Soriano &

Monsalve, 2002) and to 20 cognitive appraisals. We found significant relationships between the cognitive appraisals and the pain experience, coping strategies and emotional variables in study. These results are discussed based on the theoretical models of Lazarus and Folkman (1984) and Sharp (2000). Key words: pain, cognitive valorisations, copin, emotional variables.

### Public politics of management and social representations about its managerial instruments

**Bellico da Costa, Anna Edith** Mestrado em Educação, FAE / UEMG, Belo Horizonte, Brazil **Cabral de Vasconcelos Neto, Milton** Microbiologia, FUNED/, Belo Horizonte, Brazil

It was investigated social representation (SR) of the Sanitary surveillance's servers about: Agreement of Results (AR) and individual performance evaluation (IPE) while managerial instrument in the public administration and implications of its in the public politics. Likert's questionnaire was used on perceptions, beliefs and values associates AR and IPE with instructions for the research. The speech pro AR and its importance was better understood than IPE for to servers and integrated their SR. There was a conflicting SR of the servers on the effectiveness of the managerial instruments propagated by the official speech making the management difficult.

### Emotional wisdom: Its effects on employees' emotion regulation and relationships at work

**Belschak, Frank** HRM-OB, Amsterdam Business School, Amsterdam, Netherlands **Verbeke, Willem** Marketing, Erasmus University Rotterdam, Rotterdam, Netherlands **Bagozzi, Richard** Marketing, University of Michigan, Ann Arbor, USA

Emotional wisdom is defined as a set of seven dimensions concerning how to regulate emotions within specific domains in such a way that the individual's and the collective's well-being are tied together. Using operationalizations of emotional wisdom for employees working in a sales environment in two studies covering an intra-organizational (among colleagues) setting and an inter-organizational (customer-salesperson) setting, we discover that salespeople who score high on emotional wisdom cope better with emotionally challenging situations and achieve better social relationships than those who score low on emotional wisdom. The results hold even when controlling for the effects of emotional intelligence.

### Beyond the Barbie-Matrix: School based primary prevention of eating disorders

**Berger, Uwe** Inst. für Psychosoz. Medizin, Universitätsklinik Jena, Jena, Germany **Bormann, Bianca** University Hospital Jena, Institute of Psychosocial Med, Jena, Germany **Brix, Christina** University Hospital Jena, Institute of Psychosocial Med, Jena, Germany **Sowa, Melanie** University Hospital Jena, Institute of Psychosocial Med, Jena, Germany

Objective: More than 25% of the 12 year old girls in Thuringia (Germany) show problematic eating behaviour. This was the starting position of a newly developed program for the prevention of anorexia nervosa in girls ("PriMa"). Method: We describe the program evaluation (controlled study using a pre-post-design including 1.006 girls), and development of follow-up programs, including an intervention for boys. Results: Using standardized measures, the girls in the intervention group reported significant improvements in body self esteem, figure dissatisfaction, knowledge and eating attitudes. Conclusions: Based upon the PriMa evaluation, we established a comprehensive health promotion program at 60 Thuringian schools.

### Overcoming consequences of family violence in Latvian women: Attachment perspective.

**Bite, Ieva** Dept. of Psychology, University of Latvia, Riga, Latvia

The aim of this study is to examine connections between changes in trauma symptoms, coping strategies, social adaptation, and adult attachment after psychotherapy for women survivors of childhood abuse and domestic violence. 80 women who participated in 12 sessions' trauma focused treatment groups or 20-25 individual therapy sessions completed several self report measures. Adult attachment interviews were analyzed for 10 women. Respondents who participated in treatment indicated significant changes in trauma symptoms and social adaptation. No changes in coping strategies were found. There are positive changes in the attachment security. Changes are more significant after group therapy than after individual treatment

### Causal, preparation, and prediction judgments are not based on the same information

**Blanco, Fernando** Bilbao, Spain **Matute, Helena** Psychology, University of Deusto, Bilbao, Spain **Vadillo, Miguel Ángel** Psychology, University of Deusto, Bilbao, Spain

Most of human contingency learning literature relies on the participants' judgments of contingency between a cue and an outcome. However, variations in the specific wording of the test question produce different patterns of contingency judgments. This is due to a flexible use of the information when participants answer one type of question or another. In two experiments with college students and Internet users, we manipulated the relationship between a cue and an outcome in order to assess its effect on causal, preparation, and prediction judgments. We conclude that sensitivity to covariational manipulations is different for each type of judgment.

### The daily dynamics of personal initiative at work

**Bledow, Ronald** Arbeits- und Org.-Psychologie, Universität Gießen, Gießen, Germany **Schaupp, Kerstin** Work and Organizational Psych, University of Giessen, Gießen, Germany

Whereas the nomological network of antecedents and consequences of personal initiative has received a great deal of attention, the daily micro processes that promote or inhibit personal initiative have only rarely been studied. To close this gap we have just completed a diary study with 100 employees over 5 consecutive days with data collected twice a day. We examine how daily events, affect and expectations impact on initiative directed at different goals (short term vs. long term goals, individual vs. team goals). Using HLM we further examine how individual trait differences moderate day-level relationships.

### Attractiveness of employers offering possibilities to corporate volunteering

**Blohm, Gesche** Social Psychology, LMU Munich, München, Germany **Traut-Mattausch, Eva** Social Psychology, LMU Munich, München, Germany **Frey, Dieter**

Corporate Volunteering – employees community involvement – is for companies a highly visible action to meet their social responsibility. But are companies who offer their employees possibilities to participate in volunteering more attractive to potential job applicants? To investigate this question we conducted studies with students and managers. Participants were given job announcements of two virtual companies, one of them giving employees opportunities to engage in volunteering projects. Results demonstrated that companies offering volunteering are significantly more attractive, so that participants would rather apply for and recommend them. Moreover, the company offering

volunteering was significantly rated more positive on different organizational variables.

### Intergroup differences in values and thinking styles in relation to intercultural experience

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The purpose of the study was to investigate the relation between experience of studying abroad, thinking styles and values. 70 students participated in the study, forming two groups of comparison (with or without intercultural experience). Participants were asked to answer Schwartz Personal Values Questionnaire and Sternberg Thinking Styles Inventory. Results showed significant differences in values and tendential differences in thinking styles. Students with intercultural experience preferred creativity-related and flexible styles, valued more self-direction, stimulation and achievement, but less security and tradition in comparison to those without such experience. Significant correlations between values and thinking styles were also found.

### Mother And Child Play In Down Syndrome and typically developing dyads

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**Objective:** This study aimed to investigate mother-child play in children with Down syndrome (DS) as compared with typically developing (TD) children. **Method:** 21 children with DS (M developmental age = 20 mo) were videorecorded during solitary and collaborative play with mothers. A group of mental age-matched typically developing (TD) children served as control. **Results:** During solitary play, DS children showed less exploratory play than TD children, but the two groups did not differ in symbolic play. During collaborative play with mothers, no differences were found between the two groups either in exploratory or symbolic play. **Conclusions:** Mother-child interaction during play exerts a unique and positive influence on children's play development in both TD and DS group.

### Neurotransmitters in acupuncture research: A solid indication for further psychiatric research

**Bosch, Margaretha** Support & Psychose, ggnet Groenlo, Groenlo, Netherlands **Van Den Noort, Maurits** biological and medical psychol, University of Bergen norway, bergen, Norway

**Objectives:** Recent results indicate that the neurotransmitters that are involved in acupuncture are the exact same neurotransmitters that are involved in many psychiatric disorders. **Methods:** An extensive literature review was conducted on acupuncture and its related neurotransmitters. **Results:** Acupuncture was found to normalize dopamine-, and increase melatonin levels. Furthermore, acupuncture was found to influence neuropeptide Y, which is involved in eating disorders. Acupuncture can therefore support other therapeutic measures like psychotherapy. It might be used as an add-on treatment. **Conclusions:** Since strong indications for results have come forward, we plead for further research on mental illnesses in combination with acupuncture.

### Cerebral activations during a long lasting pain stimulation

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Functional brain imaging research has revealed a large distributed network of brain regions involved in pain. However, the relationship between the temporal aspects of perceived pain and cortical activities is greatly unknown. Especially, the temporal profile of fMRI signals in tonic experimental pain has been poorly understood. Thus, this study was designed to characterize BOLD signal intensity time course during a continuous pain. Results showed strong differences in relation to gender, bilateral activations whether hemispheric contralateral activations to the side of stimulation were maximal and a cycle of BOLD effects with successive higher and lower activations during the stimulation.

### Bolivian adolescent risk behaviors and protective and risk factors in relation to ethnic self identification

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The study aimed at investigating the risk behaviour of bolivian adolescents. It is aimed at individuating protective factors and risk, with teenagers from La Paz and El Alto, using a self-report and anonymous questionnaire, controlling ethnicity, gender, and age. 1,719 Bolivians adolescents participated from 10 to 18 yrs. With respect to Self-identification ethnicity, 27% were Mestizo, 24% Aymara, 17% Hispanic-Latino, 9% White, 3% Quechua, 3% Amazon, and 1% African American; 16% did not self identified. The analyses showed strong relationship between ethnic self-identification and both levels of risk behaviour and protective and risk factors.

### Biofeedback assisted relaxation, hypnosis and music as a control procedure in panic disorder

**Campos, Patricia** Mexico, Mexico **Panic disorder** has been widely studied, nevertheless testing the effectiveness of psychological interventions have relevance in clinical settings. The main objective of the present study was to evaluate the impact of brief interventions in patients with panic disorder who attended the National Institute of Psychiatry in Mexico City. 18 men and 12 women aged 20-55 years were evaluated before and after different procedures. Results shows important clinical implications for hypnosis and biofeedback \*National Institute of Psychiatry México City \*\*Milton Erickson Institute of Mexico City \*\*\*National University Mexico City

### Evaluation of online therapy as a tool for the development of clinical skills in a university community site

**Cardenas Lopez, Georgina** Dept. of Psychology, UNAM, Mexico City, Mexico **Flores Plata, Lorena** Psychology, UNAM, Mexico city, Mexico **De la Rosa, Anabel** Psychology, UNAM, Mexico city, Mexico **Duran, Ximena** Psychology, UNAM, Mexico city, Mexico

Recently, computer-based treatment systems have been published with successful results. These new modalities are increasingly applied for depression

and anxiety disorders. These systems have not only reduced time and financial costs of evaluation and analysis, but have also facilitated an alternative for helping psychologists to learn new competencies for practice in telehealth field. This paper will present results of the implementation and evaluation of a teaching program, aimed at 17 Psychology students, that provides psychological services through Internet. Additionally, it will focus on clinical outcomes and the impact among participants of this innovative therapeutic modality.

### Influence of pregnancy related worries on childbirth

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**Objectives:** The purpose of this study is to analyze the relationship between worries related to pregnancy and mode of delivery. **Methodology:** Sample: 39 pregnant women from Fuenlabrada Hospital. **Measurement instruments:** Cambridge Worries Scale, SCL90-R and NEO-FFI. All questionnaires were complimented during the first trimester of pregnancy. **Results:** There were 18 eutocic deliveries and 21 non eutocic deliveries. A general linear model analysis was conducted controlling SCL-90 score and NEOFFI scores. Significantly higher scores in CWS were found in non eutocic deliveries ( $F(1,35)=4.73, p=0.037$ ). **Conclusions:** The diminution of worries could help improving labour outcomes and in the prevention of non eutocic deliveries.

### Sleep deprivation and suppression of a prepotent response

**Cavallero, Corrado** Dept. of Psychology, University of Trieste, Trieste, Italy **Jugovac, Davide** Psychology, University of Trieste, Trieste, Italy

**Goal:** To evaluate the impact of sleep deprivation on dominant response inhibition **Method:** 30 participants. Two conditions: Baseline (testing after a regular night of sleep at home); Deprivation (testing after one night of total sleep deprivation). **Results:** After sleep deprivation, Stop Signal RT (estimate of the inhibition process efficiency) was significantly worse ( $p<.05$ ) than in Base-line. **Conclusions:** Results suggest a considerable impairment of the efficiency of the inhibition process following sleep loss. This is in agreement with the hypothesis of an impairment of the frontal lobe functions when normal architecture of sleep is disrupted.

### White middle-class boys as "children-at-risk": Biographical literacy of teachers in primary schools

**Chamakalayil, Lalitha** Inst. für Pädagogik, Universität Oldenburg, Oldenburg, Germany **Who are "pupils at risk"?** The term, ambiguously used in Germany, lacks a unified definition. Qualitative case reconstruction interviews, recounting biographies of challenging 2nd grade pupils, were conducted with teachers to assess their perception of students. Surprisingly, teachers chose to talk about white, middle class boys, similar to their own socioeconomic and ethnic background. Parents were described as displaying attitudes supporting or mirroring their children's difficult behaviour: competitiveness, masculine, sexualised behaviour and defiance of rules seems to be interpreted by them as an advantage in a globalized, competitive marketplace. Teachers did not take



resilience-oriented development approaches for boys into consideration and were unaware of options for professional support; instead, doing class and doing gender processes were perpetuated.

#### **Innovation implementation in the public sector: An integration of institutional and collective dynamics**

**Chang, Jae-Yoon** Dept. of Psychology, Sungshin Women's University, Seoul, Republic of Korea **Choi, Jin-Nam** Business Administration, Seoul National University, Seoul, Republic of Korea

This study integrates institutional factors and employee-based collective processes as predictors of the implementation and innovation effectiveness. We propose that institutional factors shape employees' collective implementation efficacy and innovation acceptance, and that these employee-based collective processes mediate the effects of institutional factors on implementation outcomes. We tested this framework in the context of 47 agencies of the Korean Government. Three-wave longitudinal data were collected from 60 external experts and 1,732 government employees. The results reveal the importance of management support for collective implementation efficacy, which affected employees' collective acceptance of the innovation, and these collective employee dynamics mediated the effects of institutional enablers on successful implementation as well as the amount of long-term benefit.

#### **Advance organizers on learning and retention of facts and concepts**

**Chang, Moon K.** Mathews AL, USA

**OBJECTIVES.** This study examined the effect of advance organizers (AOs) on acquisition and retention of facts and concepts presented in a science film and the interaction of AOs and ability levels. **METHODS.** Sixteen undergraduate students were randomly assigned to four groups. A 2x2 factorial design was utilized and ANOVA (equal n) was performed separately on the immediate and delayed-retention test data. **RESULTS.** The results indicated that AOs increased learning and retention of facts and concepts. However, no interaction between AOs and the ability levels was found. **CONCLUSIONS.** Ability was non-significant but AOs were significant on performance.

#### **Spiritual, value-based leadership and job insecurity: The role of employees' work affects**

**Chen, Chin-Yi** Business Administration, National Yunlin University, Tainan City, Taiwan

**ABSTRACT** "Spiritual leadership"—a concept integrating leader values, attitudes, and behaviors, has been recently proposed and measured by Fry et al. (2005). This study examines whether spiritual leadership buffers the negative side of organizational behavior, e.g., job insecurity, and how affects play a role in the process. Questionnaire responses were collected from a sample of 458 Chinese employees from a variety of work settings in Taiwan. Results showed that spiritual leadership was mediated by positive affects to influence the "quantitative" type of job insecurity, and by negative affect to influence the "qualitative" job insecurity. Cultural issues and practical implications were discussed. **KEY WORD:** spiritual leadership, value-based leadership, job insecurity, work affect, Chinese employees

#### **The development of emotional intelligence in high school students in Taiwan**

**Chen, Lee-Chou** Education and Counseling, NTNU, Taipei, Taiwan

The purposes of this study are to conduct the indexes of emotional intelligence in high school students, and to explore the differences of EI among different background subjects. Using EI Scale to survey 2029 high school students, All results are as follow: (1) EI Scale is a valid and

stabled battery used to test emotional cognition, emotional expression, positive inspiration, emotional regulation, and emotional reflection in high school students. (2) There are significant differences of EI among gender, birth order and age. This standard test will be used to study the trend of psychological and behavioral performance in high school students.

#### **An analysis of the association between emotional expressivity and emotional labor**

**Cheung, Francis** Department of Psychology, CUHK, Hong Kong, China, People's Republic of : Hong Kong SAR

**Objective:** To examine the associations between different emotional expressivity dimensions (i.e. positive expressivity, negative expressivity, impulse strength) and emotional labor strategies (i.e. surface acting, deep acting, expression of naturally felt emotions). **Method:** A total of 476 Chinese human service employees were recruited (Male = 123, Female = 353) in this questionnaire survey. **Results:** Hierarchical regression analyses showed that even when work characteristics were controlled, negative expressivity was still a significant predictor of surface acting and deep acting while positive expressivity was a significant predictor of expression of naturally felt emotions. **Conclusion:** Future research should adopt the multi-dimensional approach to delineate the effect of emotional expressivity on emotional labor.

#### **Not distraction but intentional suppression can lead to long-term forgetting**

**Chie, Hotta** Dept. of Psychology, University of Nagoya, Nagoya, Japan **Kawaguchi, Jun** psychology, university, nagoya, Japan

Recent research indicates that intentionally suppressing retrieval of an unwanted memory impairs its later recall. In the current study, we examined whether a similar type of memory impairment can be observed when people simply divert attention away from an unwanted memory. This issue was investigated by using a modified Think/No-Think task, designed to prevent remembering the unwanted memories, instead of intentionally suppressing themselves. Although both intentional suppression and distraction impaired memory for to-be-avoided traces on an immediate test, only distraction caused the deficits in later recall. These findings suggest that intentionally suppressing retrieval, rather than distracting attention is crucial for the long-term forgetting regulation of unwanted memories

#### **Episodic memory inhibition and spreading activation: Evidence of episodic memory inhibition using the Think/No-Think task**

**Chie, Hotta** Dept. of Psychology, University of Nagoya, Nagoya, Japan **Hidetsugu, Tajika** psychology, university, nagoya, Japan **Nwumann, Ewald** psychology, university, nagoya, New Zealand

We examined whether to suppress an event intentionally could also impair memory for related events to the avoided one. After study unrelated pairs, participants were asked to avoid repeatedly thinking of the target words to a cue or recall it. Then, they were asked to recognize as accurately and quickly as possible. The test materials included the target words and two kinds of nonstudied words. The result showed that spreading activation was found to the nonstudied words relating semantically and orthographically to the target words. This finding suggests episodic inhibition can be widespread to the related representation to avoided memories.

#### **Humour in psychotherapy: A theoretical overview**

**Chiotis, Georgios** Dept. of Psychology, City University, London, United Kingdom

In the present paper, the intricate interrelationship between the use of humour and psychotherapy is discussed, along with the possible outcomes of this application. This is achieved by a brief literature review and examination of the concept of humour (types, definitions, theories), and how major figures in philosophy and psychology are incorporating it in their theories of personality. Afterwards, a brief image of the use of humour in therapy is presented, while discussing how it is applied in different schools of psychotherapy. Finally, the positive and negative aspects of the application of humour in psychotherapy are presented and discussed.

#### **Feelings of young people in acute postsuicide towards significant others**

**Chistopolskaya, Ksenia** Moscow, Russia

Aim of the study was description of feelings of young people in acute postsuicide towards their nearest relatives and acquaintances. Main hypothetic feelings were alienation and despair. 20 young people (15-25 years) after recent unsuccessful suicidal attempt were given modified PRISM (Buchi & Sensky, 1998) and repertory grid technique (Kelly, 1955). Descriptive, correlation and factor analyses were used for interpretation. Subjects reported to experience negative feelings in all their contacts. Alienation was seen through placing subjects against others or with least significant for them people. The results are useful for therapy of young people in acute postsuicide.

#### **Validation of the diagnostic test for dependent and avoidant personality disorder**

**Choi, Jin-Hoon** Dept. of Psychology, Chungbuk National University, Cheongju, Republic of Korea

The purpose of this study is to test reliability and validity of dependent personality disorder (DPPD) scale and the avoidant personality disorder (AVPD) scale in Diagnostic test for Personality Disorder (Seo & Hwang, 2006). Two PD scales, Interpersonal Dependency Inventory, Schema Questionnaire, Social Avoidance and Distress Scale, Dysfunctional Beliefs Test, Fear of Negative Evaluation Scale, and Inventory of Interpersonal Problems were administered to 566 college students and adults. Two PD scales were retested to sixty participants. Test-retest reliabilities of two PD scales were  $r=.82$ , and  $.84$  and Chronbach Alpha  $.74$ , and  $.73$ . Two scales were positively correlated with criterion related dependency and avoidance.

#### **The curriculum development for remediating basic skills of learning among primary school children with learning disabilities**

**Chookhampaeng, Chowwalit** Curriculum and Instruction, Mahasarakham University, Mahasarakham, Thailand

The purpose to develop a remedial curriculum for improving the basic skill of learning. Divided into four steps : Step one : The studying fundamental data. As the result, the curriculum for children with learning disability that consist of four steps: input, process, memory, and output. Step two : The developing curriculum. As the result, the curriculum was to remedial the perceptual skill, language skill, and cognitive skill. Step three : The implementation was conducted with the primary school children. The result was the all children's learning skill were higher than before at 0.01 of significant statistical level, but the language learning skill were lower than the criteria. Step four : The curriculum evaluation. The result from the parent seminar was satisfaction.

# **The effects of organizational policies supportive of gay and lesbian employees on job involvement**

**Church, Robin** Human Resources Management, Ryerson University, Toronto, Canada

This study examined the effects of organizational policies supportive of gay and lesbian employees (policies) on the job involvement of gay and lesbian employees (involvement). A survey was administered to 551 gay men and lesbians (182 in Canada, 369 in the United States). Structural analysis was used to assess relationships and mediation. There was no direct relationship between policies and involvement but discrimination on the basis of sexual orientation was found to mediate the relationship between policies and involvement. This study underscores the importance of policies in reducing discrimination ensuring a workplace in which gay and lesbians can fully contribute.

# **Two different extinction processes in the Barnes Maze**

**Claro La Rotta, Silvana** Psychology, Universidad Nacional, Bogota, Colombia **Vargas, Viviana** Psychology, Universidad Nacional, Bogota, Colombia **Cuestas, Marcela** Psychology, Universidad Nacional, Bogota, Colombia **Lamprea, Marisol** Psychology, Universidad Nacional, Bogota, Colombia **Troncoso, Julieta** Psychology, Universidad Nacional, Bogota, Colombia **Múnera, Alejandro** Psychology, Universidad Nacional, Bogota, Colombia

It was compared the extinction process in the Barnes maze after two acquisition protocols. Sixteen subjects acquired a spatial preference and twenty four hours later eight of them received a reinforced trial as test, while the others received two reinforced trials separated for a non-reinforced trail followed for seven extinction trials (for both groups). Statistical analysis showed a treatment x trial interaction, indicating a resistance to the extinction process in the group with the two reinforced trials separated for a non-reinforced one. Differences may be explained in terms of partial reinforcement during the tests.

# **Treatment outcomes from 41 years of conducting psychotherapy in private practice**

**Clement, Paul** Private Practice, South Pasadena, USA Of 2042 cases seen by a clinical psychologist, 126 came for assessment only, 249 dropped out during intake, and 76 were still in treatment at the time of data analysis. The patients fell into 186 diagnostic categories and ranged in age from 6 months to 88 years at intake. Of 1591 treated patients, 69% were improved at termination. Success rate varied greatly across diagnostic categories. There was a significant negative correlation between age and outcome. The correlation between number of sessions and percentage of cases improved was positive and significant. Treatment effect sizes were large.

# **Pragmatic Case Studies in Psychotherapy (PCSP): A new on-line journal**

**Clement, Paul** Private Practice, South Pasadena, USA Describes how to prepare manuscripts for PCSP, an on-line journal of systematic case studies in psychotherapy from a wide range of approaches. Usually two experts write comments about a given case study. Then the author of the primary article prepares a reply. The main article, the comments, and the reply appear as a set. PCSP began publication in 2005. Over time it will develop a very large database of case studies. Researchers and clinicians can access these articles on-line at no cost. The journal's editorial board comes from nine countries. The web address is <http://pcsp.libraries.rutgers.edu>

# **Localizing psychological usability evaluation methods**

**Clemmensen, Torkil** Dept. of Informatics, Copenhagen Business School, Fredriksberg, Denmark We investigated if, in the think aloud usability test, the moderator's cultural cognitive style (Nisbett, 2003) have to be similar to the user's to get valid results. Localized clipart was used in experiments in Copenhagen, Beijing and Guwahati. 33 university students and professors participated as test users. Anova analysis of problem detection rates and communication events suggested that cross cultural test conditions created a 'tourist' effect that emphasized the non-important problems with the product. More focus is needed on the cultural cognitive style of moderators versus users. The application of the think aloud method benefits from insight from cultural psychology.

# **Behavioral, electrophysiological and pharmacological Oxytocin action on sensorial perception of pain**

**Condés Lara, Miguel** Dipt. de Neurofisiología, Instituto de Neurobiología, Querétaro, Mexico **Martínez Lorenzana, Guadalupe** Neurofisiología, Instituto de Neurobiología, Querétaro, Mexico **Rojas Piloni, Gerardo** Neurofisiología, Instituto de Neurobiología, Querétaro, Mexico **Rodríguez Jiménez, Javier** Neurofisiología, Instituto de Neurobiología, Querétaro, Mexico Recently, we described that electrical stimulation of the hypothalamic Paraventricular Nucleus (PV) as well as the intrathecal Oxytocin (OT) administration inhibits nociceptive dorsal horn neuronal responses (Brain Res. 2006, 1881: 126-137) and produced analgesia in neuropathic rats (Pain 2006, 122: 182-189). In the spinal cord OT inhibits sensory glutamatergic transmission between afferent fibers and dorsal horn neurons. Our results suggest that OT action indirectly inhibits sensory transmission in dorsal horns neurons by spinal inhibitory GABA-a interneurons. This work reveals the importance of neuronal endogenous mechanisms involved in analgesia as well as their importance related with sensorial perception.

# **Automatic processing of intergroup information as a mechanism of subjective culture**

**Contreras Ibáñez, Carlos C.** Dept. of Social Psychology, UAM, Mexico City, Mexico **Cruz, Christian E.** Sociology, Social psychology, UAM, Mexico City, Mexico Several phenomena associated with subjective culture are expressed as cognitive contents externally elaborated and acquired without mental effort, supervision, awareness and mindfulness, just features defining automaticity or unconscious processing. This work objective is to correlate scores of cultural orientation with heuristic use frequency, spontaneous attribution habits, self-monitoring and implicit stereotyping, under the hypothesis that interdependent self-construal use more often this processing way, due to social norm fulfillment habit. This was tested with 152 Mexico City university students who responded appropriate instruments and participated in implicit association test studies. Correlations generally follow the hypothesized pattern, which are interpreted within culture-cognition framework.

# **The development and initial validation of a revised attributional style questionnaire**

**Creed, Peter** School of Psychology, Griffith University, Gold Coast, Australia **Travers, Katrina** Applied Psychology, Griffith University, Gold Coast, Australia **Morrissey, Shirley** Applied Psychology, Griffith University, Gold Coast, Australia Despite its wide use, the internality subscale of the Attributional Style Questionnaire (ASQ) rarely correlates with depression and ill-health, and its factor structure does not reflect the three dimensions of explanatory style. To address these shortcomings, we rewrote items, provided individual item-stems, and administered the revised ASQ to 320 adults. EFA identified six factors, representing positive and negative aspects of the three dimensions of explanatory style. We then administered the scale to 409 adults. CFA confirmed a good fit, indicating support for an improved measure. Future studies need to examine construct validity and determine scale's suitability to measure explanatory style.

# **Work values and small business behaviour**

**Cubico, Serena** Psicologia e Antropologia, Università di Verona, Verona, Italy Small businesses (SMEs) are very dependent on little groups of decision-makers. This research intends to highlight the link between the decision-maker's work values and organizational behaviour. The instruments used are the Italian version of the Questionnaire Work Importance Study/Work Values Scale and an in-depth interview; subjects are 47 SME owners. We found that specific orientation work values emerged which are significantly correlated to specific organizational choices: Materialistic-Oriented with (negative) spin-off behaviour in employees, Self-Oriented with presence of company's web page, Other-Oriented with presence of company's web page and membership in Entrepreneurial Associations, Independence-Oriented with hiring of foreigners (negative).

# **Some relevant aspects in negotiation efficacy and rationality**

**Cunha, Pedro** Faculty of Human and Social Sc, University Fernando Pessoa, Porto, Portugal **Pereira, Pedro** Faculty of Human and Social Sc, University Fernando Pessoa, Porto, Portugal Our research studies the relation between negotiation efficacy and rationality. We have followed Mastenbroeks integrative model (1987, 1989) for negotiation efficacy and the Bazerman and Neales perspective (1993) about rational negotiation. These variables are measured by the CEN II (Negotiation Efficacy Questionnaire) with a sample (N=204) divided in four subgroups according to their different negotiation experiences. We have crossed a set of sociodemographical variables with negotiation efficacy and negotiation rationality. We have confirmed the existence of differences in negotiation efficacy associated to marital status, academic qualifications, age and profession. Concerning negotiation rationality, age, academic qualifications and profession seem to play an important role.

# **Organizational commitment in Spanish and Italian volunteers: A comparative study.**

**Dávila, Celeste** Social Psychology (Sociology), Complutense University of Madrid, Madrid, Spain **Díaz-Morales, Juan Francisco** Work and Individual Difference, Complutense University of Madrid, Madrid, Spain **Pasquini, Marianna** Psychology, University of Florence, Florence, Italy **Giannini, Marco** Psychology, University of Florence, Florence, Italy The attitudes toward the organization have important in the explanation of the continuity of the volunteers in the organizations. We compared Spanish and Italian volunteers using the Organizational Commitment Questionnaire (OCQ) to assess organizational commitment. Confirmatory and multiple-groups confirmatory factor analysis were used to assess factor structure and structural invariance across countries. The results showed that a two-factor model of organizational commitment best characterizes the OCQ structure of both samples. Factorial invariance across countries was demonstrated for both factors "strong involvement" and "strong acceptance". These findings are discussed in relation to previous research on organizational commitment and volunteerism.



### Revised behavioral rating scales on infant temperament: A description of the scales

**D'Ocon, Ana** Department of Psychology, University of Valencia, Valencia, Spain **Simó Teufel, Sandra** Dept. of Psychology, University of Valencia, Valencia, Spain This study is focused on the measurement of infant temperament in a structured episode. It was carried out through behavioral rating scales on ten temperament dimensions grouped in: Emotional tone, Interaction, Action and Self-regulation. The purpose of the study is to describe the scales and to analyze how they adjust to the construct they are supposed to measure. Subjects in the study were 40 children. They were assessed at 6 and 12 months. Results are a preliminary analysis of these infant temperament dimensions, and include reliability and validity aspects of this observational instrument.

### Introduction to Japanese Psychological Rehabilitation Therapy and its application on aged people

**Dadkhah, Asghar** Dept. of Clinical Psychology, University of Welfare & Rehab., Tehran, Islamic Republic of Iran

Psychological treatment in rehabilitation often deals not only with the stresses imposed by disability and altered life circumstances but also with issues of aging, hospitalization and medical tests and procedures. PTSD may be an aspect of patients' emotional responses as they relive the accidents or traumas, sometimes in the form of flashbacks or nightmares. Naturally in the course of continuing treatment, psycho-rehabilitationists may deal with range of evolving and changing responses to the whole spectrum of effects of disability and its life-altering impact. In this report we try to introduce Japanese Psychological Rehabilitation Therapy and its Application on aged people

### Get better social skills: Computerized theory of mind training for children with intellectual disability

**Danielsson, Henrik** SIDA - IBL, Linköping University, Linköping, Sweden **Sundqvist, Anett** IBL, SIDA & Linköping Universit, Linköping, Sweden **Rudner, Mary** IBL, SIDA & Linköping Universit, Linköping, Sweden **Hofer, Nina** IBL, SIDA & Linköping Universit, Linköping, Sweden **Rönnerberg, Jerker** IBL, SIDA & Linköping Universit, Linköping, Sweden

The effect of a computerized theory of mind training program was investigated in children with intellectual disability with a mean age of 12 years. The training time was 15 minutes every school day for 5 weeks and took place in the participant's school. Compared to an age matched control group with intellectual disability, who performed computerized training not related to theory of mind, there were training effects for some theory of mind measures, but not for all. The results are promising and form a basis for further research.

### Cross-cultural differences in attention, mood, and behavior problems: Japanese and U.S. post-secondary students

**Davis, J. Mark** School of Liberal Arts, Georgia Gwinnett College, Lawrenceville, USA **Takahashi, Tomone** Education, Shinshu University, Nagano, Japan **Shinoda, Haruo** Psychology, Risho University, Tokyo, Japan

This presentation reflects initial results of a larger collaboration between researchers in Japan and the U.S. comparing self-report of attention, mood, and behavior problems in post-secondary students. Counter to initial hypotheses, results (t-tests) indicated that Japanese students reported more past (elementary school) and recent attention problems on a DSM-IV-TR-based ADHD checklist. Differences in past problems were primarily due to greater report of inattention than hyperactivity or impulsiveness for the Japanese students. Comparisons (correlations) between ADHD checklist scores and mood and behavior problems (Achenbach scales) will also be reported. Future studies will examine differences in the factor structure of ADHD symptoms.

### Latin American foreign students in Rio Grande do Sul: Adaptation strategies in acculturation process

**de Alencar Rodrigues, Roberta** Dept. de Psicologia, UAB, Barcelona, Spain **Neves Strey, Marlene** Psicologia, PUCRS, Porto Alegre, Brazil

This paper presents the migration process of Latin American foreign students in Rio Grande do Sul. We have tried, through interviews with six Latin American foreign students, to identify the easiness and the hardships found by that group in the acculturation process and their adaptation strategies. We have also sought to verify if men and women of this study experienced migration in different ways. The findings points out that the greatest difficulties are related to housing, food, climate and language, while the easiness refers to interpersonal communication and attitudes such as persistence. Due to the globalization scenario, we propose that universities be prepared to received such a group, facilitating their access to housing and language courses.

### The rapid effects of psychoanalysis in the children's clinic

**de Barros, Rita Maria Manso** Psicologia Clinica, UERJ / PGPSA, Rio de Janeiro, Brazil

Objectives: Starting from in inquiry on the situations of clinic experience in the current times, it points to analyze the rapid effects of psychoanalysis nowadays. The psychoanalysis can help children and his parents Method: The method employed was the analyses of various clinical reports on a university clinic of psychology; consider the suffering and the results in a short time. Results: Many children and his parents were found that the pain is reverted in pleasure and the suffering changes in satisfaction on the life experiences. Conclusions: The psychoanalysis is one of the best treatments to help children and his parents.

### A study on the consequences of within-organization staff homogeneity on an organization's creativity and innovativeness

**de Cooman, Rein** Dept. of I/O Psychology, Vrije Universiteit Brussel, Brussel, Belgium **de Gieter, Sara** Work & Organizational psych, Vrije Universiteit Brussel, Brussel, Belgium **Pepermans, Roland** Dept. of I/O Psychology, Vrije Universiteit Brussel, Brussel, Belgium **Jegers, Marc** Work & Organizational psych, Vrije Universiteit Brussel, Brussel, Belgium

Within I&O psychology, high person-organization fit resulting from value congruence is mostly mentioned for its positive consequences on employee attitudes. However at the organizational level, theoreticians often warn for negative outcomes. As put in the ASA theory, at the long term organizations are occupied by a set of like-minded employees. It is predicted that this homogeneity has negative effects on innovativeness and creativity. To test this hypothesis, the present study questions a group of teachers as well as their principals. Using mixed-method technique, respondents are asked to evaluate their person-organization fit, as well as the school's creativity and innovativeness.

### Questing for social identity after merger organization

**Deng, Zhiwen** School of Art & Law, Changsha Uni.of Science&Techn., Changsha, People's Republic of China

Questing for social identity after merger organization Base on Tajfel's SIT and a social identity model of postmerger identification (Daan Van Knippenberg, et al), a social identity model of Chinese

merger-university was constructed by us. According to the model, we have workout a social identity measuring scale for merger-university. There are four components in the "scale", namely organizational identity strength, organizational emotion, interpersonal and person-organization relationship, leadership. After measuring 437 teachers who come from 14 postmerger colleges and interviewing with 32 teachers, four findings are discovered. It is the most ravishing that interpersonal relationship is the most effective factor for individual's identification and behavior in postmerger organization.

### Miniature saccades mimic as neural oscillations: Revisiting the induced gamma band response

**Deouell, Leon** Dept. of Psychology, Hebrew University, Jerusalem, Israel **Greenberg-Yuval, Shlomit** Psychology, The Hebrew U. of Jerusalem, Jerusalem, Israel **Tomer, Orr** Psychology, The Hebrew U. of Jerusalem, Jerusalem, Israel **Keren, Alon** Psychology, The Hebrew U. of Jerusalem, Jerusalem, Israel **Nelken, Israel** Neurobiology, The Hebrew U. of Jerusalem, Jerusalem, Israel

Objectives: To test the view that human induced gamma band EEG response (iGBR) reflects neural oscillations related to object representation. Methods: We recorded iGBRs induced by visual stimuli, together with video eye-tracking and single-trial analysis; Results: We show that individual iGBRs are time-locked to the onset of miniature saccades (MS) and reflect spike potentials likely of ocular muscles origin. The characteristic average 200-300 ms iGBR latency is related to a post-stimulus increase in MS probability, which depends on stimulus features. Conclusions: The typical 200-300 ms broadband iGBR is not related to neural oscillations but to an increase in MS rate.

### The organisation of number facts in memory

**Depestel, Isabel** Experimental Psychology, KULeuven Campus Kortrijk, Kortrijk, Belgium **Verguts, Tom** Experimental Psychology, Ghent University, Ghent, Belgium

A recent connectionist model of retrieval in single digit multiplication that tries to explain the organisation of number facts in memory, was examined. The model states that candidate answers to an arithmetic problem cooperate or compete, which causes the well-known five, tie and size number effects. Additionally, it predicts a new number effect which would increase with aging, while the other effects would decrease. The presence and development of all effects were tested with children and adults of various ages. The predictions were confirmed, which offers new insights for current arithmetic models and allows a better understanding of human memory.

### Prosociality does not moderate the relations between severe levels of psychopathic traits in children and poor parent-child relationships

**Diamantopoulou, Sofia** Dept. of Psychology, Uppsala University, Uppsala, Sweden **Rydell, Ann-Margret** Department of Psychology, Uppsala University, Uppsala, Sweden

We examined the unique and shared relations between prosociality, psychopathic traits, i.e., symptoms of Oppositional/Defiant/Disorder (ODD) and callousness/unemotionality (CU), and parent-child relationships (PCR). Parents rated ODD, CU, prosociality, parent-child conflicts (PCC), and parental involvement (PI) for 1199 ten-year-old children. Effects were examined by hierarchical regression analyses. With control for the other variables, prosociality was negatively related to poor PCR; ODD were uniquely, positively related to PCC; both ODD and CU were negatively related to PI. Moderating effects of prosociality indicated that it may not act as a protective factor against poor PCR among children with severe levels of psychopathic traits.

# Cardiovascular risk factors, MRI-lesion patterns and the development of Mild Cognitive Impairment

**Drugaj, Martha** Neurologie, Universitätsklinikum Essen, Essen, Germany **Mönnighoff, C. Dragano, N. Wilhelm, Hans** Neurologie, Universitätsklinikum Essen, Essen, Germany **Möbus, S. Todica, Olga** Neurologie, Universitätsklinikum Essen, Essen, Germany **Siegrist, J. Jöckel, K. H. Erbel, R. Weimar, Christian** Neurologie, Universitätsklinikum Essen, Essen, Germany

**Objective:** The objective of this study was to examine the influence of 12 medical and psychosocial cardiovascular risk factors on the development of a Mild Cognitive Impairment (MCI) and the relationship between MCI and MRI-lesion patterns within the context of the Heinz Nixdorf RECALL (HNR)-Study. **Methods:** Participants were 74 men and women from the HNR-Study cohort, who showed a reduced performance in a dementia screening. MCI was diagnosed by cognitive tests. **Results:** First analyses indicate an influence of some cardiovascular risk factors on the development of MCI. **Conclusions:** Controlling cardiovascular risk factors can reduce the risk of developing MCI.

