



Friday 25th July 2008

IA-077: The architecture of emotion: Synchronisation of component processes

Werner Sommer (Chair)

Scherer, Klaus R. CISA, Universität Genf, Genf, Switzerland

Emotions are flexible response preparation mechanisms allowing organisms to adapt optimally to events of major significance for well being. Their key feature is the variable degree of coupling or synchronization of subsystems driven by the appraisal of the pertinence of events and the individual's ability to cope with consequences. This process is recursive (with sequential, cumulative effects) and occurs at several levels of automaticity, effort, and consciousness. The continuously varying response configurations, synchronized across motivational, expressive, and somatovisceral components, provide the organism's best estimate of an optimal action readiness. This architectural blueprint will be complemented by pertinent empirical findings.

IA-078: Neurological bases of counterfactual meaning

Rainer Kluwe (Chair)

de Vega, Manuel La Laguna, Spain

Counterfactual sentences like "If Mary had bought the lottery ticket, she would have won the prize" involve a dual meaning: The real world state (Mary did not buy the ticket nor won the prize) and an alternative "as if" world state (Mary bought the ticket and won the prize). We use behavioral methods as well as ERP and fMRI techniques to explore how people understand counterfactuals, focussing on two issues: Is counterfactual meaning embodied? That is, could it activate sensorimotor processes in the brain? And which is the role of prefrontal structures in processing the dual meaning of counterfactuals?

IA-079: Cultural cognition

Michael Knowles (Chair)

Tomasello, Michael Leipzig, Germany

Human beings are biologically adapted for cultural life in ways that other primates are not. Humans have unique motivations and cognitive skills for understanding other persons as intentional agents like the self with whom one can share emotions, experience, and collaborative actions (shared intentionality). The motivations and skills involved emerge in human ontogeny at around one year of age, as infants begin to participate with other persons in various kinds of collaborative and joint attentional activities (cultural practices), including linguistic communication.

IA-080: An evolving perspective on affects and self-regulation

Herbert Scheithauer (Chair)

Carver, Charles S. Dept. of Psychology, University of Miami, Coral Gables, USA

Models of separate systems for approaching incentives and avoiding threats typically incorporate ties to dimensions of affects. It is argued here that both systems relate to affects of both valences.

Frustration and anger enhance effort in incentive pursuit (as does eagerness), depression reflects disengagement from incentives perceived as unattainable, and happiness and joy promote relaxation of current effort toward the incentive to which the affect relates. These properties facilitate pursuit of incentives that are within reach, permits abandoning incentives that cannot be reached, conserves resources, and fosters attainment of multiple goals within a given time frame, via satisficing and multi-tasking.

IA-081: Developmental dyslexia: The visual attentional span hypothesis

Valdois, Sylviane Grenoble, France

The connectionist multitrace memory model of reading (Ans, Carbonnel & Valdois, 1998) predicts that developmental dyslexia might follow from a visual attention span (VAS) disorder. We will provide evidence from both group and single case studies showing that phonological and VAS disorders typically dissociate in developmental dyslexia. The cerebral correlates of VAS abilities will be identified and evidence reported for a selective dysfunction of parietal regions in the participants with a single VAS disorder. These overall findings support the existence of distinct dyslexia subtypes, in particular one subtype characterised by a VAS disorder resulting from a parietal cortex dysfunction.

IA-085: Reflection and impulse: Predicament and promise

Helio Carpintero (Chair)

Strack, Fritz Institut für Psychologie, Universität Würzburg, Würzburg, Germany

Depending on external requirements, the adaptation of human behavior involves accuracy and speed. These criteria require different psychological processes that operate in harmony or conflict. Recently, social psychologists have described a number of dual-systems models specifying the cognitive mechanisms that are linked with the two processes. The reflective-impulsive model (RIM) has added motivational and emotional components to explain how behavior is generated under different conditions. Specifically, the model claims that behavior is a joint function of reflective and impulsive mechanisms and describes their interaction at different sequential stages. It has implications for diverse manifestations of human thinking, feeling and acting.

IA-086: Multisensory processes and how they emerge

Dietrich Manzey (Chair)

Röder, Brigitte Hamburg, Germany

Events that stimulate more than one sensory system are usually processed faster and more accurate than unisensory events. Animal studies have suggested that although multisensory neurons exist in primates at birth, more specific multisensory processes develop during the first year of life. In animals but recently in humans as well it has been demonstrated that visual deprivation from birth causes changes in multisensory interactions. If vision is restored after

some months of congenital blindness, audio-visual integration capacities do not fully recover. These and other results suggest that multisensory functions in humans are acquired based on experience during ontogeny.

IA-087: The psychology of dieting and overweight: Testing a goal conflict model of the self-regulation of eating

Meinrad Perrez (Chair)

Stroebe, Wolfgang Social and Organ. Psychology, Utrecht University, Utrecht, Netherlands

Obesity has increased dramatically in developed countries. A theory will be presented which explains why self-regulation of weight can be difficult for chronic dieters in food-rich environments. According to this theory, the eating behaviour of chronic dieters (restrained eaters) is dominated by a conflict between two incompatible goals: enjoying palatable food and losing weight. While the dieting goal normally curbs the desire for eating enjoyment, this fragile balance is easily disturbed by attractive food cues resulting in inhibition of the dieting goal. Supportive research is presented. It is argued that this theory can integrate earlier theories of self-regulation of eating.

IA-088: The impact of mirror neurons on cognition

Frank Rösler (Chair)

Rizzolatti, Giacomo Parma, Italy

We live in a world full of objects, sounds and movements. Among these stimuli, the actions of our conspecifics are particularly important for survival. How do we understand the actions of others, their intentions and emotions? There is growing evidence that this capacity is largely based on a mechanism that directly transforms visual information on motor acts into a motor representation of the same acts. In my presentation I will review the properties of this mechanism ("mirror mechanism") and discuss its implications for cognition. I will conclude discussing the relationship between the impairment of mirror mechanism and autism.

IA-089: A cross-cultural perspective on the development of sharing behaviour: Integrating behavioural economics and psychology

Zhu, Liqi Institute of Psychology, Chinese Academy of Sciences, Beijing, People's Republic of China **Keller, Monika** Max-Planck Institute for human, Max-Planck Institute for human, Berlin, Germany

This study compared the development of sharing behavior among Chinese and German 8-, 11- 13- and 18-years-olds, by adopting classical economic games, the Dictator (DG) and Ultimatum Game (UG). Children's offers as proposers in both games were collected. Results showed that: In DG, there was no significant difference between Chinese and German children. However, in UG Chinese and German children showed different trajectories. As they got older, Chinese children were more likely to offer less, while German children's offers showed a U-shape. Cross-culturally, the majority of children

revealed a fairness orientation by preferring an equal split in both conditions.

IA-090: Emotion regulation and the social sharing of emotion: Interpersonal and collective processes

Ralf Schwarzer (Chair)

Rimé, Bernard Louvain-la-Neuve, Belgium

People talk recurrently about their emotions. It is commonly assumed to be relieving. Correlative and experimental studies assessed how far simply sharing an emotion reduced its impact. No such effects occurred, but participants reported benefits from sharing. Examining sharing interactions revealed them to elicit empathy. Little room is left to cognitive processing, which is critical to emotional recovery. It was then predicted that sharing an emotion with an empathic partner would not reduce the shared emotion, but would entail marked positive effects for socio-affective variables. Reverse predictions were formulated for a partner stimulating cognitive responses. Experiments successfully tested these predictions.

IA-091: New social identities and nationalism in Latin America: A psychopolitical perspective

Montero, Maritza Caracas, Venezuela

The address will discuss, from a social and political psychology perspective: 1) New social identities and psychological factors emerging in Latin America during the last three decades. 2) Populism and authoritarianism and, characteristics associated with a historically developed dictatorial tradition 3) New forms of nationalism and supra-nationalism (forms of social identities transcending national identification). Political discourses; media information; official documents and historical research are sources providing data for the analysis. Main psychological categories considered include: A) Construction of political myths; B) Search for father-figures in mother-centred societies. C) Modes of understanding and interpreting leadership. D) Definition and attribution of power and legitimacy.

IA-092: Credibility and ethnicity: Theoretical and empirical perspectives

Rainer K. Silbereisen (Chair)

Sabourin, Michel Dept. of Psychology, University of Montreal, Montréal, Canada

The issue of credibility is relatively unexplored by previous research on the impact of ethnic factors on the criminal justice system. After addressing the shortcomings of prior research, we have tried to extend previous findings concerning ethnicity by using a more ecologically valid scheme. Results show that cues to deceit are not universally shared. Behaviors vary both according to ethnicity and credibility, and the stage of the interrogation process may also play an important role. Findings are discussed in line with past results, and a clear picture, both theoretically and empirically, of the relation between credibility and ethnicity is presented.

IA-093: Social responses and steroids: Cognitive mediators

Salvador, Alicia Valencia, Spain

Testosterone and Cortisol are steroid hormones that are closely associated with social behaviour. Studying the impact of competitive encounters on levels of these steroids contributes to a better understanding of the effects of social stressors. Several studies from our laboratory suggest that

when people are in a competitive situation, they assess it in such a way that it activates a psychobiological coping response. Their extent (or intensity) depends on several cognitive factors such as expectations and perceived possibilities of control of the outcome. The coping pattern displayed by the subject determines the steroid response while facing competition and its outcome.

IS-130: Personality and culture

Jüri Allik (chair)

Culture, cross-role consistency and adjustment

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University, Pullman, WA, USA Katigbak, Marcia Educ.

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Pullman, WA, USA

Trait and cultural psychology perspectives on cross-

role consistency was examined in two individualistic

cultures, the United States and Australia, and four

collectivistic cultures, Mexico, Philippines, Malay-

sia, and Japan. Cross-role trait consistency was

evident in all cultures, supporting trait perspectives.

Cultural comparisons of consistency supported

cultural psychology perspectives as applied to East

Asian cultures (i.e., Japan), but not collectivistic

cultures generally. Cross-role consistency predicted

adjustment best in the American sample and least in

the Japanese sample. Alternative constructs pro-

posed by cultural psychologists—personality coher-

ence, social appraisal, and relationship harmony—

predicted adjustment equally well in both indivi-

dualistic and collectivistic cultures.

Personality, personality disorders and culture

Rossier, Jérôme Inst. of Psychology, University of Lausanne, Lausanne, Switzerland

The Five-Factor Model (FFM) is a culturally stable dimensional model describing normal personality and personality disorders (PDs) are defined as "an enduring pattern [...] that deviates markedly from the expectations of the individual's culture". The aim of this research was to assess, the stability of the structures underlying the FFM and PDs and the relationship between them in a large sample from nine African countries and Switzerland. Results showed that the structures underlying the FFM and PDs and that the relationship between them was stable across cultures. However, the expressions of these PDs might vary according to the cultural context.

5 x 20: Comparing the big five dimensions of personality across 20 countries

Rammstedt, Beatrice gesis-zuma, Mannheim, Germany

Over the last decades the Big Five dimensions of personality have become the most well-accepted model of personality worldwide. The International Social Survey Programme (ISSP) now assessed for the first time the Big Five in 20 different countries based on population representative samples. The countries/regions investigated were West-Germany, East-Germany, United States, Ireland, Czech Republic, Russia, New Zealand, Philippines, Israel, Japan, Latvia, France, Denmark, Switzerland,

Flanders, Mexico, Taiwan, South Korea, Dominican Republic. Means of the five dimensions will be compared across countries and stability of gender differences in personality across countries will be examined. Results will be discussed against the background of societal and socio-economic differences among the countries.

Comparison of gender stereotypes with gender differences across generations

Kourilova, Sylvie Dept. of Psychology, Academy of Sciences, Brno, Czech Republic Hrebickova, Martina Institute of Psychology, Academy of Sciences of the CZ, Brno, Czech Republic

The research question was whether gender stereotypes correspond to real-people-ratings. The Five-Factor Model was used for assessing gender stereotypes and personality traits. Gender stereotypical characteristics were assessed using the National Character Survey (NCS). Two different age groups were asked to rate a typical young, middle-age, and old man or woman. Aggregate self-report and observer-rating scores from the Czech NEO-PI-R normative sample were used to test the correspondence with the rated gender stereotypes. The results showed that the assessed gender differences are largely consistent with gender stereotypes across different age periods as well as across judges of different age.

Russian character and personality survey

Allik, Jüri Dept. of Psychology, University of Tartu, Tartu, Estonia

Data were collected by the members of the Russian Character and Personality Survey from 40 samples in 34 administrative areas of the Russian Federation. Respondents (N = 10,862) either rated an ethnically Russian adult or college-aged man or woman whom they knew well using the Russian observer rating version of the NEO-PI-R or rated a typical Russian using the 30-item NCS. Analysis of other-ratings showed that Russian data replicated main features of an international sample combining data from 50 different cultures. Although in general personality traits in Russians closely followed the universal pattern, some reliable culture-specific effects were also found.

IS-131: Self-regulation and personal goals in different domains

Katariina Salmela-Aro (chair)

People direct their life by selecting and setting personal goals: they are active producers of their own life (Lerner, 1982). The aim of the symposium, including papers from five different countries, US, UK, the Netherlands, Switzerland and Finland, is to focus on the role of personal goals on different key domains of adult's life: career, children, interpersonal, health, financial and ecological issues, representing the key developmental tasks of adults' life. By using individual within-person approach, experimental data as well as longitudinal data sets, the results show how personal goals contribute to common good, career, health and well-being.

Self-regulation and goal appraisals: Predicting and explaining intra-individual variability in appraisal patterns

Cervone, Daniel Dept. of Psychology, University of Illinois, Chicago, USA Caldwell, Tracy L. Dept. of Psychology, North Central College, Naperville, Illinois, USA Orom, Heather Dept. of Gerontology, Karmanos Cancer Institute, Detroit, MI, USA Shadel, William G. Behavioral Sciences, RAND Corporation, Pittsburgh, PA, USA

People's appraisals of their capacity to achieve personal goals contribute substantially to self-



regulatory success. These appraisals also may vary substantially, within-person, across domains and social contexts. Predicting and explaining intra-individual variability, then, is a major challenge. We address it by employing idiographically tailored personality assessments that are guided by model of personality architecture, the KAPA (Knowledge-and-Appraisal Personality Architecture) model. Recent findings are presented from two areas of investigation: the regulation of addictive behavior, and the deployment of coping strategies in interpersonal behavior. In both, findings indicate that highly accessible self-knowledge contributes to idiosyncratic-yet-predictable patterns of goal appraisal and self-regulated action.

Money or ecology: Age-related differences in self-related vs. generative goals in a complex problem solving task

Freund, Alexandra M. *Inst. für Psychologie, Universität Zürich, Zürich, Switzerland*

Are there age-related differences in goal-orientation when pitting the personal and common good against each other? Younger, middle-aged, and older adults ($N = 102$) took part in a complex problem solving task that allowed either maximizing personal financial gains or maintaining the ecological state of a hypothetical orchard. Younger adults made significantly more financial gains than middle-aged and older adults, while older adults outperformed younger and middle-aged adults concerning the ecological state. While younger adults maximize personal gains at the cost of a common good, older adults are willing to sacrifice personal gains to maintain a common good.

Reliability and validity of the Self-Regulation Skills Battery (SRSB)

Maes, Stan *Dept. of Psychology, Leiden University, Leiden, Netherlands* **De Gucht, Veronique** *Dept. of Psychology, Leiden University, Leiden, Netherlands*
The SRSB measures goal-ownership, self-determination, goal-efficacy, planning, self-monitoring, help-seeking, social comparison, self-criticism, self-reward, attention and emotion control, coping with problems and self-efficacy enhancement. Various populations completed the SRSB, including a general population, adolescent, worksite and various patient samples. All subscales have good internal consistency. There is a relationship between self-regulation skills and healthy life-style in various samples. The SRSB can be used as a diagnostic tool for health promotion initiatives and life-style interventions.

Letting go of your dreams: Adjustment of child-related goal appraisals and depressive symptoms during infertility treatment

Salmela-Aro, Katariina *Dept. of Psychology, University of Jyväskylä, Jyväskylä, Finland* **Suikkari, Anne-Mari** *Infertility clinic, Family Federation, Helsinki, Finland*

To examine child-related goal adjustment during infertility treatment 178 (86 men, 92 women; age for females $M = 33.92$, $SD = 0.34$, for males $M = 35.68$, $SD = 0.45$) adults at Infertility Clinic in Helsinki filled in personal goal and depressive symptoms questionnaires six times during the infertility treatment. Appraisals concerning child-related goal importance, attainability, and partner support increased among those with a successful treatment outcome, while they decreased among those with an unsuccessful treatment. Child-related goal affects changed in tandem with the treatment result. Goal adjustment contributes to depressive symptoms particularly after unsuccessful treatment.

Career aspirations and occupational attainment: The adaptiveness of ambitious aims

Schoon, Ingrid *Inst. of Education, University of London, London, United Kingdom*

Objective: To examine association between teenage career aspirations and career attainment among men from socially disadvantaged family background. **Method:** In a follow-up study of over 7,000 men born in 1958 and 1970 respectively, the formation and realization of teenage career aspirations is investigated with particular focus on the wider socio-historical context in which aspirations are developed. **Result:** Evidence is provided for an increasing role of educational credentials and school motivation in shaping occupational careers. **Conclusion:** Findings are discussed in terms of adaptiveness of ambitious career aspirations for succeeding in an increasingly competitive world.

IS-132: Best practice assessment challenges in applied contexts

Cheryl D. Foxcroft (chair)

The purpose of the symposium is to reflect on/evaluate the practices in various applied contexts, identify good practices and suggest ways of addressing specific challenges in applied contexts.

Admissions assessment in higher education

Watson, Andrea *Center for Access Assess., Nelson Mandela Metro Univ., Port Elizabeth, South Africa* **Foxcroft, Cheryl** *HEADS Management, Nelson Mandela Metro Univ., Port Elizabeth, South Africa*

The purpose of this paper is to provide an overview of higher education (HE) admissions assessment practices with a view to highlighting good practices. While a global overview will be given, the main focus of the paper will be on current practices in South Africa, as illustrated by a case study of a recently merged comprehensive university. The Nelson Mandela Metropolitan University has had to re-engineer its admissions assessment practices, given the changes in HE legislature and the merger process that it has undergone. Suggestions will be made regarding how future practices in this new institution could be enhanced.

Challenges for neuropsychological assessment in South Africa

Watts, Ann *Medical Center, Entabeni Hospital, Durban, South Africa* **Pillay, Basil** *Dept. of Medical Applied Psych., University of KwaZulu Natal, Durban, South Africa*

The multilingual, transcultural, and unequal education and health status of the people in South Africa poses serious challenges for the best practice of neuropsychological assessment, particularly as most available tests are of Euro-American origin. Using data from common neuropsychological assessments and selected case studies, an evaluation of current assessment practices in this applied field will be illustrated and discussed. Given that ethnicity, language, educational background and other barriers significantly influence the outcome on neuropsychological assessments, suggestions will be made as to how practices can be enhanced and undesirable practices addressed.

Developmental assessment: Practices and challenges

Stroud, Louise *Psychology Clinic, Nelson Mandela Metropol. Uni., Port Elizabeth, South Africa*

The purpose of this paper is to provide an overview of developmental assessment in general and the Griffiths Mental Development Scales – Extended Revised (GMDS-ER) in particular, with a view to highlighting good practices. While international trends will be provided, the main focus will be on current practices in South Africa, especially with respect to the appropriateness of the measures used. The implications of revising a measure used widely

internationally, such as the GMDS-ER, based largely on the country of origin, will be explored. Suggestions will be made regarding how future practices in developmental assessment using the GMDS-ER could be enhanced.

Career assessment challenges in changing applied contexts

Watson, Mark *Dept. of Psychology, Nelson Mandela Metro Univ., Port Elizabeth, South Africa*

McMahon, Mary *School of Education, The University of Queensland, Brisbane, Australia*

The dominant story in career assessment for over a century has focused on quantitative, psychometric, standardised tools. In the recent context of an increasingly diverse society, a complex and fluid world of work, and an evolving career theory base, career assessment has been challenged to keep pace and provide meaningful assessment experiences. The lesser told story is that of qualitative career assessment, the focus of this paper. Using the example of My System of Career Influences, guidelines for the development and conduct of qualitative career assessment will be discussed and application to diverse age groups and cultural contexts considered.

IS-133: Emotions and behaviors associated to children and adolescents' violence at school

Nelda Cajigas de Segredo (chair)

This Symposium presents Latin America research on interpersonal school violence: emotions and cognitions associated with aggression plus protective and at-risk factors for prevention. Chair and Discussant integrate, comment and, with the audience, question panellists: Cajigas, Kahan, Luzardo and Ugo examine Uruguayan adolescent clusters resulting from anger, depression and bullying; Lisboa and Koller investigate Brazilian at-risk children, their bullying managing skills and resilience promotion; Berger and Rodkin analyse the effect of groups on Chilean adolescents' aggression; Pérez Algorta studies aggressive interactions between Uruguayan teachers and pupils; and Fernández, de Paula e Silva and Ferreira Salles highlight imaginary dimensions of violence phenomena.

Study of clusters generated from student anger, depression and bullying in a Uruguayan middle school

Cajigas de Segredo, Nelda *School of Psychology, University of Uruguay, Montevideo, Uruguay* **Kahan, Evelina** *School of Psychology, University of Uruguay, Montevideo, Uruguay* **Luzardo, Mario** *School of Psychology, University of Uruguay, Montevideo, Uruguay* **Ugo, María del Carmen** *School of Psychology, University of Uruguay, Uruguay*

Anger, depression and bullying were studied in 604 adolescents from a low-income school in Montevideo to better understand interpersonal violence and assist its reduction. The Students were self-administered the following scales: the STAXI-C (Spielberger) and the CDI (Kovacs) translated and validated (Del Barrio et al., 1999) and the Bullying and Fighting Questionnaire (Espelage, 2000) translated and validated by this team. After scale factorization and validation of this population, at risk students have been gathered according to their response patterns. Ward hierarchical cluster analysis has been applied and the different types of risk present in the students will be described.

Coping with peer bullying and resilience promotion: Data from Brazilian at-risk children

Lisboa, Carolina Post-Grad Clinical Psychology, *Vale do Rio dos Sinos Univer., São Leopoldo, Brazil* **Koller, Silvia Helena** Dept. de Psicologia, *Univers. Fed. do Rio Grande, Porto Alegre, Brazil*

The aim of the study was to investigate coping with peer bullying. There is evidence that victimization decreases if social skills are improved, which can be related to resilience. Forty-eight at-risk children (mean age = 11.8, SD = 1.4) answered the SCAN – Bullying. A qualitative analysis shows that children referred nonchalance strategies to deal with bullying. Few differences between gender and role were observed: non-victims referred to use more nonchalance strategies. These few differences show that coping may be related to the problem's nature and the reference to nonchalance strategies emphasizes the influence of cognitions and emotional regulation in dealing with bullying.

The mediating role of group influence on individual aggression among Chilean early adolescents

Berger, Christian Dept. of Psychology, *Alberto Hurtado University, Santiago, Chile* **Rodkin, Philip** College of Education, *University of Illinois Urbana, Champaign, IL, USA*

The present study assessed the influence of the peer group on individual aggression over a one-year period. Criticizing an individual approach to aggression, this study departs from understanding aggression as part of group dynamics serving social functions, particularly those related to social status. Hierarchical Linear Model analyses were performed on a sample of 647 5th and 6th graders followed up after one year. Results showed that peer group norms on aggression predicted individual levels of aggression after controlling for baseline aggression levels. This effect was also mediated by individual scores on perceived popularity. Methodological and conceptual considerations are further discussed.

Violent relationships between teachers and pupils in Uruguay

Pérez Algorta, Guillermo Dept. of Psychology, *Catholic University of Uruguay, Montevideo, Uruguay* The purpose of this study is to evaluate teachers' perception about teacher-pupil violent relationships, topic scarcely studied. A sample of 400 teachers from primary and secondary school is completing the Bullying Teachers and Teacher Bullying Questionnaire (adapted from by Twemlow S., Fonagy P., Sacco F. & Brethour J., 2004) starting September 2007 and continuing over a period of six months. Main study results will be presented, among others, the prevalence of this type of violence in schools; its significant dimensions; the extent of teachers admitting being victims of bullying when students; and the style differences between Bullying and No-Bullying Teachers.

Violence in schools: Interpersonal and imaginary dimensions

Fernández Villanueva, Concepción School Political Cs and Socio., *Complutense Univ. of Madrid, Madrid, Spain* **Adam de Paula e Silva, Joyce** EDUCAÇÃO, *UNESP, RIO CLARO, Brazil* **Ferreira Salles, Leila** EDUCAÇÃO., *UNESP, RIO CLARO, Brazil*

In previous research about violence in young people (Fernández Villanueva, Domínguez Revilla y Gimeno 1998) four dimensions explaining youth violence were identified: groupality, identity, ideology and "imaginary." This analytical schema was usefully applied in school violence research. This paper presents results about imaginary aspects of violence in secondary schools in Brazil as well as interpretation of secondary data about school violence perpetrated in other contexts. Using the concept of "imaginary" based in Lacan, Castoriadis, Durand, Giust des Prairies and ourselves, we

identified imaginary representations of actors, victims, social contexts and even imaginization of concrete acts of violence.

IS-134: Justice sensitivity

Manfred Schmitt, Anna Baumert (chair)

Recent research is presented on cognitive, emotional and behavioural consequences of Justice Sensitivity. Two sets of studies show that victim sensitive persons rather behave selfishly while persons sensitive to become beneficiaries of injustice behave fairly toward others. A third contribution explains why victim-sensitive persons tend to anti-social behaviour. Data show that the expectation that others will behave unfairly legitimises own unfair behaviour. In a fourth study, Justice Sensitivity moderates the impact of organisational injustice on job satisfaction. A fifth contribution reveals coping mechanisms involved in Justice Sensitivity. A sixth paper explains how Justice Sensitivity shapes the processing of justice-related information.

In search for the good guys and the bad guys: Justice sensitivity and pro-social vs. anti-social behavior

Schlösser, Thomas Institut für Ökonomie, *Universität Köln, Köln, Germany*

In our talk we will give an overview of six studies (with a total of about 800 participants) that show a robust influence of the personality-scale justice sensitivity on participants' decision to act in an either fair or selfish manner. These studies include different game theoretical paradigms (dictator games, ultimatum games, altruistic punishment games), donations to a charitable organization and studies on moral hypocrisy. In all studies a high level of justice sensitivity from the perspective of an observer or a beneficiary predicted prosocial behavior, whereas a high level of justice sensitivity from the victim's perspective predicted rather antisocial behavior.

Do empathy, perspective taking, or justice sensitivity modulate fairness in the context of experimental games?

Edele, Aileen Inst. für Psychologie, *Humboldt Universität zu Berlin, Berlin, Germany*

The current study aimed to elucidate to what extent socio-affective, socio-cognitive and normative functioning explain fairness in the dictator game. We expected affective empathy and justice sensitivity to relate positively to fairness while perspective taking would be unrelated. Different aspects of empathy, perspective taking, and justice sensitivity (four perspectives) were assessed in 35 young adults who played the dictator game. Empathy and two other-oriented perspectives of justice sensitivity explained fairness, but perspective taking did not. The results support the assumption that affective and selective normative dispositions explain differences in fair and prosocial behavior, whereas social cognition does not.

When justice sensitivity leads to antisocial behavior: The relation between victim sensitivity and assumptions about mean intentions

Rothmund, Tobias Inst. für Psychologie, *Universität Koblenz-Landau, Landau, Germany* **Gollwitzer, Mario** Inst. für Psychologie, *Universität Koblenz-Landau, Landau, Germany*

The present research addresses the question why Justice Sensitivity from the victim's perspective (JS-Victim) is related to antisocial behavior. We argue that JS-Victim encompasses both a motive to trust in the goodness of others and the expectation that others might be not trustworthy. When elicited by particular situational cues, both cognitions evoke a "suspicious mindset", which consists of an attributional bias regarding the immoral intentions of

others and a legitimization for behaving immorally oneself. Findings from two laboratory experiments support these assumptions and help answering the question in which situations a trait effect of JS-Victim is most likely to occur.