## The cub of psychotherapy

**Dorofte, Tatiana** Dept. of Education, Technical University of Iasi, Iasi, Romania

**Objectives:** The presentation of a methodological-analytic model for the systematization of the existing psychotherapies and the forecast of future models, that was published in 1986. The methodology, resembling to that of Guilford model of the intellect, led us to the creation of a three-dimensional model whose referential axes allowed us to obtain 30 categorised cells and the delimitation of an evolutionary corssbar from 1.1.1. cell to 3.2.5. cell. **Results:** With this instrument we classified a great number of the 200 known psychoterapies up to nowadays and we forecasted the emergence of the integrative orientation in psychotherapy.

## Nap now, profit later: Memory consolidation in gifted adolescents with sleep debt

**Dresler, Martin** Inst. für Psychiatrie, Max-Planck-Institut, München, Germany **Genzel, Lisa** Psychiatrie, Max-Planck-Institut, München, Germany **Steiger, Axel** Psychiatrie, Max-Planck-Institut, München, Germany **Chronic** sleep deprivation has been repeatedly shown to impair neural functioning. We tested the effects of daytime naps on verbal learning in 64 gifted adolescents who had experienced moderate to severe sleep loss for 10 days. The subjects were tested on two consecutive days with a story-learning and a word-learning task. The stories and words had to be recalled 5 hours after learning with or without a 45 minutes nap, and in a retest session one week later. The daytime naps had a beneficial effect on verbal learning which became even more pronounced after one week.

## Standardization of novel questionnaire for autobiographical memory (AM) and evaluation of emotional stimuli

**Drobtz, Reinhard** Clinical Psychology, Faculty of Psychology, Vienna, Austria **Derntl, Birgit** Clinical Psychology, Faculty of Psychology, Vienna, Austria **Kryspin-Exner, Ilse** Clinical Psychology, Faculty of Psychology, Vienna, Austria

**Aim** of study 1 was the preclinical standardization of an AM-questionnaire, which consists of 22 visual stimuli. A population of 180 students and non-students participated. Additionally, we focused on the AM-specificity. Prior to the AM-investigation, 100 other healthy subjects rated each AM-picture for 6 possible triggered primary emotions (study 2). It is intended to use the material in fMRI-studies. Significant effects of gender and education on the ratings of both studies will be presented. Data

analysis of the investigation of AM-specificity indicates that gender and education are the significant factors of AM-retrieval. Therefore, further AM-studies should consider both variables.

## Development of inspection time: The role of accelerated education for gifted children

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185 gifted children aged from 9 to 13 years old (94 in accelerated education and 91 in normal education) were tested individually on a typical visual inspection time task. Children in accelerated education outperformed their age peers slightly in normal education by shorter IT. But the main effect of education was not significant,  $F(1,179)=2.27$ ,  $p>.05$ . The result suggests that experience doesn't play an important role in the development of processing speed and is consistent with the prediction of global trend hypothesis. The implications of this for wider theoretical interpretations of the development of processing speed are discussed.

## Group norms and group identification: The application of social identity constructs to childhood bullying

**Duffy, Amanda** Coombabah, Australia

This study explored whether group norms and group identification were relevant to the explanation of childhood bullying. Participants ( $N = 169$ ), aged 5 to 12 years, were asked to pretend that they had been placed in a team for a drawing competition. The norms of the team were then manipulated (bullying versus helping) and the child's identification with the team also assessed. An analysis of variance revealed that group norms and identification interacted to influence children's bullying intentions. This finding has important implications for our understanding of bullying, as well as for the development of anti-bullying interventions.

## Relationship between moral development and altruism and coping style in personality factors of the students in Tehran

**Ebrahimi, Azam** Psychology, Shahid Beheshti University, Tehran, Islamic Republic of Iran

This study investigates the relationship between moral development and altruism and coping style in personality factors. 360 subjects were selected through multi-stage cluster sampling. D.M.T, Big(5) and (C.S.Q) as well as the statistical methods of Anova, HSD and regression used. results indicated that the emotional coping has a reverse relationship with neuroticism and altruism in speech freedom situation:(RDT), but it have a direct relationship with gender and moral development at 4 stage I. Avoidant-detached style has a direct relationship with the moral development at 4 stage. The rational style has a direct relationship with openness, agreeableness, conscientious, neuroticism and altruistic tendencies of speech freedom situation : (RDT) but it reverse with gender.

## Exhaustion in the evening as a function of workday and social stressors: A multilevel analysis

**Elfering, Achim** Department of Psychology, University of Bern, Bern, Switzerland **Grebner, Simone** Department of Psychology, University of Michigan, Bern, USA **Semmer, Norbert** Karl Department of Psychology, University of Bern, Bern, Switzerland

**Objectives:** This field study related social stressors at work to psychological recovery from work. **Methods:** During three working weeks 34 male employees reported their recovery status after work and in the evening at 9 p.m. **Results:** In multilevel analysis of 482 evening measurements sleep quality,

recovery status after work, weekdays, and social stressors were related to recovery status. An interaction between social stressors at work and weekdays indicated a more progressive decline in those reporting a high level of social stressors at work. **Conclusions:** Social stressors at work accelerate the loss of resources across consecutive work days.

## Removal of front vs back office work in call centre: An intervention study

**Elfering, Achim** Department of Psychology, University of Bern, Bern, Switzerland **Bestetti, Marco** Department of Psychology, University of Bern, Bern, Switzerland **Schade, Volker** Centrum für PersonalManagement, CPMO, Bern, Switzerland

**Objective:** Evaluation of work intervention in call centre. Tasks of former front and back office work were unified. **Methods:** Within a pre- and posttest design including a control group, 265 agents reported data on work characteristics, well-being, and subjective performance. **Objective data** on performance were also collected. **Results:** There were positive effects of the intervention on former front office agents in all dependent variables. Former back office agents however, showed mixed results, including a decline in quality of work and well-being. **Conclusions:** Interventions in Call Centre should carefully consider differential effects depending on former work design.

## Understanding workers' perception of bullying in the workplace: A cross-cultural study

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The main objective is to analyze the workers perception about bullying in the workplace, comparing 4 different samples (two from Central-America and two from Southern Europe). The data was obtained from employees who attended mobbing prevention courses and from employees who didn't. A single open question was used: "What do you understand when you think about bullying at work? Significant differences ( $p < .001$ ) were found for the type and direction of abuse when comparing the different sub samples. Friedman chi-square revealed differences ( $p < .001$ ) between the categories of mobbing, however, Kruskal-Wallis showed non-significant differences between sub samples. Results and limitations are discussed

## Psychophysiological reactions to fear and disgust pictures

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The aim of the present study was to compare psychophysiological responses to pictures associated with fear and disgust. Participants were exposed to a series of 40 emotional pictures, previously classified as fearful, disgust, pleasant or neutral. Skin conductance, heart rate, startle response, and levator labii superioris EMG-activity were recorded continuously. Each picture was also evaluated in two dimensions – affective valence and arousal. The results showed a clear differentiation between pleasant, unpleasant and neutral images on all measures, however, only the levator EMG-activity, with larger responses to disgust pictures, could differentiate fear from disgust.



### Alphabet book reading by senior kindergarteners: Does their letter knowledge dictate their eye movements?

**Evans, Mary Ann** Psychology, University of Guelph, Guelph, Canada **Saint-Aubin, Jean** Psychology, Université de Moncton, Moncton, New Brunswick, Canada

Twenty children ages 59 to 71 months read an alphabet book while their eye movements were monitored. Results revealed that children spent significantly more time on the illustration than on the letter or the word, which did not differ one from the other. Most importantly, after controlling for vocabulary knowledge, the number of letters known by a child accounted for a significant amount of variance in the latency before fixating the letter, and the time spent fixating the word. Thus, children must have acquired a critical mass of letter knowledge in order for alphabet books, to elicit attention to print.

### Effects of a brief behavioral treatment for insomnia in individuals with HIV: A pilot study

**Fair, Christine** BBHH-Scottsdale, Scottsdale, USA  
**Ramstad, David** 116B, Carl T Hayden VAMC, Phoenix, USA

Insomnia is associated with HIV impacting quality of life and medical outcome. This pilot study explored the effectiveness of a brief behavioral treatment for HIV infected individuals. Six adults with HIV participated in a behavioral treatment utilizing sleep education, restriction, and modified stimulus control to improve length/quality of sleep. Measures including sleep diaries, sleep quality, sleep drive, and insomnia severity were completed at baseline, week one, and post-intervention. Improvements in sleep drive and recognized sleep habits impacting sleep quality were observed post-intervention. Significant reductions in Insomnia were not observed. Future research recommends increased number of sessions and adherence to protocol.

### A longitudinal study on the development of theory of mind understanding in Chinese children

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Cross-sectional, scaling methods with children raised in Western societies show theory-of-mind understandings develop in consistent sequences. Do longitudinal data confirm the same sequences? And, do children from quite different sociocultural circumstances evidence the same sequences? To address these questions we used a theory-of-mind scale with 140 Chinese preschoolers from Beijing and 135 English-speaking children from the US and Australia. Focally, we followed 31 Chinese children longitudinally, with multiple scale assessments. Longitudinal results confirm the cross-sectional findings of a common sequence of understanding (with the same steps longitudinally and cross-sectionally), as well as sociocultural differences in children's developing theories of mind.

### The development of the operational thinking in Chinese school children

**Fang, Fuxi** Institute of Psychology CAS, Beijing, People's Republic of China

How does operational thinking develop in school children and which factors effect its development? We addressed these questions by assessing children longitudinally at ages 7, 9 and 12 who come from various qualities of schooling on four Piagetian's

cognitive tasks. A horizontal and vertical decalage for the acquisition were found. Concrete reasoning was manifested in some general stagelike manner combined with individual variations. A phenomenon of error-of - growth was identified in the process of acquiring conservation-of -volume. The inter-individual differences in development were constrained by the interaction of internal factors and external factors. Low- level ability children gained more benefits from schooling.

### Anger assessment with the STAXI-2:

#### Psychometric properties on Iranian university students

**Farahani, Mohammad Naghy** Dept. of Psychology, Tarbiat Moallem University, Tehran, Islamic Republic of Iran

The aim of this research is preliminary report of Spielberger's State-Trait Anger Expression Inventory -2 (STAXI-2) for students (aged 20-29 years old) of Isfahan University in Iran. This study presents initial data on a Persian version of the inventory. The subjects were 600 students from Isfahan University and 30 psychiatric patients from Esfahan Farabi hospital. The results provide initial support for Spielberger's factorial model of anger in a Persian sample, also was indicated an acceptable validity and reliability for the inventory. The results of this study are in consistent with the spielberger, s report (1999).

### A and B Personality types: Which effect on mental health?

**Fathi-Ashtiani, Ali** Behavioral Sciences Research C, Baqiyatallah University of Med, Tehran, Islamic Republic of Iran **Mahdavian, Alireza** Department of Psychology, Science and Culture University, Tehran, Islamic Republic of Iran **Ziglari, Hamideh** Department of Psychology, Science and Culture University, Tehran, Islamic Republic of Iran

The study, investigates the relationship between the mental health and personality types of university students. 170 students (85 females and 85 males) were selected. The instruments used comprised General Health Questionnaire, and A and B Personality Questionnaire. The t-test and multiple regression coefficient were used to analyze the data. There was a significant difference between students with A and B personality types in somatic symptoms, anxiety, social dysfunction and depression. That means that the students with B personality type have better mental health. Moreover A and B personality types have 12% and 6% of variance of mental health.

### Qualitative methods in pre-post-evaluation of a group psychotherapy for chronic pain: An exploratory study

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Objectives: The aim is to compare perceptions, coping strategies and disabilities in chronic pain experience as a way to describe patients improvement. Methods: Subjects are patients at the Pain Clinic which have assisted to a 12 weekly sessions of group psychotherapy and fulfilled a set of quantitative tests and an open questionnaire related to chronic pain experience before and after the treatment. In addition with quantitative measures,

qualitative methods shed new light to pre-post-treatment evaluation. Data analyses procedures are specified according to grounded theory guidelines with support of the computer-based ATLAS/ti instrument. Results and conclusions are in a processing stage.

### Differences between immigrant and non immigrant origin families in paternal stress during the hospitalization of a son

**Fernandez Castillo, Antonio** Develop.-Education. Psychology, University of Granada, Granada, Spain **Vilchez-Lara, Maria José** Anesthesiology and reanimation, Hospital Complex of Jaen, Jaén, Spain **Sada-Lazaro, Emilio** Develop.-Education. Psychology, University of Granada, Granada, Spain

We studied some of the variables that have been related to paternal stress during pediatric hospitalization, seeking for differences between indigenous and immigrant parents. In our study participated 137 parents with hospitalized children in the region of Andalusia (Spain). 85 of them were non immigrant parents and 52 immigrants. Our data indicate that no significant differences exist, in the general level of stress, between the two groups of parents. Nevertheless, it was observed differences among the associated variables with stress in the two groups. We discuss the important implications of our results for hospital context health care and institutional politics.

### Anxiety in immigrant parents during hospitalization of their children

**Fernandez Castillo, Antonio** Develop.-Education. Psychology, University of Granada, Granada, Spain **Sada-Lazaro, Emilio** Develop.-Education. Psychology, University of Granada, Granada, Spain **Vilchez-Lara, Maria José** Anesthesiology and reanimation, Hospital Complex of Jaen, Jaén, Spain

Our first objective is to analyze the presence of anxiety in immigrant parents during the hospitalization of a son or daughter, looking for differences in function of the geographical origin. Gender differences are looked for in second place. In our study there participated 75 immigrant and 75 non immigrant parents randomly selected. All of them had children hospitalized in Andalusia, Spain. We found anxiety in immigrant population like in non-immigrants but no significative differences between the two groups. No gender differences were found in immigrants. The emotional alterations of parents are important for the achievement of wellbeing during pediatric hospitalization.

### Comparative analysis of on-line versus traditional tutorship use in a university educational innovation project

**Fernandez Castillo, Antonio** Develop.-Education. Psychology, University of Granada, Granada, Spain  
The objective of this work is to carry out a comparison analysis between the main systems of tutorship in high education. 312 students of the Faculty of Educational Sciences of the University of Granada, aged between 18 and 38, answered voluntarily the assessment instruments. A cluster analysis indicated two large groups of subjects: those that show a preference for the use of traditional tutorship, and those that prefer the virtual tutorship. A majority of the students prefer traditional tutorial action. None of the two main alternatives is clearly better than the other, each one of them have advantages and objections.

### "The story of my life": Analysing homeless' and professionals' perspectives on homelessness

**Ferreira, Joaquim Armando** Fac.of Psychol. and Ed. Scienc, University of Coimbra, COIMBRA, Portugal **Mairos Nogueira, Sónia** Fac.of Psychol. and Ed. Scienc, University of Coimbra, Coimbra, Portugal  
The main goal of this research was to study factors that enhance the probability of becoming homeless,

being homeless over time and successful (re)insertion in society. To do so, we developed a multi-method qualitative approach that included participant observations during street interventions ( $n > 50$ ) and semi-structured interviews with currently and formerly homeless ( $n = 20$ ). From their life stories it became clear that some dimensions coexist in the three situations (e.g., social policies, job instability, relations, vocational volatility). However, only some of them are essential to the process of successful reinsertion, namely: relationships, training and work opportunities, counseling and specific intervention strategies.

#### Assessing the locus of task-switch costs within the processing stream

**Fiedler, Anja** *Inst. für Psychologie, Universität Tübingen, Tübingen, Germany* **Schröter, Hannes** *Psychologisches Institut, Eberhard-Karls-Universität, Tübingen, Germany* **Ulrich, Rolf** *Psychologisches Institut, Eberhard-Karls-Universität, Tübingen, Germany*

When participants are required to switch from one task to another task, switch-costs are usually observed in reaction time (RT). It is unclear, however, where these costs occur within the processing stream. We employed the lateralized readiness potential (LRP) to localize this switch-cost effect within the RT processing stream. The experiment required participants to switch between tasks, which differed in their response sets. As expected, RT increased when participants had to switch from one to another task. Most importantly, however, the LRP results indicate that this increase is associated with slower premotor and motor processing compared to a non-switch condition.

#### Emotional expression and leadership effectiveness: A study of Singaporean Chinese workers

**Fu, Jeanne Ho Ying** *Nanyang Business School, Nanyang Technological University, Singapore, Singapore*

The current research explores the effect of emotional expression on perceived leadership effectiveness. Past research (Tiedens, 2001) has shown that for Euro-Americans, angry emotion conferred more power to leaders than sad emotion. I propose that East-Asians perceive angry emotion differently than do Euro-Americans. East-Asians perceive angry emotion as less conducive to effective leadership because anger is perceived as manifesting loss of emotional control. Singaporean Chinese workers first viewed video clips in which a leader conducted a meeting expressing either angry, calm or sad emotion. Participants then rated effectiveness of the leader. Results showed that calm leaders were perceived as better leaders than angry and sad leaders.

#### Japanese life-patterns in the 2000's: Student volunteering in Japan, China and the UK

**Furukawa, Hideo** *Dept. Intercultural Studies, Ryukoku University, Ohtsu, Japan* **Yorifuji, Kayo** *Research Institute, International Economy and Work, Osaka, Japan* **Yamashita, Miyako** *graduate school of humanities, Okayama University, Itami, HYOGO, Japan*

Volunteering is one of the most important activities which enhance the quality of life for students as well as company employees. So as to explore the differences of volunteering among three countries, a preliminary survey was conducted on campus. Interim findings indicated by analyzing the questionnaire data of three universities are follows. Firstly, students in the UK are more often engaged in volunteering than any of the others. Secondly, students in Japan are willing to participate in volunteering potentially. Thirdly, students in China are sometimes mobilized to so-called compulsory

volunteering. Some lessons learned from volunteering in the UK were discussed.

#### Changes of reward system in Japanese management and the effect on the contextual performance

**Furukawa, Hisataka** *Human-Environment Studies, Kyushu University, Fukuoka City, Japan* **Ikedo, Hiroshi** *Human Sciences, St. Thomas, Amagasaki, Japan*

Success of Japanese organizations has been attributed to employees' higher organizational commitment and teamwork caused by 'equality' based on seniority reward system. Recently, almost all Japanese organizations altered seniority system to outcome-based one. This study examined, using path analysis, the effect of outcome-based system on employee's task and contextual performance through survey for 6 Japanese organizations. Results revealed the introduction of outcome-based system did not have necessarily direct and negative effect on employees' contextual performance. Specifically, new reward system had impact first on the employees' procedural and distributional justice perception. Justice perceptions influenced employees' teamwork orientation, and then contextual performance.

#### Inhibitory mechanisms in verbal and emotional processing in early Parkinsons Disease: Global or specific impairments?

**Fusari, Anna** *Basic Psychology II, UNED Univ. Nac. Ed.a Distancia, Madrid, Spain* **García Rodríguez, Beatriz** *Basic Psychology II, UNED Univ.Nac.Ed.a Distancia, Madrid, Spain* **Elgring, Heiner** *Psychology, Julius Maximilian University, Würzburg, Germany* **Molina Arjona, José Antonio** *Neurology, Hospital XII de Octubre, Madrid, Spain*

In this study we have tested inhibitory abilities in early and unmedicated Parkinsons patients (PD). We compared performance of a group of PD patients and controls on a verbal Stroop test, an emotional facial identification cued task and an emotional inhibitory task with congruent and incongruent trials (emotional expressions/corresponding nouns). Results showed an impaired performance of PD patients in the three tasks, although this deficit was more pronounced in the Stroop and the emotional inhibition task. We did not find correlation between these two inhibitory tasks, suggesting that inhibition is a multidimensional process and is not affected by stimulus type.

#### Prevalence of sexual coercion against dating partners by male and female university students worldwide

**Gámez Guadix, Manuel** *Universidad Autonoma de Madrid, Madrid, Spain* **Straus, Murray A.** *Family Research Laboratory, University of New Hampshire, Durham, USA*

Objective: The purpose of this study was to provide information on the extent to males and females perpetrated sexual coercion against a dating partner in 32 national contexts around the world. Method: This research is part of the International Dating Violence Study. Samples were collected at 68 universities in all major world regions. Results: Overall, about 26% of the men and 19% of the women reported perpetrating some form of verbal sexual coercion, and 2.4% of men and 1.8% of women admitted to some form of physically forced sex. Conclusions: Findings showed that there were large differences between nations in the rates of sexually coercive behavior and that women as well as men engage in sexual coercion.

#### Psychological variables related to treatment outcome perception in chronic pain patients

**Gómez Pérez, Lydia** *Personalidad, Evaluac. y Trab., Universidad de Málaga, Málaga, Spain* **López Martínez, Alicia Eva** *Personalidad, Evaluación y Tra, Universidad de Málaga, Málaga, Spain*

The aim of this study is to examine the simultaneous predictive power of personality factors, pain coping and medical adherence, in order to explain how patients evaluate their medical treatment outcomes. 73 non-malignant chronic pain patients were assessed using the Clinical Millon Multiaxial Inventory, the Vanderbilt Coping Strategies Questionnaire, the Participant Compliance Reporting Scale, a self-reported measure of medication adherence and the Patients' Treatment Outcomes Perception Questionnaire. Canonical correlation analysis revealed that are patients with a less adjusted personality and which tend to use more active pain coping responses those which perceived the medical treatment as less effective.

#### What do we think about when we compare two Japanese Kanji numbers?

**Gan, Qingwei** *Cognitive Psychology Lab., Ochanomizu University, Tokyo, Japan* **Ishiguchi, Akira** *Cognitive Psychology Lab, Ochanomizu University, TOKYO, Japan*

Multi-digit Arabic numeral system is a place-value system which contains both shape and position information, but Japanese Kanji numeral system only uses shape information to represent the base and power dimension of a number. Three experiments were conducted to investigate what we think about when comparing two multi-digit kanji numbers simultaneously. The results show that (1) the multi-digit kanji number is represented compositionally in comparison; (2) the length of kanji number influence the decision time; (3) the shape information works internally regardless of whether it is used to represent base or power.

#### Analyzing the safety climate and safety behavior relationship on aircrew

**Gao, Juan** *Shanghai, People's Republic of China* **You, Xuqun** *Department of Psychology, Shaanxi Normal University, Xi'an, People's Republic of China*

On the assumption that the relationship between safety climate and safety behavior is mediated by perceived barrier and situation awareness, we propose four structural equation models. Factor analysis is applied to test the instruments and to verify the goodness of fit of the proposed models, and an optimal model is thus picked out. Three conclusions are drawn: (a) Safety climate has indirect effect on safety behavior via perceived barrier and situation awareness; (b) Safety climate has indirect effect on situation awareness via perceived barrier; (c) Safety climate has strong direct effect on perceived barrier, which indicates it is necessary to eliminate the excursive attitude of aircrew to further ensure aviation safety.

#### Loyalty to supervisor in Chinese context: Antecedents and outcomes

**Gao, Yan** *Dept. of Psychology, Beijing Normal University, Beijing, People's Republic of China* **Zhang, Peng** *Human Resource, Huawei Technologies Co., Ltd., Shenzhen, People's Republic of China*

The paper is to test that Loyalty to supervisor is a more effective predictor of job-related outcomes than organizational commitment in China, a highly relationship-oriented context. 389 subjects from 3 companies answered questionnaire measuring 7 constructs including Loyalty to Supervisor, Organizational commitment, and job satisfaction. Their OCB and task performance was rated by supervisors. Result from regression analysis indicates that loyalty to supervisor was more strongly associated with in-role performance, organizational citizenship behavior than organizational commitment. The data also indicate that "Guanxi", interactional justice, perceived supervisor's Personal Morality, and Goal Efficiency are the important antecedents of subordinate's loyalty to supervisor.



### 11-M as seen by children

**García Renedo, Mónica** Oficina de Cooperación, Universitat Jaume I, Castellón de la Plana (Spain), Spain  
**Valero Valero, Mar** Oficina de Cooperación, Universitat Jaume I, Castellón de la Plana (Spain), Spain  
**Gil Beltrán, José Manuel** Oficina de Cooperación, Universitat Jaume I, Castellón de la Plana (Spain), Spain  
**Caballer Miedes, Antonio**

Our aim is to analyse the graphic representations made by schoolchildren on the 11-M terrorist attack (Madrid, 2004). The sample is made up of 116 students of a state school in Castellón (Spain). Ages range between 8 and 12, with an average age of 9.78 (s.d.=1.29). The drawings and writings were analysed descriptively through an inter-rater analysis. This study offers knowledge on the emotional and cognitive world of children with regard to large-scale human tragedies. This knowledge may prove very useful to devise intervention strategies that allow parents, teachers and psychologists to understand and help children after the event of traumatic situations of this kind.

### The role of the universitat Jaume I in emergencies and disasters

**García Renedo, Mónica** Oficina de Cooperación, Universitat Jaume I, Castellón de la Plana (Spain), Spain  
**Valero Valero, Mar** Oficina de Cooperación, Universitat Jaume I, Castellón de la Plana (Spain), Spain  
**Gil Beltrán, José Manuel** Oficina de Cooperación, Universitat Jaume I, Castellón de la Plana (Spain), Spain

Unfortunately, there is a piece of news about floods, earthquakes and terrorist attacks on a daily basis. As well as material and personal damages, these situations have a psychosocial impact in the population. By taking into account all these factors, the Universitat Jaume I has a new work area: the "Disasters Intervention and Humanitarian Aid Area". There are two specific projects in this area: a) A course in International Humanitarian Aid b) Psychosocial Observatory on Resources in Disaster Situations (OPSIDE-UJI). The main objective in this poster is to show the main two projects in this area that our University is currently working on.

### The risk and protective factors of behavior and emotional problems of children with bronchial asthma: The role of parents personality and family context

**Garckija, Renata** Klinical and Organizational ps, Vilnius University, Vilnius, Lithuania  
 Bronchial Asthma (BA) is diagnosed to 1 of 50 Lithuanian children. It is suggested that the psychopathology among BA children is by great degree related to parental and family context. By our research we seek to evaluate the impact and interplay of parental and family variables, such as parents personality, parenting styles and conflict resolution strategies, to psychological adjustment of children with BA. We will compare the clinical group with controls and make our conclusions on the basis of Structural Equation Modeling analysis.

### Application of NEO-PI-R test and analytic evaluation of it's characteristics and factorial structure among Iranian university students

**Garousi Farshy, Mirthaghy** Dept. of Psychology, Tabriz University, Tabriz, Islamic Republic of Iran

This study investigates the existence of Five-factor model of personality in Iran. A Persian translation of revised NEO personality inventory was prepared. Content validity and cultural relevance of it, were assessed. Final version of test was administered to a sample of students from Iran universities (N=1717, aged 18-24). Separate principal component analyses with varimax rotation were conducted on the intercorrelations of 30 facet scores. Results showed existence of five major factors. A sixth factor was also extracted and called "Narcissism". This factor was different within groups, males and females.

Concurrent validity and reliability of Persian form were acceptable.

### Beyond cultural Specific: Cross- cultural management in the context of globalization: General trends and psychological implications

**Genkova, Petia** Inst. für Psychologie, Universität Passau, Passau, Germany

The Study tries to pinpoint the extent to which a given corporate culture is applicable in a different cultural context. These Studies present the results from really HR- Audits. One study is about an establishment of an American company in Germany (supply industry). The second study is about a German establishment in the United States (mechanical engineering industry). The results clearly reveal that the acceptance of a corporate culture in a foreign cultural context is very low among the employees of the host country. The attempt to implement a given concept of motivation programs and human resources development measures has held negative effects instead of positive effects on work efficiency and on the commitment of staff. General trends are discussed.

### "Short-term" neuropsychological interventions on children and adolescents with Attention Deficit Hyperactivity Disorder (ADHD) and learning disabilities

**Giger, Elisabeth** Kinderpsychologie, Z.E.N., Biel, Switzerland  
**Hassink, Ralph-Ingo** Kinderpsychologie, Z.E.N., Biel, Switzerland  
**Giugliano, Sara** Kinderpsychologie, Z.E.N., Biel, Switzerland

Aim of this study is to evaluate the outcome of "short-term" neuropsychological interventions on children and adolescents with ADHD and comorbid learning disabilities. Up to now we followed 25 patients, aged 10-18 years with ADHD diagnosis for a short neuropsychological treatment. After a detailed neuropsychological examination, specific individual academic success-strategies were implemented. Parents and teachers were also specifically instructed. Questionnaires of change of behaviour and academic achievement assessment were used to evaluate the success. All patients improved significantly their academic, learning and attitudinal characteristics and they were able to sustain these improvements after intervention.

### ADHD and learning disabilities

**Glazman, Janna** Psychology Department, Moscow State University, Moscow, Germany

Objectives: To prove relationship of ADHD with learning disability, to find out its neuropsychological mechanisms and efficient methods of neuropsychological remediation. Methods: Luria battery, Conners ADHD questionnaire. Results: ADHD was revealed in 81% of learning disable children. Neuropsychological assessment proved its relation with decreased brain activation and underdeveloped executive functions. A complex program of motor and cognitive remediation aimed to activate the child ("saturation" with activity instead of prohibit it) and to form an ability of self-control. Conclusion: The proposed system of neuropsychological remediation does not look for a "button" to switch off child's hyperactivity, but it forms strategies to control it. It favors both child attention and success in learning.

### Relational reasoning in the abstract and motor domains: An fMRI study

**Golde, Maria** Cognitive Neurology, MPI CBS, Leipzig, Germany  
**Schubotz, Ricarda I.** Cognitive Neurology, MPI CBS, Leipzig, Germany  
**von Cramon, D. Yves** Cognitive Neurology, MPI CBS, Leipzig, Germany

The study aimed at differentiating brain correlates of relational processes in the motor and abstract domains using fMRI. A reasoning paradigm adapted from Raven's Progressive Matrices was employed with subjects performing in an "abstract"

condition and an "action" condition. Integration of relations was either required or not. Results showed a broad, predominantly left-lateralized fronto-parietal network to be activated for relational integration in both domains. Reasoning with abstract as compared to reasoning with action stimuli activated distinct networks. More detailed analyses revealed differential involvement of regions within the frontal cortex. Results underline functional relevance of premotor cortex in purely cognitive tasks.

### Dimensions of symbolic brand image perception in Poland

**Grbaniuk, Oleg** Experimental Psychology, Catholic University of Lublin, Lublin, Poland

With the goal of identifying dimensions of brand personality among Polish consumers, 870 people were tested from 16-34 years of age. Respondents described 37 brands from various product categories (utilitarian, symbolic/utilitarian, symbolic). The results confirm a five factors structure obtained in previous research studies (Aaker, 1997, 2001). The isolated dimensions are Competence, Excitement, Openness to others, Sophistication, and Snobbery. The result of the carried out research is the Polish Brand Personality Scale composed of the presented five dimensions, thirteen facets and thirty nine personality traits. Particular scales obtained good internal and test-retest reliability.

### Dimensions of symbolic brand image perception in Poland

**Grbaniuk, Oleg** Experimental Psychology, Catholic University of Lublin, Lublin, Poland

With the goal of identifying dimensions of brand personality among Polish consumers, 963 people were tested from 16-34 years of age. Respondents described 24 brands from various product categories (utilitarian, symbolic/utilitarian, symbolic). The results confirm a five factors structure obtained in previous research studies (Aaker, 1997, 2001). The isolated dimensions are Competence, Excitement, Openness to others, Sophistication, and Snobbery. The result of the carried out research is the Polish Brand Personality Scale composed of the presented five dimensions, thirteen facets and thirty nine personality traits. Particular scales obtained good internal and test-retest reliability.

### Performance anxiety during a musical performance and a non-musical, social performance situation

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Literature reports mixed results on the relationship between musical performance anxiety and social anxiety. Only few studies compare them in an experimental design. In the current study we compared subjective performance anxiety, cortisol, and heart rate in 31 music students while playing in a concert and while giving a speech in front of an audience. We expected that the level of performance anxiety is similar for the musical and non-musical performance. Conclusions with respect to the nature of musical performance anxiety and its relationship to social anxiety disorder are discussed.

### Why do Polish students learn English and how do they perceive this language? Psychological image of English language and motivation for learning English at Polish students.

**Grabarska, Anna** Lublin, Poland

Investigating reasons for learning English and connection between the type of motivation and "personality" of English and its similarity with ideal I. 160 students filled in the questionnaire of motivation and the ACL. ANOVA and post hoc test were used. Individuals with high or medium

level of intrinsic and high level of extrinsic motivation perceive English more positively and perceive their ideal I as more similar to personality of English than individuals with low level of intrinsic and medium level of extrinsic motivation. English is becoming "world language". The personality of English is supposed to be one of the factors influencing the motivation for learning English.

**Two points of view on motives for learning English and on psychological image of this language. A cross-cultural study involving Poland, United Kingdom and the United States of America.**

**Grabarska, Anna** Lublin, Poland

Investigating reasons for learning English by Polish students given by themselves and by native speakers from UK and the USA. Also an attempt at describing the "personality" of English by Poles and native speakers. 180 subjects filled in the questionnaire of motivation and the ACL. Descriptive statistics were used. Both groups (Poles and native speakers) indicated definitely more extrinsic than intrinsic motives for learning English by Polish students. In description of the "personality" of English Poles chose only positive adjectives while native speakers also some negative ones. English is becoming "world language". The language and motivation for learning it may be perceived differently by various nations.

**Psychological models of social inference**

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A matching heuristic model of social inferences was compared with two integration models, an unweighted-cue model and a weighted-cue model. University students saw pictures of targets (coded for gender, age, attractiveness, smiling, ethnic identity, and ethnic garb) and judged their liberalness (Study 1) or intelligence (Study 2). In both studies, the weighted-cue model significantly outperformed the unweighted model. The heuristic model, using in most cases just one or two cues, was as accurate as the weighted-cue model in predicting intelligence judgments and significantly better for liberalness judgments. We discuss the psychological plausibility of these models and their susceptibility to overfitting.

**The study on the personality of pupils in China**

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Elementary school is a critical phase in which children form and develop their own personality. It is also a key link in carrying out quality education. In order to scientifically grasp the characteristics and law of pupils' personality development and make feasible policies, targeted at 489 pupils in China, and based on research and data in «Evaluation Scale of Children's personality Development». This research sums up the characteristics in age and differences in sex concerning pupils' personality development in urban areas of China.

**Cognitive modeling of in-group preference effects in an implicit association task**

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Two different accounts of the cognitive processes involved in the Implicit Association Test (IAT) were examined. In this study (N = 84) a new IAT capturing ethnic group preferences was applied and

yielded IAT effects in good accordance with the literature. Mierke & Klauer's (2001) probabilistic task switch neglect model accounted for the IAT effects (though moderated by age) while the QUAD model (Conrey, et al. 2005) did not fit the data. In light of the QUAD models' capability to independently estimate in-group preference and out-group derogation, possible explanations for the misfit are discussed and plausible extensions of the original model's parameter assumptions are suggested.

**Changes in Body Mass Index (BMI) and eating disorder symptomatology over the life cycle in western Canadian men and women: ethnic contrasts**

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**Boisvert, Jennifer A.** Population Research Laboratory, University of Alberta, Edmonton, Alberta, Canada  
Objectives. Changes in BMI and disordered eating over the life cycle of men, women, whites and non-whites were investigated. Methods. A representative survey (n = 1200) of Western Canadians. Drive for Thinness, Bulimia and Body Dissatisfaction were analyzed with ANOVA. Results. Differences in Bulimia between whites and non-whites were due to BMI variations. Drive for Thinness was higher for women at every age except for those 65 + years. Body Dissatisfaction was greatest in the obese and in whites. Conclusions. Canadian ethnic differences in disordered eating are unique. Gender differences become minimal with advanced age.

**The mass man as defector: Implications of Ortega's "The rebellion of the masses" on social dilemma research**

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The objective of this study is to develop measurements of spiritual vulgarity of the masses based upon Ortega's "the revolt of the masses" (1930) and to investigate relations between the measurements and defective behaviors in various social dilemmas. For this purpose, we implemented two questionnaire surveys targeting at 200 university students and 1000 households in Japan, respectively. The factor analysis on the vulgarity measurements produced two subscales; autistic attitude and contemptuous attitude. Furthermore, obtained data from both surveys indicated that the vulgar scales were correlated with tendency of defective behaviors in social dilemmas, e.g. anti-environmental behavior and destructive behavior of landscape.

**Studies on Yips(2)**

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Objectives Hayashi and Yagi(2006) suggested that the yips were relevant to characteristics of perfectionism. This survey has been carried out to show some relationship between perfectionism and other personality traits. Methods Survey with perfectionism scale, obsessional inventory and MMPI to 99 university students(2007). Results We found Concern over Mistakes and Doubting of Actions scales are more correlate to MMPI and LOI sub-scales than Desire for Perfection and Personal Standard scales. Conclusions We suggested such negative factors of perfectionism more affected to activate neurotic conditions. To reduce such conditions we suggested it is useful to apply several relaxation programs.

**Is self-leadership more than volitional efficacy?**

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Volitional efficacy can be separated into self-regulation and self-control (Kuhl, 1998). Questionnaires assessing volition seem to show a high overlap to the measurement of self-leadership (Neck & Manz, 2002). This was tested in a study with a sample of 323 students using an exploratory factor analysis. The results indicate that both concepts load on distinct factors. This could be explained by theoretical distinctions between self-control, which is mainly a descriptive whereas self-leadership is mainly a normative construct. Based on these findings it is hypothesized that self-leadership skills are necessary to show self-controlled behaviour.

**Implicit and explicit memory in ADHD**

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Aloisi, McKone and Heubeck (2004) reported that children with ADHD showed problems in explicit memory performance but not in implicit memory compared to matched controls. Their memory tasks were of a visual nature. The current study asked if similar findings can be obtained presenting auditory memory tasks. Boys with ADHD were matched by age to boys without a diagnosis and given working memory, category exemplar generation and category cued recall tests. Poorer results on the digits backwards test of working memory were obtained as well as the expected explicit/implicit dissociation in ADHD. Implications for theory and learning with ADHD are considered.

**Sibling numbers and age at menarche**

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The association of sibling numbers and age at menarche was evaluated in 48,905 Japanese school-girls. The material was collected in February, 2005. Status quo data on menarche was analyzed by probit analysis with the number of children in a family. The median age at menarche tended to increase significantly ( $p < 0.001$ ) with each increasing sibling, up until 3 or more siblings. While the total age at menarche was 12.22 years old, the age at menarche among a one-child-family was 12.0 years old. But, the influence of sibling numbers was less than that of so-called secular trend.

**Work-family conflict: Reducing conflict and enhancing gain with a behavioral family intervention**

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**Hahlweg, Kurt** Institut für Psychologie, TU Braunschweig, Braunschweig, Germany  
Working parents encounter a variety of conflicting duties in their work and family lives. The present study examined the efficacy of a parenting program especially designed to their needs, including topics such as positive parenting, stress management, and



balancing work and family life. For this purpose 87 parents have been randomly assigned to an experimental group and a waitlist-control condition. Effect sizes for individual, family-related, and work-related outcome variables, such as work-to-family and family-to-work conflict, stress, and life satisfaction are presented. The results will be discussed with regard to implications for the work-family research and workplace health promotion.

#### **Children's rejection sensitivity for intimate relationships in Japan**

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Children high in rejection sensitivity (RS) anxiously expect rejection and are at risk for interpersonal and personal distress. In this study, we developed a measure to pick up children high in rejection sensitivity in Japan. Japanese children (9-12 years-old) high in rejection sensitivity avoided intimate relationships with same-sex friends. They didn't want the relationships with friends to continue for a long time. The result implicated that children high in rejection sensitivity seek security through avoiding proximity to their friends.

#### **Deliberation or Intuition?: The impact of decision modes with regard to efficiency of simple versus complex probabilistic inferences**

**Horstmann, Nina** Research on Collective Goods, Max-Planck-Institut, Bonn, Germany  
Recent studies suggest advantages of unconscious information processing compared to deliberation with regard to decision quality (Unconscious Thought Theory; Dijksterhuis, 2006). Glöckner and Betsch (in press) conduct with the Parallel Constraint Satisfaction Rule a mathematical specification of these processes and show that individuals are able to integrate complex information automatically in an astonishingly narrow time frame. Combining these approaches an experiment based on probabilistic inferences is designed to investigate the efficiency of intuitive and deliberate decision modes depending on low vs. high complexity. It is expected that intuition yields good decisions regardless of complexity level, while deliberation results in suboptimal decisions under high complexity.

#### **Psychological Information Engineering (PIE)**

**Hu, Zhan** Dept. of Psychology, East China Normal University, Berlin, Germany  
PIE is an interdisciplinary field that relates to psychology, information science, automation technology and other applied sciences. In order to realize the informationization for psychology, PIE fully applies contemporary information technology to the research and application of psychology. Simply speaking, we can regard PIE as two main parts: theoretical and engineering. The former focuses on the psychological methodology based on the information technology. The latter strives for developing practical information system, tools, products that aim to accelerating the research and application of psychology. The integration and interaction of the two parts certainly will lead psychology to a new situation.

#### **A modified paradigm in P300-based lie detection using autobiographical information**

**Hu, Xiaoping** Dept. of Psychology, Zhejiang Normal University, Jinhua, People's Republic of China  
This current study used a modified paradigm of P300-based lie detection to examine its efficiency. Unlike the previous researches which combined deceit and recognition together, this paradigm separated these two cognitive processes. 14 participants were instructed to press the button by a signal displayed on the screen which indicate "be honest" or "be deceptive" after a name. The results showed

a significant difference on P300's amplitude between recognition/nonrecognition regardless of the participants' overt behavior at site Pz ( $p < .005$ ) and Cz ( $p < .000$ ). Subsequent MANOVA (stimulus  $\times$  sites) revealed the recognition/nonrecognition cognitive process had significantly different P300 amplitude topographies.

#### **Individual differences in causal reasoning development**

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The purpose of the paper was to investigate individual differences in the development of causal reasoning ability and to identify correlates with the differences. Specifically, gender, working memory capacity, and background knowledge were investigated as correlates in the study. Inter- and intra-individual differences were also investigated among contents of causal reasoning: Psychological, behavioral, and physical contents. Participants were about 1,000 students in grades 1 to 6. Results of the study showed that gender and background knowledge were significant correlates with causal reasoning, and that inter- and intra-individual differences were found in the different content areas of causal reasoning.

#### **Four-aspect model of resilience: Cognition and utilization of personal and environmental resources**

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Resilience is the capacity of people to cope with harmful events. We classified the resilience in regard with four aspects of resource: cognition and utilization of personal and environmental resources. As this classification, four scales measuring these resources were developed. Next, we estimated the difficulty and discrimination of each item in these scales using Item Response Theory. The results showed the middle to low difficulty and the middle discrimination. Therefore, we suggest that four scales are adequate for measuring resilience of normal people and promote the clarification of the resilience more than to date.

#### **Revelation effect on autobiographical memories**

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We investigated the revelation effect for autobiographical memories under two different conditions: Either one of the words in half of the items of a Life Event Inventory (LEI) was presented as an anagram or an unrelated word was presented as an anagram before half of the LEI items. Participants were asked to solve the anagram and then rate their certainty that the event described in the LEI sentence happened to them before the age of ten. The responses of 92 undergraduate and graduate students showed that solving an anagram before a sentence did not affect the ratings for any lists although revealing a word in the sentence by anagram solution resulted in higher ratings for one list.

#### **Age differences in work motivation**

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To date there are very few empirical studies, especially with larger samples, which have investigated the relationship between employee age and levels of motivation. This paper examines age differences in work motivation in a UK sample of more than 9000 individuals who completed a comprehensive motivation questionnaire for selection or development purposes. Age differences were examined separately for men and women and by considering whether relationships between age and motivation are non-linear. Results generally support propositions from the literature which suggest a shift in people's motivators rather than a general decline in motivation with age.

#### **Comparing social anxiety in Chinese, Spanish and North American adolescents**

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This study examined the differences in social anxiety between adolescents from China, Spain and US. The results revealed that: (a) Chinese adolescents scored significantly higher than North American and Spanish adolescents on the on the SAS-A total and its subscales; (b) Chinese adolescent – both boys and girls – scored higher on the SAS-A and its subscales than both North American adolescents (boys and girls) and Spanish adolescents (boys and girls), and (d) Chinese adolescents – both 10th grade and 12th grade – scored higher on the SAS-A and its subscales than North American adolescents (10th grade and 12th grade).

#### **Decisions under ambiguity: Effects of sign and magnitude**

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Decision under ambiguity (uncertainty with unknown probabilities) has been attracting attention in cognitive science and behavioral economics. However, recent neuroimaging studies have mainly focused on gain domains while little attention has been paid to the magnitudes of outcomes. In this study, we examined the effects of the sign (i.e. gain and loss) and magnitude of outcomes in ambiguity aversion and the additivity of subjective probabilities in Ellsberg's urn problems (Camerer & Weber, 1992). We observed that (i) ambiguity aversion was observed in both signs, and (ii) subadditivity of subjective probability was not observed in negative outcomes.

#### **Mere exposure to face increases social attention: Vocal stroop interference effect as revealed in N400**

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Automatic attention to a partner's vocal affect is likely to index interpersonal sensitivity in social interaction. We demonstrated that exposure to a schematic face reliably increases this sensitivity. Participants were asked to listen to emotional words spoken in emotional tones of voice, and judge the meaning of each word as positive or negative while ignoring the attendant vocal tone. Half of the participants viewed schematic faces during the judgment. As predicted, greater interference from vocal tone was found in the face condition than in the no-face condition as measured

by response time (Study 1) and electro-encephalography (Study 2).

**Psychoeducational intervention to maintain flow activities in everyday life: Improvement in stress response and affective state**

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The purpose of the study was to examine the improvement in stress response and affective state by the intervention to increase flow activities for non-autotelic group. Prescreening non-autotelic group (N=28) according to no flow activity in everyday life, 15 experiment participants consented to execute flow activities in two weeks. After one month interval, intervention group reported more flow activities than control group. The ANOVAs on Depression (Anxiety), Liveliness, and Cognition-thought of helplessness in two groups before and after intervention showed significant differences. The intervention indicates to be important for promoting flow activities and improvement in stress response and affective state.

**The relationship between relational aggression and social intelligence of preschool children**

**Isobe, Miyoshi** Meiji University, Kyoto, Japan  
Relational aggression harms others through damage to their relationships. Previous studies suggest that having a high social intelligence could facilitate the use of such aggressive behavior. This study investigated the relationship between relational aggression and social intelligence among preschool children. The social intelligence of 64 preschool children was assessed in terms of their knowledge of peer relationships and peers' preference in toys and in activities by means of an interview using a small scale replica of their classroom and preschoolers' figures as props. As expected, the results revealed several differences in social intelligence between relational aggressive and non-aggressive children.

**Development and evaluation of the Japanese version of the DVD: Bandura's social cognitive theory: An introduction**

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Effects of verbal and visual presentations on learning the DVD, "Bandura's social cognitive theory: An introduction," were investigated and effective Japanese captions were developed. Graduate students with little knowledge of the theory responded to tests using texts and images. All the topics were rated as interesting. Comprehension tests on aggressive modeling, moral disengagement, and efficacy, showed high correct responses. Test of applying acquired knowledge to daily life revealed that the social cognitive theory could be helpful to the participants. These results are discussed in relation to the development of learning and instructional guides to increase the effects of the DVD.

**Prosocial personality, USA vs Buddha teaching, the similarity and differences**

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The objective of this study was to compare the similarities and differences between prosocial personality concept that developed in the united state and Buddha teaching. The meaning of each concept will be discussed. The researcher hypothesizes that prosocial personality in Buddha teaching has had wilder meaning than prosocial personality developed in united state. Two concepts were measured

to test the similarities and differences by canonical correlation statistic with 200 Thai people. The results and discussion will be followed in the proceeding.

**Reasoning about spatial and nonspatial relations in Nonverbal Learning Disabilities (NLD)**

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The study investigated the reasoning about spatial and nonspatial relations in three groups of children aged 11-14: children with NLD, children with verbal learning disabilities (VLD), and children without learning disabilities who served as controls. Besides figure-nonspatial problems, the other three reasoning tasks (figure-spatial, verbal-spatial, and verbal-nonspatial) were four-term series problems. The results found the NLD group didn't differ from control group on nonspatial reasoning and experienced specific difficulties with spatial problems. The VLD group developed well in figure-nonspatial problems, but showed deficits in other three tasks. The results indicated a dissociation between spatial and non-spatial relation reasoning in NLD.

**Distinct brain plasticity and mechanism of language and perception: A longitudinal case study**

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It is well known that children with early brain lesion can acquire nearly normal cognitive function. However, the underlying mechanism of such plasticity is still unclear. We addressed this question with multiple methods. 5 years after haematoma removal under left endocranium, the 11-year-old boy acquired fully normal vision and basically normal language skill. MRS data showed the left cortex has less neuron than the right one. FMRI data indicated normal activation in left occipital area but abnormal one in other left cortex in visually language task. These results suggested distinct brain plasticity and mechanism of visual perception and language.

**Comparison between MMPI and MMPI-2**

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**Moon, Kyung-Joo** Psychology, Maumsarang, Cheongju, Chungbuk, Republic of Korea  
The purpose of this study is comparing T-scores of subscales and code types between the MMPI and MMPI-2. MMPI and MMPI-2 were administered to college students (N=156, age=22.8±2.1) divided two group for counterbalancing the order effect. Time interval of administration of two tests was one week. Paired T-tests were calculated to compare on

the 3 validity scales and 10 clinical scales of the MMPI and MMPI-2. Comparisons of mean T-scores for validity scales and clinical scales showed differences on scales L, K, Hs, Pd, Pa, Pt. The concordance rate for highest scale was 37.8%; for 2 code types, 19.2%.

**Comparison of relaxation and respiration training in the treatment of headache: The importance of the cost effectiveness**

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**Prieto, Maria** Psychology, Universidad Comillas, Madrid, Spain  
**Espinar, Isabel** Psychology, Universidad Comillas, Madrid, Spain  
**Carrasco, Maria Jose** Psychology, Universidad Comillas, Madrid, Spain  
**Oliva, Beatriz** Psychology, Universidad Comillas, Madrid, Spain

Despite the well-known success of some behavioural treatments for management of headache, new approaches with lower training times and higher adherence are needed. Thus, the main goal of the current study is to study the efficacy of a respiration training treatment, with higher costs effectiveness, in a sub-clinic sample. Using an experimental approach, the respiration procedure, muscular relaxation, and placebo condition are compared. Intensity and frequency of headaches, as well as the impact of headache in daily life are compared in the three experimental groups. Implications for headache treatments are discussed.

**Social role perceptions in Romanian female students and a group of eating disordered patients**

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Key words: gender roles, Romanian, female students, eating disorders  
The study attempts to enlarge the perspective of risk for eating disorders (ED) in Romania, a culture that is progressively subscribing to Western social norms. We compared 202 young female students and 37 ED patients, using a grid questionnaire for social roles. Investigated groups displayed significant differences between the social ideal and the female gender stereotype and they both showed discrepancies between self-image and ideal-self. Students perceived themselves as more goal oriented and feminine and their ideal-self disclosed more career related features, as compared to ED patients. Data contribute to extending evaluation of promoted social models in Eastern Europe.

**Myself in the mirror: Comparison of Korean and Saudi Arabian young women's self-construction while trying on lipstick**

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Self develops in constant interaction with the socially meaningful environment. Young women (18-25 years of age) in South Korea and Saudi Arabia were interviewed in an individual experimental setting where they first put on a given lipstick (13 trials with different shades) in front of a mirror while explaining their feelings about each stimulus. Highly differentiated positively valued meaning complexes concerning shades of bright red were found in all cases in Saudi Arabia. Korean women were hesitant to accept comparable colors in their social contexts. The results are discussed within the cultural psychology of Ernest Boesch (Fernweh/Heimweh dialectics).

**Behavioral and emotional problems of preschoolers: Results of epidemiological study in Lithuania**

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The aim of the present study is to find out the prevalence of behavioral and emotional problems of children aged 2 to 5 years old in Lithuania. More than one thousand parents and about seven hundred caregiver-teachers rated the preschoolers' with Strengths and Difficulties Questionnaire (SDQ, Goodman, 1997). The environmental and familial risk and protective factors related to the preschoolers' emotional and behavioral problems (such as parental education, social-economic status, urban vs. rural residence, etc.) are presented and analyzed. The prevalence of the psychological problems is also discussed in the developmental and cultural perspective. This study is supported by Lithuanian State Science and Studies Foundation

#### **Zimbardo time perspective inventory: The adaptation process of the Lithuanian version**

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ZPTI is one of the mostly used method of time perspective research which is translated to many languages. The aim of this report is to present the ZPTI adaptation process in Lithuania and psychometric qualities of ZPTI Lithuanian version. The sample consisted of 353 students. The factory analysis that was performed showed that the same factors as in original inventory can be distinguished, though some items fall to other scales (especially many items from Present Fatalistic Scale). Cronbach's alphas range from 0.647 (Present Fatalistic) to 0.813 (Past Negative Scale), these indices from original method differ marginally.

#### **Reading the face: Comparing the Facial Action Coding System (FACS) as a video-based method and the Electromyogram (EMG) as a biophysiological method**

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Facial muscular reactions can be assessed either with the Facial Action Coding System (FACS) or the Electromyogram (EMG). In the present study, these two methods were compared with respect to their similarities, differences and ability to differentiate basic emotions. Bipolar EMG recordings and video recordings for FACS analysis were conducted simultaneously while subjects underwent emotion elicitation. Results indicate that EMG is as reliable as FACS in differentiating both positive and negative emotions and within negative emotions. Furthermore, EMG provides additional information on low level changes that are not detectable by FACS, a procedure that relies on observable changes.

#### **Social structure and causal attribution: The influence of relational mobility**

**Kamaya, Kengo** Dept. of Behavioral Science, Hokkaido University, Sapporo, Japan **Yuki, Masaki** Behavioral Science, Hokkaido University, Sapporo, Japan

Prior research has revealed cross-cultural differences in attribution styles. East Asians tend to make more external attributions, whereas North Americans tend to make more internal attributions. This research aims to unpack the underlying mechanism of these cultural differences in terms of different social structures across culture. In particular, we focus on the relational mobility, defined as "the

amount of opportunities to form new relationships, when necessary in a given society/social context". As predicted, participants who found themselves living in a more relationally mobile environment made stronger internal, as contrasted with external, attribution than those in a less mobile environment.

#### **Development of a Japanese version of the BIS/BAS scale**

**Kamide, Hiroko** Osaka University, Osaka, Japan **Daibo, Ikuo**

This study aimed to develop a Japanese version of the BIS (behavioral inhibition system)/BAS (behavioral activation system) scale to assessing two general motivational systems that underlie behavior and affect. 169 students evaluated a Japanese version of the BIS/BAS scale, MAS (Manifest anxiety Scale), and MPI (Maudsley Personality Inventory). Factor analysis revealed that the Japanese version of the BIS/BAS scale consisted of four factors and corresponded to an original scale (Carver and White, 1994). Correlations among scales also corresponded to the original result. And convergent and discriminant validity in the form of correlations with alternative measures were reported.

#### **Implicit affect influence and explicit judgments: Role of reflective system of evaluation**

**Karwowska, Dorota** Dept. of Psychology, University of Warsaw, Warsaw, Poland

In two studies the impact of implicit affect on judgments was limited by activation of reflective system of evaluation. In Study 1, 90 subjects were randomly assigned to one of two conditions: neutral (subjects compared symbols and decided if they were the same or different); reflective (subjects evaluated "good and bad" aspect of patriotism). In Study 2, we repeated the procedure using different manipulations. In both Studies "the affective priming paradigm" was used as a measure of implicit affect influence. The results show less implicit influence in reflective conditions than in neutral and control ones.

#### **Examination of maintenance factors in school attendance through text mining**

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Unlike the traditional concept of truancy support which focuses on promoting individual's academic adaptation abilities and improving academic maladjustment, the purpose of this study was to investigate the positive factors which promote school attendance from a total point of view, including environmental adjustment. Combination of 319 college students participated in a Correspondence analysis along with a questionnaire on the reason for continuously attending school. As a result, males showed clusters associated with will and growth, while females showed clusters associated with personal relationships and situational control, as the factor for continuous school attendance.

#### **Aimed movement of the arm in individuals with the mental retardation: The role of speed - accuracy trade off**

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The purpose of this study was to investigate the role of speed-accuracy in aimed arm movement in

individuals with mental retardation by measuring movement time and accuracy. The subjects were measured on how quickly and accurately they poured liquid into a cup to red line. There were 39 individuals without mental retardation and 38 individuals with mental retardation in the study. In addition, the subjects were classified according to the clinical type (Down's syndrome, autism, and the other mental retardation) and four types which added the individuals without mental retardation there compared and examined.

#### **To aggregate or not to aggregate? Subject areas on judgment achievement: A critical meta-analytic approach**

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**Athanasou, James A.** Faculty of Education, University of Technology, Sydney, Australia **Wittmann, Werner W.** Department of Psychology, Chair II, Mannheim, Germany

Judgment achievement in the framework of SJT (Tucker, 1964) was estimated with the Hunter and Schmidt method (2004) to correct for errors. 29 studies, encompassing 1 041 persons who judged 43 tasks were considered. The overall judgment achievement across different tasks was moderate (.42), but judgment achievement in different topic areas varied from a low (.22, psychological science) to a high (.58, other research areas) level. Finally, the analysis evaluated the influence of single judges, possible moderating factors and critiqued the value of a meta-analysis across tasks or separating in areas on judgment achievement in SJT.

#### **Approaches to direct mailing in fundraising: Argumentative structure and image choice**

**Keller, Raphaela** Inst. für Kommunikationswiss., Universität München, München, Germany **Fahr, Andreas** IfKW, Ludwig-Maximilians-Universität, München, Germany **Brosius, Hans-Bernd** IfKW, Ludwig-Maximilians-Universität, München, Germany

A two-by-three factorial experiment tested how the argumentative structure and choice of images influence the affective, cognitive and motivational reaction of direct-mail recipients. 288 persons were sampled and allocated by quota (sex and age). Two different text versions representing two argumentative structures (exemplification vs. base-rate information) were combined with three different images of a boy in a developing country: One showed the outcome of potential help (positive), another the challenging circumstances (negative) and a third clearly indicated the child's misery (very negative). The findings are interpreted along theoretical assumptions of the exemplification theory and motivational psychology. Approaches for fundraisers are derived: Direct mailings with exemplifications and positive images are particularly influential.

#### **Implicit learning of semantic category sequences**

**Ketels, Shaw** Dept. of Cognitive Science, University of Colorado, Boulder, USA **Healy, Alice** Cognitive Science, University of Colorado, Boulder, USA

Following the work of Goschke and Bolte (2007), we isolated implicit learning and application of abstract information. Participants watched movies of a cursor clicking on 9, 12, or 15 individual clip art images in a random spatial array. They then immediately reproduced the sequences. These sequences were either randomly ordered or consisted of items from 5 categories in a repeating order. Regardless of instruction condition, participants showed an accuracy advantage when the sequences were determined using a set ordering of categories, as compared to randomly generated sequences. The results suggest that individuals can acquire and apply abstract information implicitly.

# Investigating the casual relation ship between perfectionism, motive achievement, text anxiety and academic achievement

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**Abstract** The objective of this research is specifying the existing relation among the perfectionism, motive achievement, text anxiety and academic achievement sampling method is random proportional classified The data was studied, using the Pierson correlation and the Regression analysis, with the following results: The positive perfectionism with the mediation of the motive achievement has a direct relation with the educational development. The negative perfectionism with the mediation of the test anxiety has an indirect relation with the motive achievement. The negative perfection with the mediation of the motive achievement indirectly has an indirect relation with the academic achievement.

## A requirement analysis of study specific demands: What requirements of ability and personality do students need to be successful?

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Using Flanagan's Critical Incident Technique different university subjects such as Medicine, Psychology, Sociology, Architecture, Public and Communication, Mechanical Engineering, Business Administration, Economics, and Law were analyzed: The aim was to establish the requirements of ability and personality of adherents for mastering the study specific demands but avoid to drop out. Once these requirements are given, either an obligatory assessment-based selection could be applied or a qualified consulting could be given, even using self-assessments. Students and persons of the academic faculty were interviewed, the respective general results will be given.

## The relation between popularity and Theory of mind in school-age children

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This research investigates the relationship between popularity and Theory of mind in school-age children. Children's popularity were assessed with perceived popularity nominations in a sample of 74 fifth, and sixth grade elementary school students. A sample of 74 children were given measures mind-reading tasks and social behaviors, Index of empathy for Children. Popularity correlated most strongly with their social score, empathy scores, and then with their mindreading ability. Theory-of-mind understanding was related to higher scores of aggressive behavior for boys and prosocial behavior for girls. The results are discussed that being perceived boys and girls as popular is a key determinant of social skills.

## Post-error performance optimization by modulation of goal-relevant information processing

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The neural mechanisms underlying the reinstatement of goal-directed behavior following error commission are relatively unknown. The current fMRI study tested the hypothesis that post-error performance is optimized by top-down modulation of goal-relevant information processing. To this

end, 21 healthy volunteers performed a high error-rate inducing version of the Simon task comprised of stimuli known to activate a specific region of the ventral visual stream. By weighting post-error related hemodynamic responses with individually observed degrees of post-error behavioral adjustments, we found a dissociation between cognitive control mechanisms selectively amplifying goal-relevant visual attention and inhibiting motor responses primed by goal-irrelevant spatial information.

## Gaze following among toddlers

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We experimentally investigated whether 3-year-old toddlers could follow their peers' gaze. In the experimental trials, an experimenter induced a child (looker) to look at a doll on display, and observed the reaction of another child (follower) in front of the looker (and not looking at the doll). In the control trials, the experimenter displayed the doll in an identical manner when the follower was alone. The followers followed the gaze of the lookers, looking at the doll in approximately 90% of the experimental trials, compared with 20% of the control. These results indicate that 3-year-olds can follow their peers' gaze.

## Perceived caregiver barriers in the management of children's asthma: A qualitative study

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Research suggests that poor management of a child's asthma is associated with higher levels of wheezing, activity limitations, and more missed school days. This study investigated caregiver barriers in managing a child's asthma. Primary caregivers of 150 children, ages 5 to 12, with mild to severe asthma, provided narrative responses to a semi-structured interview. Open coding revealed the emergence of five barrier categories: Knowledge, Time, Finances, Healthcare, and Control. With this information, healthcare professional and therapists will be better equipped to help caregivers develop social and emotional coping strategies that will increase effective asthma management.

## Decisions below uncertainty: Intuitive and deliberated decision-making and their information processing influenced by the amount of information

**Komes, Jessica** Erfurt, Germany **Ulshoefer, Corina** Psychology, University of Erfurt, Erfurt, Germany **Geiger, Antje** Psychology, University of Erfurt, Gotha, Germany

This study should clarify the opposed hypotheses concerning (1) which is the decision-making style – intuition or deliberation – that leads to more accurate decisions and (2) which kind of information processing – heuristic or automatically-holistic – serve which kind of decision-making style. 49 subjects estimated the prices of menus using Paper-Pencil-Method and a computer animated presentation; while manipulating decision-making styles and the amount of information. The results, using One-way-ANOVA (GLM with repeated measurement), indicate that intuitive decisions are preferable, and that the amount of information and experience are influential on the accuracy of decision making and on the selection of information processing method.

## The role of imagination in decision making

**Konstantinidis, Andreas** Jakovos IPA, Technical University Berlin, Berlin, Germany **Jungermann, Helmut** IPA, Technical University Berlin, Berlin, Germany

People often base their decisions on the anticipated potential outcomes of the given options and their utilities. Sometimes, however, the presentation of options includes features of the options which seem to be relevant for the decision outcome although they are clearly not relevant at all. But the decision makers imagination is stimulated, evoking an extra utility which determines their choices. Data from an internet-based study with 360 participants support this hypothesis and show the specific influence of the concreteness and the intensity of the (experimentally evoked) imagination. The findings have both theoretical and practical significance for marketing and advertising.

## The neuromotor antecedents of emotion regulation in the face

**Korb, Sebastian** CISA, Université de Geneve, Geneve, Switzerland **Grandjean, Didier** Faculty of psychology, CISA/Université de Geneve, Geneve, Switzerland **Scherer, Klaus** Faculty of psychology, CISA/Université de Geneve, Geneve, Switzerland

One form of emotion regulation is the voluntary suppression of one's emotional facial expression. By using Electroencephalography (EEG) and facial Electromyography (EMG) we investigated the neural correlates of spontaneous, posed, and suppressed smiles. In three experimental conditions healthy participants (1) looked at amusing stimuli and freely expressed their feelings; (2) looked at amusing stimuli but suppressed their facial expressions; or (3) looked at neutral stimuli while smiling. Our analyses focused upon the Readiness Potential (RP), which precedes movement-onset. We expected to find a RP before all three types of smile. Preliminary results will be presented.

## The dual nature of priming: Logic and associations jointly influence indirect measures of evaluation

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Previous research found that implicit measures such as the affective priming assess only valence associations, but not logical reasoning (e.g., negation, Deutsch et al., 2006). As there is evidence that implicit measures vary with respect to underlying processes (e.g., Gawronski et al., in press), we looked at a different priming measure, the affective misattribution procedure (AMP, Payne et al., 2005). Surprisingly, all other conditions being equal, the AMP reflects logical reasoning (valence negation), in contrast to the affective priming paradigm. We further looked at boundary conditions: Negation was not reduced by time pressure, but it was reduced by cognitive load.

## Diagnostics of consequences of social deprivation in early childhood

**Kostadinova, Krasimira** Child&School Health Protection, Nation.Center PublicHealthProt, Sofia, Bulgaria

Creating tools for measurement of the consequences of social deprivation in young children reared in risk environment is important in overcoming them. Objective: To establish approach, dimensions, diagnostic proceedings for assessment of social deprivation process and result. The study covered 266 infants, 120 toddlers, 142 caregivers in institutions applying Developmental scale, experi-



mental assessment of relationships with adults and peers, case study, longitudinal observation, JSS of Spielberger, MBI, and others. The results show a delayed mental development and leading activities, typical somatic symptoms, deprived personality development, and related social characteristics. Social deprivation in early childhood is a complicated phenomenon and needs personality-based complex diagnostic method.

#### **The psychological effects of horticultural therapy on aged people that was implemented every day concentrically**

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An attempt was made to develop a geriatric care technique characterized and investigate the psychological effects by the use of horticultural therapy that stimulates the senses in nursing homes. The effects of every day activities on horticultural therapy evaluation sheet, the face scales and PGC morale scales were improved more than every week activities. Even if the object person and clients changed, it was suggested that horticultural therapy activities be suitable as a nursing care for elderly people technology because neither atmosphere nor the smile changed. These results suggested that horticultural therapy for aged people improved psychological and behavioral aspects.

#### **Individual differences in decision making about investing money for future pension**

**Kovalev, Yuri** Dept. of Psychology, St. Petersburg University, St. Petersburg, Russia

Objectives – main goal of research was - how different people make decision about investing pension money in governmental asset management company (with low income) or private asset management company (with high income). Methods – was used original questionnaire designed for Russian sample and socioeconomic data. Participants 76 male and 83 female in age 28-32 with higher education (half in economics and half in humanities); Results - the evidence of this study suggests that not type of education but sex and marital status should dictate choice for people. Conclusions - decision about most conservative investment is most typical for married men and women.

#### **Comparison of typological and dimensional approaches in business focused measurement of personality**

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Universität Fribourg, Granges-Paccot, Switzerland

Based on the widespread agreement on the Five Factor Model as dimensional approach to personality, research on typological approaches has increased recently. This study focuses on the merit of this perspective for occupational personality assessment. The BIP-6F (Business Focused Inventory of Psychology - 6 Factors; Hossiep & Krüger, in prep.) measures 6 global dimensions of personality, relevant in the professional context. Using the BIP-6F, personality types are extracted from a working sample (N=3169) and compared to Big-Five based cluster solutions. The criterion validity of types compared to dimensions is tested and incremental insights using the typological approach are presented.

#### **The Janus face of self-selection and self-generation in source monitoring: Early abilities and late inabilities in 3-, 4- and 5-year-old children**

**Kraus, Uta** Inst. für Psychologie, Universität zu Kiel, Kiel, Germany **Koehnken, Guenter** Inst. für Psychologie, Universität zu Kiel, Kiel, Germany Source attributions to real-person-sources were examined. Forty-eight children (M=38, M=45, M=56, M=65) were presented 4 sticker book pages. On each page, two person-sources (child-adult/child-child) per source term (reality-monitoring familiar; reality-monitoring unfamiliar; external; internal source monitoring) chose two wildlife-stickers, pasted them into the book and described what each animal was doing. Source recall was examined immediately afterwards. Results showed source attributions above chance in all age groups in the reality-monitoring terms and in the external terms in older 3-, 4- and 5-year-olds (t-tests). Results indicate that children conceptualized the internal sources as a sole source and failed to attribute them correctly.

#### **Because it matters to me: Differential emotion elicitation by experimental manipulation of self-relevance and goal conduciveness appraisals**

**Kreibitz, Sylvia D.** Inst. für Psychologie, Universität Genf, Geneva, Switzerland **Gendolla, Guido H. E.** Dep't of Psychology, University of Geneva, Geneva, Switzerland **Scherer, Klaus R.** Dep't of Psychology, University of Geneva and Swiss, Geneva, Switzerland Based on Scherer's (2001) Component Process Model and Gendolla's (2004) elaboration of Motivational Intensity Theory, we investigated the prediction that motivation-based appraisals differentially determine emotional responding. Participants' appraisal of self-relevance (low/high) and goal conduciveness (low/high) was experimentally manipulated using the success-failure manipulation (Nummenmaa & Niemi, 2004). Self-report indicated increased disappointment and embarrassment in the high-self-relevance/low-goal-conduciveness condition and increased amusement and pride in the high self-relevance/high-goal-conduciveness condition. Autonomic nervous system reactivity showed sympathetic discharge in response to self-relevance manipulation and respiratory and facial expressive changes in response to goal-conduciveness manipulation. Implications of results regarding motivational processes in emotion elicitation are discussed.

#### **Prevalence of disturbed eating behaviour in girls with insulin dependent diabetes mellitus and the influence of disturbed eating behaviour on metabolic control (HbA1c)**

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Århus C., Denmark **Schnieber, Anette** Department of psychology, University of Århus, Århus C., Denmark **Mose, Anne Hvarregaard** Departments of Paediatrics, Aarhus University Hospital, Århus N., Denmark

**Birkebak, Niels** Department of Paediatrics, Aarhus University Hospital, Århus N., Denmark Girls with diabetes mellitus (DM) (N = 21, age 11-17 years) completed measures of objective over-eating episodes (OOE) and objective bulimic episodes (OBE) from the EDE-Q. Data regarding metabolic control (HbA1c) were obtained through a national diabetes register. 41 % of the girls had one or more episodes of OOE, and 29 % had one or more episodes of OBE in the preceding month. Significant higher HbA1c were found among girls with than without episodes of OOE (9.1 versus 8.1,  $p = .033$ ), and among girls with than without episodes of OBE (9.4 versus 8.1,  $p = .013$ ).

#### **Effects of the number and the order of syllables in the articulatory suppression effect**

**Kroneisen, Meike** Lehrstuhl für Psychologie III, Universität Mannheim, Mannheim, Germany **Erdfelder, Edgar** Lehrstuhl für Psychologie III, Universität Mannheim, Mannheim, Germany Short-term memory is known to deteriorate if irrelevant syllables are articulated during retention. The working memory model posits that this articulatory suppression (AS) effect is unaffected by what is being articulated. We tested whether the number of syllables (0 to 4) and their order (word-like vs. inverted sequences) affects the strength of the AS effect on immediate serial recall of letter sequences. The AS effect increased with number of syllables and was smaller for word-like sequences of three or more syllables. Results are most parsimoniously explained by assuming that the episodic buffer supports retention of verbal information under AS.

#### **The effects of task instruction on P300 amplitude in a concealed information test**

**Kubo, Kenta** Graduate School of Integrated, Hiroshima university, Higashi-Hiroshima, Japan **Nitto, Hiroshi** Integrated Arts and Sciences, Hiroshima university, Higashi-Hiroshima, Japan Event-related brain potentials were recorded in a concealed information test to examine the effect of task instruction. Eighteen participants selected one playing card from five and were told that the experimenter would detect the card on the basis of their physiological responses. In the suppress condition, participants were instructed to make their responses smaller to leave the card undetected. In the enhance condition, they were instructed to make their responses larger to allow the experimenter to detect the selected card. Regardless of the instruction type, the P300 amplitude was significantly larger for the selected card than for the not-selected cards.

#### **Comparison of identification procedures for intellectually gifted preschool children**

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Regarding concept and realization, integrative and comparable research about early intellectual giftedness and its adequate promotion is rare. Identification procedures for scientific and educational purposes are commonly based on Spearman's theory of a general factor of intelligence or else on Gardner's theory of multiple intelligences sometimes expressed as 'cognitive profiles'. Using data of 547 children in the longitudinal study BiKS-3-8, which surveys children and their environments (family and preschool) from their entry to preschool, this analysis compares different identification procedures and their validation throughout one year. Results will be discussed focusing on implications for the educational practice.

#### **Functions of autobiographical remembering in situational and cultural contexts**

**Kulkofsky, Sarah** HDFS, Texas Tech University, Lubbock, USA **Wang, Qi** Human Development, Cornell University, Ithaca, USA **Hou, Yubo** Psychology, Peking University, Beijing, USA

The present research examined functions of remembering across situational and cultural contexts. In study 1, European-American and Asian-American undergraduates described memories in two hypothetical contexts: thinking about an event alone, or sharing an event with friends. In study 2, European-American and Chinese students reported memories in response to cue-words. For



each memory students reported when and why they thought about and talked about the memory. In both studies, students reported remembering for social, directive, and self functions. Situational and cultural contexts influenced the functions that were reported. The results are discussed in light of the influence of context on remembering.

**Cross-correlation functions demonstrate offset effects in the covariance of endocrine and subjective-psychological responses to psychosocial stress**

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**Entringer, Sonja** Psychiatry and Human Behavior, University of Irvine, Orange, USA  
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**Hellhammer, Dirk** Department of Psychobiology, University of Trier, Trier, Germany  
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Although stress response theories typically assume substantial correlations of psychological and endocrine stress responses, studies of psycho-endocrine covariance produced inconsistent results. To examine if this is due to different dynamics of the systems, we repeatedly and synchronously measured hypothalamus-pituitary-adrenal (HPA) axis activity and tense and energetic arousal in response to a psychosocial laboratory stressor in 221 subjects. Cross-correlation analyses showed significant time lagged correlations of tense arousal with HPA-axis responses. These results demonstrate offset effects in the covariance of psycho-endocrine stress responses and suggest that analyses of psycho-endocrine covariance need to take different dynamics of response systems into account.

**Depression association between dysmenorrhea and menstrual distress in adolescence girls**

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**Kuo, Hsien-Wen** College of Public Health, Environmental Health, Taichung, Taiwan

**Abstract Objective:** We investigated the relationship between levels of depression and primary dysmenorrhea among adolescent girls. **Method:** Cross-sectional study design was performed a senior high school in Taiwan. All subject (n=680) were interviewed using a questionnaire including 18 Moos Menstrual Distress question (MMDQ) and the Center for Epidemiologic Studies-Depression Scale (CES-D). **Results:** A significant effect of depression status on the MMDQ score was found using a logistic regression model adjusted for covariance. **Conclusion:** The data show that association dose-dependently between depression status and MMDQ score.

**Relationship between gonadal steroids and brain activation patterns during emotion processing in women**

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Findings concerning sex differences in neuropsychological functions are contradictory. One possible explanation for these inconsistencies is the influence of gonadal steroids on neural functions. In females gonadal steroids underlie profound fluctuations. Different levels across the menstrual cycle could either cause or mask sex differences in neuropsychological functions and brain activation. In the present study hormone levels at different points in

the menstrual cycle are assessed and correlated with neuropsychological functions on the one hand and electrical brain activation during emotional processing on the other hand. Preliminary results will be presented.

**Sexual behaviour, drug abuse and tobacco abuse among the street children**

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Among the 100 children, Forty-two subjects had sexual exposure at various age with either girlfriend or prostitute in which two subjects were homosexual. Seventy subjects were substance/s abusers, which included 49 alcohol abusers, 48 smokers, 42 tobacco chewers, 3 injectable drug abusers and 51 various other types of substance/s abusers. Majority of the children were uncertain about the amount and frequency of the substance/s they abuse except the tobacco chewers where majority i.e. 28 chew one or two packets of tobacco per week.

**Explaining the entrepreneurial intentions of young people: A cross-cultural study**

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**Sánchez, José C.** Social Psychology, Faculty of Psychology, Salamanca, Spain  
**Villanueva, José J.** Social Psychology, Faculty of Psychology, Salamanca, Spain  
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The aim of this study was to analyze the differences between Spanish and Mexican young people in entrepreneurial intentions and other psychological variables frequently linked with entrepreneurship, such as entrepreneurial self-efficacy, risk-taking propensity and proactiveness. We collected self-report data from 150 Spanish and 165 Mexicans, all of them University students. MANOVA was carried out in order to prove cross-cultural differences in entrepreneurial intentions and the other psychological variables. According to expected, Mexicans showed higher levels of entrepreneurial intentions, self-efficacy, risk-taking propensity and proactiveness than Spanish. The study suggests several ways of promoting self employment, specially directed to Spanish university students.

**The relationship among creativity, motivation and well-being of children**

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**Um, Jee-Hong** Child Education and Psychology, SungKyunKwan University, Seoul, Republic of Korea  
**Choe, In-Soo** Child Education and Psychology, SungKyunKwan University, Seoul, Republic of Korea

The purpose of this study was to investigate the relationship among motivation (intrinsic, material, social), creativity (creative thinking, creative personality) and well-being (emotional, social, psychological). 'Motivation scale' (Choe, 2002), 'Creativity Inventory for young Students' (Choe, 2005) and 'Well-being scale' (Keyes, 2005) were administered to 155 6th grade elementary students. Correlation analysis demonstrated that intrinsic motivation and material motivation, but not social motivation, were significantly related to creativity and well-being. Also, creativity was significantly related to emotional and psychological well-being except social one. Using multiple regression analysis, intrinsic motivation, material motivation and creativity revealed a significant contribution to the prediction of psychological well-being.

**The Lee cross-cultural anxiety dream scale: An extended study**

**Lee, Sang-Bok** Pastoral Counseling Graduate, Kangnam University, Yongin, Republic of Korea  
 This study analyzed anxiety dream scale as represented in dream contents of both 476 Korean college students and 165 Korean-American college students. A total of 258 dreams were collected and evaluated by using the Lee Cross-cultural Dream Scale, for which the intensity of anxiety was coded. A two-sample t test on the Lee Cross-cultural Anxiety Dream Scale means (Korean Group: M=1.8; Korean American Group: M=2.4) showed significant difference between the two groups (p<0.001). Two-sample t test on anxiety by gender (Female: M=2.3/ Male: M=1.8) was significant (p<0.01). The author designed this scale to explore cross-cultural comparisons of anxiety dream scales.

**Context-dependency of information as a function of task experience**

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Attentional theories of learning and memory suggest that there is a reversal relationship between the experience with the task and the attention participants pay to the context. A human instrumental conditioning experiment was conducted in which the influence of the training level (3, 5 or 8 trials) on the magnitude of the context-switch effect was evaluated. Performance was impaired by the context switch only after 3 training trials. Experience with an incidental context seems to lead participants to stop paying attention to it, and to quit using the context as a relevant factor for their performance in the task.

**The psychometric properties of the Depression-Happiness Scale short-form and the Oxford Happiness Questionnaire short-form among Slovak students**

**Levis, Christopher Alan** School of Psychology, University of Ulster at Magee, Londonderry, United Kingdom  
**Adamovová, Lucia** Institute of Experimental Psyc, Slovak Academy of Sciences, Bratislava, Slovak Republic

**Objectives:** To facilitate cross-cultural research in the psychology of happiness, the present aim was to examine the psychometric properties of the Slovak translation of the 6-item Depression-Happiness Scale and the 8-item short-form of the Oxford Happiness Questionnaire. **Method:** A sample of 151 Slovak university students completed the two translated measures. **Results:** Support was found for the internal reliability, unidimensionality and convergent validity of the two translated measures. **Conclusions:** These results suggest that both of these short measures could be commended for further use among Slovak respondents when a brief measure of happiness is required. Limitations of the present study are discussed.