How do I deal with injustice? Differences in coping patterns for justice sensitivity from a victim and perpetrator perspective

Nazlic, Tanja Inst. für Sozial-Psychologie, *Universität München, München, Germany* **Traut-Mattausch, Eva** Inst. für Sozial-Psychologie, *Universität München, München, Germany* **Frey, Dieter** Inst. für Sozial-Psychologie, *Universität München, München, Germany*

Research on relationships between Justice Sensitivity (JS) and other constructs (Schmitt et al., 2005) has not explicitly considered cognitive and behavioural coping. We expect more dysfunctional coping amongst JS from a victim-perspective whereas the perpetrator-perspective should be associated with more functional coping. A correlational study revealed evidence for our hypotheses: victim-sensitivity was e.g. associated with emotional coping and other-blame, the perpetrator-sensitivity with active coping and task-orientation. Two additional studies replicated this result through induction of victim- and perpetrator-perspective. Coping strategies can further clarify effects of JS on perception, thinking and behaviour. Successful induction of justice-perspectives will be discussed regarding intervention-strategies.

The moderating effect of justice sensitivity on organizational justice: Job satisfaction relationship in a health care setting

Ozer, Pinar Business Administration, *Dokuz Eylül University, Izmir, Turkey* **Gunay, Gonca** Business Administration, *Izmir University of Economics, Izmir, Turkey* **Basbakal, Zümrüt** School of Nursing, *Ege University, Izmir, Turkey*

Numerous studies have shown that perceptions of organizational justice have a positive relationship with job satisfaction. However, this relationship varies according to different individual factors. In this research, main emphasis was on justice sensitivity as an individual factor. Hence, this research attempted to identify the nature of the relationship between organizational justice and job satisfaction in a health care setting incorporating the moderating effect of justice sensitivity. Research was conducted applying a survey methodology and data was collected from nurses. The results indicate that justice sensitivity moderates the relationship between procedural justice and job satisfaction.

How justice sensitivity (JS) shapes attention and memory

Baumert, Anna Inst. für Psychologie, *Universität Koblenz-Landau, Landau, Germany* **Schmitt, Manfred** Inst. für Psychologie, *Universität Koblenz-Landau, Landau, Germany*

Attention and encoding processes shaped by JS are investigated: In an emotional Stroop task, interference for unjust words increased with increasing JS if injustice was primed (Study 1). In Study 2, high JS led to interpretations of ambiguous situations as less just, if injustice was primed. In Study 3, individuals high in JS were more focused in their information seeking when investigating potential injustice. Study 4 demonstrated that memory performance for justice-related information increased with increasing JS if the learning situation was framed as justice-related. Taken together, our research suggests that justice-related memory and attention function in congruency to JS.



Motivation, recall and information processing

Sanitioso, Bo Dept. of Psychology, Université Paris Descartes, Paris, France

The symposium concerns the influence of motivation on recall and information processing. The first three presentations focus on research showing the influence of (self-related) motivation on the semantic content and subjective experience of autobiographical memory recall (Sanitioso), the use of ease of remembering past behaviors as a basis for self-perception (Echterhoff), and processing of general information not directly related to the self (Augustinova). Next, research on the role of internal states in "if-then" plan implemented in goal striving is presented (Achtziger). Finally, Dunning presents data suggesting motivated reasoning can occur below awareness, related to inhibition and to visual stimuli preferences.

IS-135: Daily structure of cognitive performance

Rolf Ulrich (chair)

The multi-disciplinary research network ClockWORK (initiated by the Daimler-Benz-Stiftung) investigates the daily structure of work with special emphasis on circadian timing of higher cognitive performance, such as task-switching, speech perception and fine motor control. This symposium aims to give an overview of the problems arising from the conflict between circadian and social timing and presents the latest results on daily cognitive performance produced by the team of ClockWORK researchers in a series of constant routines.

The human circadian clock in real life

Rönneberg, Till Inst. für Med. Psychologie, Medizin, Universität München, München, Germany

Human life is controlled by the social, the sun, and the biological clock. We are most aware of the social clock, but the biological clock (synchronised by the sun clock) tells our body to do what when at all levels. When biological clocks run free in constant (time-less) conditions, they continue with a period close to 24 h (circadian) – in real life, they are synchronised to the 24-hour cycle of sun clock. Circadian clocks show large individual differences in their synchronisation – earlier or later – forming a normal distribution with the 'larks' and 'owls' forming the extremes.

Circadian variation in cognitive control

Bratzke, Daniel Inst. für Psychologie, Universität Tübingen, Tübingen, Germany **Rolke, Bettina** Inst. für Psychologie, Universität Tübingen, Tübingen, Germany **Steinborn, Michael** Inst. für Psychologie, Universität Tübingen, Tübingen, Germany **Ulrich, Rolf** Inst. für Psychologie, Universität Tübingen, Tübingen, Germany

In two studies, we investigated whether cognitive control mechanisms are subject to circadian variation. As measures of cognitive control, dual-task interference and task-switch costs were assessed. In order to reveal circadian variations in these two tasks, we used constant routine protocols. Dual-task interference and task-switch costs showed a time-of-day modulation resembling the circadian variation in overall reaction time performance. These findings suggest that tasks requiring cognitive control are particularly sensitive to the influence of the circadian system.

The triangle of sleep, clock and light in the context of shift-work

Juda, Myriam Inst. für Med. Psychologie, Medizin, Universität München, München, Germany **Rönneberg, Till** Inst. für Med. Psychologie, Medizin, Universität München, München, Germany Although night shift-workers sleep during the day, they are still being exposed to daylight and therefore remain synchronised to the normal cycle of day

and night. Night shift-workers want to sleep when the circadian clock tunes their physiology and alertness to normal day-time levels and they have to work when the body clock is set to night. Shift workers can also experience a social desynchronisation as their participation in the community is often being heavily compromised. By means of the Munich Chronotype Questionnaire for Shift Workers (MCTQshift) and by taking into account a multitude of relevant physiological, cognitive, and psycho-social factors, we find strong support for chronotype-specific differences in tolerance to shift work.

Circadian influences on sensorimotor control

Jasper, Isabelle Klinische Neuropsychologie, München-Bogenhausen Hospital, München, Germany **Häußler, Andreas** Hermsdörfer, Joachim

While a circadian rhythm is proved in gross motor performance, studies on circadian influences on different aspects of dexterous fine motor performances are scarce. Various sensorimotor tasks were performed every 3 hours by right-handed males in two 40 hour Constant Routine protocols. Fine motor skills of handwriting are subjected to a circadian rhythm with slower and smaller handwriting during the night. Circadian variations have also been found for maximum grip force and other fine motor skills. The similar circadian rhythmicity of fine and gross motor performance could devise strategies to optimize the structure of daily work concerning motor demands

Circadian rhythm in speech perception

Pusch, Kathrin Inst. für Linguistik, Humboldt-Universität zu Berlin, Berlin, Germany **Dietrich, Rainer** Psycholinguistics, Humboldt University of Berlin, Berlin, Germany **Sommer, Werner** Biological Psychology, Humboldt University of Berlin, Berlin, Germany

This study deals with the question of circadian oscillations in phonetic speech perception. 12 subjects performed a behavioural discrimination task in a forced choice paradigm and a passive oddball paradigm every 3h during 40h of sustained wakefulness under controlled conditions. Acoustic and phonetic stimuli were presented to both ears via headphones in both auditory tasks. A significant circadian modulation of reaction time indicates circadian oscillations in phonetic speech perception which cannot be accounted for solely by effects of alertness. Analysis of pre-attentive mismatch negativity elicited by pitch deviants and vocal-consonant-deviants should give more information about construct validity of this result.

Circadian and homeostatic influences on interval timing

Späti, Jakob Zentrum für Chronobiologie, Psychiatr. Universitätsklinik, Basel, Switzerland **Hofstetter, Marcel** Zentrum für Chronobiologie, Psychiatr. Universitätsklinik, Basel, Switzerland **Cajochen, Christian** Zentrum für Chronobiologie, Psychiatr. Universitätsklinik, Basel, Switzerland

Duration judgments are essential in everyday life. During 40-h of sustained wakefulness, production and reproduction of 3.75-s, 5-s, 7.5-s, 10-s and 15-s were probed every 3-h in 12 young males. The tasks yielded antidromic response curves across the 40-h episode. Reproduction displayed wake-dependent changes for shorter (3.75-s, 5-s) and circadian modulation for longer intervals (10-s, 15-s); 7.5-s intervals were reproduced accurately during the entire protocol. The findings reveal a complex interaction between task type, interval length, circadian phase and state of the sleep-wake homeostat which are yet to be incorporated into models of interval timing.

IS-136: Analysis of causal effects in experiments and observational studies

Rolf Steyer (chair)

Treatment effects are traditionally analyzed with ANOVA, ANCOVA or regression models. There, treatment effects are identified with one or several parameters in these models. However, these parameters do not equal the treatment effects if there is systematic selection of subjects to treatments. Since the 70ties, Rubin revived Neyman's 1923-theory of individual and average causal effects developing procedures for estimating and testing average treatment effects such as matching on propensities. Leading experts will present and illustrate this and other new procedures and show how ANOVA and regression techniques can be integrated into a unified theory of individual and average causal effects.

Sufficient conditions for unbiased average and conditional causal treatment

Steyer, Rolf Inst. für Psychologie, Universität Jena, Jena, Germany

Self-selection of units into treatment conditions and systematic attrition may lead to severely biased treatment effect estimates. It is well-known that we can adjust for this bias under the assumption of strong ignorability, e.g., via propensity score analyses. I will present alternative sufficient conditions for unbiasedness and for successful adjustment. In contrast to strong ignorability, some of these other sufficient conditions are empirically testable, at least in the sense of falsifiability. This is also of practical importance, because these sufficient conditions for unbiasedness – again unlike strong ignorability – can also be utilized in choosing covariates on which adjustments are based. Alternatives to propensity score adjustments are presented as well.

Title to be announced

Rubin, Donald B. Dept. of Statistics, Harvard University, Cambridge, USA

For objective causal inferences from nonrandomized comparative studies, often called observational studies, they must be assigned to parallel, as closely as possible, randomized experiments. There are several aspects of this, the most obvious of which is the lack of any outcome data during this process, but there are several other activities that are critical. This presentation will describe these, which generally require a great deal of thought before any computing can begin.

Conditions under which adjustments for nonrandom assignment might be successful

Shadish, William R. Dept. of Psychology, University of California, Merced, CA, USA

When units self-select into conditions, effect estimates may be biased. In theory, bias can be reduced if the assumption of strong ignorability is met, but this is difficult to assess in practice. The present study examines several measures of strong ignorability. Results suggest that a necessary but not sufficient condition for successful adjustment is obtaining balance between conditions after propensity score adjustment, and that bias reduction is highly correlated with the indirect measures of strong ignorability—the more likely it is that strong ignorability is met, the greater the bias reduction.

Two conditions under which experiments and quasi-experiments have repeatedly given comparable causal estimates

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

This paper describes the results from a set of studies where the results from a randomized experiment are



compared to those from a quasi-experiment sharing the same intervention group. Similar causal results are achieved when the experiment is compared to regression-discontinuity and to designs employing intact group matching. However, correspondence is rarer when attempts are made to equate two demonstrably non-equivalent groups through statistical adjustments or individual case matching. In this last case, covariates capturing the selection process are crucial. Yet there is rarely any way to know that one has indeed validly assessed the selection process.

Title to be announced

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

In studies with non-random assignment the Campbell tradition has emphasized inclusion of design elements that address specific threats to interval validity. We illustrate this using an evaluation of a sales campaign in which (a) nonequivalent dependent variables and (b) multiple pre- and post-tests are employed. The Rubin tradition has emphasized careful specification of the causal estimand and propensity score procedures that provide close matches of treatment and control participants. We illustrate this using an evaluation of the effect of retention in grade on schoolchildren. Other modern statistical methods for equating groups are mentioned. The Campbell and Rubin approaches are compared.

Testing general hypotheses on individual causal effects using aggregate data

Erdfelder, Edgar *Lehrstuhl Psychologie III, Universität Mannheim, Mannheim, Germany* **Auer, Tina-Sarah** *Lehrstuhl Psychologie III, Universität Mannheim, Mannheim, Germany*

Experimental psychologists usually test hypotheses referring to the means of dependent variables calculated across individuals. However, a careful analysis of the underlying research questions reveals that the substantive hypotheses stimulating experimental research almost always conform to general hypotheses on individual causal effects (ICEs) rather than to statistical hypotheses on average causal effects (ACEs). We aim at bridging the gap between statistical and substantive hypotheses by analyzing under which conditions strong conclusions on ICE distributions can be inferred from aggregate data. A procedure of testing general hypotheses on ICEs is proposed and illustrated using examples from cognitive aging research.

IS-137: Test security applications of innovation in data forensics analysis

David Foster (chair)

This security symposium highlights the current threats to test security and new methods and technology to combat them. Participants will present research on the effectiveness of any of several new technologies in the area of test security. These include, but are not limited to security-friendly test and item designs, data forensics analyses, web monitoring systems, copyright infringement detection tools, item exposure controls and algorithms, and biometrics and other authentication technologies and methods.

Catching cheaters with better testing procedures and statistics

Hambleton, Ronald *School of Education, University of Massachusetts, Amherst, USA*

More and more often instances are being reported of cheating on tests. The goal of this paper will be to briefly describe some of the ways in which cheating is being done, and then to describe practices that might improve the validity of test scores to reduce

the level of cheating and catch at least some of the cheaters. These practices extend from better informing everyone about what is acceptable and unacceptable behavior concerning tests, to improving test security and administration procedures, to identifying cheaters based upon statistical analyses of their item response data.

Monitoring of suspicious response-time patterns on computerized tests

van der Linden, Wim *Faculty of Behavioral Sciences, University of Twente, Enschede, Netherlands* **Quo, Fanmin**

To identify aberrant response-time patterns on educational and psychological tests, it is important to separate the speed at which the test taker operates from the time the items require. A lognormal model for response times with this feature was used to derive a Bayesian procedure for detecting aberrant response times. A combination of the response-time model with a regular response model in an hierarchical framework was used in an alternative procedure for the detection of aberrant response times. The procedures are illustrated using a data set for the Graduate Management Admission Test® (GMAT®).

Applying data forensics to defend the validity of online employment tests

Burke, Eugene *Dept. of Psychometrics, SHL Group Limited, Thames Ditton, United Kingdom* **Maynes, Dennis**

SHL uses on-demand tests through the Internet which are unsupervised. Using Caveon's data forensics technology SHL has developed a security strategy to support the deployment and use of these tests. Regular data forensic audits of candidate data are undertaken to review a number of key indices such as high scores, collusion, highly speeded patterns of responding as well as score aberrance. The paper describes the data forensics indices for these analyses and results for over 60,000 live candidates who have been audited using these indices. How these audits are used to inform and improve test security is also described.

Using large-scale simulations to evaluate the effects of cheating

Wright, Dave *USA*

This paper shares results from large scale simulations used to evaluate the effect of cheating on the benefit from testing, and the benefits from verification of test scores in managing the impacts of cheating. Two examples are provided from over 1,000 simulations, one typifying an honest testing condition and one typifying high levels and impacts of cheating (1 in 5 candidates engage in cheating through proxy with a 2 SD gain in scores). These examples serve to show the loss of benefit from cheating and the recovery of that benefit offered by verification procedures.

IS-138: Language processing in Chinese

Hsuan-Chih Chen (chair)

To build a genuinely comprehensive theory of language processing, it is important and useful to conduct cross-language research. The Chinese language, due to its salient differences in structure from European languages, provides challenging opportunities to explore both universal and language-specific processes. Hence, selected recent studies on processing Chinese and their implications will be presented and discussed.

Morphemic ambiguity resolution in processing Chinese

Tsang, Yiu-Kei *Dept. of Psychology, Chinese Univ. of Hong Kong, Hong Kong, China, People's Republic of: Hong Kong SAR* **Chen, Hsuan-Chih** *Hong Kong, China, People's Republic of: Hong Kong SAR*

Chinese monosyllables typically represent morphemes and can be written down with individual logographic characters. A morphemically ambiguous situation occurs when a syllable is part of a compound word, but its dominant meaning bears no relationship to the word. We present results of two experiments designed to investigate meaning dominance and semantic context in morphemic ambiguity resolution using a visual world paradigm. Both meaning dominance and context showed reliable effects on the eye movement data. The results are discussed in terms of the time course of morphemic ambiguity resolution in processing spoken Chinese.

The role of semantic radicals in Chinese character recognition: Behavioural and electrophysiological findings

Weekes, Brendan S. *Dept. of Psychology, University of Sussex, Brighton, United Kingdom* **Su, I-Fan** *Dept. of Psychology, University of Sussex, Brighton, United Kingdom*

The semantic radicals of Chinese characters can convey meaning information to the reader. Previous research has demonstrated that radicals affect character identification and categorization. Our objective is to illustrate how radical consistency, transparency and combinability are involved in semantic access using lexical decision, semantic categorization and picture-word interference tasks as well as event related potentials. The results show areas of activity related to differential features of semantic radicals emerge at different spatial and temporal loci during pre-lexical and post-lexical processing. Our findings inform cognitive models of word recognition in Chinese and highlight challenges for the development of these models.

Involvement of cognitive control in Chinese sentence comprehension: Evidence from fMRI

Zhou, Xiaolin *Dept. of Psychology, Peking University, Beijing, People's Republic of China* **Ye, Zheng** *Dept. of Psychology, Peking University, Beijing, People's Republic of China*

We manipulated plausibility and syntax to examine the involvement of cognitive control to resolve conflicts between incompatible sentential representations in Chinese sentence comprehension. The results showed increased activations for implausible relative to plausible sentences over medial prefrontal cortex (mPFC), left middle frontal gyrus (LMFG), and left inferior frontal gyrus (LIFG). The LIFG activity was affected by both factors, while the activities of mPFC and LMFG were only influenced by Plausibility. Thus, processing implausible sentences needs brain regions responsible for the implementation of linguistic representation (LIFG) and those associated with the resolution of representational conflict regardless of information type.

Age-of-acquisition effects on naming characters in two Chinese dyslexic individuals

Law, Sam-Po *Speech and Hearing Sciences, University of Hong Kong, Hong Kong, China, People's Republic of: Hong Kong SAR* **Yeung, Olivia** *Speech and Hearing Sciences, University of Hong Kong, Hong Kong, China, People's Republic of: Macao SAR*

Wong, Winsy *Speech and Hearing Sciences, University of Hong Kong, Hong Kong, China, People's Republic of: Macao SAR*

We examined dyslexic individuals' performance on reading aloud single characters varying in age-of-acquisition (AoA), consistencies related to the semantic and phonetic radicals, and other variables.



The results of initial assessment suggest that FWL showed a reliance on the non-semantic reading route with greatly reduced semantic input, while TWT's reading aloud was mainly mediated by the semantic reading route. Regression analyses were used to analyze their reading performance. It was found that AoA and phonological consistency significantly predicted FWL's performance, and AoA and semantic transparency significantly accounted for TWT's. The findings are consistent with the arbitrary mapping hypothesis.

Reading unspaced scripts: Eye movement in reading Chinese and Japanese

Feng, Gary *Psychology and Neuroscience, Duke University, Durham, USA* **Mazuka, Reiko** *Psychology and Neuroscience, Duke University, Durham, USA* **Jincho, Nobuyuki** / *REIKEN Brain Science Institute, Japan*

Current theories of reading eye movements assume that explicitly marked word boundaries enable strategic eye-movement programming and parafoveal processing. The Chinese and Japanese scripts present a challenge because they do not mark word boundaries. Using a gaze-contingent paradigm, we show that Chinese and Japanese readers optimize their eye-movement planning by exploiting visual correlates of linguistic units. Adding spaces to the scripts result in shorter fixation duration but more fixations, thus does not substantially improve reading speed. Simulation studies also show that existing visual cues in the unspaced scripts afford useful eye-movement strategies that additional spaces get diminished returns.

Chinese and English speakers' perception of the time of an event

Chen, Jenn-Yeu *Inst. of Cognitive Science, National Cheng Kung University, Tainan, Taiwan* **Su, Juiju** *Inst. of Cognitive Science, National Cheng Kung University, Tainan, Taiwan*

We examined whether tense might affect English and Chinese speakers' time perception of an event. Chinese and English speakers described each presented pictures in their native languages. The pictures depicted action events that were happening, have happened, or were about to happen. Chinese speakers displayed a strong tendency of describing a past/future event as a present one and were less accurate in capturing the time of an event than English speakers. It appears that the particular linguistic forms adopted in a language can bias its speakers towards focusing on certain aspects of the world in exclusion of others.

IS-139: Individual stress resistance: Conceptual foundations and applied research

Anna Leonova (chair)

The symposium gives an overview of contemporary research in individual stress resistance. The goal of the presenters is an integrative representation of approaches to evaluation and upholding of stress resistance through a set of predictors of efficient behavior, well-being and mental health of the subject under influence of unfavorable environmental and psychosocial factors. The discussion comprises the role of genetic predispositions, resource investing coping, organizational support as well as emotional regulation in the framework of state-trait approach. New diagnostic and prevention tools are exemplified by results of empirical studies carried out in context of different subdisciplines of psychological science.

Individual differences in response to psychosocial stress – from genes to social interaction

Kirschbaum, Clemens *Inst. für Psychologie, Technische Universität Dresden, Dresden, Germany* **Rohleder, Nicolas** *Inst. für Psychologie, Technische Universität Dresden, Dresden, Germany* **Mueller-Fries, Eva** *Inst. für Psychologie, Technische Universität Dresden, Dresden, Germany*

The burdens of chronic or traumatic psychological stress are significant, both for the individual and society. Among the pathways responsible for the impact of adverse psychological stimulation, the hypothalamus-pituitary-adrenal (HPA) axis appears to be key. A combination of social-evaluative threat with a loss of controllability is the strongest predictors of HPA activation under laboratory and real-life conditions. Imaging studies suggest that prefrontal brain structures (including BA 9 and 10) control the stress-induced endocrine response. In addition, recent evidence from behavioral genetics suggests a role for neurotransmitter polymorphisms in the HPA response. Finally, intracellular signaling cascades are being unraveled describing how stress gets under the skin.

Preventing burnout and building engagement

Maslach, Christina *Dept. of Psychology, University of California, San Francisco, USA*

Burnout has been an issue of major concern in the workplace, given its high costs for both employees and organizations. Its presence as a social problem in many occupations has been the impetus for the research that is now taking place in many countries. Empirical findings show that burnout is largely a function of the social environment in which people work. The key causes lie in six critical areas of mismatch between the person and the job. Solutions to prevent burnout and to achieve its opposite, engagement with work, exist at both the individual and organizational level.

Psychological evaluation of individual stress resistance by the means of state-trait paradigm

Leonova, Anna *Faculty of Psychology, Moscow State University, Moscow, Russia* **Velichkovsky, Boris** *Faculty of Psychology, Moscow State University, Moscow, Russia*

An individual level of stress and its outcomes strongly depend on enduring personal attitudes and transitory appraisals of the situation. Accordingly, a psychodiagnostic model of stress resistance in the framework of state-trait paradigm was developed. It is based on integrative assessment of indicators of anxiety, aggression, depression, and exhaustion considered as dispositional traits and actual states crucial in the stress evoking process. The model was validated by an examination of contrast groups: psychosomatic patients and personnel with high/low job efficiency (745 persons). Furthermore, marked differences in the stress resistance profiles help to compile preventive programs appropriate for each individual case.

The role of resource investment coping in a development of individual stress resistance

Vodopyanova, Natalia *Faculty of Psychology, St. Petersburg State University, St. Petersburg, Russia* **Starchenkova, Elena** *Faculty of Psychology, St. Petersburg State University, St. Petersburg, Russia*

The concept of resource investment coping is considered through the modes of cognitive, emotional, and behavioral efforts' utilization for a conservation and/or enhancing individual capacities to cope with stressful situations. In the study of railroad dispatchers the interrelations between indicators of a stable job performance, current emotional states and coping styles were analyzed with including the measures of the Greenglass Proactive Coping Inventory and the Hobfoll Gain/Loss Checklist. The data suggest that dispatchers with a higher stress resistance use a wider

range of proactive coping strategies. It provides the use of better recovery strategies and anticipation of emerging stress events.

A complex non-drug technology for improving the level of individual stress-resistance

Glazachev, Oleg *Inst. of Normal Physiology, Academy of Medical Sciences, Moscow, Russia* **Dudnik, Elena** *Inst. of Normal Physiology, Academy of Medical Sciences, Moscow, Russia* **Yartseva, Ludmila** *VNIIMI, Academy of Medical Sciences, Moscow, Russia* **Platonenko, Vyacheslav** *VNIIMI, Academy of Medical Sciences, Moscow, Russia*

An individual level of stress resistance is considered as a human ability to retain efficient behavior and well-being by an adequate tension of regulatory mechanisms and homeostatic functions under the press of psychosocial stress-factors. This approach is exemplified by the results of empirical studies on psychosomatic patients and overtraining sportsmen. Different patterns of uncontrolled stress reactions are considered as the qualitative predictors of lowering stress resistance. Efficient prevention of such negative effects without drug assumption can be achieved by implementation of the complex rehabilitation system elaborated on the basis of physiotherapeutic multi-modal technology "Alfa Spa System" (Sybaritic INK, USA).

IS-140: New trends in clinical psychology

Winfried Rief, Stefan Hofmann (chair)

Clinical psychology is a fast developing field. This symposium will highlight a few of these new trends. An example of integrating new trends of genetics, brain imaging, and cognitive-emotional aspects will be reported by Joormann. Another new trend is to amplify the effect of psychological interventions using pharmacotherapy. A further emerging field is the use of the internet and virtual reality for enhancing the effect of psychological interventions (Botella). Finally, this symposium will be concluded by a presentation how psychological interventions can support the treatment not only of mental disorders, but also of medical conditions.

Amplifying the effect of psychological interventions through pharmacotherapy

Hofmann, Stefan *Dept. of Psychology, Boston University, Boston, USA*

Recent advances in the neuroscience of fear-reduction have led to novel approaches for combining psychological therapy and pharmacological treatments. Exposure-based therapy is partly based on extinction to reduce the fear response in anxiety disorders. Animal studies have shown that D-cycloserine (DCS), partial agonist at the glycine recognition site of the glutamatergic N-methyl-D-aspartate receptor facilitates extinction learning. Similarly, a number of recent studies in humans have shown that DCS enhances fear reduction during exposure therapy of some anxiety disorders. This presentation will discuss the biological and clinical aspects of this emerging field of translational research.

Genetics, brain imaging and cognitive-emotional aspects and their relevance for psychopathology

Joormann, Jutta *Dept. of Psychology, University of Miami, Coral Gables, FL, USA* **Gotlib, Ian** *Dept. of Psychology, Stanford University, Stanford, CA, USA*

Important developments that promise to change clinical psychology in the coming years include advances in molecular genetics and brain imaging. In a sample of girls at high risk for depression, we investigated how a polymorphism in the serotonin transporter gene is related to neural correlates of emotion regulation and neuroendocrine responses to stressful situations thereby moderating the link between stressful life events and emotional dis-

orders. This polymorphism was related to cognitive biases that have been implicated in depression. Our findings suggest an important role for the integration of genetic factors and brain imaging research into current models of emotional disorders.

The internet and virtual reality as tools to increase the efficiency of psychological interventions

Botella, Cristina Dept. of Psychology, Universitat Jaume I, Castellón, Spain **Gallego, M. José** Dept. of Psychology, University of Jaume I, Castellón, Spain **García Palacios, Azucena** Dept. of Psychology, University of Jaume I, Castellón, Spain **Baños, Rosa** Dept. of Personality, University of Valencia, Valencia, Spain

In order to evaluate the efficacy of two Internet-based interventions seventy-seven participants with social phobia were randomized to: a) "Talk to me" a telepsychology treatment for fear of public speaking, b) a therapist-delivered treatment, or c) a waiting-list control group. Also, thirty-five participants with specific phobia were randomized to either: a) "Without fear", a telepsychology treatment for specific phobia animal type, or b) a therapist-administered treatment. These studies showed that both Internet-based treatments were equally effective than the therapist-administered treatment. Our work demonstrated that online cognitive-behavioral programs could be a good alternative in the treatment of specific phobias.