**Importance of ratings in self-estimated intelligence: A means of validation?**

**Levis, Christopher Alan** School of Psychology, University of Ulster at Magee, Londonderry, United Kingdom  
**Cruise, Sharon Mary** Department of Psychology, University of Chester, Chester, United Kingdom

**Objectives:** Previous research has examined the influence of beliefs about intelligence on how individuals estimate their own intelligence. However, no research has examined importance ratings of self-estimates of intelligence as a means of validating self-ratings. **Method:** 455 participants provided self-estimates in ten domains of intelligence, and rated the degree to which they endorsed



the importance of each domain of intelligence. Results: Correlation analyses indicated small to moderate significant positive associations between importance ratings and self-estimates of domains of intelligence. Conclusion: These findings attest to the role of importance as a means of establishing the construct validity of self-estimated intelligence.

#### **The test and revision of Hewitt Multi-dimensional Perfectionism Scale for Chinese college students**

**Li, Na** Faculty of Education, Qufu Normal University, Qufu, People's Republic of China **Li, Jianwei** Faculty of Education, Qufu Normal University, Qufu, People's Republic of China

1959 college students were tested, and then the exploratory and confirmatory factor analysis was applied to the data, at last the  $\alpha$  coefficients, 1 month interval test-retest reliabilities and other factors were computed. The revised Scale consisted of 15 items, and explained 49.55% of the variance with loading between 0.49~0.77. And  $\chi^2$ , RMSEA, NFI, CFI, GFI met requirements of psychological assessment. The  $\alpha$  coefficients of the scale and sub-scales and test-retest reliabilities were over 0.65. The revised Scale for Chinese college students is more suitable for use among the native students.

#### **Effects of 1+2 training pattern for phonemic awareness on English words decoding**

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To investigate effects of 1+2 training for phonemic awareness on English words decoding, a pretest-posttest comparison group quasi-experimental design was adopted, 89 grade 3 pupils were assigned to three groups: Scheme A, Scheme B and comparison groups. Schemes A and B were characterized by integrated training of phonemic awareness with phonetic symbol and letter-sound correspondences (1+2), nonetheless, Scheme A involved phonemic segmentation and blending, whereas Scheme B involved phonemic identification, segmentation, blending, deletion and substitution. It was found that both Schemes A and B could significantly enhance decoding skills, however, there was no significant differences between two Schemes.

#### **The inactivation of the basolateral amygdala disrupts contextual, but not discrete cue conditioned association in morphine-induced cue preference**

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The authors examined the effects of the basolateral amygdala (BLA) in morphine related contextual and discrete cue conditioning. The apparatus for conditioned cue preference paradigm was consisted of three compartments (contextual conditioning) or one compartment (discrete cue conditioning). Prior to conditioning sessions rats received intra-BLA injections of lidocaine. Time in the morphine-paired side minus saline-paired side was analyzed by using two-way analyses of variance. The results show BLA inactivation selectively impaired acquisition of context-morphine association without interfering with discrete cue-morphine association. These observations are compatible with the view that BLA contributes to contextual, but not elemental conditioning in fear conditioning.

#### **The development and validation of the Chinese clinical multi-axial inventory**

**Li, Xixi** Department of Psychology, Chinese University of HK, Hong Kong, China, People's Republic of : Hong Kong SAR **Leung, Freedom** Department of Psychology, Chinese University of HK, Hong Kong, China, People's Republic of : Macao SAR

Large scale self-report personality inventory is the most frequently used tool in psychological assessment. However, there has not yield an indigenous and theoretically sound clinical instrument for Chinese clinicians. The present study intends to develop the Chinese Clinical Multiaxial Inventory (CCMI) that corresponds closely to modern conceptualization of psychopathology with the multi-axial DSM system. The CCMI is designed to assess: 1) Axis-I clinical symptoms; 2) Axis-II disordered personality features; and 3) psychosocial adjustment. The reliability and construct validity of the CCMI scales will be examined and the standardization will be conducted using a large data-set of psychiatric and normal samples.

#### **PTSD and chronic pain: Development, maintenance and comorbidity**

**Liedl, Alexandra** BZFO, Berlin, Germany **Knaevelrud, Christine** Research Department, Center for Torture Victims, Berlin, Germany

Objectives: In addition to Posttraumatic Stress Disorder (PTSD) 30-80% of traumatized individuals also suffer from chronic pain. Methods: A review of the current literature on mechanisms of development, maintenance and comorbidity of PTSD and chronic pain will be provided. Results: Based on the review the "Perpetual Avoidance Model" was developed. Consequential treatment implications will be presented. Conclusions: The presented model helps to understand the development and maintenance of these two disorders and the way how they interact, which is of crucial importance for treatment. 1 Otis JD, Keane TM, Kerns RD (2003) An examination of the relationship between chronic pain and posttraumatic stress disorder. J Rehabil Res Dev 40:397-406

#### **Mobile phones use in classroom activities: A psycho-social educational approach**

**Ligorio, Maria Beatrice** Psychology, University of Bari, Bari, Italy **Tateo, Luca** Education Sciences, University of Salerno, Fisciano (SA), Italy

The contribution presents a positive model of mobile phones use in educational context, based on empirical evidences of technologies supporting reflexive thinking, meta-cognition and collaborative problem solving into classroom activities. Within a EU funded project, 40 high school students have been involved in a collaborative problem solving activity and asked to video-record the relevant moments of the work with their own mobile phones. The videos constitute the stimulus for a classroom discussion which have been video recorded and analyzed by researchers. Results show that mobile technology can effectively support collaborative learning activities.

#### **Race, culture and psychotherapy**

**Lijtmaer, Ruth** Ridgewood, USA

In the US, race and culture are used stereotypically; therefore we have chasms that go unacknowledged. Therapists may misjudge the verbalizations of the patient, attributing the patient's behavior only to pathology if they are unaware of the significance of race and culture in people's lives. Even if both members of the dyad are of similar background, we cannot take the patient's conflicts for granted. The clinician's ethnic biases and psychodynamic beliefs influence identifying what is pathological and consequently the therapeutic process. The presentation will focus on the challenges therapist's face when working with patients different from them.

#### **Children's conceptions of death and suicide**

**Lin, Siu-Fung** Dept. Applied Social Studies, City University of Hong Kong, Kowloon, China, People's Republic of : Hong Kong SAR **Yuen, Tracy** Applied Social Studies, City University of Hong Kong, Kowloon, China, People's Republic of : Macao SAR Irreversibility, nonfunctionality, and universality of Death and the concept of suicide are considered understood by most children by age 7-10 years. A total of forty 4 to 5-year-olds and 7-8 year olds were recruited to examine whether education programme would foster the development of death concept and thus affect children's attitude towards suicidal behaviour in later life. A local popular video clip extracted from an animation "My life as McDull" was used for exploring the concept of death among very young children in HK while a short story "The poisonous apple" was used to investigate children's disapproval of killing oneself.

#### **The compilation of perfectionism scale for Chinese adolescents and youths**

**Lin, Yanyan** Faculty of Education, Jining University, Jining, Jingning, People's Republic of China **Li, Jianwei** Faculty of Education, Qufu Normal University, Qufu, People's Republic of China

We compiled a Native Perfectionism Scale for Chinese adolescents and youths that fits the Chinese cultural background. The Scale consisted of 38 items, six subscales: Perfect Expectation, Personal Standards, Concerns with Mistakes and Doubts, Organization, Introspection, Parents' Expectation and Control. Factor analysis indicated that the six factors explain 55.35% of the variance with loading between 0.52~0.82. The seven subscales had internal consistencies with split-half reliabilities 0.78~0.87, Cronbach's alphas 0.82~0.92, and test-retest reliabilities of 0.80~0.91,  $p < 0.01$ . The Scale is well practical.

#### **Hydration and cognitive performance of secondary school children**

**Ling, Jonathan** Dept. of Psychology, Keele University, Newcastle-under-Lyme, United Kingdom **Stephens, Richard** Psychology, Keele University, Newcastle-under-Lyme, United Kingdom **Hodges, Katie** Psychology, Keele University, Newcastle-under-Lyme, United Kingdom

Objectives: Research has suggested a relationship between hydration and cognitive performance. While evidence for this relationship is robust for adults, the data for children is unconvincing. Methods: The cognitive performance of children hydrated with 500ml of water was compared with those hydrated with 50ml of water in a randomised cross-over design. After a short interval, children completed 4 tests measuring cognitive function. Results: Performance on 3 of 4 tests was improved in the 500ml hydration condition compared to the control ( $p < .002$ ). Conclusions: Increased hydration in children can lead to improvements in performance, specifically short- and long-term memory and executive function.

#### **Effect of epistemic motives on group creativity under different cultures**

**Liou, Shyhnan** Dept. of Labor Relations, National Chung Cheng Univ., Chia-Yi, Taiwan

This study proposes that need for cognitive closure (NFC) influence group creativity under different cultures through dual routes which include promoting group centrism and motivating cultural conformity. Experiment 1 tests the effects of NFC on divergent and convergent performance of group creativity under different cultures (interdependent vs. independent) (H1 & H2). Experiment 2 examines the moderating function of dissent expression (promote divergent thinking, H3) and transformational leadership (promote divergent and convergent thinking, H4) on NFC effects, thus functional

dissociate those dual routes. Results support H1 to H3, and H4 partially.

#### The study of emotional intelligence and interaction between peers for elementary students

**Lo, Pin-Hsin** and Counseling, Dept. of Education, Psychology, Taipei, Taiwan

We try to edit a scale to evaluate the interactions among schoolchildren, and then to explore the relationship between schoolmates' interaction and emotional intelligence. We use questionnaire for 1393 elementary students. Data gathered is processed with "confirmatory factor analysis", "reliability analysis", "one-way MANOVA", and "t-test". We find: First, schoolgirls interact more positively, compared with schoolboys. Second, the development of positive and negative interaction between peers for the sixth grade is more obvious than other grades. Third, schoolchildren who score high in emotional intelligence interact more positively with each other than those who score low in emotional intelligence.

#### Attention modifies gender differences in face recognition

**Lovén, Johanna** Karolinska Institutet, Aging Research Center, Stockholm, Sweden **Rehman, Jenny** Karolinska Institutet, Aging Research Center, Stockholm, Sweden **Herlitz, Agneta** Karolinska Institutet, Aging Research Center, Stockholm, Sweden

Women recognize more faces than men do. This advantage is more prominent for female faces and may depend on women directing more attention to female than to male faces. To assess this, participants completed two face recognition tasks: one with full and one with divided attention at encoding. Gender differences, favouring women, were reduced when attention was divided, as compared to the full attention condition. Preliminary results suggest that gender differences for female faces vary as a function of the degree of available attention. Thus, women may attend more to female than to male faces, resulting in more accurate recognition.

#### Can "less" be "more" in group decision making?

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We compared the decision performance of two groups in this study: one with members using the Take-the-best (TTB) strategy and the other with members using the Minimalist (MIN) strategy. While TTB requires members to have precise knowledge about the task environment, MIN requires them to know nothing. It turned out that the ignorant MIN group can beat the knowledgeable TTB group in environments where information is more evenly distributed among the cues. Moreover, this group-level less-is-more effect will be magnified when group size is large, knowledge has to be acquired through learning, and cues' information is subject to errors.

#### Industrial psychology in the (sometimes) contradictory context of workplace- and lifestyle-enhancement

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Industrial psychological research traditionally resorts to workplace enhancement methods. On the one hand it is obvious that activities focussing the working conditions are in the long term more effective and efficient than behavior-related train-

ings. But on the other hand more health related approaches focussing on individual resources might be more accepted by the focus group and the social partners. Progressive Workplace Health Management allows for both approaches. The results of several employee attitude surveys in the public sector ( $n > 17,000$ ) are presented and show in which way the approaches are combined. They provide support for a modern interpretation of reliable psychological knowledge.

#### The importance of the type of information in the misinformation paradigm

**Luna, Karlos** Basic Psychological Processes, Univ. of the Basque Country, San Sebastián, Spain **Miguel, Malen** Basic Psychological Processes, Univ. of the Basque Country, Donostia-San Sebastián, Spain

Using the misinformation paradigm we investigated the type of contents that are more conducive to generating false memories. In three experiments the participants watched a video about a bank robbery and received false misinformation through a questionnaire. The misinformation could be about an action or a detail (Exp. 1), central or peripheral information (Exp. 2) and high or low typicality (Exp. 3). In general, there were more false alarms with details, with peripheral information and with high typicality contents. This results suggest the importance of the type of information in the creation of false memories with ecological materials.

#### The development of Adolescent Authentic Happiness Questionnaire

**Luo, Yueh-Chuan** National Taiwan University, Taipei, Taiwan **Lin, Yicheng** Department Psychology, National Taiwan University, Taipei, Taiwan

Based on the model of authentic happiness (Seligman, 2000), this study aims to develop adolescent authentic happiness questionnaire. Taiwan Adolescent Authentic Happiness Questionnaire was developed with 978 subjects recruited from five junior and senior high schools. The principal component analysis with Varimax rotation and confirmatory factor analysis were used to examine the factor structure of the scale. The results showed that 18 items were grouped into 4 dimensions: self-actualization, altruistic happiness, interpersonal relationship, and family happiness, that accounted for 53% of the total variance explained. All of the 18 items had factor loadings higher than .40 and external validities were pretty good.

#### Career choice and apprenticeship. Do migrant and native students differ?

**Müller, Romano** Inst. für Bildungspsychologie, Pädagog. Hochschule Bern, Bern, Switzerland

Six independent variables were supposed to be of importance for the vocational process of adolescents from different cultural background, SES and sex: educational prerequisites; intelligence; vocational goals, self-efficacy; proximal barriers and support. The dependent variable was defined by "level of the assigned profession". Variables were modelled following the guidelines of the socio-cognitive career theory SCCT. An electronic questionnaire was submitted to 5201 apprentices in 64 professions (Swiss-natives: 4208; migrants: 993; age: 19;2). Analyses by SEM. Independently of cultural, social background and sex 48% of the variance of the assigned level of profession can be explained by the SCCT-model. The impact of proximal variables remains negligible. Apprentices from a migrant background are disadvantaged.

#### Students' handling of graphs in university

**Marín Oller, Cristina** San Sebastián de Los Reyes, Spain **Pérez Echeverría, María del Puy** Psicología Básica, Universidad Autónoma de Madrid, Madrid, Spain **Postigo Angón, Yolanda** Psicología Básica, Universidad Autónoma de Madrid, Madrid, Spain

The fundamental aim of this research is to analyse psychology students' skills to read and interpret graphic information, and more concretely: to analyse the possible differences between recognition (selection) and interpretation of graphs and to study the influence of familiarity with graph's content (psychological-non psychological), in relation with the participant's amount of instruction in psychology. We found significative differences according to the following variables: familiarity with content; kind of task (selection/ interpretation) and instruction level of participants.

#### Dimensionality and correlates of the social dominance orientation scale on Croatian sample

**Maricic, Jelena** Institute of Social Sciences, Zagreb, Croatia **Franc, Renata** Psychology, Institute of social sciences, Zagreb, Croatia **Sakic, Vlado** Psychology, Institute of social sciences, Zagreb, Croatia

The aim of the study is to explore structure and correlates of the SDO Scale on Croatian nationally representative sample ( $N=1004$ ). Factor and correlational analysis, and ANOVAs were conducted. Results confirm two-dimensional factor structure, named oppositions to equality and group-based dominance. Opposition to equality is higher among males, less religious and right politically orientated people ( $p<0,01$ ). Higher group-based dominance orientation is more characteristic for low income group and low education level, older age ( $p<0,01$ ), and males ( $p<0,05$ ). Results are discussed in relations to Croatian social context and to results from previous studies about SDO scale in different countries.

#### How are we including our pupils with Emotional and Behavioural Difficulties (EBD)?

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The aim of this study is to understand the problems faced by the educative system in Madrid when trying to include pupils with EBD (Wagner et al., 2006; Clough et al., 2005). The method used combines questionnaires that assess characteristics and resources of schools and individual variables, which are answered by pupils, their parents, teachers, school counsellors, head teachers and professionals from Mental Health Services; and focus groups with a smaller sample. Some of the obstacles described by participants are: lack of training, difficulties in collaboration with external services, or negative attitudes towards their inclusion. Guidelines for educative-policies are offered.

#### Differential outcomes: Improving memory in five and seven-year-old children

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Until recently, no one had explicitly addressed the issue of whether the differential outcomes procedure (DOP) might improve memory performance in humans. To explore this issue, in the present study children were trained on a conditional discrimination task and then they were tested after 1 day, 1 hour and 1 week from this training phase. The results indicated that participants showed higher performance and persistence of learning when DO were arranged. This finding demonstrated that the use of the DOP facilitate long-term memory in



children and suggest its use as aid to memory in people with memory impairments.

#### Suppression of the pain experience enhances interpretation biases of ambiguous stimuli

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Objectives We wanted to study if suppression of the pain experience could play a role in the development of cognitive biases. Method Participants were randomly allocated to one of the next conditions: suppression, acceptance and spontaneous coping strategies. After the intervention participants completed the cold pressor task while engaging in the relevant coping strategy. Cognitive biases were assessed at the end of the follow up session. Results and conclusion There was a significant effect of the experimental condition on bias towards affective vs sensory pain words. Participants in the suppression condition showed a stronger bias towards sensory and affective pain.

#### How to control epistemic uncertainty fifty-fifty

**Masuda, Shinya** *Nursing and Medical Care, Keio University, Fujisawa, Japan* **Sakagami, Takayuki** *Psychology, Keio University, Minato-ku, Tokyo, Japan* **Hirotaka, Sumire** *Environmental and Information, Musashi Inst. of Technology, Tsuzuki-ku, Yokohama, Kanagawa, Japan*

We examined the joint effect of anchoring and epistemic uncertainty (Bruine de Buin et al., 1998) in an experimental survey. 101 respondents estimated eight personal risk questionnaires which followed one of three different probabilities (20, 50, and 80%) as an exemplar for answering a questionnaire. Results from the open-ended responses showed that frequencies of the 50% response disappeared when probability of the exemplar was 20% or 80%, but they were highest in six out of eight questionnaires when it was 50%. Epistemic uncertainty seems to be controlled not only by answering methods, but also by anchoring items.

#### Psychological mechanisms in the development of chronic headache in patients with migraine or tension type headache

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Objectives: Our prospective, population based longitudinal study investigated the interaction of biological factors, psychiatric comorbidity, stress exposure and headache-coping in transformation of episodic to chronic headache (CH). Methods: 1) Cross-sectional comparison (CH (n=43) vs. non-CH (n=344)); 2) longitudinal regression (baseline and 1-year follow-up; in n=325 headache remained episodic, n=19 developed CH); 3) matched pairs for chronic patients. Dependent variables: Stress exposure, social support, emotional, cognitive and coping reaction to headache. Results: CH-patients are impaired in depression (p=.000), stress experience (p=.005) and seeking social support (p=.002). Discussion: CH-prevention could be possible by training patients in functional stress coping and social skills.

#### The present conditions of the dysuria patients in Japan

**Matsuda, Hisao** *Sakai, Japan*

In Japan, careworkers and healthcare practitioners in the field are devising countermeasures against future caring in Japan. In this research, especially, the social effects of difficulties in urinating after spine injuries and cerebral infarctions are discussed.

The effects of treatments of urination disorders on mental and psychological states of the patients and their families were investigated. The research showed that burdens of nursing cares by families included a lot of mental factors. The results contributed to supporting practices of staff members in the field of nursing cares from mental and psychological viewpoints.

#### The effects of home environment on parenting and child development

**Matsumoto, Satoko** *Ochanomizu University, Tokyo, Japan* **Sugawara, Masumi** *Department of Psychology, Ochanomizu University, Tokyo, Japan* **Sakai, Atsushi** *Division of School Education, University of Yamanashi, Kofu, Japan*

Children experience various effects of environment throughout their developmental trajectory. Therefore, it seems necessary to find out the process which explains the relationship between environment and children's development. The objective of present study is to examine this mechanism by using the data collected from Japanese families with infants. In this study, home environment will be the focus of consideration. The specific aspects of home environment examined are conditions of inside/outside the house. The indirect effects of these environmental conditions on children's development are examined, where the variables measuring parenting placed as the mediator, and children's characteristics placed as outcome variables.

#### The role of response mode on Stroop and reverse Stroop interference in the group version test

**Matsumoto, Aki** *Human-Environment Studies, Kyushu University, Fukuoka, Japan* **Hakoda, Yuji** *Human-Environment Studies, Kyushu University, Fukuoka, Japan* **Watanabe, Megumi** *Human-Environment Studies, Kyushu University, Fukuoka, Japan*

We developed the group version of the Stroop Color-Word Test, which measures both Stroop and reverse Stroop interference (Hakoda & Sasaki, 1990). This test was performed by matching response, where participants selected the appropriate word and color patch from the provided choices printed on paper. In this study we conducted this test using two response modes: oral and matching. Results showed salient Stroop interference in oral response. However, both types of interference were recognized and statistically significant in matching response. It is proposed that this test might be a valuable tool for measuring individual differences in human information processing.

#### Why playing games is better than living lifes

**Mayer, Monica** *Inst. für theor. Psychologie, Universität Bamberg, Bamberg, Germany*

The objective of this research was to realise why people get so absorbed in computer games that they forget everything outside. To figure out how and why these people get addicted some people were very deeply examined, using the case study method. 27 persons aged 8 to 68 were interviewed, 22 males and five females. The four gaming types based on Bartle (Explorer, Achiever, Socializer and Killer) were ratified and their psychic mechanisms as well as the motivational and cognitive base of the addiction as part of the psychic anatomy were elucidated based on the Theory of Action Regulation.

#### Timing emotional sounds: Contingent negative variation modulation predicts modulation of subjective duration

**Mella, Nathalie** *Neuroscience, CNRS, Paris, France* **Pouthas, Viviane** *neuroscience, CNRS, Paris, France*

The influence of emotion on time processing has been investigated in previous studies, showing that negative events generate a lengthening of subjective

duration. The present experiment aimed at determining electrocortical correlates of such an effect. Twelve participants estimated the duration of neutral and negative sounds varying in arousal level, when attending to time and when attending emotion. Highly arousing sounds were judged longer than less arousing ones. This effect was stronger when attending to emotion than when attending to time. Subjective duration modulations were reflected by right frontal negativity (CNV), which suggests that CNV is an index of experienced duration.

#### Do physicians inform themselves and their patients in a balanced manner?

**Mendel, Rosmarie** *Inst. für Psychiatrie, Technische Universität München, München, Germany* **Traut-Mattausch, Eva** *Department of Psychology, Ludwig-Maximilians-Universität, München, Germany* **Hamann, Johannes** *Psychiatric Department, Technische Universität München, München, Germany* **Jonas, Eva** *Department of Psychology, Universität Salzburg, Salzburg, Austria* **Frey, Dieter** *Department of Psychology, Technische Universität München, München, Germany* **Kissling, Werner** *Psychiatric Department, Technische Universität München, München, Germany*

Objective: To determine whether physicians making a treatment decision inform themselves and a patient about the benefits and risks of antipsychotic drugs in a balanced way. Methods: Subsequent to a brief case history, physicians indicated which benefits and risks of antipsychotics they will inform themselves or their patients about respectively. Results: Physicians informing themselves looked for more risks than benefits; physicians informing a patient presented significantly more benefits than risks. Conclusions: A risk-related information search can lead to a neglect of potential benefits and thus cause suboptimal decisions; a benefit-related information presentation to patients can entail legal actions against physicians.

#### Development of a screening tool for the identification of psychooncological treatment needs in breast cancer patients

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Purpose In order to facilitate identification of patients with psychooncological treatment needs we developed a suitable screening instrument based on patient-reported outcome. Methods 105 breast cancer patients participated from Innsbruck Medical University. Assessment instruments used were EORTC-QLQ30, HADS, DT and HQ. Statistical methods included logistic regression and ROC-curves. Results Stepwise forward-selection showed that EORTC-QLQ30 subscales Role-Functioning and Emotional-Functioning as well as former psychological treatment were the optimal predictor set for the need of psychooncological treatment. The AUC for this predictor set was 0.88(CI95%0.82-0.95). Conclusion Assessment of patients QOL appears useful for prediction of psychooncological treatment needs in breast cancer patients.

#### Instruction based modulation of the Simon effect

**Metzker, Manja** *Dresden, Germany* **Dreisbach, Gesine** *Allgemeine Psychologie, Technische Universität Dresden, Dresden, Germany*

In a series of experiments we compared the effects of stimulus-response (SR) based vs. rule based processing on the Simon effect. That is, all participants received the same stimulus set, but were instructed to either use direct SR mappings or one categorization rule. The Simon effect, i.e. faster reaction times when stimulus and response location correspond, was only present when participants used a categorization rule, but disappeared when participants used SR mappings. This result contradicts classical theoretical accounts of the Simon effect, such as dimensional overlap model and other dual route models. Implications for Simon effect theory will be discussed.

#### Assertive style in the deaf student: A comparative study

**Mies i Burrull, Àngels** *Psicologia Evolutiva, UAB, Bellaterra /Cerdanyola, Spain* **Fornieles, Albert** *Psicobiologia i Metodologia, UAB, Bellaterra / Cerdanyola, Spain*

This research analyses awareness of social-competency skills in deaf students on the basis of their auto-perception and that of their school peers. Differential aspects amongst deaf and non-deaf students are also studied in this respect. The sample consists of 10 deaf subjects, currently undertaking primary education, with an oral communicative mode. A questionnaire on social interaction skills and the CABS scale (Michelson, 1987) are used. The results to date show a lesser tendency in the use of an assertive style in the resolution of conflicts. The conclusions allow us to gain which aspects merit greater attention for future intervention.

#### Achievement motivation and leadership between the gifted children.

**Mohamed, Hiba** *Psychology, Niel West, Khartoum, Sudan*

This Study aims at investigating the relationship between achievement motivation and the characteristics of leadership in the gifted children. The sample constitutes of (418) pupils (212) are males and (206) females. And (23) primary school teachers. Three tools were used in the study: achievement motivation, leadership, behavioral characteristics of gifted children. There is no correlation the study showed achievement motivation and leadership. There are no differences between males and females in achievement motivation and leadership. There are according to assessment of the teacher UC MAS students are motivated, while the students gifted school is less motivation.

#### Emotional functioning and sleep disorders in children aged 6-12 yrs

**Mojs, Ewa** *Dept. of Health Sciences, Poznan University, Poznan, Poland* **Glowacka, Maria** *Dept. of health Sci, Poznan Univ. of Medical Sci, Poznan, Poland* **Zarowski, Marcin** *Chair and Dept of Dev. Neurol., Poznan Univ. of Medical Sci, Poznan, Poland* **Samborski, Włodzimierz** *Clinic of Physiotherapy, Rheum, Poznan Univ. of Medical Sci, Poznan, Poland* The aim of the study was the estimation of the emotional processes in children aged 6-12 yrs. of age. 84 boys and girls participated in the study. They fulfilled a questionnaire of the SD. Next 30 patients from the examined group with diagnosed SD participated in the psychological and neurological examination. The STAI and STAIC scale, scale of impulsivity, control expression of emotions and depression used in the study. The statistical analysis shows the significant correlation between SD and the prevalence of emotional disorders. There was no correlation between the duration of SD and the results of psychological tests.

#### Motivations for promotion and prevention in the initiation and maintenance of close relationships

**Molden, Daniel** *Psychology, Northwestern University, Evanston, Illinois, USA* **Finkel, Eli** *Psychology, Northwestern University, Evanston, Illinois, USA* **Johnson, Sarah** *Psychology, Northwestern University, Evanston, Illinois, USA* **Eastwick, Paul** *Psychology, Northwestern University, Evanston, Illinois, USA*

Desires for advancement (promotion) and security (prevention) are both fundamental human motivations. The present research investigates how such motivations influence the initiation and maintenance of close relationships. Two longitudinal studies, one involving people seeking romantic relationships and one involving people already in romantic relationships, assessed the pursuit of possible partners and commitment to existing partners, respectively. Correlational analyses revealed that stronger motivations for promotion predicted increased pursuit of potential partners and decreased commitment to current partners whereas stronger motivations for prevention predicted the opposite pattern of results. Relationship satisfaction may therefore depend upon different motivations at different stages of relationships.

#### Double dissociation between reading and spelling

**Moll, Kristina** *Inst. für Psychologie, Universität Salzburg, Salzburg, Austria*

We investigated the dissociation between reading and spelling deficits in 110 German speaking children based on four groups: children with isolated reading deficits, children with isolated spelling deficits, children with both deficits and controls. Children read words and pseudohomophones derived from these words. We expect intact orthographic representations reflected by a lexicality effect for reading disabled and controls, but not for spelling disabled children. Furthermore, we assume a deficit in access to phonology reflected by reduced naming speed in rapid digit naming tasks for reading disabled in contrast to controls and spelling disabled children. The data are currently being analysed.

#### Adult attachment styles and attitudes towards sharing time with one's partner

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This study examines if people with different attachment styles differ in their attitudes towards sharing time with one's partner. The study was carried out using 746 university students. The Relationship Questionnaire (RQ) was administered to determine the adult attachment style. Direct measures of their attitude towards sharing time with one's partner were also collected. Variance analyses show significant differences according to adult attachment style in their attitudes towards this interpersonal behaviour. Scheffé tests revealed that participants with a secure and preoccupied attachment style showed the most positive attitudes towards sharing their time with one's partner, whilst both types of avoidant individuals showed the less positive attitudes. Dismissing individuals reported the lower average score.

#### Construction of the conflict attribution scale in Mexican couples

**Montero Santamaria, Nancy** *Faculty of Psychology, Nat. Aut. University of Mexico, Mexico City, Mexico* **Rivera Aragon, Sofia** *PSYCHOLOGY FACULTY, UNAM (MEXICO), DF - MEXICO, Mexico* **Diaz Loving,**

#### Rolando PSYCHOLOGY FACULTY, UNAM (MEXICO), DF - MEXICO, Mexico

Unlike interaction with strangers (a major criticism to the experimental study on Attribution), marriage consists in constant observation of the other's behavior. Hence, this study was aimed at constructing an instrument that could provide integral measurement of attribution to conflict in Mexican couples. The Attribution and Emotions Scale (Betancourt, Flores and Cortes, 2004) was therefore applied. It was answered by volunteers living with their partners (474 males and 491 females). Results obtained through the psychometrical analysis included in the instrument show that Intentionality predominates and that Causality Locus and Stability are also identified, giving a greater active role to the other in the relationship.

#### The role of demographic variables in predicting mental health among physically disables in Isfahan City

**Moradi, Azam** *Psychology, Isfahan University, Isfahan, Islamic Republic of Iran* **Ghamarani, Amir** *Psychology, University of Isfahan, Isfahan, Islamic Republic of Iran*

The purpose of this research was to determine the share of employment status, marital status, education level, intensity of disability, and gender in predicting the mental health of physically disables. Subjects were consisted of 100 members of Isfahanian Society of Disables who were selected randomly. For assessing the mental health GHQ - 28 was used. Results of stepwise regression analysis showed that employment status and marital status are best predictors for mental health respectively, but adding education level, intensity of disability, and gender to former variables can't increase the predicting power of the mental health in physically disables significantly.

#### Preschool children's interactive play: Individual differences and their antecedents

**Morino, Mio** *Early Childhood Education, Shokei College, Kumamoto, Japan*

The aim of this study was to examine how children's understanding of mental states, language ability and peer interactions at the age of 3 (Time1) were related to the quality of their play after the transition to the new class of 4-year-olds (Time2). A sample of 57 children (Time1) completed the tasks of theory of mind, understanding of emotions and Picture Vocabulary Test. The observations were also made when children (Time1 and 2) were free to choose their own playmates and activities. As a result, the role of language ability was important in the interactive play.

#### How does informative and non-informative feedback influences learning in children?

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The influence of feedback in relation to individual differences and brain activity in learning tasks was investigated. The combination of an educational and a neuroscience study showed interesting results. 230 children (age 10 to 13) completed a learning task (with informative or non-informative feedback) and measures for individual differences. 37 children in a functional neuroimaging study completed the same task while their brain activity was assessed. When the learning material was structured the informative feedback group performed slightly better than the non-informative feedback group. Positive feedback was associated with stronger



activity in visual brain regions and the caudate nucleus.

**Mikhail Bakhtin's dialogue approach combined with Gestalt approach as a means of improving the group work in workshops, group psychotherapy and team building**

**Mstibovskiy, Illia** Rostov-on-Don, Russia

Objective: to elaborate theoretical basis and practical tools for the group leader in the form of unique methods of maintaining a group dialogue. Methods: 1. modeling the essential features of Mikhail Bakhtin's Dialogue Approach (MBDA) in relation to group work. 2. using Gestalt Approach to make group members experience the dialogue during specially organized exercises. 3. assessing group work in the dialogue mode basing on Kurt Levin's field theory. Results: A rapid natural increase of group cohesiveness, member's sincerity and activeness, which is achieved primarily by means of encouraging both their autonomy and participation in the group.

**Construct validity of employment interviews - Do they assess, whatever you ask for?**

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The present study investigated construct validity of employment interviews in light of their dimensions, i.e. the constructs they aim to assess. Based on a sample of 282 candidates applying for a clerical apprenticeship, a multimodal interview was applied. Comprehensive exploratory and confirmatory construct analyses indicated correlations with social competence as assessed via self reports (.17-.30) and assessment center tasks (.51-.57, uncorrected); however, as expected, construct saturation was moderated by the dimensions underlying the interview. It is concluded that, in addition to the typical, dyadic situation of the interview, construct validity is determined by the content of questions and rating scales.

**Pre-selection methods for employment interviews - A reference model**

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Even though employment interviews are quite expensive, they represent one of the most often used methods for personnel selection. The present paper reviews a total of seventeen methods regarding their utility for pre-selecting candidates prior to the interview according to two dimensions: process efficiency and diagnostic gain. Based on an extensive literature search and data from meta-analytic and primary studies, a reference model was established reflecting the utility of these methods for pre-selection. As such, this model integrates the literature concerning construct and criterion related validity of the interview and can be used as guideline for practitioners designing selection processes.

**Reconsolidation in human episodic memory**

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**Gomez, Rebecca** Psychology, University of Arizona, Tucson, USA

Reactivated memories can be modified and subsequently require reconsolidation. We reported reconsolidation effects in human episodic memory: Memory for an object set was modified by presentation of a new set if participants were reminded of the first set before learning the second set. The reminder involved three components: the

experimenter, a reminder question, and the spatial context. We now show re-instating the spatial context is crucial for obtaining the reminder effect. An additional study looked at the boundary conditions for contextual reminders. We found that the spatial context triggers reconsolidation only in unfamiliar but not in familiar contexts.

**Relationship between depression and hostility among teachers**

**Naderi, Mohamad Mehdi** Azadshar, Islamic Republic of Iran

Objective: The purpose of the present study was to examine the relationship between depression and hostility among teachers. Method: Participants were 531 teachers of education organization of Golestan province in Iran. The mean age of the participants was 37.49 years (SD = 5.58). There were 215 men and 316 women. Measures: All participants completed a questionnaire booklet containing one self-report measures: The Symptom Checklist-90-R (SCL-90-R). Results: The results of the present study demonstrate that: Correlation between depression and teacher's hostility is meaningful and positive ( $r = 0.714, p < 0.001$ ). Conclusions: The present study revealed that a more depression is associated with a high level of self-reported hostility.

**Birth weight is associated with antenatal maternal cortisol diurnal rhythm**

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In this study, an influence of the antenatal maternal activity of hypothalamus-pituitary-adrenal axis on birth weight was investigated by measuring diurnal cortisol rhythm in 20 midterm and 24 late pregnant women (mean age  $29.3 \pm 4$  yrs). The participants were classified into non-decrease, low level decrease and high level decrease groups, according to their cortisol decrease rate (from 8:00 to 11:00). Birth weight was significantly lower in midterm than late pregnant in non-decrease group ( $p < .05$ ). This finding suggests the effect of the antenatal maternal flattened diurnal cortisol rhythm on birth weight differs between midterm and lateterm.

**Effects of instructions in individuals with the mental retardation**

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The purpose of this study was to investigate the role of instructional effects in individuals with mental retardation by measuring movement time and accuracy. The subjects were measured on how quickly and accurately they pored liquid into a cup to red line. There were 39 individuals without mental retardation and 38 individuals with mental retardation in the study. In addition, the subjects were compared and examined the four types which were classified according to the three clinical types and healthy person.

**Redressing inequities in third-partner relationships**

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This study examined whether an individual maintain equity in trans-relational relationships (Austin & Walster, 1975). A total of 129 undergraduates

completed a questionnaire that contained two hypothetical exchange situations. The respondents were initially either over-rewarded or under-rewarded, and then they were given a chance to distribute the rewards between themselves and their partners. In each situation, the respondents worked with different partners. In addition, respondents were informed that their partners worked with someone at another time. The results indicate that over-rewarded people redressed those inequities from third parties only when they knew that their first and second partner worked together.

**Relative importance of expressive behavior in emotion judgment with contexts: The effects of situation, sex of judges, and nationality of expressers on Japanese judges**

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Utsunomiya University, Utsunomiya, Japan

The present study focused on the effects of situational information (situation where expressions occurred: public versus private), nationality of expressers (Japanese versus American), and sex of participants on the judgment of emotion by 78 Japanese college students. Multilevel analysis revealed that expressions were more important than elicitors in the emotion judgments and that expressions of American expressers were more weighted than those of Japanese. The relative importance of expressions in emotion judgment was replicated in the present study and the findings were discussed in terms of the relative effectiveness of contextual information in the judgment of emotion.

**Emotional control of the children in stress coping and the process of the resolution**

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It is an important and interesting subject to study which behavior is taken associated with which emotion, in order to control emotions in stress coping and to maintain smooth communication. This study covers toddlers in the United States and emotional control seen among multiage members surrounding three-year-old children is examined. Stress coping seen in interpersonal relations with multiage children is taken up here.

**The assessment of risk propensity through a dilemmas task**

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Risk Propensity (RP) is a trait characterized by an increased probability of engaging in behaviors that involve some potential harm, but also an opportunity for some benefit. A sample of 892 people participated in a study in which a new RP task, composed of several dilemmas, was explored. Each dilemma includes the initial set plus sequential approximations for estimating the Indifference Value between a Secure and the expected value of an uncertain Game. The scores showed good internal consistency, reasonably test-retest reliability, and good validity as reflected in the correlation with other Risk Propensity task.

**Influence of learning techniques on information processing**

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**Krishnan** Physical Science, Meston college of

education, Chennai, India

Objective of the study: To establish the fact that effective information processing is dependent on the



learning techniques one adopts. Methodology of the study: A sample of 100 students in the age group 13 to 17 were chosen. They were divided in to two groups control and experimental. To experimental group certain specific learning methods were taught. For the same group neuro transmitter serotonin was tested taking blood samples of the students before and after adopting learning techniques. Expected results : Increase in serotonin levels in the blood sample establishes the relationship between information processing and learning techniques.

#### **The role of visual imagery as mind tool in information processing**

**Navaneethan, Girija** Chennai, India

Objective : To understand the significance of visual imagery in the information processing of individuals. Methodology: Visual imagery is one of the mind tool which enables an individual to experience the perception of some object event or scene that occurs when the relevant object, event, or scene is not actually present to the senses. The sample consists of boys and girls of the age group 17 years chosen and given training in visual imagery to learn chemical bonding in chemistry. Their confidence level and achievement ability were tested before and after the application of the tool. Expected results : Calculation of "t" test value revealed a remarkable improvement in achievement test scores and also boosted the confidence level of the students

#### **Parents' child-feeding practices: A comparison between two towns Mexico City and Morelia, Michoacán**

**Navarro, Gabriela** Social Psychology, UMSNH, Morelia, Michoacán, Mexico

The objective of this study was to compare Parents' feeding attitudes and practices in two Mexican samples of mothers from different towns. Participants: 300 mothers of 4 to 11-year-old girls and boys from Mexico city and 300 from Morelia, completed the Mexican adaptation of the Child Feeding Questionnaire MACFQ. Cronbach's alpha = .8383 (Navarro, 2006), a self-report measure of parental attitudes, beliefs and practices about child feeding and obesity proneness. It will be presented Factor structure of the MACFQ by town. Means of the seven factors of the MACFQ were compared between towns by Student t- test.