Psychological interventions for medical conditions

Rief, Winfried Inst. für Psychologie, Universität Marburg, Marburg, Germany

Even in medical conditions with clear organic pathology, psychological factors play a major role for illness-related disability and management strategies. This is confirmed in a study investigating 50 patients receiving heart surgery (e.g., valve replacement or bypass). Disability 3 months after the surgery was mainly predicted from illness perceptions and attitudes as assessed before the medical interventions, but not from medical status before or after surgery. Two randomized clinical trials, one including 120 chronic back-pain patients, the other including 110 tinnitus sufferers, further confirm the relevance of psychological approaches in medical conditions.

The psychological treatment of hallucination and delusion

Kuipers, Elizabeth Dept. of Psychology, Institute of Psychiatry, London, United Kingdom
Delusions and hallucinations used to be thought of as 'unamenable' to rational discussion (Jasper 1913). However, since the 1990s cognitive behavioural approaches to anxiety, trauma and depression have been extended to the difficulties found in psychosis, in addition to antipsychotic medication. There have now been a number of randomised controlled trials and several meta analyses. The most recent of these confirm that medication resistant delusions and to some extent hallucinations are most responsive to these approaches usually via improvements in affect (depression). Treatment effects are moderate, at best. The mechanisms that may be involved, and the future development of such treatments will be discussed.

IS-141: Touching for learning: Contributions of haptic modality in learning to read, to write and to identify geometrical shapes in kindergarten children

Edouard Gentaz (chair)

The objective of this symposium is to show that incorporating the haptic modality in traditional training used in kindergarten children to prepare

reading, writing and mathematics improves their effectiveness. Firstly, we will describe the three principal functional characteristics of the haptic modality which are likely to support training: a good haptic identification of the objects, an analytical haptic perception and a haptic perception not dominated by the vision. Then, we will examine studies which reveal the positive effects of multisensory training (vision, audition and haptics) on the understanding of the alphabetic principle, the handwriting production of letters and the identification of geometrical shapes in the 5 year old children. Finally, we will examine whether similar effects are also observed in adults.

Effect of visuo-haptic exploration of letters in the reading acquisition

Hillairet de Boisferon, Anne Grenoble, France

The visuo-haptic exploration of letters in reading interventions facilitates 5-year-old children's understanding of the alphabetic principle. The role of the sequentiality of the exploration was investigated in two interventions which proposed to develop phonemic awareness and letter knowledge and differed on the way the letters were explored: visually and haptically in multisensory intervention, only visually but in a biological sequential way in "biological" intervention. The number of decoded pseudo-words was higher after multisensory intervention than after biological intervention. The haptic exploration of letters per se, rather the visual perception of writing biological motion, explains the haptic effects.

A visuo-haptic device (Telemaque) increases the kindergarten children's handwriting acquisition

Palluel-Germain, Richard Grenoble, France

This study examines whether incorporating a visuo-haptic device 'Telemaque' may increase the fluency of handwriting production of cursive letters in kindergarten children. Forty two 5 year-old children were assigned an intervention involving either Telemaque or not. The results showed that the fluency of handwriting production for six letters (a b, f, i, l, s) was higher after the "Telemaque" intervention than after the control intervention: The movements were faster, exhibited less velocity peaks and children put up the pen less often during the letter production. These results showed that the Telemaque device may help children to increase the proactive strategy to control handwriting movements.

Evaluation of multisensory interventions intended for the acquisition of geometrical shapes in kindergarten children: A study on the contribution of the haptic modality

Pinet, Leatitia Grenoble, France

This study examines the effect of the incorporation of the haptic exploration in intervention intended to favor the acquisition of three geometrical shapes (squares, rectangles and triangles) in kindergarten children. The efficiency of two interventions was compared: In multisensory intervention, the visual and haptic modalities are used to explore the relief shapes while only the visual modality is mobilized in the classic intervention. Performances increased after both interventions but their magnitudes were higher after the multisensory intervention than after the classic intervention. These results were discussed in relation to the functional specificities of the manual haptic modality.

Learning of arbitrary association between visual and auditory unknown entities in adults: The "Bond effect" of the haptic exploration

Gentaz, Edouard Paris, France

The study examines whether the haptic exploration allows adults to better learn the arbitrary association between visual and auditory unknown entities. Adults must learn 15 associations in two interven-

tions: with their visual modality in the "classic" intervention and with their visual and haptic modalities in the "multisensory" intervention. Performances in the visual and audio intramodal recognition tests similarly increased after both interventions. In the visuo-auditory recognition test, the performances increased after both interventions but their magnitudes were higher after the multisensory intervention. The hypothesis of a haptic bond effect between visual and auditory entities is discussed.

Haptic guidance increases the visuo-manual tracking of untrained ellipses drawing

Bluteau, Jeremy St. Ismier, France **Coquillart, Sabine** i3D, INRIA, Saint Ismier, France **Payan, Yohan** GMCAO, TIMC-IMAG, la tronche, France **Gentaz, Edouard** LPNC, CNRS, Grenoble, France

This study examines whether two well-know types of haptic guidance -control in force or in position- increased the visuo-manual tracking of untrained ellipses drawing in terms of shapes and dynamics criterions. Three interventions were proposed in which completely defined ellipses were generated from the « two-third law » and learned. These interventions differed according to the haptic guidance (force, position or no guidance). Both position and force controller while generalized learning improve the fluidity of movements whereas no significant improvements was observed in term of trace shape.

IS-142: Perception, action and graphic representation

Annie Vinter, Christiane Lange-Küttner (chair)

The symposium offers a rich overview of the diversity of approaches in the study of drawing behaviour in children and adults. As indicated by the title of the symposium, relationships between drawing and perceptual functioning, between drawing and motor aspects of performance, between drawing and conceptual knowledge and memory will be explored and discussed. Data collected from individuals with typical development or with pathologies (blindness, autism) will be presented.

Drawings by blind people who had sight for an extended period

D'Angiulli, Amedeo Dept. of Psychology, Carleton University, Ottawa, Canada **Kennedy, John M.** Dpt. of Psychology, University of Toronto, Toronto, ON, Canada

Drawings by a blind child shortly after loss of sight at circa age 11 show a short-lived decline in developmental level with recovery of developmental level within one year. Drawings by a blind adult who gained sight for circa a decade in her 20s show use of stick figures and a novice developmental level. These observations support the hypothesis that drawing development may be the same in the sighted and the blind, and may depend on making drawings more than on the presence or absence of sight. We compare these two case-histories to observations of blind people making drawings that are literal copies of shapes of objects, and drawings that use metaphoric devices.

Beyond the global and analytical processing dichotomy: An approach through drawing in children

Vinter, Annie CNRS 5022, University of Bourgogne, Dijon, France

A large body of research in developmental psychology has been concerned with the extent to which processing visual objects or scenes begins with identifying the local elements or the complex whole. Most experiments have used perceptual judgments of similarity to investigate this question. However, a few of them have shown that the study of drawing behaviour constitutes a fruitful way of assessing



how children parse objects into elements and integrate them into wholes. We will present results from two drawing experiments that suggest the necessity to define intermediary levels between local and global processing of object's structure.

Developmental differences in drawing performance of the dominant and non-dominant hand

van Mier, Hanneke *Psychology, Cogn. Neuroscience, Maastricht University, Maastricht, Netherlands*

The development of drawing performance of the dominant and non-dominant hand was assessed in the current study. Children between the ages of 4 to 12 years were presented with drawing tasks that differed in complexity with respect to motor planning and programming. For each task drawing time, percentage of stop time, drawing distance, velocity and errors were measured. With increasing age and use of the dominant hand, children performed the tasks faster, more accurate and with shorter stops. A significant interaction of age group and hand in several tasks suggests differential maturational changes for the dominant and non-dominant hand.

The impact of knowledge on copying and drawing accuracy in individuals with autism

Ropar, Danielle *Dept. of Psychology, University of Nottingham, Beeston, United Kingdom*

Sheppard, Elizabeth *Dept. of Psychology, University of Nottingham, Beeston, United Kingdom*

Mitchell, Peter *Dept. of Psychology, University of Nottingham, Beeston, United Kingdom*

There is a general consensus among researchers that our conceptual knowledge proves to be a significant obstacle when attempting to illustrate an object accurately in typically developing children and adults. Since individuals with autism show difficulties with conceptual integration, we might expect them to be less likely to make knowledge associated errors when drawing or copying stimuli. Research providing evidence for a special advantage in accurately copying 2-dimensional stimuli (but not with drawing 3-dimensional stimuli) in autism will be presented. Implications of these findings will be discussed in relation to islets of ability in autism and previous drawing research.

Different repetition/training effects in spatial memory and drawing

Lange-Küttner, Christiane *Dept. of Psychology, London Metropolitan University, London, United Kingdom*

Can you actually train drawing skills like you can train memory by repetition? 80 Children between ages 5 and 11 were asked to repeat the Draw-A-Person test three times plus three times they were drawing a police person. Repeated drawing caused deterioration in performance, however, in older children specificity interacted with sequence insofar as the Draw-A-Person Test had become robust to training, while the more challenging Draw-A-Police-Person was better in the beginning than in the end of the exercise. Spatial drawing deterioration vs. spatial memory improvement (see other conference contribution) is discussed in a DD model of diligence development.

IS-143: The brain basis of language comprehension

Angela D. Friederici (chair)

Our knowledge concerning the brain basis of language processing has increased considerably over the past decade due to the application of brain imaging techniques. The symposium will present five prominent views on the language-brain relationship. Dissociable neural networks supporting different aspects of language such as syntactic, semantic and thematic processes located in the left

hemisphere, are proposed by all views. The views differ, however, conceptually in their assumptions about the interactive character of these separable processing streams and of how domain-specific these processing systems are. Neuroanatomically, they differ with respect to the potential involvement of right hemispheric and subcortical structures.

From action to syntax: Evidence from ERPs and fMRI for common neural systems

Kuperberg, Gina R. *Department of Psychology, Tufts University, Medford, USA*

ERP and fMRI findings converge to suggest that semantic violations between verbs (actions) and their subject NP arguments (Agents) evoke a neural response that is distinct from that evoked by violations arising only at the level of real-world semantic knowledge, but similar to that evoked by morphosyntactic violations. These data are discussed in terms of a model in which comprehension proceeds along dissociable, parallel but highly interactive neural processing streams: one that is based on the frequency of co-occurrence of words or events, and another that builds up structure through the operation of both morphosyntactic and action-relevant (thematic) semantic constraints.

Language comprehension: Relevant brain systems and their temporal relation

Friederici, Angela D. *CBS, Max-Planck-Institut, Leipzig, Germany*

Based on neurophysiological data (ERP and fMRI) I propose a model comprising three neural networks in the left hemisphere: one semantic network and two syntactic networks, one for building local structure and one for computing grammatical relations. ERP data reveal that structure building takes place during a first phase, computation of semantic and grammatical relations during a second, and integration of these different information types during a third phase. The right hemisphere computes prosodic information which interacts with syntactic information on-line. Data from patients indicate that the corpus callosum, the brain structure connecting the two hemispheres, makes this interaction possible.

Contributions of memory brain systems to first and second language

Ullman, Michael T. *Dept. of Psychology, Georgetown College, Washington, USA*

Neurocognitive evidence – from behavioral, neurological, developmental, electrophysiological and neuroimaging studies, of both natural and artificial languages – is presented suggesting that in first language (L1), the lexicon of stored word-specific knowledge depends on the temporal-lobe based declarative memory system, whereas aspects of the mental grammar, which underlies the rule-governed composition of complex linguistic forms, depends on the frontal/basal-ganglia-based procedural memory system. In contrast, in later-learned second language (L2), both word-specific knowledge and complex forms depend largely on declarative memory, although with experience the grammar is gradually proceduralized, becoming increasingly L1-like. Neurocognitive evidence from explicit vs. implicit training paradigms is also presented.

The role of the basal ganglia in language processing

Kotz, Sonja A. *Brain Sciences, MPI for Human Cognitive and, Leipzig, Germany*

The functional role of the basal ganglia (BG) in language perception is controversial. Our recent event-related potential (ERP) work with BG patients shows that (i) syntactic reanalysis is affected, while (ii) selective attention is not, and (iii) syntactic reanalysis can be compensated by external and language inherent rhythmic stimulation. Latter data reveal that (iv) metric and

syntactic processes interact, but (v) that BGs can not detect metrical deviations, and (vi) the functional brain network supporting both syntactic and metric processing overlaps. Results will be discussed in relation to the functional nature of the BG in language processing and beyond.

The monitoring of language perception

Kolk, Herman *Dept. of Cognitive Psychology, Radboud University Nijmegen, Nijmegen, Netherlands*

Errors of human performance are common and it is generally assumed that the cognitive system is able to monitor for such errors and to repair them. The many current studies of monitoring have been exclusively devoted to production. However, we also make perceptual errors and are able to detect them. We have proposed that a strong conflict between what you perceive and what you expect signals the possibility of a perceptual error. This conflict brings the brain to reprocess the input and gives rise to a P600. This positivity thus has a general function, not just a syntactic one.

IS-144: Cutting it fine: Understanding and managing self-injurious behaviour

Penelope Hasking (chair)

This symposium aims to further our understanding of self-injurious behaviour. We examine the nature and extent of self-injury in adolescent and young adult samples, and explore the correlates of this behaviour. Qualitative analyses are utilised to gain a deeper understanding of one man's experience with self-harm. Finally we examine a solution-focussed treatment to assist nurses to treat those who self-injure.

Self-injurious behaviour in adolescents

Anderson, Holly Knox *School of Psychology, Monash University, Victoria, Australia*

Objectives: To establish the incidence of self-injurious behaviour in community and clinical samples of adolescents and differences between adolescents who self-injure and those who do not on psychopathology, coping strategies, alcohol use and emotion regulation. Methods: 446 adolescents recruited from secondary schools and 50 adolescents recruited from psychiatric units completed a self-report questionnaire. Results: A high incidence of self-injury was noted in both samples. Samples differed on all measures of psychopathology and in their attitudes towards self-injury. Conclusion: A high proportion of young people engaged in relatively mild self-injury, but still suffered significant psychological distress.