#### **Unobserved heterogeneity in trauma patients desire for autonomy in medical decision making in an emergency department**

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**Miller, Peter** Drug and Alcohol Prevention, MUSC, Charleston, USA  
**Schlattmann, Peter** Biometry and Clin Epi, Charité - Universitätsmedizin, Berlin, Germany  
**Braehler, Elmar** Medical Psychology and Sociol, University Leipzig, Leipzig, Germany  
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Objectives: To evaluate unobserved heterogeneity in trauma patients' desire for autonomy in medical decision-making (DAD). Methods: Study in 1,009 emergency department patients (median age 32 years, 62% male). A covariate adjusted finite mixture model was established. Results: Three latent subpopulations (low DAD in 53.3 % / medium DAD in 35.6 % / high DAD in 11.1 % of patients), a positive association of female gender respectively school education, and a negative association of higher age respectively substance use with patients' DAD was evaluated. Conclu-

sions: Trauma patients' DAD showed unobserved heterogeneity which could not be explained by established explanatory variables.

#### **The influence mechanism of the small or middle-size enterprise owners' charismatic leadership toward followers**

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**He, Qian** Department of Psychology, Zhejiang University, Hangzhou, People's Republic of China

This study investigated 206 employees who come from small or middle-size enterprises, to explore the relationships between owner's charismatic leadership, the employee's self-efficacy, self-esteem, self-structure and organizational citizenship behaviors (OCBs). The results showed that self-efficacy mediated the relationship between strategic vision and non-conventional behavior of charismatic leadership and OCBs, self-esteem mediated the relationship between sensitivity to environment and non-conventional behavior of charismatic leadership and OCBs, but the effect of the non-conventional behavior is negative. Finally, strategic vision and personal risk influence the self-construal, but the self-construal did not influence the OCBs, the influence of sensitivity to followers is not significant.

#### **The dependence of emotional child's reactions on methods of punishment and reward in family**

**Nikolaeva, Elena** Dept. of Child's Psychology, State University, St. Petersburg, Russia

The problem of this research was to analyze a variety of children's cardiac reactions on emotional stimuli (remembering of the reward and punishment in family). 162 children (7 yr. old) were participants. Programs SPSS and Surface have been used. We showed, that system of interaction of children and parents at which children believe, that them do not encourage or seldom praise, promotes change of cardiac reaction not only in a situation of the reward, but also punishment when their vegetative reaction under stress decreased. Research was supported by Grant 07-06-00576a by RGSF

#### **Comparison of normative beliefs between Japanese and U.S. students to group abusive activities**

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**Watanabe, Namiji** Letters, Ferris women University, Shizuoka, Japan  
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The purpose of this study is to investigate cross cultural communalities and differences of normative beliefs to group abusive activities between Japanese and U.S. students. For, we developed Group Health Scale which is consisted of 51 items for what activities are abusive psychologically against personal human rights. The students of the both countries responded to the questions: If you belonged to a group, or an organization that is characterized by each of the following items, how would you feel? It is found that the U.S. students have two cognitive structures which are classified into seven sub-structures in the Japanese.

#### **Effect of self-esteem on reselecting interactional partners in persuasion games: An investigation using the Settoku Nattoku Game (2)**

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**Yanagisawa, Kuniaki** Graduate school of I.A.S., Hiroshima Univ., Higashi-Hiroshima, Japan

Effect of self-esteem on selecting interactional partners was investigated using a persuasion game named the Settoku Nattoku Game (SNG; Sugiura, 2003). In this study, we focused on the effect of self-esteem on repeated selection of interactional partners by using data from two SNGs. Freshmen at a university (n = 24) participated in the SNG game twice. The results were consistent with prior studies and indicated that high self-esteem people tended not to select the same partners, whereas low self-esteem people tended to repeatedly select the same people.

#### **Effects of attachment on interpersonal relationship development**

**Niwa, Tomomi** School of Education, Nagoya University, Nagoya, Japan

The aim of the present study was to examine the different contact frequency and amount of interaction in the early stage of relationship to favorable or unfavorable person arising from the features of attachment to parents. Four hundred and sixteen undergraduates and 587 undergraduates were surveyed on the contact frequency and amount of interaction with unfavorable or favorable person respectively. The main result showed those low on avoidance of parental attachment had less interaction with favorable person than those who scored high. However, there was no difference in contact frequency between those who were high on avoidance of parental attachment and those who were low.

#### **Psychometric properties of the obsessive beliefs questionnaire: Children version in a non-clinical Spanish sample**

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**Godoy, Antonio** Personalidad, Evaluación y Tto, University of Málaga, Málaga, Spain  
**Gavino, Aurora** Personalidad, Evaluación y Tto, University of Málaga, Málaga, Spain  
**Valderrama, Lidia** Personalidad, Evaluación y Tto, University of Málaga, Málaga, Spain  
**Fernández, Rosa** Personalidad, Evaluación y Tto, University of Málaga, Málaga, Spain  
**Quintero, Carolina** Personalidad, Evaluación y Tto, University of Málaga, Málaga, Spain  
**Romero, Pablo** Salud Mental, Hospital de Jaén, Jaén, Spain

The Obsessive Beliefs Questionnaire (OBQ - Obsessive Compulsive Cognitions Working Group, 2001) is a self-rated scale that is used for measure cognitive aspects of obsessive - compulsive disorder (OCD). The aim of this work is to evaluate the dimensionality, reliability and validity of the children version of this questionnaire in a Spanish sample of children, the Obsessive Belief Questionnaire - Children Version, (OBQ - CV, Godoy, unpublished work). The results indicate that the OBQ - CV is a reliable measure in this sample and that it has a good convergent and discriminant validity with different measures of anxiety and depression.

#### **On the syndromological approach to studying the personality aspects of teaching stress**

**Nosenko, Eleonora** Dept. of Psychology, National University, Dnipropetrovsk, Ukraine

The aim of the study was to assess the adequacy of the approach. 60 young teachers were assigned to groups differing (t-test) on the level of anxiety and depression as an index of burnout. Correlation analysis (r-Pearson) of the scores on burnout and those on Cattell 16 PF revealed six symmetrical factors the opposites of which characterised low (1) and high (2) burnout groups : B.E.G.L.O.Q2 (p<.01) Five nonsymmetrical factors also had significant correlations in group 2: H.I.Q3.Q4.N. Factor C had positive correlation in group 1. The findings prove the adequacy of the approach and prompt the ways of improvement in training teachers.



### Verbal memory in experienced actors and controls

**Notthoff, Nanna** Dept. of Psychology, Stanford University, Stanford, USA **Jonides, John** Department of Psychology, University of Michigan, Ann Arbor, USA

**Objectives:** How do actors remember verbal material? **Hypothesis:** Actors extract the meaning first, then remember details. They are successful recalling meaningful stories, less with unrelated words. **Methods:** We tested experienced actors' (nA=21) and controls' (nC=24) memory for unrelated (RAVLT) and related pre-categorized word lists (CVLT) and their ability to recognize themes (Roediger & McDermott False Recall Paradigm). **Results:** No significant differences were found in RAVLT and CVLT. Actors identified more themes in the False Recall Paradigm (meanA=4.14, SD=2.17; meanC=1.79, SD=1.25;  $p=0.0001$ ). **Conclusions:** Actors are better at extracting gist than controls, resulting in better performance when remembering meaningful materials using their own categories.

### Recollective states as predictors of academic success

**Nourkova, Veronika** Psychology, Moscow State University, Moscow, Russia **Yeremenko, Victoria** Psychology, Moscow State University, Moscow, Russia

Can verbs, that students use starting their exam answers with, predict their grades? In the study 250 participants rated those verbs which mean states of consciousness accompanying recollection. Cluster analyses extracted 3 types of such states: type 1 - "know, remember", type 2 - "recollect", type 3 - "think, suppose, feel". Comparing verbs by which students start their exam answer and grades they got we found out that verbs forming the first group predict the highest proportion of excellent grades, verbs from the second group predict the highest proportion of medium grades and verbs from the third group predict the highest proportion of lowest grades.

### Electroencephalographic correlates of cognitive development in children aged 5 to 6 years

**Novikova, Svetlana** Developmental Psychophysiology, MSUPE, Moscow, Russia **Posikera, Irina** developmental psychogenetics, PIRAE, Moscow, Russia **Tsetlin, Marina** developmental psychophysiology, MSUPE, Moscow, Russia **Pushina, Natalya** developmental psychogenetics, PIRAE, Moscow, Russia **Malakhovskaya, Elena** developmental psychophysiology, MSUPE, Moscow, Russia **Stroganova, Tatiana** developmental psychogenetics, PIRAE, Moscow, Russia

**Objective:** To estimate the relationships of electroencephalographic (EEG) spectral parameters under attention load on cognitive functioning in preschoolers. **Methods:** EEG was recorded in 82 5-to-6-year-old children under three conditions: "Closed eyes", "Visual attention", "Attention-to-speech". Intelligence (IQ) was measured using Kaufman Assessment Battery for Children. Multiple regression was applied. **Results:** EEG spectral amplitudes under "Closed eyes" condition did not relate to IQ parameters. In contrast, theta rhythm spectral amplitudes registered under attentive states explained up to 34% of IQ scores variance. **Conclusions:** The findings showed the contribution of EEG theta under attentional load in the individual diversity of IQ in children.

### The effect of an audience on cortisol response to a speech task

**Oda, Yayoi** Toyo, Japan **Endo, Kenji** Department of Psychology, Aoyama Gakuin University, Toyo, Japan Although many studies demonstrate that cortisol increases during speech, few studies demonstrate the effect of an audience. To examine the effect of

an audience upon cortisol response, undergraduates participating in groups of 10-12 were divided into audience and non-audience conditions. Each participant of the audience condition group delivered a 5-minute speech to the experimenter and the rest of their group, whereas the participants of the non-audience condition performed the same task in another room without an audience. The result demonstrated that the salivary cortisol level only increased in the audience condition group and not in the non-audience condition group.

### Making clinical psychology accessible to people with intellectual disabilities

**Ogi, Laura** Learning Disabilities, National Health Service, Birmingham, United Kingdom

**Aim** This is a unique initiative to promote access of information around psychological care, facilitate informed consent and support the education of related professionals. **Method** A 37 min DVD in which psychologists introduce the approach they use at work in a way that is easy to understand and a booklet for related professionals. **Results** Outcomes assessed through five service user focus groups and two professionals focus groups. **Conclusion** The results will be discussed in relation to the proposed aims such as facilitating access to psychological care, the education of related professionals and informed consent.

### Self-regulation in early childhood: The relations to social skills and problem behaviors

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The purpose of this study was to examine the relations of self-regulation to social skills and problem behaviors in Japanese preschool children. We considered four aspects of self-regulation; self-assertiveness, self-inhibition, attention shifting and attention focusing. Four hundred and fifty-two children's self-regulation were rated by their parents. Two hundred and sixty-two of them were rated social skills and problem behaviors by their teachers. We made a cluster analysis of the standardized scores of four aspects of self-regulation and found six clusters. The results of analysis revealed the different characteristics of social skills and problem behaviors in each cluster.

### Classification of Ibaso "Person who eases your mind" in female undergraduates

**Okamura, Toshimitsu** Nara Nersery College, Kyoto, Japan

Ibaso (the comfortable place) is an idiosyncratic word to Japanese culture. Ibaso referred to the space, the time and the person that ease your mind. Especially the person who eases your mind was critical. Participants were asked to choose alternatives of answers to the questions, "Who is the person that eases your mind in situations (high or low anxiety)?" Multiple correspondence analyses were performed to the choices of person mentioned above. The results indicated that the person who eases your mind were categorized to three groups by two axis in both situations, namely "myself", "family" and "friend" groups.

### Improving autonomy in mentally retarded children by precision teaching method

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The aim of study is to verify the effectiveness of the software, based on Precision Teaching (PT), for increasing, in mentally retarded subjects, knowledge and correct use of money. It was compared the

fluency and accuracy of answering between two groups (mental disabled and non-disabled subjects). It was investigated the gender differences in learning. The results showed an improvement of knowledge for all the groups, and, in the post-training, there aren't differences among the students. Precision Teaching method seems to have enhanced significantly the accuracy and fluency on answering, and, in general, the learning of correct use of money.

### Emotional support reduces social pain and anterior cingulate cortex activation during ostracism

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To examine the effects of emotional support on social pain caused by ostracism, we conducted an fMRI study in which participants played a virtual ball-tossing game (Cyberball task). They were initially included and afterward excluded. In the latter half of the excluded session, they received emotionally supportive text messages on the screen. The emotional support reduced subjective social pain and the activation of anterior cingulate cortex associated with ostracism. The results suggest that anterior cingulate cortex is involved in representation of psychological pain.

### Interference and overshadowing in contingency learning

**Orgaz, Cristina** Bilbao, Spain **Vadillo, Miguel Angel** Psychology, University of Deusto, Bilbao, Spain **Matute, Helena** Psychology, University of Deusto, Bilbao, Spain

The aim of this experiment is to study the relationship between interference and cue competition in contingency learning. These effects were explored by testing 62 college students with a standard preparation for the study of human contingency learning. Inferential analyses show that a cue that has been overshadowed loses its ability to interfere with another cue. Interestingly, current models of associative learning predict no interaction between these phenomena. These results also suggest that interference can be used as an indirect measure for cue competition effects

### Hungarian and French students' social representation on competition

**Orosz, Gábor** Reims, France

The purpose of the present study is to compare Hungarian and French students' social representation of competition. Words associated to competition were collected. Vergás's process of analysis was carried out to show the structure and content of the representations. According to our results Hungarian and French students' representations are basically similar, containing mainly sport. However among peripheral elements some differences appear: French students concentrate on the motivating factors of competition, but success and economic concepts play a central role in the representation of Hungarians. These results can be explained by the countries' different historical and cultural backgrounds.



### Subjective alienation: Measurement and correlates

**Osin, Evgeny** School of Psychology, University of East London, Moscow, Russia

The aim of the study was to develop a Russian-language psychometric tool measuring subjective alienation based upon the Alienation Test (Maddi, Kobasa & Hoover, 1979). A pool of 120 items was administered to adult and student samples ( $N=452$ ). Item-total correlations, factor analysis and structural equation modeling were used, yielding a 60-item questionnaire measuring 4 patterns of subjective alienation over 5 different domains. The alienation scale and its subscales demonstrate high internal consistency and significant negative correlations with a number of subjective well-being measures. An original scale of alienation in educational setting was also developed, demonstrating similar results.

### Emotional intelligence and structures through designing scale suitable to the Sudanese environment

**Osman, Habab** Psychology, Adrak Private Company, Khartoum, Sudan **osman, habab** psychology, adrak private company, Khartoum, Sudan

This study examines the identification of emotional intelligence and structures through designing scale suitable to the Sudanese environment. To achieve this aim, two scientific methods were employed, namely, documentation and descriptive method. The questionnaire and the scale was applied to a group of 410 participants both males and females. The study shows that items and dimensions of the constructed scale enjoyed adequate level of reliability and validity. The result of factor analysis shows that there is a high saturation of emotional intelligence with five sub structures including (Self-awareness & Motivation, Managing Emotion, General Mood, Emotion Facilitation of Thinking, and empathy).

### The influence of repetition on the change of cue-validities

**Ostermann, Tanja** Bonn, Germany

Inconsistent with the common assumption of unidirectional reasoning from cues to options, it was recently shown that subjective cue-validities are changed during the process of decision making (Simon et al., 2004). The observed bidirectionality in reasoning is explained by automatic processes of maximizing consistency (Glöckner & Betsch, in press). Based on these results an experiment was conducted to test whether repeated in comparison with singular presentation of decision tasks influences the strength of these changes in cue-validities. It was furthermore examined whether these changes also influence subsequent decisions.

### Altruism with price as a signal: On intrinsic motivation and crowding-out

**Otto, Philipp** Inst. für Mikroökonomik, Europa-Universität Viadrina, Frankfurt, Germany **Bolle, Friedel** Microeconomics, Europa-Universität Viadrina, Frankfurt (Oder), Germany

In this paper we provide an explanation why and how external intervention can undermine intrinsic motivation. It is hypothesized, that the offered price is taken as a proxy for the "market value" of the corresponding activity. By including an "altruism parameter" in our simple model of intrinsic motivation, we can make straight forward predictions about changes in intrinsic motivation and resulting observed behavior like crowding-in or crowding-out, correspondingly with or without persistence. Which of these effect is observable on the aggregated level, fully depends on the constitution of the two variables "altruism" and "income" in the group.

### Examining the effects of mother's socialization goals, developmental expectations, and psychological control in Turkish preschool children's social competences

**Ozturk, Pinar** Psychology, Abant İzzet Baysal University, Bolu, Turkey **Kumru, Asiye** Psychology, Abant İzzet Baysal University, Bolu, Turkey

This study examines the effects of mothers' socialization goals, developmental expectations, and psychological control in preschool children's prosocial behaviors, thoughtfulness, verbal intelligence, and hostility. The total of 175 children aged 4-6 years old, their mothers and teachers were recruited in Turkey. Results revealed that older children scored higher on prosocial behaviors and verbal intelligence; girls scored higher on prosocial behaviors; and boys scored higher on hostility. Also, socialization goal of child's self development positively predicted prosocial behaviors and verbal intelligence; inconsistent control behavior negatively predicted verbal intelligence and thoughtfulness; and developmental expectations about social skills negatively predicted prosocial behaviors.

### Quantifying and delimiting the proliferation of executive functions

**Packwood, Sonia** Quebec, Canada **Tremblay, Sébastien** École de psychologie, Université Laval, Quebec, Canada

The proliferation of executive functions (EF) makes this concept unclear and difficult to operationalize. The purpose of the present study is to estimate the extent of the proliferation and the degree to which EF overlap conceptually and psychometrically. A meta-analysis and exhaustive literature review have enabled us to identify the most frequent EF as well as the neuropsychological tests typically used to measure them. A semantic network analysis revealed clusters of EF and also indicated several overlaps across EF. These results are very informative about the organisation of EF and promote a holistic view of executive control.

### Predicting risk factors of attachment disorders in school age children with respect to parents' attachment styles

**Paivastegar, Mehrangis** Dept. of Psychology, Alzazra University Tehran, Tehran, Islamic Republic of Iran

Attachment disorders of all degrees are a significant and growing feature of all society. These disorders not only damage individual children, but also society at large. If these disorders in children are not recognized and addressed, it is difficult to treat and prevent them. In this study, we investigated the relationship between parents attachment style and Children's attachment disorder. Parent's attachment style was tested. It was also found that girls presented attachment disorder more than did boys. The final analysis of data indicates the insecure/ anxiety attachment and marital conflict as major predictors of children attachment disorders.

### The effects of obligation of role on marital conflicts in Chinese couples

**Pan, Chun Feng** Department of Psychology, National Taiwan University, Taipei, Taiwan **Hwang, Kwang Kuo** Department of Psychology, National Taiwan University, Taipei, Taiwan

Most of past researches attempting to investigate why conflicts happened in marital relation highlighted personal trait or the characteristics of the marital relation per se. However, the authors employed "methodological relationalism" to stress the obligation of different roles between persons-in-relation to explore the cause of Chinese marital conflict. Results supported the authors' expectation that obligation of role base on different relationship between the subjects and other significant others such as mother or father in law was determinant of the cause of the marriage conflicts. The issue of

mending the marriage relationship is worthy to discuss further.

### Cross-cultural adaptation of overseas Chinese students in Japan

**Pan, Hong** Graduate School of Integrated, Hiroshima University, Higashi-Hiroshima, Japan **Ura, Mitsuhiro** Integrated Arts and Sciences, Hiroshima University, Higashi-Hiroshima, Japan

Effect of support acquisition strategy of overseas Chinese students ( $n=177$ ) on cross-cultural adaptation was examined by focusing on social-networking skills. The result of a pass analysis indicated that the relationship between social networking skill and adaptation was mediated by emotional/informational supports from Japanese people. Specifically, empathy/conflict-resolution skill was effective in eliciting support from Japanese and this support facilitated social cross-cultural adaptation, which in turn led to better mental adaptation. In addition, it was revealed that for Chinese students with high network maintenance skill, academic/informational supports from Chinese people which were affected by empathy/conflict-resolution skill facilitated mental adaptation.

### Relationship quality and health: The moderating effect of community involvement

**Paprocki, Christine** Dept. of Psychology, Columbia University, New York, USA **Patton, Matthew** Psychology Department, University of Chicago, Chicago, USA **Visser, Penny** Psychology Department, University of Chicago, Chicago, USA

Individuals who are unsatisfied in their marriages are at heightened risk for negative physical health outcomes (see Burman & Margolin, 1992 for review). The current study examined moderators of this relationship using data from 4,242 married individuals who participated in the National Survey of Midlife Development in the United States (MIDUS). Regression models indicated a significant interaction between measures of community involvement and relationship quality on physical health: higher community involvement predicted better health ratings, especially for those in low quality relationships. This implies that community involvement may be particularly beneficial or therapeutic for individuals unhappy in their marriages.

### Construct validity of Paulhus' Comprehensive Inventory of Desirable Responding (CIDR)

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The aim of this study was to test the construct validity of the Croatian version of Paulhus' Comprehensive Inventory of Desirable Responding (2006). The CIDR comprises four subscales intended to measure components of social desirability: agentic management, agentic enhancement, communal management and communal enhancement. For this purpose independent samples of participants were tested in three situations with different instructions for self-presentation: one honest ( $N1=224$ ) and two different "fake good" instructions ( $N2=249$ ,  $N3=196$ ). Conducted analyses revealed different factor structures in three situations, giving partial support to the model. Further studies are needed.

### When are predictions self-fulfilling?

**Peetz, Johanna** Dept. of Psychology, Wilfrid Laurier University, Waterloo, Canada **Buehler, Roger** Psychology, Wilfrid Laurier University, Waterloo, Canada **Griffin, Dale** Sauder School of Business, University of British Columbia, Vancouver, Canada



We examined under which conditions people's predictions of task completion dates carry over to their actual completion times. We randomly assigned students to predict an early or a late completion date of an experimental task, using an anchoring procedure. In the task, participants were asked to write three short essays in the 14 days following the session. These essays were either sent by email (easy condition) or by letter mail (difficult condition). Our results show that, in the domain of task completion, predictions carry over to behavior only for easy but not for difficult tasks.

#### How are causal powers combined?

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Generative causes make the probability of their effects grow beyond zero or a certain base rate. But how do naïve reasoners compute the expected probability of an effect when two causes of such an effect are simultaneously present? And how is the power of a single cause discounted from a compound? Several experiments are presented in which people failed to combine or discount causal powers in accordance with normative probability calculus. Instead, they seem to use simple additive and subtractive combination rules that can give rise to judgment biases (over- and under-expectation) with significance in daily life.

#### Culture and coaching

**Perkins, Patrick Scott** New York-Presbyterian Hospital, Weill Cornell Medical College, New York, USA **Cronan, Kerry Richard** Counselling Centre Ltd., Professional Consulting and, Eagle Farm, Australia **Aidman, Eugene Vladimir**  
Coaching, in particular in the area of leadership, has become a regular practice in consulting psychology. Strategies will only be effective if they fit the cultural context in a way that does not mix the change in interpersonal process with a possible unnecessary change evolving in the cultural context. This presentation will draw upon studies in coaching that alert practitioners to the issue of the appropriate recognition of culture both within and surrounding the context of organizations, as well as the harmonizing of the interactions between branches of organizations of the one company.

#### An investigation of multiple predictors of bulimia nervosa

**Pfost, Karen S.** Psychology, Illinois State University (110, Normal, Illinois, USA **Westendorf, Christina** Normal, Illinois, USA **Meadows, Brooke A.** Psychology, Illinois State University (110, Normal, Illinois, USA **Philippe-Albrecht, Nona** Psychology, Illinois State University (110, Normal, Illinois, USA  
Bulimia nervosa seems associated with body objectification, perfectionism, impulsivity, low self-esteem, and avoidant coping, with feminism being a potential buffer. This study extends research on determinants of bulimia nervosa by assessing predictors using the Objectified Body Consciousness Scale, Multidimensional Perfectionism Scale, Barratt Impulsiveness Scale, Rosenberg Self-Esteem Scale, the COPE, and the Feminist Identity Development Scale. These measures, along with the BUILT-R (a measure of bulimic symptoms), will be administered to 250 females at a public university in the U.S. A hierarchical regression analysis will be conducted to assess the contribution of these predictors.

#### The personal styles inventory: A measure of normal-range personality traits

**Pfost, Karen** Dept. of Psychology, Illinois State University, Normal, USA **Kunce, Joseph** Psychology, Educational & Psychological, Columbia, USA **Newton, Russel** Psychology, Educational & Psychological, Columbia, USA  
The Personal Styles Inventory (PSI-120; Kunce, Cope, & Newton, 1999) is a measure of normal-range personality characteristics which is a unique assessment tool. Profiles take the form of an eight-component circumplex with underlying axes of introversion/extroversion and preference for stability/change. Feedback describes both personality as a whole and the three domains of cognition, affect, and behavior. The discrepancy between basic and current behavior serves as a barometer of current stress in response to environmental demands. A considerable body of research attests to the PSI-120's concurrent and discriminant validity

#### The role of competitiveness and social comparison in youth's health behaviors

**Piko, Bettina** Dept. of Behavioral Sciences, University of Szeged, Szeged, Hungary **Skulteti, Dora** Dept. of Behavioral Sciences, University of Szeged, Szeged, Hungary **Gibbons, Frederick** Dept. of Psychology, Iowa State University, Ames, USA  
Objectives: The main goal of the present study is to investigate the role of competitiveness and social comparison in health-compromising and health-promoting behaviors. Methods: Data were collected from high school students (N = 548) in the Southern Plain Region, Hungary, using self-administered questionnaires. Multiple regression analysis was used in the statistics. Results: The role of social attitudes may be quite different depending on the situation they are used: competitiveness may act as a risk factor for substance use, social comparison may act as a protection. Conclusions: These results suggest that learning to be more socially oriented should be a part of children's socialization.

#### Machiavellianism and the characteristics of friendship in same-sex couples of friends

**Pilch, Irena** Inst. of Psychology, University of Silesia, Katowice, Poland  
The aim of this study was to examine the associations of Machiavellianism with the characteristics of friendship. The data were obtained from the sample of 81 same-sex couples of friends (aged 17-49). Mach IV and a set of self-descriptive measures of a relationship's characteristics (closeness, satisfaction, support, influence, control, self-disclosure, trust, attractiveness) were used. Correlational, regression and cluster analysis were performed. Machiavellianism was negatively related to closeness, satisfaction and trust, and positively to control, but mainly for men. The results imply that Machiavellianism may reduce the quality of many friendship. The implications are discussed in terms of evolutionary psychology.

#### Psychometric properties of WISC-IV verbal subtests (Latvian version) in individual versus group testing situation

**Pivovarovs, Andrejs** Dept. of Psychology, University of Latvia, Riga, Latvia **Rašvska, Malgožata** Psychology Department, University of Latvia, Riga, Latvia  
The purpose of this study was to evaluate the differences of psychometric properties of WISC-IV five Verbal subtests (Latvian version) between individual and group (writing) testing. The participants, 470 students aged 11 through 16 were divided in 5/5 matched samples. Analysis showed that discrimination indices in individual testing are somewhat higher than in group testing. Mean scores in individual testing are higher than in group testing, yet only two subtests have statistically significant differences. There are also other persistent differences of subtests psychometric properties

between individually and group administered testing. Key words: psychometric properties, WISC-IV, discrimination index, verbal subscales

#### Anxiety profile as indicator of child psychological wellbeing in different life spheres

**Podolskij, Andrei** Dept. of Developm. Psychology, Moscow State University, Moscow, Russia **Karabanova, Olga** Developmental Psychology, Moscow State University, Moscow, Russia  
Anxiety is considered to be an indicator of child psychological wellbeing. Different types of anxiety are described in contemporary studies besides traditionally selected personal and situated ones. It's fruitful to describe also an anxiety profile, which represents a combination of different types of anxiety as anxiety level in different life spheres varies very much. Using the A. Prihozhan Anxiety test it has been shown that anxiety profile is determined by such important variables as child's interrelations with parents, peers, teachers, and also school achievements. Results achieved allows to work out a correction work for children with high level of anxiety

#### Construct validity: How to prove it by theory-based item generating rules and IRT model-based analyses

**Poinstingl, Herbert** Inst. für Psychologie, Universität Wien, Wien, Austria **Kubinger, Klaus D.** University of Vienna, Faculty of Psychology, Vienna, Austria  
The Family Reasoning Test (FRT) is a new verbal reasoning test. The testee has to find the right relationship of two persons when a short story is given as an item of a more or less complex family description. The items are built by using theory-based item generating rules, the latter stated according to some cognitive operations. The linear logistic test model (LLTM; Fischer, 1972), a specialization of the Rasch model, is used in order to test the construct validity of the test. If the LLTM holds then the hypothesized cognitive operations actually determine the difficulty of an item.

#### The ability to detect egoism: Social distance matters

**Pradel, Julia** Wirtschafts- u. Sozialpsychol., Universität zu Köln, Köln, Germany **Fetschenhauer, Detlef** Economic and Social Psychology, University of Cologne, Cologne, Germany  
From an evolutionary point of view the ability to distinguish altruistic from egoistic interaction partners is highly adaptive - especially in close relationship with high interdependence. To find out whether humans are in fact capable to read signs of prosociality we examined 328 students of elementary and secondary school classes. We initially tested the true degree of altruism of each individual by asking subjects to divide some money between themselves and another person anonymously. Afterwards subjects had to predict their classmates' decisions. Indeed, estimates were much better than chance. Furthermore, social closeness (e.g. friendship) influenced the accuracy of predictions positively.

#### Behavioral analysis of sexuality in relation to HIV/AIDS: Commitment in sexual behavior

**Pramod, D. S.** Community Counselling, Health Alert Organisation, Deopur, Dhule, India **Vaishali, P.S.** Community counselling, Health Alert Organisation (NGO, Deopur, Dhule, India  
Objectives: To assess Behavioral analysis of Sexuality in relation to HIV/AIDS. Methods: feedback questionnaire available to all consultants. Results: 35 consultants addressed for study, 68% allopathic, 20% Ayurvedic & 12% traditional-healers. couples screened 21% reported talk about HIV/AIDS affection. 79% kept silence. 78% of agreed to be screened after counseling. Conclusion: HIV/AIDS

affection often comes into private conversations of many couples [ 68 We need to permanent sensitization and information and adequate care taking of the already affected Lessons learned: Rural/tribal population an iceberg phenomenon. need to shift our focus form urban to rural areas where AIDS is epidemic.

#### **Academic achievement in relation to depressive symptomatology, intelligence and neuropsychological variables**

**Preiss, Marek** Dept. of Psychology, Prague Psychiatric Center, Prague, Czech Republic **Franova, Lenka** Psychology, Institute of Psychology, Prague, Czech Republic

Project examined relations between academic achievement, depressive symptomatology, neuropsychological variables and intelligence in children sample (N=814), from elementary schools in Prague. Neuropsychological tests, depressive scale, academic performance and intelligence were administered. Significant relations between school grades and intelligence, depressive symptomatology and partially neuropsychological variables was found. Common variance of used psychological variables for the overall average grades was 25.8% ( $p < .0001$ ), for boys 25.7 and for girls 30.1. When examining problematic academic achievement it is necessary to control for depressive symptomatology. Psychological variables can explain only 1/4 of academic achievement, 3/4 are necessary to be explained with other information.

#### **Development of the Types of Intuition Scale (TIntS)**

**Pretz, Jean** Dept. of Psychology, Illinois Wesleyan University, Bloomington, USA **Brookings, Jeffrey** Psychology, Wittenberg University, Springfield, OH, USA

The TIntS was developed to measure three types of intuition identified in a recently-published literature review (Pretz & Totz, 2007): holistic, inferential, and affective. Holistic intuitions integrate diverse sources of information in a Gestalt-like and non-analytical manner, inferential intuitions are based on previously-analytical processes which have become automatic, and affective intuitions are based on feelings. Items for each type of intuition were administered to 170 undergraduates. Reliability and factor analyses supported the distinction among the three predicted types of intuition, and the scales were validated by examining correlations with existing measures of intuition and personality.

#### **Does incentive strength affect response force?**

**Puca, Rosa Maria** Inst. für Bildung, Ruhr-Universität Bochum, Bochum, Germany **Rinkenauer, Gerhard** Modern Human-Machine Systems, IfAdo, Dortmund, Germany

In two experiments we assessed whether behavioral strength is modulated by incentive strength. Participants had to press a force key, whenever a number appeared on the screen. Positive, negative numbers and zero indicated the amount of points they could either win or loose. Experiment 1 revealed that response force increased with the amount of points. In Experiment 2 this finding was replicated. An additional control group, however, in which participants were instructed just to respond to the presented numbers, did not show any response force effects. Thus, our findings strongly suggest that incentive strength affects response force.

#### **Equotherapy: Health professionals speaks on their motivations for the exercise of this work**

**Pugas, Mirela** Mackenzie University, São Paulo, Brazil **Yabuki, Renata** Psychology Course, Mackenzie University, São Paulo, Brazil **Becker, Elisabeth** Pós-graduation, Mackenzie University, São Paulo, Brazil The horse is an animal applied as a therapeutic resource for its useful characteristics. The objective

of this research was describing the present factors in the health professional chosen to work with 'Equotherapy'. The method had as procedure of five semi structure interviews. The result ('content analyses') allowed to consider for this group the motivation say about liking the animal and the interaction with it and the opportunity to work in nature conditions. These professionals find in the direct observation of therapeutics benefits and the experience of humanity help are the most important motivational link of continuity of this activity.

#### **The neural basis of syllogistic reasoning: An event-related potential study**

**Qiu, Jiang** School of Psychology, Southwest University, Chongqing, People's Republic of China **Zhang, Qinglin** School of Psychology, Southwest University, Chongqing, People's Republic of China

The spatiotemporal analysis of brain activation from syllogistic reasoning and one baseline task (BST) execution was performed in 14 normal young adult participants using high-density event-related brain potentials (ERPs). Results mainly showed that (see figure 1): a greater negativity in VSR and ISR as compared to BST developed 600-700 ms. Dipole source analysis of difference waves (VSR-BST and ISR -BST) indicated that the negative components were mainly localized near the medial frontal cortex/the anterior cingulate cortex, possibly related to the manipulation and integration of premise information.

#### **The relationship between socio-economic status and mental health**

**Rajaei, Yadollah** Zanjan, Islamic Republic of Iran

The aim of this study was to investigate the relationship between socio-economic status (income, education, and occupation) and mental health. 150 employees in Zanjan comprising university heads, professors, teachers, civil servants, laborers, and farmers completed the Mental Health Inventory (MHI) and demographic information form. Data were analyzed using One-Way ANOVA and Chi-Square. Results revealed that there were significant relation between indexes of SES, distress and well-being. Significant differences were found between men and women in distress and well-being. Finding can be helpful in providing appropriate policies for preventive programs and promoting public health.

#### **Hypnosis in the alleviation of procedure-related pain in children with cancer**

**Ramirez Zamora, Laura Miriam** Queretaro, Mexico

Although cancer is not always painful in its own right, these patients undergo numerous painful procedures including lumbar puncture (LP) and bone marrow aspiration (BMA) Objectives 1) Examine the efficacy of a hypnotic intervention in reducing procedure-related pain and anxiety during PL and BMA among patients with leukemia 2) Adapt a coping pain questionnaire, a distress behavioral scale and the Stanford Hypnotic Clinical Scale for Children to Mexican population. 3) Explore changes in coping and hypnotic responsiveness after hypnotic intervention Methods 20 pediatric leukemia patients undergoing regular LP and BMA in a quasiexperimental design with repeated measures. Pilot results will be presented

#### **Relationship of gatekeepers' attitude toward condom use and condom use behavior of female sex workers in China**

**Ran, Zhao** and Economy, Central University of Finance, Beijing, People's Republic of China **Fang, Xiaoyi** Institute of developmental Psy, Beijing Normal Univ, China, Beijing, People's Republic of China **Li, Xiaoming** medical school, Wayne State University, USA, Detroit, USA

To explore gatekeepers' attitudes toward condom use, and to assess their association with FSWs'

consistence condom-use, condom use intention and sexual disease infection. Condom use specific support from gatekeepers was rather low in establishments. Gatekeepers' attitudes toward condom use were positively associated with condom use frequency (OR, 1.326; 95%CI: 1.048-1.678) and intention ( $\beta$ , 0.127;  $P < 0.001$ ;  $R^2_{adj}$ , 0.096;  $F$ , 23.728\*\*\*) among 454 establishment-based FSWs in Guangxi, China. However, they were not associated with sexual disease infection. Health workers should work together with gatekeepers to create a supportive local environment for condom use in establishments. In addition, treatment of sexual disease will be necessary.

#### **Peculiarities of ethnic identity and ethnic stereotypes of young people from mono and multicultural families in Latvia**

**Raschevskis, Vitalijs** Social Psychology, Daugavpils University, Daugavpils, Latvia **Vorobjovs, Aleksejs** Social Psychology, Daugavpils University, Daugavpils, Latvia **Ruza, Aleksejs** Social Psychology, Daugavpils University, Daugavpils University, Daugavpils, Latvia

The objective of the research is to study peculiarities of ethnic identity and ethnic stereotypes of young people from mono and multicultural families in Latvia. Theoretical background is based on Tajfel's and Turner's social identity theory, Berry's theory of acculturation, Ericsson's and Murcia's theory of identity formation, etc. Two methods have been used in the research: Phinney's Multi Ethnic Identity Method (MEIM), and Soldatova's Types of Ethnic Identity Method (TEIM). The results let to make a conclusion peculiarities of ethnic identity and ethnic stereotypes of young people from mono and multicultural families in Latvia.

#### **Epidemiology of postpartum anxiety and depressive disorders**

**Reck, Corinna** Inst. für Psychiatrie, Universität Heidelberg, Heidelberg, Germany

Objectives: Depressive and Anxiety Disorders are the most frequent mental disorders in the postpartum period. This is the first study on postpartum anxiety disorders in Germany. Methods: In a two-stage screening procedure a population-based representative sample of 1024 postpartum women were studied over the first three months postpartum using DSM-IV-criteria. Results: The estimated rate of anxiety disorders was 11.1% and of depressive disorder was 6.1%. Young mothers ( $< 25$  years) with a high education level had a heightened risk of developing depression following delivery. Conclusions: Controlled studies comparing postpartum and non-postpartum prevalence of anxiety disorders are required, as well as specialized programmes for prevention and treatment.

#### **Impact of violent computer games on memory consolidation and concentrativeness**

**Rehbein, Florian** KFN, Universität Hannover, Hannover, Germany **Mölle, Thomas** Medienn. und Schulleistung, KFN, Hannover, Germany **Kleimann, Matthias** Medienn. und Schulleistung, KFN, Hannover, Germany

Objectives: To test the hypothesis whether the perception of media violence especially videogames results in lower performances in memory, learning and attention. Methods: Experiment (between-subjects design). 360 participants aged 18-25. Treatment: Non-violent filmlets, violent filmlets, non-violent videogames, violent videogames and non-media leisure activities. Outcome measures: School related memory and learning performance (VVM: Visueller und Verbaler Merkfähigkeitstest; WERNICKO: Fictional language acquisition), attention performance (KLT-R: Konzentrations-Leistungs-Test). Results: Statistical evaluation indicating impairment of concentrativeness in violent videogame usage but no impairment of memory performance. Conclusion: Our findings are



strengthening the "Modified-Information-Processing-Hypothesis" rather than the "Deletion-Hypothesis".

#### **Coping strategies and personal strengths and difficulties in internationally adopted children**

**Reinoso, Marta** Dept. de Personalitat, Universitat de Barcelona, Barcelona, Spain **Forns, Maria** Personalitat, Universitat de Barcelona, Barcelona, Spain

This study analyzes the type of coping strategies used by international adopted children and their relationship with personal strengths and difficulties. The Kidcope (Spirito et al., 1998) and the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997) were administered to a sample of 50 internationally adopted children (50% boys and 50% girls) and their parents, respectively. The subjects were recruited from several adoptive parents associations of Barcelona (Spain). Self-reported problems were categorized and their relationship to coping strategies and psychological adjustment was explored. The results are discussed within the framework of Lazarus and Folkman's stress and coping model (1984).

#### **Love addiction: The role of personality in its understanding**

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The addiction to love is in our days, a pathological consequence of many personal and situational variables that are related (Retana-Franco, 2007). Among these, the personality traits play an important role in the way the lover feels, thinks and behaves being close and far from his/her object of love. Based on this, the purpose of this research was to measure persistence, anxiety, obsessiveness, despair, sense of emergency, and others traits in order to identify the personality profile of these lovers. Findings will be described in terms of the literature of love, passion, addictions to substances and gender differences.

#### **The emotional regulation process of jealousy: The case of homo and heterosexuals lovers**

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Jealousy is an emotion that emerges when the individual perceives a real or imaginary threat to the exclusivity with a love one (Díaz-Loving, Rivera-Aragón & Flores-Galaz, 1989). In this context of romantic jealousy, the experience evokes high vulnerability. Due to its intensity and the strong consequences in the emotional life, it appears necessary to explore the processes involved in the way the individual cope with the emotion and with the object of love (Gross & Thompson, 2007). The present research studied in 200 Mexican adults (50% homo & 50% heterosexual) the five processes that allow examine the main mechanism to regulate the emotion and the particular strategies.

#### **Is there a common construct underlying the need for cognition, perfectionism, industriousness and persistence?**

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In this poster is presented the adaptation and validation of five scales from four different theoretical approximations and the relation between them, the constructs evaluated were Need for cognition, Perfectionism (2 different scales), industriousness and Persistence. The sample was no probabilistic, intentionally conformed by 446 participants (male = 47%; Age M=23, SD=9) from

Mexico City. The scales present Cronbach's Alpha values from 0.78 to 0.91, factor and structural equation modeling analysis were performed, the results shows an underlying theoretical construct to the four constructs referred previously.

#### **Disentangling the working memory impairment in ADHD**

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Research investigating the specific nature of the working memory (WM) impairment in Attention Deficit Hyperactivity Disorder (ADHD) is lacking. Here we investigated executive and non-executive aspects of verbal and spatial WM functioning in children with ADHD. Twenty-seven drug naïve boys with ADHD (age range 7-13) and matched controls performed a range of specifically designed and standardized WM tasks. Children with ADHD were impaired on visuo-spatial but not on a non-executive verbal WM task requiring the ability to maintain information in memory. The current data disentangles the WM impairment in ADHD suggesting particular difficulties in executive aspects of visuo-spatial WM.

#### **Is genetic information helpful or harmful? A randomised clinical trial**

**Rief, Winfried** Inst. für Psychologie, Universität Marburg, Marburg, Germany

The emerging success of genetic research leads to more and more knowledge about the heredity of several disorders. However, the question arises whether this genetic information is helpful or harmful for affected people. We investigated 300 people with obesity, and they received either a psychological consultation including information on genetic determinants of obesity, or a psychological consultation without genetic information. Group allocation was per randomisation. Results indicated that the inclusion of genetic information is only warranted for a subgroup of people with obesity, namely those with clear individual evidence for genetic determinants (family history of obesity or MC4R-mutation).

#### **Questionnaire for Obsessive Compulsive Disorder Diagnoses (Q-OCDD): Psychometric properties in a clinical group**

**Rivas Moya, Teresa** Psychobiology and Methodology, University of Málaga, Málaga, Spain **Gavino, Aurora** Psychobiology and Methodology, Málaga University, Málaga, Spain **Planas, Amanda** Psychobiology and Methodology, Málaga University, Málaga, Spain

This study focuses on the validation of the Questionnaire for Obsessive Compulsive Disorder Diagnoses (Q-OCDD; Planas, Rivas and Gavino, 2004; Rivas, Planas and Gavino, 2004) in a Clinical Group. 17 subjects aged 16-57 answered the Q-OCDD, Yale-Brown Obsessive-Compulsive Scale (YBSR(A); Baer, Brown-Beasley, et al., 1993) and underwent a Clinical Interview based on DSM-IV-R. Agreement between raters is 0.87. Convergence/Divergence between the classification of Q-OCDD and YBSR(A) scores are shown. Criterion validity of Q-OCDD categories in relation to DSM-IV-R criteria shows moderate sensitivity (78.6) and high specificity (100) in detecting OCD. The clinical and theoretical implications of these results are discussed.

#### **Thinness and beauty: When food becomes the enemy**

**Robles, Delma** Center for Counseling Services, De La Salle-College of St. Ben, Manila, Philippines

The study examines self-construal variables (perfectionism, body image, ideal body shape, and

socio-cultural pressure) and their path leading to bulimia, anorexia and binge eating as mediated by self-esteem and well-being among 137 college women. Three models were tested using path analysis. Model 1 showed that body image significantly affects self-esteem and well-being. When the model was constricted, perfectionism had a significant effect on self-esteem and well-being in addition to the effects of body image. The third model shows the best fit. Self-esteem and well-being mediates the effect of body image and perfectionism to bulimia.

#### **Romantic love, physical attraction and sexual behaviour in Mexican adolescents**

**Robles Montijo, Silvia Susana** Investigación-UIICSE, FES Iztacala-UNAM, Tlalnepantla, Mexico **Díaz Loving, Rolando** Investigaciones Psicosociales, Facultad de Psicología, UNAM, México, D.F., Mexico

This study evaluated the relationship between physical attraction and romantic love with the intention of having sex and using condoms in adolescents with and without sexual experience. The participants were 300 Mexican teenagers (mean age of 15.2 years), 50% with sexual intercourse experience. The results indicated that intention of having sexual intercourse was related to physical attraction in adolescents with no sexual experience and only with intense sexual desire in those who already have had sexual experience. The intention to use condoms was related to romantic love in adolescents with no sexual experience and it was related to physical attraction and passionate love only in sexually experienced teenagers.

#### **Beliefs about the future**

**Rocca, Claudia** Psychology, Carleton University, Ottawa, Canada **Thorngate, Warren** Psychology, Carleton University, Ottawa, Canada

In a world that is undergoing change, it's important to determine young adults' expectations about the future. Here we examine what students from different countries think about their own futures and that of the world. Participants from Canada and Iran completed a questionnaire assessing future expectations for themselves and the world. The results give insights about cultural differences in individual's personal views and expectations of their futures the world's. We want to determine if beliefs about the future are related to gender and age, and see if the methodology is useful for exploring cultural differences in images of the future.

#### **Conflict emergence and conflict management in developing scientific innovations**

**Rocholl, Anne** Berlin, Germany **Schulze, Anna** Dorothea Organizational Psychology, Humboldt Universität zu Berlin, Berlin, Germany

The genesis of scientific innovation is characterized by conflicts and controversies. If they are handled constructively, the process of innovation proceeds more constructively, too. In 50 problem-centred interviews with researchers in basic research and applied research in the field of genetic engineering, we analyzed the process of innovation from an early stage to the implementation in new products and methods. In longitudinal studies we followed the development of six projects. Based on this, we created a model which shows the main steps of innovation development. We demonstrate how these accompany the handling of conflicts.

#### **Effects of psychotherapy and exercise-training on psychosocial and physiological parameters of HIV-1 positive persons**

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The present study was designed to compare the effects of a psychotherapy intervention and an exercise-training program on psychosocial and physiological parameter in a sample of HIV-1 positive persons. A pre-, post-test design with two experimental groups (psychotherapy,  $n = 20$ ; exercise,  $n = 19$ ) and a control group ( $n = 14$ ) was carried out. Health-related quality of life improved significantly in the exercise and in the psychotherapeutic group relative to the control group. Coping strategies, as well as immune indices remained invariable in the three groups. Findings suggested that exercise and psychotherapy interventions enhance health-related quality of life in HIV-1 positive individuals.

#### Internal structure of the DBAS-18 in a sample of Spanish elderly

**Rojas, Antonio** Facultad de Psicología, Universidad de Granada, Granada, Spain **Sierra, Juan Carlos** Facultad de Psicología, Universidad de Granada, Granada, Spain **López, Carmen** AEPC, AEPC, Granada, Spain **Sanchez, Arturo** AEPC, AEPC, Granada, Spain

This study analysed internal structure of the Spanish DBAS-18 using the sample of 433 Spanish elderly (age:  $M = 68.25$ ;  $SD = 8.99$ ). Four factors yielded by Sierra et al. (2006) in a Spanish shift-workers sample obtaining different values of internal consistency: Consequences of the insomnia on the diurnal yield/functioning ( $\alpha = .73$ ), Control and prediction of the sleep ( $\alpha = .50$ ), Consequences of the insomnia on the physical and mental health ( $\alpha = 0.75$ ), and Expectations on the association sleep-age ( $\alpha = .50$ ). The factor analysis conducted afterwards drew out another four factors but not with hardly any coherence.

#### Psychometrics properties of Athens Insomnia Scale-5 in a Spanish sample

**Rojas, Antonio** Facultad de Psicología, Universidad de Granada, Granada, Spain **Sierra, Juan Carlos** Facultad de Psicología, Universidad de Granada, Granada, Spain **Sanchez, Arturo** AEPC, AEPC, Granada, Spain This work shows the psychometric properties of Athens Insomnia Scale-5 (Soldatos et al., 2000) in Spanish sample of 237 adults (mean age = 50.89;  $SD = 20.67$ ) (41.8% for men and 58.2 for women). The exploratory factor analysis has yielded only one factor that explains 49.43% of the variance, showing internal consistency of .74, better than the values obtained by Guilera et al. (2006) using Spanish university students sample. The scale did not show the capacity to differentiate between men and women, but the results indicated significant correlation with the age ( $r = .20$ ;  $p < .01$ ).

#### The implications of depression and the main impact on the human body

**Romero Molina, Adriana** Metepec, Mexico

The present work has the objective to analyze the main implications of depression and its impact in the bodies of the five subjects; for this end it was implemented a qualitative study. Autobiographical techniques, semi structured interviews and a projective technique was applied to this investigation, such techniques were implemented to the five adult women that attended psychological attention regarding depression. The results that were obtained show that the subjects present symptoms such as insomnia, gastrointestinal difficulties, headaches, pain on the neck area and finally, weakening of the psychomotor functions. These symptoms make identifiable the body's implications that its brings with itself a depression.

#### What do people with disabilities desire from their service organizations of personal assistance?

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The present study investigated what adult users of Swedish personal assistance desire of their service organizations. Qualitative analysis of interviews with 12 users gave five categories: (1) Interact with the user in a service-minded way, (2) mediate between users and personal assistants, (3) provide good work conditions for personal assistants, (4) represent the user politically and (5) have a proper ideology of personal assistance. The results were discussed in relation to theories of customer desires. The first category corresponds to desires of service customers in general, while the other four categories are more specific for personal assistance.

#### Developmental study about textual and extratextual inferences and its relationship with working memory

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The aim of this work is to analyze the relationship between textual vs. extratextual inferences and working memory. One hundred and twenty subjects were used (40 from 4th primary grade; 40 from 2nd Primary grade and 40 from University). three on-line proofs were used to measure inferences and three different versions of Reading span Test were used to measure working memory as independent variable. Results showed: a) significant differences according to WM in 2nd grade students in the use of textual inferences; b) significant use of textual generation in 3rd grade group; c) significant developmental differences between three groups in generation of both inference types. Keywords: inferences, reading comprehension, working memory.

#### Enemies: Their purpose in our Lives

**Rourke, Jessica** Victoria, BC, Canada **Gifford, Robert** Dept. of Psychology, University of Victoria, Victoria, Canada

The need for enemies was examined. We hypothesized that participants would report a need for enemies, having previously had enemies, and that enemies serve a purpose. The participants were 141 undergraduates at a Canadian university. On open-ended and checklist items, 15% expressed a need for enemies, 79% had experienced at least one enemy in their lifetime, and 41% believed that enemies serve a purpose (e.g., motivating them to improve and as a means of social comparison). Those with higher self-esteem reported a greater need for enemies. Perhaps counter-intuitively, enemies may often play a valuable role in people's lives.

#### The psychology of internet activity

**Rudnicka, Patrycja** Inst. of Psychology, University of Silesia, Katowice, Poland

Despite the Internet becomes important part of everyday life, significant differences in its dispersion and use are being observed. Demographic, environmental and individual factors are mentioned as key issues. However their relationships and influence on internet activity is still to be explored from psychological perspective. Based on data gathered from over 1000 students, cluster analysis and structural equation modeling (SEM) were used to identify and estimate causal relationships between psychological factors and patterns of internet use. Study results show self-efficacy, anxiety and attitudes significant factors shaping internet activity.

#### Changes in the cognitive restructuring technique during the psychological treatment

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The aim of the present work is to analyze the changes in the restructuring technique as the treatment progresses. We observed 10 recorded sessions of a single case who requested treatment in a private centre. 6 segments of restructuring were randomly selected and analyzed with The Observer XT and a coding system for the verbal behaviour of therapists and clients. Results show changes in the verbalizations of the therapist and the client during the application of the technique. In the long term it means an advance in a general model which will guide a more systematic use of the technique.

#### Relation between verbal recall memory and facial affect perception in schizophrenia

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Patients with schizophrenia have a consistent deficit in facial affect perception. This deficit might underlie the poor adaptive functioning of schizophrenic patients and could be attributed to impairments in basic neurocognitive domains. This study explores the relationship between emotion perception measured using the Face Emotion Identification Test (FEIT) and the Face Emotion Discrimination Test (FEDT) (Kerr & Neale, 1993), and two verbal recall tests: immediate and delayed recall in a sample of 45 patients. Results show a significant association between recall tasks and the FEDT. The implications of the results in the study of neurocognition and social cognition are discussed.

#### Collective efficacy, civic culture, fear to crime, perception of police, emotional climate and victimization: A exploratory study in Bogota

**Ruiz Pérez, Jose Ignacio** Psychology, Universidad Nacional de Colomb, Bogotá, Colombia **Cepeda Gómez, Diana** Magaly Psychology, Universidad Nacional de Colomb, Bogotá, Colombia

Recent research show collective efficacy is a relevant variable in community impact of delinquency, fear to crime and health problems. In this paper relationships between collective efficacy, civic culture, and perception of police, victimization and emotional climate and crime victimization is presented. Data were obtained from a non-randomized sample of university students (three institutions) and neighbors of Bogotá.

#### Psychosocial subgroups in patients with chronic pain: Evidence for maladaptive pain-related coping within the dysfunctional group based on the Multidimensional Pain Inventory

**Rusu, Adina** Carmen Inst. für Medizin. Psychologie, Ruhr-Universität Bochum, Bochum, Germany **Hasenbring, Monika** Med. Psychology & Sociology, Ruhr-Universität Bochum, Bochum, Germany

Background: To examine the relationship between the Dysfunctional group, based on the Multidimensional Pain Inventory (MPI), and dysfunction.



tional pain-related coping strategies. Methods: 120 chronic pain patients were assigned to MPI groups and compared on pain-related fear-avoidance coping (FAC) and endurance coping (EC) measured by the Kiel Pain Inventory. Results: Dysfunctional patients reported more anxiety/depression, help-/hopelessness, catastrophizing and thought suppression than did adaptive copers. However, subgroups did not differ with regard to endurance behaviour and avoidance of social and physical activity. Conclusions: Future studies should investigate the contribution of thought suppression and endurance behaviour within the MPI groups and unravel the complex relationship between pain-related FAC and EC.

#### **Self-concept, attachment security and motivation of achievement in university students**

**Sabelnikova, Natalia** Pedagogical Institute, Barnaul State Pedagog. Univ., Barnaul, Russia

The purpose of the study was to investigate relation between peculiarities of young adults' motivation of achievement, attachment and the particular aspects of their self-concepts (self-respect, self-interest, self-acceptance, etc.). Subjects were 147 university students. The following instruments were employed: Motivation Questionnaire by Kubyshkin; Experience in Close Relationships Inventory (ECR) by Brennan, Clark and Shaver and Self-Attitude Questionnaire by Stolin. Results show differences in attachment of the subjects with different levels of aspiration for competition and social prestige. The level of aspiration for competition differs also in students with different peculiarities of self-concepts. Self-concepts of students with different attachment styles are also examined. Implications of the results are discussed.

#### **Image is everything?: The effects of industry groups images on private investors willingness to invest**

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**Jungermann, Helmut** Psychologie, FR 2-6, TU Berlin, Berlin, Germany

According to traditional theories of finance the willingness to invest in stocks is determined by risk and return. Yet, studies have shown that other factors like e.g. the "home" of the company also affect investment decisions. We hypothesized that another factor is the image of industry groups, such as Software or Media. 140 participants were asked to invest (hypothetically) 50,000 € in funds of different industry groups. Subjects also had to assess the image of these industries. A regression analysis showed that the amount invested was best predicted by the image. Perceived risk and benefit were significant predictors as well.

#### **The role of emotions in conflict resolution strategies in cross-sex friendships of adolescents**

**Salanga, Maria Guadalupe Corpuz** Counseling & Educational Psych, De La Salle University, Manila, Philippines

A between-groups experiment was conducted to examine the effect of appeasement and supplication emotions evidenced by the target on conflict resolution strategies utilized by the other individual in the conflict exchange. One hundred eighty-six participants were randomly assigned to vignettes depicting their involvement in a conflict with an opposite sex friend evidencing either appeasement or supplication emotions. Participants then rated the strategies they would likely utilize to handle the conflict. Results of one-way analysis of variance reveal that appeasement emotions led the other individual to use proactive resolution strategies while supplication emotions led to the use of passive resolution strategies.

#### **Prevalence of dissociation among German adolescents and the relations to academic achievement and media use**

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Objectives: The study aimed at examining the prevalence of dissociation and its connection to academic achievement. Methods: 1784 German secondary school students were surveyed. Data was analyzed by means of hierarchical regression and path analysis. Results: 12,6% of the students (response rate 88 %) showed high dissociation scores signifying pathological dissociation. This prevalence was higher than that for antisocial behaviour and emotional distress. While dissociation showed no relation with academic achievement, it was related with the use of media. Conclusions: The high prevalence of severe dissociation suggests continuing research on the relation between dissociation and social functioning.

#### **Gender and hierarchical level effects in using interpersonal influence tactics in Brazilian organizations**

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To investigate gender and hierarchical level effects in using interpersonal influence in Brazilian organizations, 141 agents and 274 targets (subordinates, peers and bosses) filled a questionnaire evaluating 11 influence tactics. Results showed that influence tactics usage were affected by hierarchic level of the target more than by the gender of the target. Nonetheless, male agents reported greater usage than their targets of most of the tactics, while female agents evaluated themselves similarly to their targets. Also, we found that there were differences between self and others evaluations concerning tactics usage, suggesting the importance of conducting both analysis in future research.

#### **Mood congruence effects in depressed patient's childhood memories**

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The objective of this study was to ascertain whether or not depressed individuals show a mood congruency effect when remembering their childhood memories. The results of two groups – one with fifteen subjects without a previous history of psychopathology and the other composed of fifteen subjects with a depression diagnosis – were compared using an Autobiographical Memory Task, the Beck Depression Inventory, State-Trace Anxiety Inventory and a Schema Questionnaire. The results showed the inexistence of a mood congruency effect, which suggests that childhood memories aren't as biased as more recent ones. This discrepancy can be useful in therapeutical work.

#### **Reliability and factor structure of the Hurlbert Index of sexual assertiveness from a transcultural study**

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OBJECTIVE. Reliability and factor structure of the Hurlbert Index of Sexual Assertiveness (HISA; Hurlbert, 1991) were examined in two Spanish-

speaking women samples with different cultures. METHOD. HISA was administered to 300 Salvadorian women and 227 Spanish women. RESULTS. For the Salvadorian sample, items 14, 19, 20, and 22 showed lower item-total correlations; the hypothesized one-factor solution accounted for 31.50% of the variance and alpha coefficient was .89. For the Spanish sample, items 8, 20, and 22 obtained lower item-total correlations; the one-factor model accounted for 31.97% of the variance and alpha coefficient was .90. In addition, similar results were reported from both samples

#### **Emotional labor and impression management in the local tourism industry**

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ABSTRACT This research is considered to be a prime study in the Philippine context. This study attempted to establish the relationship between emotional labor and impression management in the local tourism industry. A total of 160 respondents working as frontline staff were asked to answer the questionnaires. Two sets of questionnaires were used to gather the data: (1) Emotional Labor Instrument; and (2) the Balance Inventory of Desirable Responding (BIDR), which included impression management. Emotional labor is evident, regardless of reported impression management strategies. The results also serve as a tool to increase awareness about the tendencies towards job exploitation and psychologically hazardous working environments.

#### **Cognitive behaviour therapy on emotional and personality factors**

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This investigation focusses on emotional and personality factors among college students. 200 college students from 18 to 25 years age group were selected and their emotional and personality factors were tested and pre-test scores were noted. They were given cognitive behaviour therapy were given for three weeks along with deep muscle relaxation. Then their anxiety, anger, depression states, happiness, self confidence, concentration and emotional intelligence were measured. Data were statistically analysed through 'C.R.', correlation coefficient and 'F' test. conclusions. There were significant differences between pre-test and post-test scores of anxiety, anger, depression states happiness, self confidence, concentration and emotional intelligence among college students before and after applying CBT

#### **Study on the evolution of the personality disorders in a day hospital**

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**Sanchez, Jose Maria** PSYCHIATRY, FUNDACION HOSPITAL DE MOLLET, BARCELONA, Spain  
**Fabregat, Vicente** PSYCHIATRY, FUNDACION HOSPITAL DE MOLLET, BARCELONA, Spain  
**Borrego, Raquel** PSYCHIATRY, FUNDACION HOSPITAL DE MOLLET, BARCELONA, Spain  
**Corominas, Antoni** PSYCHIATRY, FUNDACION HOSPITAL DE MOLLET, BARCELONA, Spain

OBJECTIVE: To determine the predictive factor of response in patients with personality disorders. DESIGN & METHOD: 40. Sociodemographic, historical and clinical variables (SCL-90/GSI) were collected at the admission. The following variables were assessed throughout the treatment: Social Adaptation Self-evaluation Scale, Coping Orientations to Problems Experienced and the Simplified questionnaire of adhesion and therapeutic compliance. Data collected at discharge: SCL-90/GSI, personality (SCID-II), intelligence (WAIS-III) and questionnaire of satisfaction with treatment. The analyses: bivariate test and logistic regression.

**RESULTS:** The variables "suppression of competing activities and venting of emotions" are positively related and "religion" is negatively. **CONCLUSIONS:** Perception and coping strategies are predictors of improvement.

#### Face validity in personality tests: Psychometric instruments and projective techniques in comparison

**Sartori, Riccardo** Dept. of Psychology, University of Verona, Verona, Italy

**Objectives:** Face validity differentiates personality tests such as projective techniques and psychometric instruments. People were asked to compare the two kinds of tests on the mere basis of their surface. **Methods:** 238 participants were administered an ad hoc tool. Data were analyzed using techniques of Correspondence Analysis. **Results:** Personality tests are judged in two dimensions: the aesthetic and the efficacy. Although participants acknowledge that psychometric instruments are credible and scientific, there is a clear preference for projective techniques, principally by females, people younger than 22 and participants with lower education ( $p < .05$ ). **Conclusions:** The aesthetic dimension seems to prevail over the efficacy dimension.

#### Acquiescence and social desirability in the Italian version of the Balanced Emotional Empathy Scale (BEES) by Mehrabian

**Sartori, Riccardo** Dept. of Psychology, University of Verona, Verona, Italy

**Objectives:** The study has investigated the effects of acquiescence and social desirability in the Balanced Emotional Empathy Scale (BEES) by Mehrabian, which is a self-report instrument for the measurement of emotional empathy. **Methods:** 204 participants were administered the 30 items of the BEES together with 9 items from the Social Desirability Scale (SDS) by Marlowe and Crowne. The data were analyzed using techniques of Linear Correlation and Analysis of Variance. **Results and Conclusions:** Results show that the responses to the items of the BEES are not affected by acquiescence, but, though not in a particularly marked way, by social desirability ( $r$  between BEES and SDS = .21,  $p < .001$ ).

#### Prediction of psychiatrists on the incidence of Egorrhea symptoms among university students in Japan

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**Objectives:** People with "egorrhea" symptoms (ES: Kasahara, 1972) feel that private information (i.e. emotions and thoughts) "leak out," and it is regarded as a serious clinical condition. The aim of the present study was to investigate the predictions of psychiatrists on the incidence of ES among university students. **Methods:** Using a twelve-item instrument designed to assess ES, the prediction of psychiatrists on the incidence of egorrhea and its actual incidence were compared. **Results:** The actual incidence of egorrhea was higher than the predicted incidence. **Conclusions:** Japanese psychiatrists might tend to diagnose ES as a clinical problem.

#### The role of the visuospatial sketchpad in associative learning

**Sasaki, Takashi** Department of Education, Keio University, Japan, Tokyo, Japan

Three experiments were conducted to investigate the role of the visuospatial sketchpad in associative learning. Experiment 1 demonstrated that spatial tapping was more disruptive than articulatory suppression during an associative learning task. This effect was confirmed in Experiment 2 using the relearning method to examine the effect of the

spatial tapping task. In Experiment 3, the set size of the primary task was reduced and the secondary spatial tapping task resulted in faster RTs during the relearning session: a finding consistent with a contextual interference effect. These results suggest that the visuospatial sketchpad plays a crucial role in associative learning.

#### Evaluation of Japanese college students with ADHD-related problems: A comparison between morningness and eveningness groups

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To evaluate a relationship between ADHD and nocturnal life, or continuous phase-shifting of the circadian rhythm to the later hours, 497 students answered a questionnaire, which included items from the Japanese versions of the Morningness-Eveningness Questionnaire (MEQ) and the College-level ADHD Questionnaire (CAQ). The students were divided into three subgroups based on their MEQ scores: Morning, Intermediate, and Evening types. One-factor ANOVAs and post-hoc tests revealed that the Evening group reported a significantly higher score on inattention and hyperactivity than other groups ( $p < 0.05$ ), and also reported a higher score on impulsivity than the Intermediate group.

#### Performance monitoring and decision making in patients with borderline personality disorder

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Patients with borderline personality disorder (BPD) are characterized by marked impulsive behaviour associated with diminished action monitoring and deficits in decision making. Despite its relevance for goal directed behaviour little is known about the neurobiological correlates of these processes in patients with BPD. In the present study, decision making was examined in patients with BPD and matched healthy controls while performing a modified version of the Iowa Gambling Task. Performance monitoring was obtained by measuring the error-related negativity after erroneous responses and negative feedback. The results reveal alterations of performance monitoring and decision making in patients with BPD.

#### Is it always better to share?: Differential associations of couples' shared possible selves with psychological well-being as a function of marital quality

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We examined effects of sharing possible selves with one's spouse for psychological well-being, which we hypothesized to depend on marital quality. Both members of 61 couples (38-84 years) coping with the husband's prostate cancer completed assessments of possible selves, marital quality, and psychological well-being. Using our coding system for shared selves, we found that a higher percentage of couple's shared selves was related to greater purpose in life and self-acceptance in happily married spouses. Unhappily married spouses reported less environmental mastery with more shared selves. We concluded that sharing possible selves is an asset only for happily married couples.

#### Validation and standardization of the test of every day attention for children in Flanders and the Netherlands

**Schittekatte, Mark** Dept. Psychology, Ghent University, Gent, Belgium **Fontaine, Johnny** Testpracticum PPW, Ghent University, Ghent, Belgium **de Clerck, Stefaan** Testpracticum PPW, Ghent University, Ghent, Belgium **Groenvynck, Hans** Testpracticum PPW, Ghent University, Ghent, Belgium

The Test of Everyday Attention for Children (TEA-Ch) is a promising battery to measure attentional processes developed in Australia (Manly et al., 1999). The test consists of nine subtests which are meant to measure three functionally separable attention systems, namely Selective Attention, Sustained Attention and higher level "executive" control. The test was validated and standardized on a sample of 293 healthy Australian children between the ages of 6 and 16. However, generalizability of psychological instruments to other cultural groups cannot be merely assumed. The focus of the cross cultural current research is the need for 'local' norms.

#### Relevance of spatial frequencies for the attentional bias to threatening faces

**Schmidt-Daffy, Martin** Biopsychologie/Neuroergonomics, Technische Universität Berlin, Berlin, Germany

Three experiments investigated whether an attentional bias to threat is mediated by information contained in low spatial frequencies. In each experiment 24 male students completed a visual-dot-probe-task with low- and high-pass filtered pictures of different facial expressions. Confronted with neutral expressions angry expressions (threatening) attract more attention than happy expressions, especially when low-pass filtered pictures were used. However, attention towards angry and happy expressions did not differ when directly confronted. Results are in line with the assumption that a threatening signal contained in low spatial frequencies increases attention for salient perceptual information independent of its emotional valence.

#### An improved scoring procedure for the name Letter task

**Schmukle, Stefan** Inst. für Psychologie, Universität Leipzig, Leipzig, Germany **Krause, Sascha** Department of Psychology, University of Leipzig, Leipzig, Germany **Back, Mitja** Department of Psychology, University of Leipzig, Leipzig, Germany **Egloff, Boris** Department of Psychology, University of Leipzig, Leipzig, Germany

In the name letter task participants report their liking for all letters of the alphabet. Conventionally, a score of implicit self-esteem is computed for each participant as the difference between the evaluation of her/his initial letters and the corresponding evaluation by participants whose initials did not include those letters. We introduce a new scoring procedure that additionally controls for differences in evaluation tendencies between participants. We could demonstrate its superiority by showing that the improved but not the conventional scoring leads to a theoretically predicted moderation effect: Implicit and explicit self-esteem were positively correlated only for participants low in deliberation.

#### Retraumatization: A review

**Schock, Katrin** Research, Behandlungszentrum Folteropfer, Berlin, Germany **Knave, Christine** Research Department, Center for Torture Victims, Berlin, Germany

**Objectives:** Retraumatization is a frequently cited but ill-defined condition. In general the term is used to describe aggravations of PTSD symptoms due to a stressor related to the initial traumatic experience. Aim of this presentation is to give an overview of



current concepts of retraumatization. Methods: Review of research literature. Results: Based on the literature review dimensions were identified which provide a coordinate system for the definition of retraumatization: 1) duration/intensity of initial symptoms 2) duration/intensity of current symptoms 3) nature of the retraumatizing event. Conclusion: Current research is characterized by very heterogenic definitions of retraumatization. The proposed dimensions allow a comparison of these diverse approaches.

#### Effects of psychosocial stress on working memory: Is there an influence of task difficulty and emotional valence?

**Schoofs, Daniela** *Inst. Verhaltenspsychologie, Ruhr-Universität Bochum, Bochum, Germany* **Preuß, Diana** *Inst. für Psychologie, Ruhr-Universität Bochum, Bochum, Germany* **Wolf, Oliver** *Inst. Verhaltenspsychologie, Ruhr-Universität Bochum, Bochum, Germany*

Objectives: To examine the influence of stress on working memory. Methods: The performance in an n-back task varying in difficulty and stimuli employed (digits vs. neutral and emotional pictures) was assessed after psychosocial stress or a control-condition. Results: Analysis revealed significant impairments of stressed subjects in the digit version of the n-back task. This effect was not modified by task difficulty but decreased in size the longer the task was performed. Conclusions: Stress associated endocrine changes produce working memory impairments in a neutral n-back version. Findings will be compared with results obtained with the emotional working memory task.

#### Motivation and knowledge acquisition during computer supported collaborative learning

**Schoor, Cornelia** *Technische Universität Chemnitz, Chemnitz, Germany* **Bannert, Maria** *Professur Päd. d. E-Learning, TU Chemnitz, Chemnitz, Germany*

This study investigated the influence of motivation on knowledge acquisition and learning activities during computer supported collaborative learning (CSCL). Based on findings on motivation during individual learning, we hypothesized that motivation has a positive influence on CSCL outcomes. We therefore measured motivation before, during and after a CSCL task. We found that self-efficacy, a positive attitude towards collaboration and flow during the session had a significant positive influence on knowledge acquisition. Performance avoidance goal orientation and work avoidance showed negative relationships with knowledge acquisition. Thus, motivation is important in CSCL while the mediating processes still have to be analysed.

#### Affect control theory: Linking social cognition to symbolic interactionism

**Schröder, Tobias** *Inst. für Psychologie, Humboldt-Universität zu Berlin, Berlin, Germany*

Affect Control Theory (ACT; Heise, 1979, 2007) holds that people control social interactions by striving to maintain feelings about the situation. Stemming from sociology, ACT predictions have rarely been tested in psychological experiments. We asked 60 Ss to manage a computer simulated company by communicating with different virtual employees. Preliminary results of the experiment support ACT: predicted specific actions correlated with observed Ss' actions ( $\rho=.40$ ), predicted specific emotions correlated with Ss' reported emotions ( $\rho=.49$ ). We discuss these results in terms of overcoming the gap between the "two social psychologies" via using ACT for linking Social Cognition to Symbolic Interactionism.

#### Positive faces, words and scenes facilitate approach

**Schulz, Stefan M.** *Inst. für Psychologie 1, Universität Würzburg, Würzburg, Germany* **Gerdas, Antje B.** *Department of Psychology 1, University of Würzburg, Würzburg, Germany* **Alpers, Georg W.** *Department of Psychology 1, University of Würzburg, Würzburg, Germany*

Facilitation of compatible movements (approach vs. avoidance) in response to emotional stimuli (positive vs. negative) has been found with different tasks, stimuli, and outcome variables. We resolved issues of referential ambiguity, feedback, and different response measures in a novel task. In 26 participants, we compared times needed for initiation and execution of compatible vs. incompatible arm movements in response to emotional faces, words, and scenes. Initiation was slower for scenes. Execution was faster when stimulus valence and response were compatible, particularly for approaching positive stimuli. The results validate our task, but suggest moderating factors for response facilitation by valence evaluation.

#### Emotional and cognitive correlates of social skills in middle childhood: A preliminary study

**Schulz, Annie Karin** *CIIPME / CIPCA, Buenos Aires, Argentina*

It is a well known fact that development of social skills in childhood is closely related to later social, academic and psychological performance. The purpose of this study was to evaluate some of the most important emotional and cognitive correlates of social skills, such as positive emotions, loneliness, depression, and coping styles in Argentinean children from 8 to 12 years old ( $n = 300$ ). Methods of data collection consisted in different behaviour rating scales (parent and teacher report) and self reports. Results of multivariate analysis of variance between social skills and the other variables are consistent with previous findings and theory.

#### Acquaintanceship effect and judgement accuracy in well-acquainted dyads

**Schweinberger, Kirsten** *Inst. für Psychologie, Universität Fribourg, Fribourg, Switzerland* **Vollmann, Manja** *Department of Psychology, University of Konstanz, Konstanz, Germany* **Renner, Britta** *Department of Psychology, University of Konstanz, Konstanz, Germany* **Weber, Hannelore** *Department of Psychology, University of Greifswald, Greifswald, Germany*

This research examines to what extent the acquaintanceship effect (Funder, 1999) can be shown among well-acquainted dyads and whether qualitative or quantitative facets of acquaintanceship are better predictors for judgement accuracy. 90 students rated their own degree of optimism and were assessed by 3 acquaintances using the Life Orientation Test-Revised and the Generalized Self-Efficacy Scale. Accuracy was determined by inter-judge agreement between peer ratings and target self-ratings. Analyses show that only qualitative aspects of acquaintanceship such as closeness of friendship are associated with self-peer agreement. These findings suggest that qualitative aspects of relationships were underestimated in previous studies.

#### Students' preferential helpers in facing various areas of concerns

**Setiawan, Jenny Lukito** *Universitas Ciputra, Surabaya, Indonesia*

This paper describes a study designed to investigate preferential helpers on various areas of concern among Indonesian students. A questionnaire consisted of 14 areas of concerns and 14 choices of helpers was distributed to 1,279 students. Findings showed that friend, mother and self was the most preferred helpers across areas of concerns. Specifically, friend was mostly chosen in 7 areas of concerns, mother was the most preferred helper in

3 areas of concerns. Self was the most common choice in 4 areas of concerns. The study confirms that preferential helpers are conditional to the nature of problem.

#### The study of hand function in chronic schizophrenia

**Shafaroudi, Narges** *Occupational Therapy, School of Rehabilitation Science, Tehran, Islamic Republic of Iran* **Dori, Fatemeh** *Occupational Therapy, School of Rehabilitation Science, Tehran, Islamic Republic of Iran*

This study was conducted to compare the hand function in Schizophrenics with healthy controls. Jebson Taylor was used to assess the hand function of 27 schizophrenic patients as well as 27 controls. There was a significant difference between the schizophrenic group and the healthy group. The scores of seven subtests of Jebson in schizophrenics were lower than the healthy group ( $p < 0.05$ ). Altered hand function often limits the person's capacity to perform effectively to complete daily tasks. Based on the results, hand dysfunction has to be considered in schizophrenic patients so the treatment and planning for improvement of these deficits are important.

#### Effects of Sildenafil (Viagra) on inhibitory cognitive task in the rats

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Sildenafil (Viagra) is an inhibitor of phosphodiesterase type 5 which has been demonstrated in the brain cortex and hippocampus. The effects of pre-training, post-training or pre-retrieval administration of sildenafil on the inhibitory cognitive task in the rats were tested using shuttle box apparatus. Pre-training administration of sildenafil decreased the number of trials to acquisition. Post-training and pre-retrieval of sildenafil increase time spent in the dark compartment. Sildenafil facilitate acquisition, consolidation and retrieval of inhibitory avoidance task. Therefore, it seems sildenafil acts as a memory enhancer in the simple inhibitory cognitive task in the rats.

#### The moderated effect of trait and state self-control on framing effect

**Shan, Jing** *Psychology Department, Peking University, Beijing, People's Republic of China* **Wang, Haini** *Psychology Department, Peking University, Beijing, People's Republic of China* **Wang, Lei** *Psychology Department, Peking University, Beijing, People's Republic of China*

Three studies demonstrated that trait and state self-control ability moderated framing effect. Study 1 and Study 2 used different tasks (risky choice problems and Balloon Analogue Risk-taking Task) to examine the moderation effect of trait self-control ability on framing effect. We manipulated the state self-control ability to test the moderation effect of state self-control ability in Study 3. As predicted, participants high (vs. low) in trait and state self-control were less likely to be influenced by frame and their choices were more consistent across different frames. These results suggest that self-control is an important moderating variable for framing effect.

#### Comorbidity in teacher rated ADHD children

**Sharma, Vandana** *Dept. of Psychology, Meerut College, Meerut, India*

Objective : to examine prevalence rate of comorbidity and gender differences in the expression of comorbidity in teacher rated ADHD-Children.

Design: socially varied, mainly urban children centered in the city of meerut in U.P., India. 222 ADHD children aged between 6-12yrs, were rated by teacher on Vanderbilt scale. Result : Almost 50% ADHD children show comorbidity. Gender difference is not significant in the rate of comorbidity, but significant difference is found in the expression. Conclusion: the results suggest that gender influences the type of comorbidity. Boys show more oppositional defiant disorder, while girls show more anxiety.

**The effect of the attitudes shown by the respondent in self-disclosure on the evaluation for general self and general others.**

**Shiomura, Kimihiro** Iwate Prefectural University, Iwate, Japan **Moribe, Masato** Toyogaoka-Gakuen, Reformatory Institution, Toyoake, Japan **Ohashi, Sanae** Nanyo Senior High School, Kyoto Prefectural High School, Kizugawa, Japan

Forty-eight female university students participated in this experiment. The participants were asked to disclose themselves to the respondent. The attitude of the respondent was experimentally manipulated as two conditions, the one is acceptable condition and the other is non-acceptable condition. The implicit associations of Self and Others with good-bad connotation measured by GNAT are implicit self-esteem. The GNAT is a conceptually quite similar technique to the IAT. We analyzed the degree of change in these indexes before and after the self-disclosure. The results in implicit indexes suggested that the boundary between Self and Others was made unclear by self-disclosure.

**The relationship between self-effacement for in-group/out-group members and self-related concepts**

**Shiomura, Kimihiro** Iwate Prefectural University, Iwate, Japan **Funakoshi, Risa** Faculty of Social Welfare, Iwate Prefectural University, Iwate, Japan **Noguchi, Kenji** Department of Psychology, University of Florida, Gainesville, USA

The purpose of the research is to investigate how self-related concepts predict self-effacement for in-group/out-group members. Participants were 211 Japanese university students (male 83, female 128). Multiple regression analyses were conducted on self-effacement for in-group members and out-group members. Self-effacement for in-group members was significantly predicted by independent self ( $\beta = -.15^*$ ), extraversion ( $\beta = -.33^{**}$ ), other-directedness ( $\beta = .13^*$ ), and IOS for in-group members ( $\beta = -.25^*$ ). The results for out-group members are quite different. Based on these findings, we discussed about the differences between in-group/out-group members and its involvement for Japanese adolescents.