Assessing the intention to help those who self-injure: A test of the theory of planned behaviour

Thomas, Jodie *School of Psychology, Monash University, Victoria, Australia*

Objectives: To test the utility of the theory of planned behaviour to predict an intention to help those who self-injure using a general community sample. Methods: 220 participants completed self-report questionnaires assessing knowledge of self-injury, attitudes towards self-injury and intention to help someone who self-injures. Results: Positive associations were observed between subjective norms, perceived control, empathy and a less negative attitude and intention to help someone who self-injures. Subjective norms also interacted with attitudes to predict helping intention. Conclusion: The theory of planned behaviour may be a useful conceptual framework for assessing the intention to help someone who self-injures.

Knowing me, knowing you: How one gay man made meaning about and sense of his self-harm

Estefan, Andrew School of Nursing and Midwifery, Griffith University, Nathan, Australia
 Objectives: To explore the experiences of gay men who self-injure. Methods: A qualitative narrative methodology was used to enable in-depth engagement with men's accounts of their self-injury. Results: One man used a quest narrative to organise his experience of his self-harm. The use of the quest narrative created possibilities for understanding this man's self-harm beyond conventional clinical discourses. Conclusion: Listening to stories of life provides insights that embed self-injury in rich contexts and therefore resist reductionist explanations. When heard, these stories generate insights for clinicians that might facilitate empathetic work-ing.

From crisis management to turning point: An education intervention on self-harm and the emergency nurse's role

McAllister, Margaret School of Health and Sport Sci, University of Sunshine Coast, Maroochydore, Australia

Objectives: An education intervention using Solution Focused Nursing was designed to interrupt emergency nurses' tendencies to be concerned only about the client's problem. Methods: This mixed-method, pretest / posttest design involved test and comparison groups being administered surveys to explore professional self concept and perceptions of nursing. Qualitative methods included interviews and think aloud activities to explore clinical reasoning. Results: There were significant improvements in attitudes and clinical skills, particularly in relation to the client's future behaviours. Conclusion: By teaching nurses brief strategies the intervention helped nurses to see their role as transforming the present crisis into a turning point.

Coping, emotion regulation and alcohol use as moderators in the relationship between psychological distress and self-injury

Hasking, Penelope School of Psychology, Monash University, Victoria, Australia

Objectives: To examine whether coping skills, emotion regulation and alcohol use moderate the relationship between psychological distress and self-injury, in a non-clinical sample of young adults. Methods: 289 young adults completed self-report questionnaires assessing the variables of interest. Results: Adaptive coping strategies served to protect those who were psychologically distressed from severe self-injury. However for those who reported greater distress, this protective effect was negated by heavy alcohol use. Conclusion: Coping skills training may serve to protect young people from self-injury, however those who are severely distressed should also be screened for heavy alcohol use, as this may increase the risk of severe self-injury.

IS-145: Prenatal and early biological risk, genes and human development

Dieter Wolke (chair)

The last decade has seen an increasing interest in understanding the role of early biological risk, genetic factors, brain changes and plasticity for human cognitive and behavioural development. Three presentations will focus on prematurity and biological risk variation as a natural experiment to study the impact on brain and cognitive, behavioural and emotional development. The other two papers will explore the use of genetic sensitive designs to determine the impact of genes and environment (e.g. bullying) for psychopathology in childhood. The interaction between biological

risk, genetics, environment and functional outcome will be discussed.

Development of the fetal brain

Hueppi, Petra Dept. of Pediatrics, University Children's Hospital, Geneva, Switzerland

Adverse events during early life can result in changes in trajectories that may lead to the "programming" of adult-onset diseases or cognitive/behavioural deficits. Adverse events during gestation and early life can stem from unbalanced nutrition, exposure to stress and stress hormones. Prematurity often combines all these risk factors that can lead to developmental disruption and plasticity in the brain. Advanced magnetic resonance imaging (MRI) techniques have provided us with new modalities to study human cerebral development in vivo. Imaging data are presented illustrating developmental disruption and plasticity in the developing brain and its consequences to functional integrity of the brain.

Premature birth as a natural experiment for the study of human functional neuro-plasticity

Wolke, Dieter Dept. of Psychology, University of Warwick, Coventry, United Kingdom

The timing of premature birth is related to different stages of fetal brain development. Studying the outcome of prematurity (cognitive functioning, psychopathology, educational outcomes) provides a natural experiment for the study of functional neuroplasticity. Findings from several cohorts of premature children that vary from extreme (<25 weeks gestation) to mild prematurity (>32 weeks gestation) indicate that social environmental intervention can compensate for mild prematurity while extreme prematurity appears to lead to global aberrant brain development reducing the ability to take advantage of environmental stimulation. There appears to be a turning point for positive functional neuroplasticity at around 30-33 weeks gestation.

Early biological and psychosocial risk for hyperkinetic disorder

Esser, Günther Inst. für Psychologie, Universität Potsdam, Potsdam, Germany

What are the differences between infants that develop hyperkinetic disorder compared to those with emotional or antisocial disorders or without mental disorder? Twenty-six children with hyperkinetic disorders, 25 with emotional disorders, 30 with antisocial disorders and 241 undisturbed children were followed from birth till the age of 8 years. The most important predictors for the onset of hyperkinetic disorders were low birth weight, the mother's origin from a broken home, early social impairments of the child and the mother's neglect of the infant.

Testing for environmentally-mediated effects: An example using bullying victimisation and children's internalizing problems

Arseneault, Louise SGDP Centre, Institute of Psychiatry, London, United Kingdom

Research has consistently indicated that being involved in bullying is associated with negative outcomes. However, the mechanisms by which bullying operates have not been fully investigated. Using data from a genetically-informative longitudinal cohort of 1,116 twin pairs, we tested whether the experience of being bullied has an environmentally-mediated effect on internalizing symptoms in young children. Results indicated that monozygotic twins who had been bullied had more internalizing symptoms compared to their co-twin who had not been bullied, indicating that bullying victimization has an environmentally-mediated effect on children's internalizing problems. This effect remained significant after controlling for pre-existing internalizing problems.

An extensive multi-centre study on genetics and gene x environment interaction of ADHD

Meyer, Jobst Neurobehavioral Genetics, Universität Trier, Trier, Germany

Attention Deficit/Hyperactivity Disorder (ADHD) is a complexly inherited childhood disorder affecting around 10% of school-aged children. Heritability estimates in the range of 0.6 - 0.8. Adult ADHD patients frequently develop symptoms of Major Depression, thus pointing to a contribution of stress-related endocrine systems and -genes to the disorder. We have recruited several multiplex as well as 200 nuclear families with ADHD. Extensive genetic studies using DNA-Chip technology were conducted, and combined with elucidation of the familial and school environment. Our results point to gene x environment interaction with respect to severity of symptoms, and monogenic inheritance in some cases.

IS-146: Psychological lay beliefs across cultures

Eun-Kook Mark Suh (chair)

Lay beliefs shared by cultural members, even if they are inaccurate, exaggerated, or simply wrong, are important vehicles for understanding the stability and change of various cultural syndromes. Despite the rich theoretical potentials, this topic has not been actively investigated with culture as a backdrop. This symposium will showcase the latest findings on how beliefs about self and others, fate, life goals, and happiness vary across cultures.

Culture and beliefs about a person's essence: Relative weight between visible versus invisible cues

Suh, Eun-Kook Mark Dept. of Psychology, Yonsei University, Seoul, Republic of Korea

Among the various aspects of the person, which ones are most reflective of his/her "essential" quality? In line with classic social psychology findings, Americans in this study thought that the relatively invisible aspects of the person (e.g., ambition) contained more of her essence than the visible cues (e.g., appearance). Koreans, on the other hand, emphasized the visible aspect more than the invisible aspect. Such contrasting cultural pattern emerged when participants engaged in an impression formation task, and also when they made evaluative judgments of a person whose behavior and intention mismatched.

Negotiable fate: Exercising agency under immutable constraints

Chiu, Chi Yue Psychology, University of Illinois, Champaign, USA **Chiu, Chi-Yue** Dept. of Psychology, University of Illinois, Champaign, USA **Au, Evelyn** Dept. of Psychology, University of Illinois, Champaign, USA

Negotiable fate, the belief that fate and personal agency jointly determine one's personal outcomes, challenges the assumption of incompatibility between fate and personal agency. In a series of four studies, we examine the impact of two societal-level factors that foster the development of negotiable fate: action-outcome contingency (the extent to which personal outcomes are contingent on one's actions), and constraint malleability (the degree to which societal constraints are perceived to be malleable). We propose that negotiable fate is most likely to develop when people are rewarded for their efforts, but face immutable societal constraints that affect their ability to attain these goals. The results from all four studies provide converging evidence in support of this hypothesis.



Life goals in the family: A three-generation cross-cultural study

Grob, Alexander *Inst. für Psychologie, Universität Basel, Basel, Switzerland* **Weisheit, Wibke** *Wibke, Weisheit Inst. für Psychologie, Universität Basel, Basel, Switzerland*

Assumptions about family resemblances are widely held among people all over the world. Old sayings like "it runs in the blood" or "like father, like son" reflect people's beliefs. Psychologists from various backgrounds propose mechanisms explaining why characteristics like life goals might run in the family. Yet there are convincing arguments for few overlap in life goals: Family members share different parts of their biographies with each other, belong to different societal cohorts, and have been socialized in different historical contexts. We will present data on life goals from three-generation families in four different cultural settings and answer the question about family resemblance in life goals empirically.

Fate attributions across cultures and religious groups

Norenzayan, Ara *Dept. of Psychology, University of British Columbia, Vancouver, Canada*

Studies examined attributions of life events to fate, the potential cultural influences on such attributions, and the underlying processes behind such influences. In several comparative studies, attributions to fate were consistently greater for Chinese Canadians than for European Canadians; these attributions were also greater for Christians than the non-religious, regardless of ethnicity. Mediation analyses identified two independent influences on fate attributions: the ethnic differences in fate attributions were partially mediated by holistic thinking, whereas religious differences were partially mediated by belief and devotion to God.

IS-147: Visual search and attention

Hermann Müller, Joseph Krummenacher (chair)

Current research into selective processing is presented. Wolfe shows that search efficiency depends on pre-knowledge about object features and (non-classic) information not related to visual features. Kumada reports that patients with right frontal lobe damage exhibit impaired performance in search for pre-cued target features; result interpretation is based on dimension weighting, the dynamics of which are addressed in Krummenacher's overview of experimental and imaging studies. Chun reports fMRI evidence for "filling-out" of scene representations by parahippocampal and retrosplenial cortices. Humphreys shows how single information items in working memory automatically guide selection by affecting eye movements, perceptual processes, and evoked potentials.

Classical and non-classical guidance of attention in visual search

Wolfe, Jeremy M. *Harvard Medical School, Harvard University, Cambridge, USA*

If observers are asked to search for a red letter among letters of various colors, they will guide their attention to red items, increasing the efficiency of search. This "classic" guidance has been extensively studied for several decades. Less is known about guidance in scenes. If observers are asked to search for a bottle in a natural scene, they seem to guide attention to surfaces that could hold bottles. In this talk, we will show that scene guidance can be very effective but that operates under different rules from classic feature guidance.

Feature-based control of attention for visual search in normal and damaged brains

Kumada, Takatsune *Dept. of Human Informatics, AIST, Ibaraki, Japan*

Feature-based top-down control of visual search was examined in patients with frontal lobe damage, in comparison with normal control participants. Feature singletons were presented in search displays, and participants responded to the presence or absence of feature singletons specified by a cue. The patients showed normal search performance when they detected any singletons in search displays. However, when they asked to detect only target singletons with features specified by a cue, they showed difficulty in searching for the targets. This result suggested that frontal lobe coded target template, and/or applied target template for bottom-up information.

Dynamics of dimension-based weighting mechanisms in visual search

Krummenacher, Joseph *Inst. für Psychologie, Universität Fribourg, Fribourg, Switzerland* **Müller, H.-J.**

Selective vision may be guided by non-spatial object features. A red object within green ones attracts attention seemingly automatically. Here, deployment of focal attention is determined by saliency activity based on multiple feature contrast signals. Summarizing recent own results, we discuss the role and computational dynamics of dimension-specific feature contrasts in visual search. The generation of dimension-specific saliency is mainly stimulus-driven and contrasts are weighted before integration. Dimension-specific activations may be top-down modulated. fMRI and EEG studies suggest that modulations of dimension-specific signals are achieved by a fronto-occipital cortical network, and that dimensional weighting affects early stages of perceptual analysis.

Scene representation and search

Chun, Marvin M. *Dept. of Psychology, Yale University, New Haven, USA*

Whether one can dissociate attention from eye movements is under debate. A spatiotopic (world-coordinate) system is required to maintain a sustained locus of spatial attention across saccades, and we've confirmed such updating across eye movements. However, we have novel evidence that the native coordinate system is retinotopic. During the first 100–200 ms after saccades, visual processing is facilitated at the retinotopic location, even when this location is task-irrelevant. When the retinotopic location is task-relevant, robust facilitation persists long after the saccade. The native system of endogenous spatial attention may be retinotopic, updated to spatiotopic coordinates when required by task.

Working memory and search

Humphreys, Glyn W. *School of Psychology, University of Birmingham, Birmingham, United Kingdom* **Soto, D. Rothstein, P.**

Current theories propose that information held in working memory (WM) can guide visual selection of a target. We have examined whether such guidance processes take place automatically, even when the information held in WM is irrelevant for search. We report that the WM stimulus affects the first eye movement even to pop-out targets, it affects perceptual processing of targets under brief exposure conditions and it affects early components of evoked response to search displays. fMRI results indicate that guidance from WM can be separated at a neural level from bottom-up priming, with selection mediated by a fronto-thalamic circuit.

IS-148: The appearance of colored objects

Karl Gegenfurtner (chair)

Human observers have the remarkable ability to assign constant color labels to objects, even though the wavelength composition of the light entering the eye can vary substantially. In this symposium the multitude of different mechanisms that contribute to color constancy will be considered, ranging from low level retinal cues to high level memory effects.

Are observers "opportunistic" Bayesians when using color for object identification?

Zaidi, Qasim *Dept. of Optometry, State University of New York, New York, NY, USA*

Color is primary in the identification of objects, particularly when objects do not differ in shape or texture, but changes in illumination with time, season, and weather, can lead to changes in the spectra of lights reflected from objects. We measured accuracy of object identification across two different illuminations on the basis of color cues. Patterns of correct and incorrect identifications ruled out color-constancy, contrast-constancy and inverse-optics. Instead of using information that could have led to accurate identifications, observers based identification on similarities in object colors as projected onto the illuminant color difference. This performance reflects an "Opportunistic" Bayesian strategy.

Perception of surface color in binocularly-viewed, three-dimensional virtual scenes

Maloney, Laurence *Psychology and Neural Science, New York University, New York, USA*

In everyday scenes, the intensity and chromaticity of light absorbed by a matte surface depends on the location and orientation of the surface. I describe recent experiments intended to investigate surface color perception in 3D rendered scenes. We found that the visual system partially compensates for changes in illumination due to changes in location and orientation of test surfaces. In carrying out these experimental tasks, observers effectively represents the spatial distribution, chromaticities and relative intensities of light sources in the scene. I'll describe additional experiments where we assess how the visual system estimates and discounts illumination.

On the functional role of the mechanism sensitive for the correlation between chromaticity and luminance

Golz, Jürgen *Inst. für Psychologie, Universität zu Kiel, Kiel, Germany*

In previous works Don MacLeod and I have argued that the correlation between chromaticity and luminance within the retinal image can play a functional role for achieving colour constancy and is used accordingly by the human visual system. Here I will present experiments showing that the effect of the chromaticity-luminance-correlation is substantially more global than reported by Gran- zier, Brenner, Cornelissen & Smeets [Journal of Vision, 2005, 5, 20-27], who questioned that this scene statistic is used for the purpose of colour constancy. I will also discuss potential factors that may have lead in the experiments of Granzier et al. to an underestimation of the spatial extent to which the chromaticity-luminance-correlation is taken into account.

Colour constancy of natural objects

Hurlbert, Anya *Dept. of Neuroscience, University of Newcastle, Newcastle, United Kingdom* **Ling, Yazhu** *Institute of Neuroscience, Newcastle University, Newcastle upon Tyne, United Kingdom* **Vurro, Milena** *Institute of Neuroscience, Newcastle University, Newcastle, United Kingdom*

Colour constancy – the tendency of object colour to remain constant under changing illumination – is most likely mediated by multiple mechanisms. At the cognitive level, the memory colour of familiar objects may contribute to constancy, as Hering (1905) argued. We measured colour constancy of familiar and unfamiliar objects in an experimental setup which allows us to adjust the apparent colour of real objects while preserving natural cues to 3D shape. Observers reported whether particular colours 'matched' particular objects under varying illumination conditions. We find that the extent of colour constancy depends on object familiarity and the accuracy of colour memory.

Memory effects on color appearance

Gegenfurtner, Karl *Inst. für Psychologie, Universität Gießen, Gießen, Germany*

We asked human observers to adjust the colour of natural fruit objects until they appeared achromatic. The objects were generally perceived to be grey when their colour was shifted away from the observers' grey point in a direction opposite to the typical colour of the fruit. These results show that colour sensations are not determined by the incoming sensory data alone, but are significantly modulated by high level visual memory.

IS-149: Competition across psychological disciplines and cultures

Marta Fülöp (chair)

Competition is an interpersonal, an intergroup, an economical and a political phenomenon that has many different aspects and can be approached from different psychological disciplines. The present symposium brings together 5 papers that study competition from economic, social, developmental and personality psychological perspective. These studies have been carried out in societies that have been undergoing profound societal and economic changes in the last two decades: China, Hungary, Slovenia and Russia. In all these countries competition has been a key phenomenon of the changes. The symposium highlights how competition manifests itself across different cultures and psychological realms.

The competitive strategies of Hungarian business people

Fülöp, Marta *Inst. for Psychology, Hungarian Academy of Sciences, Budapest, Hungary*

Market economy has been established in the post-socialist countries almost for two decades. During this process those who have taken part in the business life have had to change their views and understanding of competition, as well as to alter their attitudes and values in connection with it. In our study 202 in-depth interviews were carried out with Hungarian business people on their attitudes towards competition, on their perception of the nature of competition in the Hungarian business life and the competitive strategies they employ in their private and professional life. The results of the qualitative analysis are presented in the paper.

Constructive versus destructive competitive tendencies as a function of perceptions of fairness

Berkics, Mihály *Dept. of Social Psychology, Eötvös Loránd University, Budapest, Hungary*

Previous studies have shown that morality or fairness can be an important factor in the perception of competition. This study investigated constructive versus destructive behavioral competitive strategies resulting from different perceptions of fairness. Participants were presented with hypothetical workplace scenarios, in which the level of perceived fairness was varied by manipulating the

perceived correlation between work performance and outcomes (salaries). Participants were asked to judge each scenario in terms of fairness and satisfaction, as well as to make attributions for the outcomes and predict likely courses of action (among them, constructive vs destructive competition) for the hypothetical characters.

The representation of competition and its participants: Russian economics / business students' views

Garber, Ilya *Dept. of Socio Economics, Saratov State University, Saratov, Russia*

The goal of the study was to describe the image of competition and its participants from the Russian Economics/Business student's point of view as a part of a cross-cultural investigation. 231 students participated in the research (30% males and 70% females). In order to reveal the structure of the representation of competition a free associative technique was used and the results were analyzed according to Vergés's (1992) method. A questionnaire of closed-ended questions was applied to identify students' attitudes towards competition in the business world and their perception of the factors that lead to success in business.

Self-concept and competition in cross-cultural perspective

Kobal Grum, Darja *Dept. of Psychology, University of Ljubljana, Ljubljana, Slovenia*

The main focus of the study was to reveal the nature of the connection between competition as a personality dimension and self-concept in three countries: Slovenia, Serbia and Spain. University students filled in the Self-Description-Questionnaire to measure their general and specific domains of self-concept (Marsh & O'Neill, 1984) and Ryckman et al's (1990, 1996) two measures of competitiveness: hyper-competitiveness and personal development competitiveness. Personal development competitiveness in all three countries was more related to the social parts and to particular individual parts of the self-concept. Contrary, hyper-competitiveness was more related to individually oriented motivation. Culture also had a significant impact on self-concept and competition.

IS-150: The developmental significance of close relationships

Rita Zukauskienė (chair)

People live together with other people and they are forced to have relationships with others. Close relationships are important aspects of life and social development. Parents provide the first experiences in close relationships for children, but by adolescence, peers become more important than family as confidants and providers of emotional support. Later on romantic relationships play very important role in peoples' life. Considering that various relationships are very important for development, in this symposium we will cover several domains of interpersonal development: (a) parent-child relationships; (b) friendships and peer relationships; and (c) romantic and spousal relationships.

The influence of romantic relationships on youths' delinquency: Social-influence and/or social-amplification?

Eklund, Jenny *Centre for Health Equity, Stockholm University, Stockholm, Sweden*

Objectives: To investigate whether the influence of romantic relationships on youths' delinquency interacts with youths' delinquency propensity. Methods: The sample comprised Swedish 7th-8th grade girls and boys (n=686) who participated in three annual data collections. Variable-oriented statistical methods including regressions with post hoc probing of interaction effects were used. Results: Romantic relationships predicted subse-

quent delinquency for youths who were prone to delinquency, and indicated that romantic relationships amplified an already existing delinquency propensity. Conclusions: The findings further support the influence of romantic relationships on adolescents' delinquency, but emphasise the importance of investigating individual characteristics as potential moderators of this association.

Understanding leaving home and related developmental tasks: What is the right kind of parental support?

Seiffge-Krenke, Inge *Inst. Entwicklungspsychologie, Universität Mainz, Mainz, Germany*
von Irmr, Joerg *Inst. Entwicklungspsychologie, Universität Mainz, Mainz, Germany*

Objectives: This longitudinal study examines the relationships between the pattern of leaving home and earlier developmental progression and parental support. Methods: data from a sample of 93 participants and their parents were used. Results: Paternal and maternal support during adolescence were found to be important predictors of the timing of leaving home. In-time leavers received lower levels of parental support and were more active in romantic relations during adolescence. No differences between the three groups emerged with respect to occupation or professional career. Conclusion: Developmental progression did not differ between in-time leavers and those who continued to reside in the family home.

Early temperamental unmanageability, harsh parenting profiles and romantic relationships in adolescence

Pakalinskiene, Vilmante *Dept. of Psychology, Mykolas Romeris University, Vilnius, Lithuania*

Objectives: It was examined the possible roles that different combinations of harsh parenting might play in the link between early unmanageable temperament and later romantic relationships. Methods: Prospective data from 3 months to 18 years in a sample of 212 children were used. Results: Latent class analysis revealed different patterns of harsh parenting. In mixture models, unmanageable temperament increased children's risk of having worse relationships. Children who experienced harsh treatment or only discordant relationships had bad relationships in adulthood. Conclusions: It seems that physical punishment has a different meaning in the context of good parent-child relationships than in the context of discordant relationships.

Youths' psychopathic traits predict parenting: Examining the difference between boys and girls

Muñoz, Luna C. *Dept. of Psychology, Univ. of Central Lancashire, Preston, United Kingdom*

Objectives: Could the affective and interpersonal qualities (callous-unemotional and grandiose/manipulative traits) affect parenting beyond the effect of the behavioral and more observable qualities (impulsive/irresponsible traits) of psychopathic traits? Methods: Boys (n=250) and girls (n=277), from 13 to 15 years old, and their parents were surveyed over two years. Results: Hierarchical regressions showed that impulsive/irresponsible traits accounted for much of the variance in predicting negative parenting, parental control, and parents' feelings about their child. The prediction was stronger for girls. For boys, callous-unemotional traits incrementally predicted to negative parenting. Conclusions: The findings suggest that risky girls and remorseless boys are distressing to parents.



Personality type and gender mediates the relation between parental rearing practices and youth behavioral problems

Zukauskienė, Rita Dept. of Psychology, Mykolas Romeris University, Vilnius, Lithuania

Objectives: It was examined whether personality in combination with gender plays a role in the association between parental rearing practices and youth behavioral problems. **Methods:** Prospective data from 14 to 17 years in a sample of 449 children were used. **Results:** Perceived parental rejection and overprotection was positively associated with aggression for girls, but not for boys. For boys, rejection by father and mother was associated with depression only. Personality type and gender moderated these associations. **Conclusion:** Several clear moderating effects of the personality type x gender groups were found on associations between perceived parental rejection, overprotection, depression and aggression.

Peer group selection and influence in adolescents' internal and external problem behavior

Kiuru, Noona Dept. of Psychology, University of Jyväskylä, Jyväskylä, Finland **Nurmi, Jari-Erik** Dept. of Psychology, University of Jyväskylä, Jyväskylä, Finland **Salmela-Aro, Katariina** Dept. of Psychology, University of Jyväskylä, Jyväskylä, Finland

The present study examined whether adolescents' peer groups are homogeneous in internal and external problem behavior and whether peer group selection and influence contribute to this group homogeneity. The Finnish adolescents ($n = 611$, median age = 15) answered questionnaires measuring their internal and external problem behavior and peer relations once before a transition to post-comprehensive schooling and twice after the transition. The results of multilevel modeling showed that peer group members resembled each other in both internal and external problem behaviour. Moreover, peer group selection operated in both behaviors. The analyses concerning peer group influence are in progress.

IS-151: Gender and health

Adriana Baban (chair)

The aim of this symposium is to argue that gender analysis is fundamental to the understanding of all dimensions of health, including health promotion, disease prevention, health-care and health policies. The papers focus on women's health in relation to their everyday lives, exploring how their embodied experiences are shaped by cultural beliefs, economic context, social institutions and health policies. Specific health issues, such as cervical cancer prevention, menopause, infertility, diabetes, heart disease will be discussed by the participants. Overall, this symposium demonstrates the implications of gender-sensitive strategies to improve women's physical, emotional and social health and well-being.

The effects of menopause on quality of life in a sample of Romanian women

Baban, Adriana Dept. of Psychology, Babes-Bolyai University, Cluj-Napoca, Romania **Kallay, Eva** Psychology, Babes-Bolyai University, Cluj-Napoca, Romania **Colcear, Doina** Cardiology, Medical University, Cluj-Napoca, Romania **Zdrenghea, Dumitru** Cardiology, Medical University, Cluj-Napoca, Romania

Aim: To investigate the effects of menopause on the Quality of Life in a sample of Romanian women. **Method:** Our study involved 145 Romanian women (age: 48 - 53), 65 at menopause and 80 not having any symptoms of menopause. All participants were assessed regarding their level of depression (13 - item BDI) and Quality of Life (SF-36). **Results:** Women at menopause have higher level of emo-

tional distress, and lower level of social functioning and vitality. **Conclusions:** Counseling women at menopause may enhance their well-being.

Empowering infertility patients in the medical encounter: Effects on satisfaction with the encounter

Benyamini, Yael Dept. of Social Work, Tel Aviv University, Tel Aviv, Israel **Casday, Sharon** Social Work, Tel Aviv University, Tel Aviv, Israel **Gozlan, Miri** Women's Health Center, Maccabi Health Services, Rishon LeZion, Israel **Kokia, Ehud** General Management, Maccabi Health Services, Tel Aviv, Israel

Objectives – to examine the effect of an intervention aimed at increasing female infertility patients' involvement in the medical encounter on their satisfaction with the encounter. **Methods** - 149 patients undergoing fertility treatments were randomly assigned to experimental and control groups. The experimental group received a brochure encouraging active participation in the encounter and structured instructions for preparation for the encounter. Satisfaction was assessed in both groups following the visit. **Results** – satisfaction with the medical encounter was higher in the experimental compared with the control group. **Conclusions** – preparing young women in a stressful situation for the medical encounter can increase their satisfaction.

Promoting women's heart health: Six-month follow-up results of a preventive trial

Julkunen, Juhani Dept. of Psychology, University of Helsinki, Helsinki, Finland **Rantanen, Piia** Research and development, Rehabilitation Foundation, Helsinki, Finland **Vanhanen, Hannu** medical, the Finnish Heart Association, Helsinki, Finland

Aim. To evaluate the effectiveness of two interventions in promoting women's heart health. **Methods.** High-risk women ($n=126$) were randomized into two groups: group-intervention and self-care group based on risk communication (simple cross-over design). Follow-up assessments were at 6 and 12 months. **Results.** At six months, significant positive changes in cardiovascular risk factors were observed in both experimental groups. **Conclusions.** Intervention based on individual risk communication and counselling by a nurse is as effective as a 10-session group intervention in producing positive changes in risk factors.