**How can Japanese-specific positive automatic thoughts predict future depressive states?**

**Shiraishi, Satoko** Tokyo, Japan **Koshikawa, Fusako** Department of Psychology, Waseda University, Tokyo, Japan **Sugamura, Genji** Department of Psychology, Kansai University, Osaka, Japan

This study examined how Japanese-specific positive automatic thoughts (PATs) could affect future depressive states. Volunteers (N=204) completed assessments of PATs, negative automatic thoughts (NATs), negative events (NEs), and depression twice in a month. Hierarchical multiple regression analysis showed that the frequency of NEs and PATs directly predicted future depressive cognition. It was also revealed that the interactions between NEs and NATs, and ones between NEs and PATs affected future depressive mood in the same direction. Although reducing the degree of future depressive cognition, PATs increase future depressive mood via NEs.

**Investigate the test of the colored progressive matrices upon those with special needs of hearing impairment in Khartoum**

**Siddig, Zahra** Khartoum, Sudan

The present study aims to investigate the test of the Colored Progressive Matrices upon those with special needs of hearing impairment in Khartoum state between the ages of 6 to 12 year old. The amount of the sample chosen for the study was 170 children both gender from the educational institutions in Khartoum State. The most essential recommendation of this research is orienting research makers and post-graduate students to focus on and use this idea in doing psychological Tests, and measuring the ability of hearing impaired patients to be used in research works as well as in scientific applications.

**Developmental delay: The meaning of a term**

**Silva, Elisabete** Faculdade de Psicologia, Universidade de Coimbra, Coimbra, Portugal **Petrucci Albuquerque, Maria** Centro de Psicopedagogia, Faculdade de Psicologia, Coimbra, Portugal

The present research addresses the precision and theoretical delimitation of the term developmental delay. Since it is a commonly used term amongst Portuguese child care professionals, the study examines different professionals' conceptions of this term. For this purpose, a questionnaire was designed, which amongst other items, asked professionals to identify the criteria used to diagnose developmental delay; to characterize the child with a developmental delay; to enunciate the areas most affected in this condition. The analysis of the answers obtained in a group of 100 professionals, showed the absence of a common meaning amongst professionals using the term.

**A multidimensional view of temperament: Correlation between parental reports and observational methodology**

**Simó Teufel, Sandra** Dept. of Psychology, University of Valencia, Valencia, Spain **DOcon, Ana** Department of Psychology, University of Valencia, Valencia, Spain **Banacloche, Diana** Department of Psychology, University of Valencia, Valencia, Spain

This study is focused on the measurement of infant temperament and analyzes the correspondence between two different assessment techniques: on one side temperamental data obtained by parental reports and, on the other side, observational assessment made by a trained observer on several rating scales on infant temperament dimensions. Subjects in the study were 40 assessed at 6 months. Parents fill out the Infant Behavior Questionnaire (IBQ-R; Gartstein and Rothbart, 2003) and children were observed during a structured episode through the Revised Behavioral Rating Scales on Infant Temperament (DOcon and Simó, 2007). This instrument evaluates ten infant temperament dimensions: irritability, sadness, pleasure; social orientation, cooperativeness, activity; attention, reactivity, soothability and stability.

**Study of self-destructive phenomenon**

**Sokolova, Elena** Psychology, Moscow State University, Moscow, Russia

Study of suicide phenomenon is presented; their emotional, regulatory, cognitive, interpersonal determinants are examined. Rorschach test with scales (Lerner, Blatt, Ilizur), Marlen-Witkin scale for cognitive style; test for coping strategies Plutchik-Kellerman, SCL-90 was used. 200 patients were examined - with depressive disorder and suicide attempts. Results demonstrate connection between structural-functional organizations of the defense mechanisms, differentiation - integration, dependency - autonomy, hostility - cooperation. Results specify the role of deficiency symbolic processes in lowering effectiveness of self-regulatory systems,

allows differentiating borderline and narcissistic types of personality, level of suicide risk

**The effect of network overlaps on roommates' perceived legitimacy with regard to conflicts**

**Soma, Toshihiko** Faculty of Humanities, Kyushu Women's University, Kitakyusyu, Japan

This study aimed to examine the effect of network overlaps outside roommate relationships on the perceived legitimacy of roommates and their partners when a conflict arises in the relationship. Based on Klein & Milardo (2000), I hypothesized that roommates having larger networks that only support their own positions will perceive themselves as more legitimate than their counterparts. Sixty-one female boarding students participated in this survey. The path analysis revealed that roommates coping with a conflict find it difficult to consider their behaviors as legitimate when they have more networks supporting both theirs and the partners' positions.

**Effects of general mental ability and emotional intelligence on self-assessed career-related abilities**

**Song, Jiwen** Lynda School of Business, Renmin University, Beijing, People's Republic of China **Law, Kenneth S.** Department of Management, The Chinese University of Chin, Hong Kong, People's Republic of China **Chen, Zhijun** Department of Management of Or, Hong Kong University of Scienc, Hong Kong, People's Republic of China **Huang, Emily G.** Department of Management, Hong Kong Baptist University, Hong Kong, People's Republic of China

The present study investigated the relationship between emotional intelligence and self-assessed career-related abilities. 506 college students in a large university in eastern China participated the survey. A two-wave longitudinal design (with a 3-month interval) was adopted to avoid the threat of common method variance. Through hierarchical linear regression analyses, we found that on top of General Mental Ability, emotional intelligence measured in Time 1 had incremental predictive power for students' self-assessed career-related abilities (including social abilities and enterprising abilities) in Time 2. Theoretical contributions and implications were discussed.

**Emotional intelligence, evaluation and development in bachelor students**

**Sosa Correa, Manuel** Psicología, Universidad Autónoma de Yucatán, Mérida Yucatán, Mexico **Gamboa Ancona, Lorena** Psicología, Universidad Autónoma de Yucatán, Mérida Yucatán, Mexico **Peniche Aranda, Cyntia Cristina** Psicología, Universidad Autónoma de Yucatán, Mérida Yucatán, Mexico

This experimental investigation had as main objective the evaluation and development of Emotional Intelligence (EI) for which two groups were used, an experimental and a control one. An EI and NEO personality pretest was applied to both. A workshop designed to develop EI was given to the experimental group afterwards, lastly EI and personality posttest was applied to both groups. Results allowed to develop a personal growth protocol, which can be used as guidance to utilize thoughts for our own psychological well being.

**Prenatal stress during war: Findings and outstanding questions**

**Sosic, Bojan** Research and Development, HealthNet International, Sarajevo, Bosnia and Herzegovina  
A quasi-prospective study is being conducted in Sarajevo, Bosnia and Herzegovina, aiming to explore the existence, mechanisms of onset, appearance, and the extent of childhood-expressed effects of maternal exposure to stressors during war. Children born during war are screened for several putative markers of prenatal stress in comparison to



children born before and after the war. Preliminary findings, and problems relating to certain nuisance variables, especially nutritional, are discussed. Special attention is given to the duration of war-related stressors during gestation. The relation of prenatal stress to the so-called 'transgenerational PTSD' is examined.

#### **Development and validation of an instrument to measure planning competence and problem solving capacity: The Gate-Card Test (GCT)**

**Spijkers, Will** *Inst. für Psychologie, RWTH Aachen, Germany*

The Gate-Card-Test (GCT) was developed to measure planning- and problem solving capacity. Construction of the GCT is based on classical maze-tests (e.g., Porteus Maze Test). The GCT consists of 60 (single) maze-tasks. There are two advantages over the classical maze-tasks. First advantage is, that the test considers different standardized levels of difficulty. Second advantage means, that an objective evaluation is guaranteed, because one optimal solution for every task was implemented. The instrument was validated by tests measuring cognitive skills, like organisational ability, intelligence, working memory, conceptualisation skills and cognitive flexibility ( $n=81$ ). Results confirmed the hypothesized correlations.

#### **Networks in Nigeria: A pilot study on network characteristics and their relation with life satisfaction in a Nigerian sample**

**Stadler, Christian** *Psychologische Praxis, Dachau, Germany* **Strobel, Maria** *Psychology, LMU Muenchen, Muenchen, Germany* **Spörrle, Matthias** *Dept. for Psychology, Ludwig-Maximilians University, München, Germany*

Social relationships are a central determinant of life satisfaction. The collectivity of individual social relationships form a social network. This study examines such networks in a Nigerian sample ( $N = 108$ ). Network size, proportions of positive and negative relationships within those networks, and structural characteristics (e.g. network centrality) were assessed. Furthermore, network characteristics were examined concerning their association with life satisfaction. Results indicate overall positive relations of network size with life satisfaction and differential relations of network characteristics with life satisfaction. Results are discussed in terms of (1) cross-cultural assessment of network characteristics, (2) life satisfaction as related to social structural characteristics, and (3) differential associations between network types and different aspects of life satisfaction.

#### **Confidence bias: An instance of systematic irrationality?**

**Stankov, Lazar** *International Testing Service, Princeton, USA* **Kleitman, Sabina** *Psychology, The University of Sydney, Sydney, Australia*

This paper explores the nature of miscalibration as assessed by the over/underconfidence bias score and links it to another instance of non-normative (irrational) responding - the lack of awareness of the additivity principle of probability theory. Four studies employed a multiple-choice test of Verbal Reasoning to assess these two tendencies. The results indicate that over 60% of participants tend to violate the "additivity" postulate of probability theory. The manner in which participants violate the additivity principle - neglect of non-focal alternatives - is related to measures of confidence and miscalibration bias. There exist tendencies towards irrationality that are independent of overall ability level.

#### **Dissociation of decisions in ambiguous and risky situations in obsessive-compulsive disorder**

**Starcke, Katrin** *Inst. für Psychol. Psychologie, Universität Bielefeld, Bielefeld, Germany* **Tuschen-Caffier, Brunna** *Clinical Psychology, Albert-Ludwig-Universität, Freiburg, Germany* **Markowitsch, Hans** *Physiological Psychology, University of Bielefeld, 33501 Bielefeld, Germany* **Brand, Matthias** *Physiological Psychology, University of Bielefeld, 33501 Bielefeld, Germany*

Patients with obsessive-compulsive disorder (OCD) often have problems in everyday decision-making and previous investigations found deficits in the Iowa Gambling Task (IGT) measuring decisions under ambiguity. In the present study, OCD patients' performance on a decision-making task with explicit and stable rules, the Game of Dice Task (GDT), was investigated. Twenty-three patients with OCD and 22 comparison subjects were examined with the GDT, the IGT, and further neuropsychological tasks. Patients performed poorly in the IGT, but were unimpaired in the GDT and executive functioning, indicating reduced decision-making under ambiguity commonly linked to orbitofrontal dysfunctions, but intact decision-making under risk conditions.

#### **Comparison of a card and a computer version of the Wisconsin card sorting test**

**Steinmetz, Jean-Paul** *Dept. of Psychology, University of Luxembourg, Walferdange, Luxembourg*

**Houssemand, Claude** *Psychology, University of Luxembourg, Walferdange, Luxembourg*

The Wisconsin Card Sorting Test (WCST) has been frequently used to assess prefrontal cognitive functioning. The aim of this study was to evaluate the validity of the computer version of the test in comparison to the card version. A total of 106 healthy subjects received either the card version or the computer version during the first followed by the card version or the computer version during the second part of the experiment. Repeated measures MANOVA have been conducted in order to analyze within-subjects variations depending on the assignment. Results will be discussed.

#### **The impact of self-efficacy and collective efficacy on kindergarten students' emotions and achievement**

**Stephanou, Georgia** *Early Childhood Education, University Western Macedonia, Thessaloniki, Greece*

This study examined (a) the effects of kindergarten students' pre-domino game emotions, self-efficacy and collective efficacy in the formation of their performance in the games, and (c) the role of efficacy beliefs in emotions, and in the impact of emotions on performance. The participants ( $n=200$ ) completed the scales at the middle of a school year. The results showed that (a) students' experienced a variety of emotions (mainly, encouragement), (b) emotions, self-efficacy and, mainly, collective efficacy positively influenced performance, (c) collective efficacy, compared to self-efficacy, was a more powerful formulator of emotions, and of the impact of emotions on performance.

#### **Insulin, brain and gender: Effects of intranasal insulin in male and female humans**

**Stockhorst, Ursula** *Inst. für Psychologie, Universität Osnabrück, Osnabrück, Germany* **Blicke, Maren** *Inst. of Medical Psychology, University of Duesseldorf, Duesseldorf, Germany* **Folly, Maria** *Inst. of Medical Psychology, University of Duesseldorf, Duesseldorf, Germany* **Romanova, Daria** *Inst. of Medical Psychology, University of Duesseldorf, Duesseldorf, Germany* **Scherbaum, Werner A.** *Endocr., Diabetol., Rheumat., University of Duesseldorf, Duesseldorf, Germany*

Objective: Effects of acute intranasal insulin on food-intake, memory, blood-glucose, hormones and symptoms were examined in healthy males

and females. We expected an anorexic effect of central insulin in males only, and memory-improvement in both genders. Methods: Under double-blind conditions, 30 female and 30 male students were administered six times either intranasal insulin (20 iU) or placebo. Blood-glucose, hormones, memory and symptoms were repeatedly assessed, food-intake was measured in a single test-meal. Results: After insulin, only males reduced food-intake and showed respective blood-glucose and hormonal changes, females tended to improve specifically spatial memory. Discussion: Gender-specificity is discussed. (DFG STO 323/1-2).

#### **Alexithymia: State, trait, diagnosis or?**

**Stoimenova-Canevska, Emilija** *Communication, New York University Skopje, Skopje, The former Yugoslav Republic of Macedonia*

Objective: The aim of the study was to determine what alexithymia is. Method: The study was conducted in Macedonia in a year period, on 100 psychosomatics and 100 healthy subjects. NEO-PI-R, info from GP record and interview with each participant was preformed. The results were analyzed with descriptive statistics, correlation method and factorial analysis. Results: There is connection between alexithymia and neuroticism, agreeableness, conscientiousness on the level of the whole sample, but there is difference between two sub-samples. Conclusion: Still unclear what really alexithymia is; it seems that it has chameleonic attributes depending of the angle of view.

#### **Conflict when religiosity and sexual orientation collide: Reconciliation through resilience**

**Subhi, Nasrudin** *School of Education, The University of Queensland, St. Lucia, Australia*

The purpose of this study was to explore processes of resilience among gay men who currently or previously identified with the Christian faith and their experiences of conflict between religiosity and sexual orientation. A qualitative study was conducted via in-depth semi-structured interviews with purposively selected gay men. Three distinct resilience strategies emerged, specifically embracing religiosity, altering religious beliefs and abandoning religion to reconcile conflict. Religiosity was considered within a resilience framework developed in the study. The resilience framework proved to be a viable means of exploring the conflict and indicated that multiple pathways towards resilience exist.

#### **The importance of test-item sensitivity on stereotype threat effects**

**Suen, Mein-Woei** *Taichung, Taiwan* **Wang, Jui Sing** *China Medical University Hospi, China Medical University Hospi, TAICHUNG COUNTY, Taiwan* **Keller** (2003) indicates stereotype threat effects (STEs) reveal while participant's ability have been push to limit. Two experiments were drawn out to know the importance of test-item sensitivity on gender STEs. Experiment 1 used Whites ( $n=36$ ) for a 2(stereotype:threat vs.non-threat)  $\times$  3 (test-item difficulty:low vs.moderate vs.high) design. Results reveal gender STEs just occur on the moderate test. Experiment 2 occupied Asians ( $n=40$ ) for a 2(stereotype)  $\times$  2 (difficulty:moderate vs.high) design. The results showed STEs just reveal on high difficulty test. Thus, test sensitivity for inducing STEs is according to the ability of participant group. More details and findings are discussed.

#### **Eye movement performance under endogenous and exogenous cue in learning disabilities**

**Sui, Guangyuan** *Zhejiang Normal University, Jinhua, People's Republic of China*

Classical cue paradigm was employed to examine the endogenous and exogenous attention in learning disability group and control group with EYE-LINKII. The results indicated that under the con-



ditions of low endogenous cue predictivity and long SOAs (onset of a target) of exogenous cue, no cue-validity effects was found in all groups; participants in grade 6 performed better than those in grade 3; there were no differences on response time and cognitive speed between learning disabled and matched groups but with significant differences on cognitive span and strategy. These results demonstrated that the attentive quality of learning disabled children differed from matched group to some extent.

#### Age-related changes in voluntary and reflexive saccades in children with learning disabilities

**Sui, Guangyuan** Zhejiang Normal University, Jinhua, People's Republic of China

Experiments were conducted using eye movements to investigate age-related changes in reflexive saccades and voluntary control of saccadic eye movements in children with learning disabilities (LD). The results indicated that (1) in pro-saccade task, there were no significant differences in reflexive saccades between LD and normal children; (2) in anti-saccade task, the LD groups showed significantly higher percentage of errors than the control groups, the rate of errors got no significant age-related changes in LD children (9-12 years old); (3) in memory-guided saccade task, LD children took longer saccadic reaction time than normal children. These results demonstrated that LD children's inhibitory control abilities were not improving with their aging.

#### Cross-cultural study on peer experience and loneliness of Chinese and American children

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**Zhou, Zongkui** Psychology, Hua Zhong Normal University, Wuhan, People's Republic of China  
**Zhao, Dongmei** Psychology, Hua Zhong Normal University, Wuhan, People's Republic of China  
**Cohen, Robert** Psychology, University of Memphis, Memphis, USA  
**Hsueh, Yeh** College of Education, University of Memphis, Memphis, People's Republic of China

With the thriving of ecology movement and cross-cultural research, the influence of peer interaction on loneliness in the comprehensive ecological background was taken into consideration. 430 Chinese children and 165 American children in elementary school from grade four to six participated in this investigation. A hypothesized structural equation model was applied to test the relations between peer experience (e.g., peer relationship) and loneliness. The results indicated that there was no significant cultural difference on the functioning pattern between peer experience and loneliness, but some path coefficients of the model have difference.

#### Response control ability through error processing

**Suzuki, Kota** Graduate School of Sports, University of Tsukuba, Tennodai, Japan  
**Shinoda, Haruo** Faculty of Psychology, Ritsyo University, Shinagawa, Japan

The relationship between motor impulsivity due to task performance and error-related negativity (ERN) was examined. In experiment 1, subjects were classified according to their performance on the arrow flanker task. This resulted in an impulsive group (shorter response time (RT) and higher error rate), an average group (average RT and error rate), and a prudent group (longer RT and lower error rate). In experiment 2, ERN was recorded in the impulsive and average groups, and results showed that ERN decreased in the impulsive group. Overall, differences in ability of response control may stem from differences in response conflict monitoring.

#### Effects of the reasons for hiding the inner self on verbal strategy arising from a sense of unwanted transparency

**Tabata, Naoya** Dept. of Psychology, University of Tsukuba, Tsukuba, Japan

The purpose of this study was to investigate the reasons for hiding the inner self on verbal strategy arising from a sense of unwanted transparency, the sense that another person seemingly notices something that they would rather conceal. Undergraduate participants were asked to pretend to be graduate students and to interview confederates. The experimental conditions were manipulated by the reason for hiding that they were really undergraduate students. After a sense of unwanted transparency was manipulated, participants were asked a contrived question. As expected, verbal strategy for the question was affected by the reason for hiding the inner self.

#### The development of the innovative leadership scale

**Tak, Jin-Kook** Dept. of Industrial Psychology, Kwangwoon University, Seoul, Republic of Korea  
**Kim, Chan-Mo** Management Study Center, POSCO Research Institute, Seoul, Republic of Korea  
**Cho, Eun-Hyun** Industrial Psychology, Kwangwoon University, Seoul, Republic of Korea

The present study investigates the reliability and validity of the innovative leadership scale. With a sample of 177 employees in a large company, the results of factor analyses showed that the five-factor model with 14 items had a high fit to the data. These factors were innovation pursue, problem solving, vision presentation, risk-taking, and showing initiative. All of these factors were significantly related to various criteria such as identification with the group, attachment to the group, organizational commitment, and supervisor satisfaction, confirming criterion-related validity of the scale. Results of multiple regression analyses showed that risk taking and showing initiative were more important predictors in explaining criteria.

#### The development of the friendship-behavior scale and the relation of intimacy

**Takagi, Mami** Kansai University, Nisinomiya, Japan  
**Takagi, Osamu** Faculty of Sociology, Kansai University, Yamate-cho, Suita-city, Osaka, Japan

The main purpose of this study was to develop the friendship-behavior scale and to investigate the relation of intimacy. 207 participant completed questionnaire regarding their friendship-behavior of friend or close-friend. According to factor analysis of the friendship-behavior, four factors were revealed: "self-disclosure", "gathering the information of the friend", "forming relations" and "observation". In addition, the level of intimacy caused the difference in the friendship-behavior. The analysis found that "self-disclosure" and "forming relations" were increased to close-friend compared with friend. However, to the friend, observation behavior was increased. That is, the criterion validity was confirmed.

#### Effects of attachment on interpersonal relationship development

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**Niwa, Tomomi** Education and Human Development, Nagoya University, Nagoya, Japan

The effect of parental attachment on Interpersonal Affect's (IA) changes in the early stage of relationship was examined. This longitudinal study was conducted at a 3-month interval at the beginning of a university year, where each time 1027 freshmen were asked to rate IA for favorable or unfavorable person. From the result of the multiple regression analysis, the effects of "Anxiety to Parental Attachment" were prominent in the relationship to favorable person. That is, the more they had

anxiety to parental attachment, the higher they rated "hatred", "threat", and "envy" to favorable person, but there were no significant relation to the changing amount of IA.

#### Recognition memory for cars and identification of location

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**Kawaguchi, Atsuo** Fine Arts and Music, Aichi Prefectural University, Aichi, Japan  
**Kitagami, Shinji** Department of Psychology, Nagoya University, Nagoya, Japan

We investigated how accurately people can remember the locations in which the cars were present. Participants were shown each of 10 photographs of cars, of which 5 were in one location and 5 in another location. In the two-alternative forced-choice recognition test, they were shown 20 photographs of cars, displayed in pairs. Immediately after that, two-alternative forced-choice test for the location, in which each of the target cars had initially appeared, was administered. The results showed that people recognize cars much better than they remember where the cars were encountered. These results are discussed in terms of source monitoring framework.

#### Big loss in gamble situation and impulsivity

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**Takahashi, Nobuaki** Shimojo project, JST ERATO, Atsugi-shi, Kanagawa, Japan  
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Forty-four collage students underwent the Iowa Gambling task and impulsivity test, Matching Familiar Figures Test (MFFT). In general, the participants gradually shifted the choices from high-risk to low-risk. However, the impulsive participants with high scores of MFFT made more risky choice than the reflective participants. They tended to continue risky choices after big loss and the tendency enhanced as the loss cumulated. On the other hand, the reflective participants avoided risky choices after big loss. Cognitive impulsivity is related to the sensitivity to monetary loss.

#### Reciprocal relation between rumination and depression

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**Tanno, Yoshihiko** Graduate School of Arts and Sc, the University of Tokyo, Tokyo, Japan

Rumination is characterized as a negative repetitive thinking style. Previous researches have suggested rumination might be a risk factor of depression. On the one hand rumination may contribute to increasing depression, but at the same time depression may intensify rumination. In the present study, such a reciprocal relation between rumination and depression was investigated. Two-time points assessment was conducted on 160 undergraduates. Cross-lagged effects model and Synchronous effects model showed that rumination intensified depression and that depression intensified rumination. This result indicates that there may be a reciprocal relation between rumination and depression, which can maintain and exacerbate depressive disorders.

#### Does "Nostalgic feelings" influence the recall of autobiographical memory?

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**Naka, Makiko** Psychology, Hokkaido University, Sapporo, Japan

The present study examined the influence of nostalgic feelings on recall of autobiographical memory. Fifty-seven undergraduates were asked to give their autobiographical memory in their childhood and nostalgic music they listened to when they were in elementary school. A month later, they were asked to decide whether episodes shown on a screen were from their elementary school days or from junior high school days. In one condition,



nostalgic music was accompanied whereas in another conditions no music or non-nostalgic music were given. Results showed those who experienced nostalgic feelings in music condition recalled elementary school episodes with shorter reaction time.

#### **Perceptions of teaching technology, professors' effectiveness in applying technology and business students' learning performance**

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**Austin, Jill** Management and Marketing, Middle Tennessee St University, Murfreesboro, USA

This study examined business students' perceptions of four objectives (i.e., fun, learning, motivation, and career application) across five types of teaching technology (i.e., Projector, PowerPoint, Video, Internet, and Lecture), business professors' teaching effectiveness in using these technologies, and students' learning performance (self-reported GPA). Results revealed that younger students preferred video, whereas older students favored lecture. Further, the use of video for learning, projector and lecture for fun, PowerPoint for career and motivation, and Internet for learning all contributed to professors' overall teaching effectiveness. Finally, professors' effectiveness in using the lecture method and low expectation for the use of a projector were related to high GPA.

#### **Allocation of attention to the prisoner's dilemma payoff matrix**

**Tanida, Shigehito** Graduate School of Letters, Hokkaido University, Sapporo, Japan  
**Yamagishi, Toshio** Graduate School of Letters, Hokkaido University, Sapporo, Japan

According to social value orientation, people with a pro-social value orientation cooperate in the one-shot prisoner's dilemma game because they internalize payoffs to other people as a part of their social utility. To examine the validity of this model, we used an eye-tracker to determine whether cooperators pay more attention to other player's payoffs than defectors. Results of the experiment revealed no difference between cooperators ( $n=43$ ) and defectors ( $n=72$ ) in attention to other's payoffs. A time series analysis revealed that defectors spent more time looking at their own outcomes early in the experiment when first understanding the payoff structure.

#### **The effect of the self-enhancing presentations on the appraisals from friends**

**Taniguchi, Junichi** Kawanishi, Japan

The present study examined the effect of the self-enhancing presentations toward their friends on the evaluations from friends. 120 pairs of same-sex friends answered the questionnaire. Main findings were as follows: 1) Participants with low self-esteem presented themselves in more self-enhancing ways to their friends than participants with high self-esteem. 2) Participants got more positive appraisals from their friends than their self-views. 3) Only if the closeness of participants with their friends were low, on dimensions of competence, the more self-enhancing participants' self-presentations toward their friends were, the more positive they got actual appraisals from their friends.

#### **The impact of executive functioning on the personality of air traffic controllers**

**Taukari, Atish** Bombay, India

The study looked at the relationship between executive functions and personality facets in air traffic controllers. Fifty psychologically and physically healthy controllers were assessed on the Behavioral Assessment of Dysexecutive Syndrome Battery and NEO Five-Factor Inventory. Results reveal that controllers' ability to plan actions ahead in order to solve problems predicts agreeableness

and neuroticism. Further, spontaneous planning ability and minimizing errors by using feedback predicts agreeableness. Thus, planning ability enhances cooperativeness and reduces maladjustment in controllers.

#### **The study of emotional intelligence in women who attempted suicide with the poisoning**

**Tavakoli, Mahgol** Psychology, Isfahan University, Isfahan, Islamic Republic of Iran

Objective: In this study the EQ in women who attempted suicide with the poisoning method was investigated. Method: In a semi-experimental research, 80 women who attempted suicide from poisoning agency in Isfahan Nour hospital as an experimental group and 80 Normal women as a control group were randomly selected and Bar-On EQ questionnaire was administered. Result: Total EQ scores and its items in an experimental group in compare with control group were very low ( $p<0/0001$ ). Also the cut-off point for 2 groups was reported in the paper. Conclusion: EQ in women who attempted suicide significantly was lower than normal women and low EQ can be considered as a risk factor for suicide.

#### **The association between quality of life and pain beliefs in cancer patients**

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**Roshan, Rasool** shahed university, shahed university, Tehran, Islamic Republic of Iran  
**Tavoli, zahra** Arash hospital, Arash hospital, Tehran, Islamic Republic of Iran

Objectives: The purposes of this study was to determine the relationship between pain beliefs and quality of life(QOL) in Iranian cancer patients. Method: A consecutive sample of gastrointestinal cancer patients attending to Tehran Cancer Institute were assessed for QOL(the EORTC QLQ-C30) and pain beliefs(the PBPI). Results: 98 patients were studied. higher scores on pain consistency were negatively and significantly associated with QOL. Conclusion: This study has supported the multidimensional notion of the cancer pain experience in Iranian patients. Although these data are correlational, they provide additional support for a biopsychosocial model of chronic pain.

#### **A laboratory study of upward emotional contagion: How followers influence leadership effectiveness**

**Tee, Eugene** Brisbane, Australia

In a laboratory study, we tested hypotheses that followers' mood states influence leaders' performance though emotional contagion processes. Twenty-eight (28) Australian undergraduates assumed the roles of leaders and supervised teams of trained confederates who were instructed to portray either positive, negative, or neutral moods during a car-building task. Leader mood and performance were assessed by trained observers. Results supported our hypotheses. Leaders were found to 'catch' both positive and negative mood from followers. Leaders in a positive mood were also found to perform more effectively than leaders in a negative mood, suggesting that followers' moods have the ability to influence leadership effectiveness.

#### **Gender aspects of deputy school principals' conflict management competence**

**Tetyana, Dzuba** Organizational Psychology, Institute of Psychology, Kiev, Ukraine

Objectives. To find out links between deputy school principals' gender and their conflict management competence. Methods. The investigation was done on 158 deputy school principals using Karamushka Conflict management competence survey and SPSS. Results. Men and women deputy statistically significantly differed in levels of development of

cognitive and personality components of conflict management competence ( $r<0.01$  and  $r<0.05$  respectively). No statistically significant distinctions were found between males and females in levels of development of the operational component of the conflict management competence. Discussion. The findings can be used in conflict management training at institutions of post-graduate pedagogical training.

#### **Introducing heterogeneous form item sets in general mental ability tests the case of the problem test**

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**Huic, Aleksandra** Department of Psychology, Faculty of Philosophy, Zagreb, Croatia  
**Urch, Drazen** Department of Psychology, Faculty of Philosophy, Zagreb, Croatia

The Problem Test, a new general mental ability test, is introduced. The lack of specific instructions and variety of test item forms make it suitable for measuring the capacity to adapt to new problems, reducing the exercising effect to minimum. The aim of this research was to make a psychometric validation of the test. The results of 1200 participants were examined in a real employment testing context. Although the test consists of items heterogeneous regarding form and content, the Cronbach alpha index points to high test reliability ( $\alpha=0.87$ ). The issue of compiling heterogeneous instead of homogeneous item forms is discussed.

#### **We cannot force intuition**

**Topolinski, Sascha** Inst. für Psychologie II, Universität Würzburg, Würzburg, Germany  
**Strack, Fritz** Institut für Psychologie, Universität Würzburg, Würzburg, Germany

Intuitive judgments about whether a word triad has a common associate or not without retrieving the common associate depend on the partial semantic activation of the common associate. We show that this activation runs automatically and is even hampered by reasoning. In Experiments 1-3 the mere presentation as well as the incidental reading of a triad activated the common associate, while an intentional search for the common associate did not. Memorizing of the word triad even inhibited the common associate. In Experiment 4, searching for the CA decreased the accuracy of intuitive coherence judgments compared to merely reading the triad.

#### **Psychometric study of the reading comprehension test for children of first grade of Lima, Peru**

**Torres, William** Callao, Peru  
**Delgado Vazquez, Ana** Esther Psychology, URP, Lima, Peru  
**Escurre Mayayute, Luis Miguel** Psychology, URP, Lima, Peru

Presents the psychometric study of the reading comprehension test for children elaborated by Aliende, Condemarin, and Milicic. The participants were 734 students of first grade of public and private schools of seven school districts (UGEL) of Lima, Peru. The reliability of the test was calculated using Cronbachs alfa coefficient (0.65 to 0.85), which shows that the test is up to the standards. It was used the CFA to validate the instrument and it was found that the test has one factor. The test instructions, the answer sheets, the scoring norms, were adapted. Its pointed out the work of the graduate students on LD at the Universidad Ricardo Palma

#### **Individual differences in emotional intelligence and incidental memory of words**

**Toyota, Hiroshi** Dept. of Psychology, Nara University of Education, Nara, Japan

Participants were required to complete the Japanese version of emotional skills and competence questionnaire to assess the level of emotional intelligence. Then they were asked to rate pleasantness of

the episode that each target reminded it of followed by unexpected free recall tests. Participants with high emotional intelligence recalled targets with pleasant, neutral and unpleasant episodes equally. Whereas for participants with low emotional intelligence, targets with neutral episodes were recalled less than those with pleasant and unpleasant ones. These results were interpreted as showing that the level of emotional intelligence determined the effectiveness of episodes on targets as retrieval cues.

#### **E-teaching skills approach enhancement in health psychology e-learning: The role of a decision-making approach under visual-analogical scenarios**

**Trovato, Guglielmo** Internal Medicine & Health Psy, University of Catania, Catania, Italy **Pace, Patrizia** Health Psychology, University of Catania, Catania, Italy

E-Learning is encouraged in health professions education considering that this new educational technology efficiently delivers educational materials at reduced costs, with increased access, clear learning-process accountability. An e-learning course was developed with the goals of improving students knowledge and skills. Health psychology issues and problem-solving skills in decision-making under specific case-studies were included in the learning object delivered to students. This approach, mainly visual-analogical, depends on skills and potential of student self-teaching, i.e. in their capacity of re-building a correct case-study and/or a decision-making tree. The developed e-learning tool was effective and improved knowledge/skills achievement of medical and psychology students.

#### **Disease representation and contextualization as critical associated components of clinical decision making: A preliminary study**

**Trovato, Guglielmo** Internal Medicine & Health Psy, University of Catania, Catania, Italy **Catalano, Daniela** Internal Medicine & Health, University of Catania, Catania, Italy **Pace, Patrizia** Internal Medicine & Health, University of Catania, Catania, Italy **Aprile, Giuseppe** Surgery & Endoscopy, University of Catania, Catania, Italy **Magro, Gaetano** Pathology, University of Catania, Catania, Italy

Objective: Context factors in medical decision-making are commonly considered negligible components of errors and/or medical interventions complications. Effects and mutual relationship, if any, of physician's disease representation and personal contextualization, not only on diagnosis but also on treatment-choice of patients. Method: A questionnaire addressed to decision making in gastroenterology was developed and validated. Comparison of models of different disease representation and pathways of contextualization in some categories of medical specialists (pathologists, gastroenterologists, internists, family doctors) was done. Results: Different disease representation were observed: contextualization issues were associated with different features in decision making and professional behavior. Conclusion: Physician's contextualization and disease representation are important features in clinical decision-making.

#### **The role of various moods play in facial emotion recognition**

**Tseng, Hui-Hsuan** Dept. of Psychiatry, NTU Hospital, Taipei, Taiwan **Chen, Sue-Huei** Department of Psychology, National Taiwan University, Taipei, Taiwan **Huang, Yu-Lien** Department of Psychology, National Taiwan University, Taipei, Taiwan

Objectives: To examine the negative effects of depression and interpersonal sensitivity on perception of facial emotions. Methods: 88 college students received assessment of computerized Diagnostic Analysis of Nonverbal Accuracy 2-Taiwan version (DANVA2-TW) and SCL-90-R. Results:

Concerning facial emotion recognition accuracy, no significant differences among groups with various levels of depression mood, but interpersonally sensitive subjects make more mistakes. Conclusion: Person with higher interpersonal sensitivity, but not depression, tends to make more mistakes in perceiving facial emotions. Discussion will center around the role of various moods play in facial emotion recognition.

#### **Gender stereotypes implicit in language: A cross-cultural comparison of gender ascriptions in German and Chinese interpersonal verbs**

**Tumasjan, Andranik** Inst. für Psychologie, Universität München, München, Germany **Bekk, Magdalena** Department of Psychology, Ludwig-Maximilians University, München, Germany **Klaas, Hannah** Sophie Universität München, München, Germany **Spörrle, Matthias** Dept. for Psychology, Ludwig-Maximilians University, München, Germany

Two samples (N = 386) from Germany and China were compared in order to investigate intercultural specifics of gender stereotypes in language. Using the Revised Action-State Distinction (Rudolph & Försterling, 1997) 24 interpersonal verbs were selected to examine verb type effects on gender ascriptions to persons involved in social interaction. Consistent with previous research, German respondents perceived interpersonal actions (e.g. support) as being caused by men whereas interpersonal states (e.g. surprise) were perceived as being induced by women. Additionally, results provide first evidence that Chinese participants perceived both types of interpersonal interaction to be caused by men. Implications for intercultural communication are discussed.

#### **The role of music in young adults' emotional lives**

**Udovicic, Martina** Dept. of Psychology, Faculty of Philosophy, Sesvete, Croatia **Banozic, Adrijana** Department of psychology, Faculty of Philosophy, Zagreb, Croatia **Vojnic Tunic, Ana** Department of psychology, Faculty of Philosophy, Zagreb, Croatia **Prot, Sara** Department of psychology, Faculty of Philosophy, Zagreb, Croatia **Stamenkovic, Barbara** Department of psychology, Faculty of Philosophy, Zagreb, Croatia **Plosnic, Fani** Department of psychology, Faculty of Philosophy, Zagreb, Croatia

This study explored the links of emotions and moods with listening to music in a sample of Croatian young adults (N = 250). Survey data was collected, measuring participants' habits of listening to music and their moods before, during and after listening. The participants reported their predominant mood while listening to music is happy, relaxed and inspired. The majority of participants (89%) reported feeling better after listening to music, and positive mood induction was one of the most common motives for listening to particular types of music. No reliable differences in mood were found between fans of different music genres.

#### **Emotional intelligence evaluation using the BarOn (I-CE) Inventory in a sample of Lima, Peru**

**Ugarriza-Chavez, Nelly** Psychology, Universidad Ricardo Palma, Lima, Peru

The BarOn Emotional Quotient Inventory was used with a representative sample of 1996 participants from the urban area of Lima, Peru. The age of all men and women included in the sample were over 16 years old. A second-order confirmatory factor analysis was performed on the composite scales of the EQ-I which verified the 5-1 factorial structure proposed by the eclectic model of the emotional intelligence of Bar-On (1997). It was found that emotional intelligence increases with age, and that significant gender differences do exist for many factorial components. The alpha coefficient was .93 for the Total CE, revealing the internal consistency of the inventory. Administration, scoring and interpretation norms were elaborated.

#### **Effects of attending to or away from pain depend on the level of catastrophic thinking about pain**

**van Damme, Stefaan** Experim. Clinical Psychology, Gent University, Gent, Belgium

We investigated the effects of spatial attention on pain experience. During short pain stimulation attention was directed to (focus) or away from (distraction) the stimulated hand using a cueing task. ANOVA's showed lower fear ratings in the focus relative to distraction group. Also less pain was reported in the focus group but only in participants low in catastrophic thinking about pain. However, for high catastrophizers, pain ratings were lower in the focus group. It is concluded that focusing to pain helps controlling affective responses to pain, whereas distracting from pain diminishes sensory pain perception, particularly when appraised as threatening.

#### **Enhancement of emotional clarity: An intervention study**

**van de Loo, Kirsten** Inst. für Psychologie, Techn. Universität Darmstadt, Darmstadt, Germany **Schmitz, Bernhard** Institut für Psychologie, Techn. Universität Darmstadt, Darmstadt, Germany

The aim of the study was to enhance emotional clarity as it is an important variable within learning. 108 students were assigned to two experimental and a control group. Experimental group A was trained to experience and describe specific emotions, experimental group B got a mindfulness training. Emotional clarity was measured by the Trait Meta-Mood Scale (Salovey et al., 1995), an emotion recognition task and a questionnaire measuring the accuracy of emotion descriptions. Multivariate analyses of variance showed expected effects on some of the dependent variables. Results are discussed regarding effect sizes and the character of future interventions.

#### **Comparing web-based and face-to-face memory testing**

**van Hooren, Susan** Dept. of Psychology, Open University Netherlands, Heerlen, Netherlands **Franssen, Marielle** Psychology, Open University Netherlands, Heerlen, Netherlands **Waterink, Wim** Psychology, Open University Netherlands, Heerlen, Netherlands

The aim of this study is to examine the validity of web-based testing. Performance on a web-based memory test was compared to a face-to-face memory test, taking into account differences in computer attitude, computer experience and motivation. A counter balanced within subjects design was used. After accounting for the intrinsic factors, scores on the web-based test are lower than scores on the face-to-face test. These differences were more pronounced in older age. In spite of the advantages of web-based testing, it is crucial to consider that web-based neuropsychological testing is not comparable to face-to-face testing, especially among older age groups.

#### **Psychometric properties of motivation for choice of study program inventory**

**Vanags, Martins** Dept. of Psychology, University of Latvia, Riga, Latvia

The Motivation For Choice Of Study Program Inventory (Voitkane, Miežite, Raščevska & Vanags, 2006) was designed to measure motivation of choice for study program in high-school graduates entering university. This study extended the previous psychometric findings (Vanags, 2006) to a bigger sample. The questionnaire construction was done on two independent samples (first stage N=145, both males and females, age 18-20; second stage N=300, both males and females, age 17-20). Factor analysis exposed three dimensions with high internal consistency: external motivation, motivation for knowledge, motivation for career development. Divergent validity of SPCI was tested. Keywords:



study motivation, first-year student adjustment, inventory, SPIC

#### Acute stress has not effect on long-term object recognition memory in rats

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A previous experiment developed in our laboratory showed a deleterious effect of acute stress on the acquisition of short-term memory measured by an object recognition task. Present experiment evaluated the effect of acute stress at long-term memory in 24 male Wistar rats randomly assigned to one of three groups: a) One hour motor restriction b) Four hours motor restriction and c) no restriction, followed by the acquisition of the task, and evaluated 24 hours later. A one way ANOVA test showed no significant differences between groups, indicating that acute stress does not affect the acquisition of long-term object recognition memory.

#### Interference and facilitation effects on the recall of a list of words induce by presented or self-generated verbal information

**Vargas, Viviana** Psychology, Universidad Nacional de Colomb, Bogotá D.C., Colombia

It was compared the effect of self-generated verbal information with externally presented verbal information over the recall of a list of words. A factorial design was used with independent variables of: a) moment of presentation, and b) kind of information; it was also a control group. 63 students were randomly assigned to the groups. Multiple ANOVA analysis was used to see the effects over the number of right and wrong answers in free recall and key recall. Presentation of external information, before and after recall, produced an interference effect; on the contrary, self-generated information produced a facilitation effect.

#### Emotion regulation difficulties and adjustment in newlyweds couples

**Velotti, Patrizia** Dynamic and Clin. Psychology, University of Rome, Rome, Italy **Castellano, Rosetta** Dynamic and Clinical Psychology, University of Rome, Rome, Italy **Zavattini, Giulio Cesare** Dynamic and Clinical Psychology, University of Rome, Rome, Italy **Objective:** Although researchers have examined the link between marital adjustment and different personality's aspect, the precise role of emotion remains unclear (Snyder, 2006). The current study explores the link between individual's difficulties in emotion regulation and dyadic adjustment in the context of newlyweds couples. Methods: Participants. 100 couples participated. Measures. The Difficulties in Emotion Regulation Scale (DERS, Gratz & Roemer, 2004). The Dyadic Adjustment Scale (DAS, Spanier, 1976). Results: We tested two main effects: actor effect and partner effect and we found that difficulties in emotion regulation had a negative impact on dyadic adjustment.

#### The effects of leadership practices and perceived organizational support on maritime crew team performance: The mediating role of affective commitment

**Viranuvatt, Parinda** I/O Psychology, Thammasat University, Bangkok, Thailand

This study tested the influence of team leadership behaviour and perceived organizational support (POS) on team performance. Affective commitment to leader was proposed to mediate the relationship between leadership and team performance, as measured by objective measurement of team

performance. Affective commitment to organization was also proposed to mediate the effects that POS had on team performance. The mediation test was done by using Baron and Kenny's (1986) method. The results indicated that only POS, not leadership behaviours, positively affects team performance. No mediating relationship was found in the hypothesized model. This anomalous results lead to questions pertaining subjective vs. objective criteria

#### The impact of an osteopathy treatment on chronic pain intensity

**von Fischern, Iris** Praxis Evost, Wiesbaden, Germany **Deichmeier, Frank** Praxis Evost, Praxis Evost, Wiesbaden, Germany **Spörle, Matthias** Psychology, LMU, Munich, Germany

Treatment of chronic pain patients is of increasing relevance in clinical research. Our study investigates potential reduction of patients' levels of pain intensity due to an osteopathy treatment. Thirty-six persons with chronic pain diagnosis participated in a two-stage treatment process and repeatedly filled out established measures (e.g. Numerical Rating Score) of pain localization and intensity. In a first stage participants received no intervention, in the second stage a maximum of six osteopathy treatments was given. Analysis revealed significant reductions of pain intensity in the waiting period as well as in the treatment period. The improvement during the treatment period was significantly larger than the one during the waiting period.

#### Gender and educational differences in shame in adolescents

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Shame is one of the important causal factors in psychological pathways and becomes particularly prominent from the period of adolescence. In this study 954 high school students, mean age 16 year, filled out a questionnaire on three specific areas of shame. Higher educated adolescents reported significantly more general shame than lower educated adolescents, and females reported more characterological, behavioural and bodily shame compared to males. The largest gender difference was found in bodily shame. As a conclusion, gender and educational differences should be taken into account in future research of shame related issues in adolescents.

#### Evidence of prenatal transfer of testosterone in humans?: Decreased left-handedness in females from opposite-sex twin pairs

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Objectives: Female twins from opposite-sex pairs might be exposed to prenatal transfer of testosterone. Testosterone is suggested to play role in the formation of handedness. Earlier singleton studies have shown that right-handers have higher levels of testosterone than left-handers. Methods: We studied handedness in population based FT12 study, which includes all Finnish twins born in 1983-87. We used cluster corrected chi2 statistics. Results: the prevalence of left-handedness was significantly lower in females from opposite-sex pairs compared to females from same-sex pairs. Conclusion: Results

support the prenatal testosterone transfer hypothesis and are very unlikely to be caused by postnatal socialization effects.

#### Formal complexity, real cognitive complexity and reaction time

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The problem of complexity is to be discussed as intermedial between computer and cognitive science. Formal computational complexity of solved tasks evaluated by well-known formal methods was compared with neurophysiological and psychophysical data. Formal evaluation of complexity was graduated by differences in reaction and solving time that were interpreted as indicators of real cognitive complexity. Degrees of fatigue level evaluated by instrumental methods and interpreted as addition cognitive complexity showed approximately monotonic dependency between computational complexity and real subjective complexity.

#### Use of patient-self-assessments in emergency care to predict mortality for heart failure patients

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Objective: Evaluate the potential of patient-self-assessments predicting mortality of heart failure (HF) patients. Methods: 99 patients with decompensated HF were included. New-York-Heart-Association classification (NYHA), B-type-natriuretic peptide (BNP), Minnesota Living with Heart Failure Questionnaire (MLHFQ) have been determined within 24h after admission. Results: 17 patients died due to HF within 12 months. Those with BNP-values >600pg/ml or MLHFQ-scores > 70 had an increased mortality-ratio ( $p < 0.05$ , Kaplan-Meier-analyses). Patients with both risk factors had a 54 percent likelihood of dying within one year in contrast to nine percent for patients without both risk factors. Conclusion: Self-assessments help to predict mortality for HF patients.

#### Representations and motivations to breastfeed: A comparison between French and German mothers.

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Objectives: The purpose of this study was to investigate the potential reasons for the dissimilarity in breastfeeding rate between German (90%) and French (56.3%) mothers. Methods: Representations about breast and bottle feeding so as motivations to breastfeed or not were collected and compared in 126 French and 80 German primiparous mothers. Results: Results show significant differences between these two populations in terms of breastfeeding representations and motivations to breastfeed or not. Erroneous and irrational beliefs are more representative in French mothers. Conclusion: This study provides insight for understanding breastfeeding rate differences between these two countries.

# Revision of the "Wiener Matrizen Test"

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Objective: The Wiener Matrizen Test (WMT; Formann & Piswanger, 1979) show Rasch Model (RM) properties despite the huge changes since its first publication (social changes, extensive research on RM with development of new model tests)? Methods: The WMT was given to n=2495 persons (14-64 years). Psychometric properties of the WMT were analysed by means of various model tests. Results: Despite extensive model testing and high test power only six items were excluded. Reliability and validity of the shorter WMT are comparable with the original. Conclusion: The results further indicate that the WMT is independent of cultural contexts.

# Gratitude, relationship quality and life satisfaction in friendship pairs

**Walker, Simone** Psychology, UTM, University of Toronto, Mississauga, Canada  
The current study examined gratitude within best friendships. Ninety-two best friend pairs reported their own dispositional gratitude, friendship quality and life satisfaction. Participants also reported three gratitude-related memories which were reliably coded for the emotional response and expression of the beneficiary. Main results showed that participants rated the friendship as more companionable, nurturing, and intimate, and were more satisfied with life when the beneficiary experienced and expressed grateful emotion. In conclusion, results suggest that both the experience and expression of gratitude within a friendship are important for the quality of the relationship and the life satisfaction of the pair.

# Research on Chinese puberty sexual morals structure

**Wang, Yuan** School of Teacher Education, Shenyang Normal University, Shenyang, People's Republic of China **Guo, Li-Yan** School of Teacher Education, Shenyang Normal University, Shenyang, People's Republic of China  
Based on the literature review on sexual morals, a structural interview and an open-ended questionnaire were designed to measure sexual morals of puberty, and then a Chinese Puberty Sexual Morals Scale were developed. The results showed that the scale was of good reliability and validity, which consisted of four components, the brink sex behavior morality, process sex behavior morality, purpose sex behavior morality, sex information dissemination morality.

# The experimental research on time pressure affecting decision strategy

**Wang, Dawei** Psychology, Shandong Normal University, Jinan, People's Republic of China  
The study examines how decision-makers make decision strategy, using Information Board and Eye-Movement technique. During the study process, the researcher explored the problem by introducing time pressure (high/moderate/low) and task (important/unimportant) variable. By analyzing Eye-Movement data, the results were as follows: (1) Time pressure and task had more effects on decision making; (2) When encountering time pressure, decision makers were inclined to choosing linear strategies to cope with tasks of great significance, vice versa.

# The structure, developmental characteristic of adolescents' interpersonal competence

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Interpersonal competence referred to the tendency to behave effectively and appropriately, which made him in harmony with others. The present research defined the structure of interpersonal competence, and then developed the "Interpersonal Competence Questionnaire(ICQ)" and explored the general characteristic of adolescent' interpersonal competence. Results indicated: (1) Interpersonal Competence Questionnaire included 3 factors: interpersonal motivation, interpersonal cognition and interpersonal skills; (2) There were significant grade difference in interpersonal motivation, grade and gender difference in interpersonal skills and interaction between gender and grade in interpersonal cognition.

# Affective and facial responses to tastes in human adults

**Weiland, Romy** Inst. für Psychologie, Universität Würzburg, Würzburg, Germany **Macht, Michael** Institute of Psychology, University of Würzburg, Würzburg, Germany  
Objectives: We examined the influence of tastes on affective and facial reactions. Methods: Thirty-two subjects rated intensity, pleasantness, and mood in response to taste solutions differing in concentration and quality. Facial reactions were recorded and were analysed by the Facial Action Coding System. Results: Facial reactions were differentially affected by tastes. With increasing concentration, subjects rated tastes as more intense, and some tastes (bitter, salty, umami) as less pleasant. Conclusion: Facial responses in human adults are similar to those found in human newborns. Moreover, taste concentration plays a key role in the quantity of facial reactions.

# Personal light: Evaluation of dynamic lighting by Philips in Hamburg schools

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Positive effects of lighting on performance in workplaces indicate that optimizing lighting in classrooms is a promising approach to improve the performance of students. This study compares seven programs differing in illuminance and colour temperature. Main objectives are to investigate effects on attention, aggressiveness and hyperactivity in students. Therefore, in a controlled field trial, six natural classes are observed cross-sectionally and longitudinally. First results point to positive effects on work speed and accuracy, assessed by the "d2". The findings will lead to conclusions on effects, usability and acceptance of Dynamic Lighting in the school setting.

# Human amygdala habituation during the presentation of auditory stimuli

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The human amygdala has been reported to habituate in response to visual stimuli (e.g., Fischer et al., 2003). It is less clear, however, whether and in which amygdala subregion habituation also occurs in response to auditory stimuli. Using functional

MRI, brain responses to piano pieces were investigated in 18 healthy subjects. We find that the relative magnitude of responses in the latero-basal amygdala, defined using a probabilistic map (Amunts et al., 2005), significantly declined over time ( $p < 0.05$ ). These results indicate that habituation is not specific to visual amygdala responses but represents a more general property of human amygdala function.

# Who benefits from planning?: The road to action is paved with high intentions

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Objectives If-then planning facilitates the translation of intentions into action. Mediation effects of planning are assumed to be stronger in individuals with high intentions. Methods Moderated mediation analyses in two longitudinal studies on physical activity and oral hygiene (follow-up 3 months, respectively 4 months after baseline). Results The strength of the indirect effect of intentions on behavior via planning increased along with levels of intentions (moderator). The sufficient level of intentions is different for the two behaviors. Conclusions Small changes in intentions might determine whether planning translates intentions into action. The importance of intentions should be considered when developing planning interventions.

# The effect of process improvement on coordination success in work teams

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In two studies we examined the effect of process improvement (i.e. reflection, adaption) on team coordination as well as its mediating mechanisms on a cognitive level (shared mental models) as well as on a motivational level (team trust). In an experimental control group design study with 32 three-student groups process improvement was manipulated by reflecting previous performance. In a cross-sectional field study, members of 116 organizational teams rated process improvement activities and coordination. ANOVA and Partial Least Square analyses indicated that process improvement led to better team coordination. This effect was partially mediated by shared mental models and team trust.

# Religiosity and substance use in a community sample of adults

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OBJECTIVE: To better understand the effect of religiosity. METHOD: A sample of 330 adults (M age 41 years) reported on behavioral aspects of religiosity [e.g., belonging, attendance] and personal aspects [e.g., value on religion, nonreligious spirituality, forgiveness]. RESULTS: Religiosity was inversely related to smoking and alcohol use. The effect of personal religiosity was mediated through lower risk-taking tendency and less coping motives for smoking and alcohol use, also with a direct effect to (less) alcohol use. The effect for behavioral aspects was mediated through less coping motives for alcohol use and heavy drinking. CONCLUSIONS: The protective effect of religiosity for



substance use is partly mediated through psychosocial factors.

#### **Are female leaders more transformational? Transactional and transformational leadership of historical male and female leaders**

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Although research found that female supervisors and managers exhibit more transformational leadership than their male counterparts, considerable more male than female leaders can be found. Empirical research comparing male and female leaders at the CEO- or world-class level is virtually nonexistent. The present study utilized a sample of 35 historical leaders from various fields such as politics, military, and business. Subjects were students of psychology who were presented a biography of one of the historical leaders. Results revealed that female leaders exhibited more transformational leadership than male leaders. These results were stable across historical period and subject's gender.

#### **Anxiety and depression show opposite patterns of associations with Glucocorticoid receptor expression in children**

**Wolf, Jutta** Dept. of Psychology, University of British Columbia, Vancouver, Canada **Chen, Edith** Psychology, University of British Columbia, Vancouver, Canada

The present study tested whether the overlapping constructs depression and anxiety might predict different patterns of activation at the molecular level. Glucocorticoid-receptor expression was assessed repeatedly in 36 healthy children and 50 children with asthma. Child anxiety and depression were measured at baseline. Only healthy children showed decreases in glucocorticoid-receptor expression in response to anxiety and increases in response to depression ( $\beta = -.64, p < .001$ ;  $\beta = .56, p = .004$ , resp.). The present results suggest that in healthy children, depression and anxiety do show distinctive features at the molecular level. Children with asthma, however, may have an immune system that responds less dynamically to negative psychosocial states.

#### **Are all anger experiences the same?**

**Wranik, Tanja** Psychology, University of Geneva, Geneva 4, Switzerland **Fiori, Marina** Psychology, University of Chicago, Chicago, Illinois, USA

We examined similarities and differences between anger at another person and anger at the self. Participants responded to questions about recent anger experiences, including their evaluations, behaviors, and regulation strategies. We also measured emotion regulation styles, personality, and well-being. The two anger experiences differed in important ways, including intensity, length, evaluation structure, and resultant behaviors. Moreover, although social sharing was frequent in both types of anger, it was only positively associated with anger intensity when angry with another person. We will discuss anger experiences in terms of emotional intelligence and functionality for the work environment and in social relationships.

#### **Measuring susceptibility to emotional contagion. Preliminary analysis of psychometric properties of a Polish adaptation of the Emotional Contagion Scale**

**Wrobel, Monika** Inst. of Psychology, University of Lodz, Lodz, Poland

Objectives: The aim of the study was to adapt the Emotional Contagion Scale (ECS) to Polish conditions. Methods: The ECS was translated into Polish with the use of back translation procedure and then completed by 186 participants aged 19 to 31.

Results: The analysis of the psychometric properties of Polish version (factor structure, homogeneity and test-retest reliability) revealed that the parameters of the adaptation are satisfactory and comparable with the characteristics of the original scale. Conclusions: The preliminary results indicate that Polish ECS can be treated as a useful and reliable tool for measuring individual differences in susceptibility to emotional contagion.

#### **The competing value framework (CVF) presidential leadership behavior in technology universities in Taiwan**

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The purpose of this research was to investigate the presidential leadership behaviors in 29 technology universities in Taiwan based on the Competing Values Framework (CVF) presidential leadership behavior. It includes four second-order factors relating to people, leading change, managing processes, and producing results. Each second-order factor includes 3 first-order factors. 651 valid samples were collected from 29 technology universities in Taiwan. MANOVA were applied to determine if there are significant differences between/among the categories in each demographic variable. Participants' gender, whether they participate in administrative duties, age, and whether they were homeroom teachers influenced teachers' perceptions on their president's leadership behaviors.

#### **The theoretical construct and measurement of college students' interpersonal interaction efficacy**

**Xie, Jing** Dept. of Psychology, Beijing Normal University, Beijing, People's Republic of China

Based on investigation about more than 1000 college students' interpersonal interaction, we compile a scale to analyse the college students' interpersonal interaction efficacy. Through this research, we want to discuss the internal structure of the college students' interpersonal interaction and bring the concept of self-efficacy into the area of interpersonal interaction. The result demonstrates the sense of college students' interpersonal interaction efficacy consists of six aspects: intimation efficacy, impression management efficacy, benefit-other efficacy, connection efficacy, mood-control efficacy, self-value efficacy.

#### **Emotional reactions of parents to their child's aggression and withdrawal**

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Objectives: This study aimed to assess emotional reactions of parents to their child's aggression and withdrawal in China. Methods: 302 parents having one child aged 4 to 8 were interviewed with a structural questionnaire developed from Mills and Rubbin (1990). Results: (1) Parents' dominant emotional responses to both of aggression and withdrawal were concern. (2) Child's aggression mainly evoked parents' anger and embarrassment whereas child's withdrawal caused their disappointment. (3) Parents reported more negative emotions to 6-year-old and 8-year-old child's problematic social behavior than to 4-year-old child's. Conclusion: Parents' emotional reactions to aggression were different from to withdrawal.

#### **Regulatory focuses and co-worker preferences**

**Yamagami, Makiko** Educational Program, Ochanomizu University, Wakoh, Japan

This study examined the influence of regulatory focuses on interpersonal attraction. 117 undergraduate students read the behavior descriptions of two different persons who use promotion focus vs. prevention focus, respectively. They selected one of them as a future co-worker, and responded to the Regulatory Focus Questionnaire (RFQ; Higgins, et al., 2001). A 2 (high vs. low promotion focus) x 2 (high vs. low prevention focus) ANOVA revealed the significant interaction effect: when the promotion focus is low, highly prevention focused participants tend to choose prevention focused target. The result suggests that the preferences of the self-regulation affect the interpersonal preferences.

#### **The difference of evaluation apprehension among diverse cultures**

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The comparative survey was conducted in terms of the degree of evaluation apprehension. 357 Japanese, 90 Chinese, and 105 American were asked how much they apprehended others' evaluations in 26 situations. Five factors were extracted, and Japanese apprehended others' evaluations more than two other countries on four factors which were Misbehavior in Public, Mistakes in Public, Evaluation for Ability and Public Attention, and they were related to negative emotions. But there was no difference on Public Appearance relating to pleasant emotion. These results may be derived from the differences of relative values of self-assertiveness and the evaluation from others.

#### **Characteristics of paranoid thoughts in a non-clinical population**

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Objectives: We examined the characteristics of paranoid thoughts compared with social anxious thoughts in Japanese student sample. Methods: Participants were 148 undergraduates. Nine characteristics were assessed on both paranoid thoughts and anxious ones: resistance, distress, absurdity, conviction, corrigibility, controllability, perception of intended harm, anger and frequency. Results: A multivariate analysis of variance (MANOVA) indicated that patterns of the characteristics differed depending upon two kinds of thoughts (Wilks' F (9, 125)=9.12,  $p < .001$ ). Conclusions: Paranoid thoughts were characterized by higher absurdity, perception of intended harm and anger, and lower frequency and conviction compared with social anxious thoughts in non-clinical samples.

#### **The study on social support network to accelerate thriving from career crisis: In the case of researchers at early career developmental stage**

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The purpose of this study was to figure out the relationship between the characteristics of social-support-networks, which Japanese researchers hold at early developmental stage, and thriving from their career crisis. An in-depth interview of 28 researchers indicated 4 types of network: some sincere admirer, old and trusted labmates, informants as quarry of excited idea, remotely related



persons. We found that they had happened to be acquainted with informants in the struggling process to recover from their career crises. Also, continuous joint studies with informants, largely consisting of a few, had an important role to their thriving and career development.

**SAKURA – Pseudo-personality construction of virtual patients in scenarios of a simulated dental clinic**

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Newly developed role-playing software, Sakura, graphically represents clinical scenarios to enhance students' manners and dental knowledge. The student plays the dentist and three animation patients receive utterances the student chooses from five, prepared on the Transactional Analysis. Each choice affects the patient's two emotional factors – anxiety and anger, which are graphically represented real time to show the effect of choice immediately. The student can graphically understand how his choice affected the patient's emotional conditions in a good/bad way. As a result of the above simulation course, students' understanding of the importance and tact in dentist-patient communication was greatly improved.

**Comprehension and application of verbal communication strategies characterized by Chinese primary school children with learning disabilities**

**Yan, Rong** English Department, BISU, Beijing, People's Republic of China **Yu, Guoliang** Institute of Psychology, Renmin University of China, Beijing, People's Republic of China

The present research aims to explore the development of verbal communication strategy characterized by Chinese learning-disabled children in primary schools. 241 third-, fourth-, fifth- and sixth- grade students (117 LD & 124 Non-LD) participated in this study. Repeated measure was used to examine the differences between the two groups. The results indicate that LD children were developmentally retarded than those without LD at both comprehension and application levels. The aforementioned findings were helpful to the interventions for the improvement of LD children's social skills.

**Effect of self-esteem on negotiation time when selecting interactional partners in a persuasion game: An investigation using the Settoku Nattoku game (1)**

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People with low self-esteem may take longer to negotiate when selecting partners for interactions. The effect of self-esteem on negotiation time was investigated using a persuasion game named the Settoku Nattoku Game (SNG; Sugiura, 2003). Freshmen at a university ( $n = 26$ ) participated in a study that focused on data of "persuasion players" in the SNG. The results were consistent with the hypotheses suggesting that people with low self-esteem tend to spend more time negotiating than people with high self-esteem. The author has discussed the possibility that people with high and low self-esteem take different approaches when interacting with others.

**A study of relation between team leaders' in-degree centrality in networks and the corresponding team effectiveness**

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This paper investigates that, against a background of Chinese culture, the impact of team leaders' in-degree centrality in the corresponding team advice networks and friendship networks, on team effectiveness (including subjective task performance, team viability, and cooperation satisfaction). Fifty-three team leaders and their team members from various organizations (totally 369 persons) have participated in this study. The outcome of regression analysis shows that team leaders' in-degree centrality in team advice networks has a significantly positive impact on team effectiveness, whereas team leaders' in-degree centrality in friendship network fails to have a significant impact on team effectiveness.

**An investigation of team social capital as a mediator between transformational leadership and team effectiveness**

**Yang, Hui** Beijing, People's Republic of China **Luo, Fang** Department of Psychology, Beijing Normal University, Beijing, People's Republic of China

This paper investigates, against the background of Chinese culture, if and how team social capital plays as a mediator between transformational leadership and team effectiveness. Fifty-three team leaders and their team members, with a total of 369 people, have participated in this study. An analysis via structural equation model (SEM) shows that, team social capital indeed acts as a mediator between two dimensions of transformational leadership—individualized consideration and professional skills—and team effectiveness, whereas it fails to act as a mediator between other two dimensions of transformational leadership—moral influence and inspirational motivation—and team effectiveness.

**Study on mathematics learning disability children's solving complex arithmetical problems**

**Yao, Jingjing** Psychology, Zhejiang Normal University, Jinhua, People's Republic of China

Protocol method was employed to study the process of complex arithmetical problem-solving of grade four students, while easy of learning and judgment of confidence were tested. Result: (1) LD children's problem-solving process is consistent with the general pattern of problem-solving, but each process has its own characteristic, appearing different error types. (2) LD children were distinctly lower than learning gifted students in easy of Learning develop level and in Judgment of Confidence of math problem solving. (3) There is no distinct difference in Easy of Learning and Judgment of Confidence between boys and girls.

**The role of speech rate and gaze in persuasion**

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Two experiments were conducted whether slow speech rate and/or a high amount of gaze affected the perceptions of speaker persuasiveness, using a videotaped message by a female speaker. In Experiment 1, one of three speech rate messages (slow, moderate or fast) was presented by an audio player. The result indicated that the effect of the speech rate was not significant. In Experiment 2, speech rate (slow / fast) and a amount of gaze (low / high) were manipulated and presented. The result

suggested that the slow speech rate and high amount of gaze affected the positive perceptions of speaker persuasiveness.

**Visual-spatial representations in mathematical problem solving among children with and without learning difficulties in mathematics**

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The present study aims to explore how schematic and pictorial representations were used and associated with spatial ability in mathematical problem solving among 30 MD and 31 Non-MD Chinese primary school children, using Mathematical Processing Instrument. The results indicate that MD Children reported less use of schematic representations but more use of pictorial representations and showed less successful performance on mathematical tasks than Non-MD children. In addition, there was a decrease and tendency to use pictorial representations by the children without MD, but no decreasing tendency was found among those with MD. The aforementioned findings were helpful to the interventions for LD children's mathematical problem solving.

**Resilience and mental health among people living with HIV/AIDS and their spouses in a rural area of central China**

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This cross-sectional study examines resilience and mental health of people living with HIV/AIDS (PLWHA) and their spouses in a rural county of Central China. 200 PLWHA and their spouses were interviewed separately. The measurements included resilience, depression, anxiety, and stress etc.. The prevalence of mental problems, factors associated with mental health (e.g. HIV symptoms, medication and side effect), and the relationship between resilience and mental health were investigated. The interaction between the psychological status of the PLWHA and their spouses was also explored. The implications of providing psychological service and conducting intervention to promote resilience and mental health were discussed.

**The effects of associative direction and strength on metacognitive illusions for children with learning disabilities**

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Metacognitive illusions referred to the absolute differences between judgments of learning (JOLs) and recall because individuals were misguided by invalid cues. Both children's with and without learning disabilities (LD) (3-6 graders) metacognitive illusions and group differences were examined. Paired-associate direction and strength tasks (Koriat & Bjork, 2005) were used to find aspects of the



cue-target relationships contributing to metacognitive illusions. Results indicated children exhibited metacognitive illusions for weak, especially backward word-pair. It was higher metacognitive illusions for children with LD than normal children. We argued backward word-pair enhance learners sensitive to metacognitive illusions, which could distinguish sensitively from two groups.

#### **Social information processing in Chinese children with and without LD**

**Yu, Guoliang** Inst. of Psychology, Renmin University, Beijing, People's Republic of China **Dong, Yan** Institute of Psychology, Renmin University of China, Beijing, People's Republic of China

The present study aimed to examine social information processing in Chinese children with and without learning disabilities (LD). Children were placed into three different social interactive situations associated with peers and adults using Dodge's SIP in two sub-situations: the blurry situation and the clear one. The results demonstrated that children with LD had more difficulties in blurry and clear authority-compelling situations; LD children demonstrated significantly lower performance in encoding accuracy and completeness. Under blurry peer situations, the total number of reactions and the number of negative and aggressive responses in LD children were significantly greater than those of non-LD children.

#### **How to lead Chinese organizational learning: Relationship between paternalistic leadership and organizational learning**

**Yu, Haibo** School of Management, Beijing Normal University, Beijing, People's Republic of China **Xiaoming, Zheng** Tsinghua University, School of Economic and Management, Beijing, People's Republic of China **Liluo, Fang** Institute of Psychology, Chinese Academy of Sciences, Beijing, People's Republic of China **Wenquan, Ling** School of Management, Jinan University, Guangzhou, People's Republic of China In order to explore the relationship between paternalistic leadership and organizational learning, four hundred and ninety one surveys from ten Chinese enterprises were collected by surveying. The results of HRA (hierarchical regression analysis) showed that benevolence leadership and moral leadership were positively correlated with organizational learning; however, authoritarianism leadership were negatively correlated with organizational learning. The results also showed that there were positive interaction effects of moral and benevolence leadership on individual learning, authoritarianism and benevolence leadership on explorative learning, benevolence and authoritarianism leadership on exploitation; and there were negative interaction effects of moral and authoritarianism leadership on collective learning, moral and authoritarianism leadership on exploitation learning.

#### **Advanced digital video technologies as "design tools": Conditions for effective collaboration and self-regulated learning in the classroom**

**Zahn, Carmen** Knowledge Media Res. Center, Tübingen, Germany **Hesse, Friedrich W.** Institut für Wissensmedien, Tübingen, Germany **Klages, Benjamin** Knowledge Communication, Knowledge Media Research Center, Tübingen, Germany **Pea, Roy** Wallenberg Hall, Stanford University/SCIL, Stanford, CA, USA **Rosen, Joe** Wallenberg Hall, Stanford University/SCIL, Stanford, CA, USA

Advanced digital video technologies can support new types of self-regulated collaborative learning in school. In our DFG-funded research, we investigate the instructional method of using video as a "design tool" for knowledge and visual skills acquisition in German/history lessons. Based on cognitive theories of writing and design, a field study (N = 234) was conducted to test impacts of digital video technology and media-related concepts on pupils' colla-

boration, knowledge/visual skills acquisition and motivation. Results reveal a general effectiveness of the instructional method and a significant superiority effect of an advanced technology over a more simple solution on pupils' task interest.

#### **The "Forest" project: Learning biology by multimedia design in primary education**

**Zahn, Carmen** Knowledge Media Res. Center, Tübingen, Germany **Rau, Thomas** Lerngruppe Blau, Französische Schule Tübingen, Tübingen, Germany A pilot study on computer-supported learning in primary school compared writing a researchers' notebook (paper & pencil) to designing a multimedia presentation (computer) in biology lessons with 24 pupils. Analyses of the notebooks and design products revealed significant positive correlations between information structuring in the notebooks and performance in multimedia design for all pupils. Moreover, girls wrote significantly more text into their notebooks than into their computer-based multimedia presentations. No similar effects were found for computer-based writing and visual design activities. Results will be discussed in relation to their practical implications for elementary instruction.

#### **The comparison of family functioning in depressed patients and patients without psychiatric disorders in Isfahan**

**Zargar, Fatemeh** Clinical Psychology, Tehran Psychiatric Institute, Tehran, Islamic Republic of Iran The purpose of this study was comparing the family functioning between depressed patients and patients without psychiatric disorder in Isfahan. From 3 clinics of psychotherapy in Isfahan city, 30 depressed patients were randomly selected. The control group was consisted of 30 non-psychiatric patients who were referred to one hospital in Isfahan. The Bloom's Family Functioning Test (FFT) was administered to both groups. The results of analysis of covariance showed that family cohesion, family sociability, family idealization (amount of family pride) of depressed patients and total of family functioning was significantly lower than control group.

#### **Cross-cultural gender attitudes: Hostile and benevolent sexism to men in Poland, South Africa and Great Britain**

**Zawisza, Magdalena** Dept. of Psychology, University of Winchester, Winchester, United Kingdom **Luyt, Russell** Department of Psychology, The University of Winchester, Winchester, United Kingdom **Zawadzka, Anna Maria** Department of Psychology, The University of Gdansk, Gdansk, Poland Cross-cultural studies exploring gender attitudes indicate that those in Great Britain (GB) and South Africa (SA) lie at opposite ends of the liberal-conservative continuum. None of these studies includes Polish (PL) participants. It was hypothesized that gender attitudes in PL would lie between those in GB and SA. Attitudes, hostile and benevolent sexism to men, among students from each country (n = 120) were compared. One way ANOVAs partially confirmed the hypothesized pattern. Attitudes in PL and GB were less sexist and hostile than those in SA but SA and PL attitudes appeared equally more benevolent than those in GB.

#### **Metabolic syndrome, but not major depression itself influences Cytokine levels in depressed inpatients.**

**Zeugmann, Sara** Klinik für Psychiatrie, Charité-CBF, Berlin, Germany **Anghelescu, Ion-George** Klinik für Psychiatrie, Charité-CBF, Berlin, Germany **Schwarzer, Ralf** Gesundheitspsychologie, Freie Universität Berlin, Berlin, Germany

**OBJECTIVE:** To assess how depression and metabolic syndrome modulate proinflammatory cytokine production. **METHODS:** Severity of illness

(HAMD-17), metabolic syndrome (International Diabetes Federation criteria) and cytokine concentrations (CRP, IL-6, adiponectin, resistin and fibrinogen) were assessed in 69 depressed inpatients. **RESULTS:** Analyses of variance revealed that depressed patients with the metabolic syndrome had significantly higher levels of CRP and IL-6, and significantly lower levels of adiponectin. Correlational analyses did not reveal a relationship between severity of depression and proinflammatory cytokine activation. **CONCLUSIONS:** According to the present data, cytokine dysregulation is amplified in depressed inpatients with metabolic syndrome.

#### **Are they really self-confident: The influence of concealing learning-relevant information on the self-concept of students with learning disabilities**

**Zhang, Bao-shan** Institute of Psychology, Chinese Academy of Science, Beijing, People's Republic of China **Zhao, Jun-yan** Institute of Psychology, Chinese Academy of Science, Beijing, People's Republic of China **Yu, Guoliang** Institute of Psychology, Renmin University of China, Beijing, People's Republic of China

Through the experiment context of individual interviews with strange authorities, the influences of concealing learning-relevant information on the self-concept of LD children are tested on both the conscious and unconscious level. In the study, LD children and NLD children are distributed respectively to the interview context with disclosing learning information and that with concealed learning information. The results indicate that, the state self-esteem of LD children under the condition of concealing learning-relevant information has improved dramatically; LD children under the condition of concealing learning information has a tendency of suppressing negative self-image.

#### **A research of the relationships between leadership behavior and job satisfaction in hospital**

**Zhang, Hui** Dept. of Humanities, Capital Medical University, Beijing, People's Republic of China **Objective** This research is designed to explore the relationship between the leadership behavior style and job satisfaction in the primary community hospital. **Methods** Let 173 medical staffs complete the questionnaire including leadership behavior scale and job satisfaction scale anonymously. **Results** Leadership behavior styles of hospital administrators have made significant difference in job satisfaction. Of the four leadership styles, doctors and nurses in the leader of PM style perceive greater extent of job satisfaction than those who under other leadership styles. **Conclusion** PM leadership style is the best one, and the worst is pm style.

#### **Consumers' multiattribute decision-making of search engine**

**Zhang, Lirong** Institute of Psychology, CAS, Beijing, People's Republic of China **Wang, Yong** CSEB, Institute of Psychology, CAS, Beijing, People's Republic of China **Fan, Chunlei** CSEB, Institute of Psychology, CAS, Beijing, People's Republic of China This study explored the consumers' multiattribute decision-making of search engine. 201 adjectives of attributes collected by surveys and former studies were divided into 3 categories: functional, symbolic and experiential. Subjects were asked to decide the importance of these attributes, presented randomly with E-Prime software, and to respond as quickly as possible when choosing search engine. Results show a negative correlation between importance and RT (reaction time) and functional attributes have the shortest RTs, which are significantly faster than those of symbolic/experiential attributes. The results suggest that consumers focus more on functional rather than symbolic/experiential attributes when choosing search engine.



**Influences of event-valence, time-pressure, description and reference on subjective probability judgments**

**Zhang, Qin** Dept. of Psychology, Capital Normal University, Beijing, People's Republic of China **Qiu, Xiaowen** Department of Psychology, Capital Normal University, Beijing, People's Republic of China  
The present study investigated whether the subjective probability judgments were influenced by event-valence (positive or negative), time-pressure (with or without), description (in detail or in general) and reference (self or others). 31 participants were asked to estimate the probability of 136 events with or without time-pressure. Results showed that participants gave higher probability estimate for positive other-reference events than self-reference events. In addition, higher probability was related to positive events described in detail without time-pressure and positive events described in general with time-pressure. These results were discussed in the context of the culture difference between the east and west world.

**Effect of cue location compound letter processing: An ERP study**

**Zhang, Xuemin** School of Psychology, Beijing Normal University, Beijing, People's Republic of China **Li, Yongna** School of Psychology, New York State University, New York, Armenia **Bai, Siyu** School of Psychology, Beijing Normal University, Beijing, People's Republic of China  
In the present study, we recorded event-related potentials both for pre-cued and post-cued compound letter processing. The results suggested that the processing of post-cued was distinguished from that of pre-cued condition. The hierarchical processing for a compound letter followed after a pre-cue cause frontal and parietal hemispheric asymmetry in early negativity (N1) and long-latency positivity (P3); Global and local processing showed difference in both early negativity (N1) and long-latency positivity (P3). The congruency of the compound letter showed effect only in long-latency positivity

(P3). One interesting finding was the significant effect in left hemisphere, no such effects in right hemisphere.

**Study on mental healthy improvement of woman in climacteric period by Yoga**

**Zhao, Ameng** Qiqihaer Medical College, Qiqihaer, People's Republic of China **Liu, Haiyan** Psychiatry Medicine Department, Qiqihaer Medical College, Qiqihaer, People's Republic of China  
Objective: To discuss the influence of Yoga on mental healthy of woman in climacteric period. Method: 64 voluntary women in climacteric period were attended Yoga training while another 64 as contrast group. Results: obvious improvement on the anxiety level, the sleeping quality and physiologic indexes were found in the training member. Conclusion: Yoga can improve the state of mental healthy of woman in climacteric period.

**Explicit and implicit measures of intimate relationships and their influential factors**

**Zhou, Le** Dept. of Psychology, Peking University, Beijing, People's Republic of China **Su, Yanjie** Department of Psychology, Peking University, Beijing, People's Republic of China  
In order to investigate whether social relationships shape the selves of Chinese in the same way as with German's (Pohlmann & Hannover, 2006), we measured explicit and implicit closeness of Chinese's relationships with their lovers, mothers and best friends, as well as their self-construal. Results indicated that the interdependent showed lover-reference effect and higher implicit closeness of lover than the independent, which did not show this effect. Moreover, we found that the more interdependent the independent subjects were, the higher their explicit closeness with their lovers and best friends. The results suggest that Chinese construct their relationships differently from Germans.

**Effects of entrepreneur's characteristics on performance in Chinese small high-tech firms**

**Zhu, Jiping** Enterprise Management, Zhejiang University, Hangzhou, People's Republic of China **Qi, Zhenjiang** enterprise management, Zhejiang University, Hangzhou, People's Republic of China  
This empirical research focuses on the relationships between entrepreneur's characteristics, organizational fitness and firm performance in Chinese small firms. MANOVA and multiple regression were used in analyzing questionnaire data from 251 individuals in 35 small high-tech firms. The results indicate that: (1) The abilities to make decision, foresee and innovate varied among the entrepreneurs in small high-tech and non high-tech enterprises; (2) fitness between organizational elements significantly correlated with the entrepreneur's characteristics; (3) the entrepreneur's abilities to make decision, foresee and innovate had significant effects on small high-tech firms' performance. Practical implications and future research direction are discussed.

**Problematic mobile phone use and psychological health of college students in Malaysia**

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The relationship between problematic mobile phone use (PMPU) and psychological health was explored in a sample of college students in Malaysia. PMPU was measured using a 27 items scale (Bianchi & Phillips, 2005), whilst the psychological health was assessed using the 12 items, GHQ (Goldberg, 1978). Results revealed that the students do not exhibit problem mobile phone use behavior, and were at a moderate level of psychological health. Nonetheless, students with higher scores on the PMPU scale appeared to be more psychologically disturbed. This study adds to the limited information about mobile phone use amongst young people in Malaysia.