The role of gender in the prevention and attention of diabetes in the Mexico-US border

Givaudan, Martha IMIFAP, Mexico City, Mexico **Vitela, Ana Laura** Psychology, IMIFAP, Mexico City, Mexico

The aim: to present a program directed at acquiring knowledge and skills directed at the prevention of diabetes. **Method:** the target population is men and women in the US-Mexico Border States who are over 20 years of age and have never tested for their health status. We developed and implemented a training program of 266 nurses and physicians. They are replicating it in their clinics and communities. The results show that while men attend the health services much less than women they get significantly better attention in the home. **Conclusion:** health recommendations are made regarding differential gender role expectations.

IS-152: Culture and self: Independence, interdependence, and beyond

Shinobu Kitayama (chair)

Over the last two decades, an independence-interdependence theory of cultural self has been highly influential as a guiding hypothesis in investigating cultural variation in self, cognition,

emotion, and motivation. The aim of this symposium is to take stock of empirical findings from the past, showcase some of the cutting-edge research on the topic, and then to explore new frontiers of research for the next decade. Five speakers will cover a wide range of topics including self, choice, parenting, and cognition. Moreover, this panel represents both a variety of methods and a wide range of populations.

Does interdependence equal weakness in the land of the free?

Markus, Hazel Rose Dept. of Psychology, Stanford University, Stanford, USA **Hamedani, Maryam** Dept. of Psychology, Stanford University, Stanford, USA Whether the focus is politics, economics, the environment or the media, we live in an interdependent world. Yet given their history, founding ideology, institutions and everyday practices, Americans are likely to have relatively more elaborated schemas for independence than for interdependence. In two studies, products, people, cities, ideas and actions were framed as either independent or interdependent. Participants, both European American and Asian American, liked those targets characterized as interdependent, but also evaluated them as weak, passive, unsuccessful and not normal. In two subsequent studies, the focus was on the self. When primed with interdependence, European Americans but not Asian Americans, solved fewer anagrams and squeezed a handgrip with for a shorter period of time than when primed with independence.

Understanding cultural differences in the self: A neuroimaging approach

Han, Shihui Dept. of Psychology, Peking University, Beijing, People's Republic of China Social psychological research shows that people from different cultures are characterized with distinct construals of the self. Our recent brain imaging work investigated the neural basis of cultural influence on self-styles and self-related processing. We found that Western/East Asian cultures that cultivate independent or interdependent self modulate neural representation of the self by excluding/including intimate others from/in the neural structure of the self in the ventral medial prefrontal cortex (MPFC). Religious cultures (Christianity) result in weakened neural coding of stimulus self-relatedness in the ventral MPFC but enhanced neural activity underlying evaluative process applied to self-referential stimuli in the dorsal MPFC.

Cognition and parenting

Keller, Heidi Inst. für Psychologie, Universität Osnabrück, Osnabrück, Germany

This study addresses cultural differences in parenting behavior, parenting cognitions and parental perception. Parents representing the cultural models of independence and interdependence, German middle class mothers and Cameroonian Nso farmers participated in this study. Parenting strategies were assessed in mother child free play situations, when the children were three months of age. Socialization goals and maternal perceptual style as expressed with the Framed Line Test were assessed. The data confirmed the expected relationships between maternal perceptual style, socialization goals and parenting behaviors. Cameroonian farmers embody the model of interdependence whereas German middle class mothers embody the model of independence.

Eco-cultural basis of cognition: Farmers and fishermen are more holistic than herders in rural Turkey

Uşkul, Ayşe K. Dept. of Psychology, University of Essex, Colchester, United Kingdom **Kitayama, Shinobu** Psychology, University of Michigan, Ann Arbor, USA **Nisbett, Richard** Psychology, University of Michigan, Ann Arbor, USA

It has been hypothesized that interdependent (versus independent) social orientations breed more holistic (versus analytic) cognitions. If so, farming and small-scale fishing, which require more co-operation (and represent a more interdependent mode of being) than does herding, may encourage a more holistic mode of cognition. To test this hypothesis we compared responses to tasks measuring categorization, reasoning, and attention by members of herding, fishing, and farming communities in North-Eastern Turkey. As expected, results indicate a greater degree of holistic mode of cognition preferred by fishermen and farmers than by herders. Implications for eco-cultural origins of cognitive differences are discussed.

Unconscious influences of social eyes: Choice and motivation in the U.S. and Korea

Kitayama, Shinobu Ann Arbor, USA **Na, Jinkyung** Psychology, University of Michigan, Ann Arbor, USA Choice can be self-motivating, but this effect will depend on the nature of culturally sanctioned self. In independent cultures private choice will be most motivating, but in interdependent cultures public choice will be most motivating. In 2 studies, we tested this idea by inducing an awareness of public scrutiny in highly serendipitous fashion so that participants were not aware of their own awareness of the public scrutiny. Americans performed a task best when they chose the task in the absence of public scrutiny, but Korean performed a task best when they chose the task in the presence of such scrutiny.

IS-153: Adaptive testing in theory and application

Lutz F. Hornke (chair)

Adaptive tests are one of the most intriguing developments in psychological assessment of the last thirty years. Until recently, adaptive tests are routinely used in large-scale assessment programs but are not broadly implemented in day-to-day psychological assessment. The symposium addresses recent developments and future perspectives in adaptive testing. Special topics address the design of item banks, the role of item-response theory, the use of computers, and possible barriers to the application of adaptive testing in different domains of psychological and educational assessment.

Adaptive testing in the 21st Century

Bejar, Isaac I. Research Dept., Educational Testing Service, Princeton, USA

It seems inevitable that ultimately essentially all testing will be administered by computer. Advances psychometric models and models of adaptive testing will play a critical role in that future. I will argue that the content, the items have not received sufficient attention and that such attention is needed to insure sustainable and valid assessments. Specifically, the approach to assessment design that served us well last century needs to be updated to reflect advances in our understanding of the psychology behind test behavior, psychometric advances and technological developments. I will illustrate through examples of recent research and ongoing projects.

Impact of violations of the unidimensionality assumption in computer-adaptive testing

Walter, Otto B. Psychologisches Institut IV, Westf. Universität Münster, Münster, Germany

For the construction of item banks for computer adaptive tests an assumption of unidimensionality (i.e. all items of a test measure the same construct) is usually required. Violations of this assumption may affect the accuracy of item and person parameter estimates. Using both simulated and real data, we investigated the effect of a multidimensional latent trait (2, 3, and more dimensions) on item calibration and score estimation. Indices obtained from exploratory and confirmatory factor analysis were used to quantify the degree of multidimensionality and derive criteria for assessing the extent to which violations of unidimensionality still yield robust score estimates.

Item pool design

Reckase, Mark CEPSE, Michigan State University, East Lansing, USA

The positive features of computerized adaptive tests are only exhibited if they procedures operate on a test item pool with sufficient items with an appropriate distribution of characteristics. The best procedures will not function well with a poor item pool. This presentation describes a methodology for designing the characteristics of an item pool that will support the proper function of the CAT. The design yields a target for the development of operational item pools. The target is based on the use of the test and the distribution of examinees.

Item writing rationales

Kubinger, Klaus D. Psychologische Diagnostik, Universität Wien, Wien, Austria

Adaptive testing only works if there is a big item pool. However, developing items just by professional eager leads in most cases to the deletion of many items when they were calibrated – by the Rasch model at best. For this item writing rationales will be needed. Besides of a lot of formal rationales, the content rationales are preferable be represented by some item generating rules. If there actually are such rules, Fischer's LLTM would master to calibrate them, as a consequence of which they enable the test author to construct an item with a difficulty on his/her particular demand.

Recent and future applications of computer-adaptive testing

Hornke, Lutz F. Inst. für Psychologie, RWTH Universität Aachen, Aachen, Germany **Lang, Jonas W.B.** Inst. für Psychologie, RWTH Universität Aachen, Aachen, Germany

The authors review applications of adaptive testing in different areas of assessment. While there has been a rapid emergence of adaptive tests in large-scale assessment programs, the breakthrough of adaptive testing methods in ordinary psychological assessment has been somewhat mixed. The authors found that only a very small proportion of psychological tests available to psychologists are adaptive tests in one sense or the other. Barriers to the use of adaptive testing outside of large-scale assessment programs are discussed as well as the many potential ways to foster the use of adaptive testing.

IS-154: Eating disorders

Brunna Tuschen-Caffier (chair)

The symposium will be focused on new developments and new data concerning psychotherapy with eating disordered patients. One speaker (Munsch) will present new data to evaluate short-term CBT. Another speaker (Schlup) will pay attention to predictors and moderators of treatment outcome. Two speaker will present new data of meta-analyses concerning psychotherapy for patients with bulimia

nervosa (deZwaan) and with binge eating disorder (Vocks). Finally, one talk will be about obesity of children (Braet).

Ecological Momentary Assessment (EMA) to evaluate efficacy of a cognitive behavioral treatment for binge eating disorder

Munsch, Simone Inst. für Psychologie, Universität Basel, Basel, Switzerland **Milenkovic, Natasa** Inst. für Psychologie, Universität Basel, Basel, Switzerland **Meyer, Andrea H.** Inst. für Psychologie, Universität Basel, Basel, Switzerland **Schlup, Barbara** Inst. für Psychologie, Universität Basel, Basel, Switzerland **Margraf, Jürgen** Inst. für Psychologie, Universität Basel, Basel, Switzerland **Wilhelm, Frank** Inst. für Psychologie, Universität Basel, Basel, Switzerland

Objective: To explore feasibility of EMA and to evaluate short-term CBT. Methods: Twenty-eight individuals were randomized to treatment or to wait-list condition. EMA was accomplished (7 days) before wait-list, before and after treatment. Results: Acceptance and compliance ratings were high. EMA exhibited less binges than retrospective instruments. Binge eating was significantly reduced. Craving, feelings of hunger and control remained stable. Conclusion: EMA is feasible and less susceptible to retrospective memory distortion. Short-term CBT is efficacious. Binge eating may be the tip of the iceberg, but craving and reduced feelings of control might represent more stable aberrations of impulse control.

Predictors and moderators of treatment outcome in a cognitive-behavioral (CBT) short- and long-term treatment for Binge Eating Disorder (BED)

Schlup, Barbara Inst. für Psychologie, Universität Basel, Basel, Switzerland

Objective: To examine whether rapid response, baseline negative affect or binge frequency predicted or moderated treatment outcome in two CBT treatments for BED. Method: 76 participants with BED participated in a 16- or 8-session CBT. Treatment response referred to remission from binge eating and reduction of binge episodes. Results: Rapid response and high negative affect did not predict nor moderate treatment outcome at posttreatment or at 1- and 2-year follow-up. Patients with higher initial binge eating showed higher remission rates in the shorter intervention. Conclusion: CBT, short or long-term, was effective for the majority of patients, regardless of predictors of treatment outcome.

The needs of carers: a comparison between eating disorders and schizophrenia

de Zwaan, Martina Abt. für Psychosomatik, Universitätsklinikum Erlangen, Erlangen, Germany

Objective: This pilot study compares the level of distress and the need for support between carers of patients with anorexia (AN) and bulimia nervosa (BN) and carers of patients with schizophrenia. Methods: Thirty-two carers of patients suffering from AN and BN and 30 carers of patients with schizophrenia filled out the General Health Questionnaire (GHQ-12) and the Burden Inventory (BI). In addition, they were interviewed with a semi-structured research interview, the Carers' Needs Assessment (CNA), to assess relevant problem areas as well as the need for helpful interventions. Patients with an eating disorder were interviewed with the Eating Disorder Examination (EDE) and patients with schizophrenia with the Positive and Negative Syndrome Scale (PANSS) to assess the severity of the disorder. Results: The mean duration of illness was 5.3 years in the patients with eating disorders and 7.3 years in the patients with schizophrenia. Most of the carers were mothers or partners. In the CNA we found high numbers of problems as well as high numbers of unmet needs for interventions. The most frequently mentioned problem areas in all groups of carers were



"disappointment caused by the chronic course of the illness, concerns about the patient's future" and "problems in communication with the patient". The most frequently reported need for support in all groups was "counseling and support by a professional". Carers of patients with BN reported a significantly lower number of problems and of needs for interventions compared to the carers of patients with AN and schizophrenia. Also in the BI and the GHQ-12 we found significantly lower total scores in carers of patients with BN. Carers of patients with AN and schizophrenia did not differ significantly in any of the assessments. The severity or duration of illness of the patients did not correlate with the carers' burden or needs. Conclusions: Carers of patients with an eating disorder and carers of patients with schizophrenia are burdened with similar problems and have high levels of unmet needs which are usually not addressed in clinical practice. Carers of anorectic patients have higher levels of difficulties in various areas compared to carers of bulimic patients and did not differ from carers of patients with schizophrenia.

Meta-analysis on the effectiveness of various treatments for Binge Eating Disorder

Vocks, Silja Inst. für Klin. Psychologie, Universität Bochum, Bochum, Germany **Tuschen-Caffier, Brunn** Bielefeld, Germany **Pietrowsky, Reinhard** **Kersting, Anette** **Herpertz, Stephan**

Objective: The aim of the present meta-analysis is to integrate the findings of treatment studies concerning psychotherapy for Binge Eating Disorder. Method: Criteria for the inclusion of a study were that (a) the participants were diagnosed according to the DSM-IV, (b) at least one therapeutic intervention was applied and (c) symptom-specific outcome parameters were assessed. Results: Thirty-eight studies fulfilled these inclusion criteria and were assigned to the intervention categories psychotherapy, self-help, weight loss, pharmacotherapy and combination of various treatments. Conclusion: Based on these results, S3 treatment guidelines concerning the treatment of Binge Eating Disorder are developed.

Towards defining subtypes in overweight children

Braet, Caroline Dept of Develop. Psychology, Universiteit Gent, Gent, Belgium

Children with overweight are a heterogeneous group and differ on dimensions measuring dietary restraint and psychopathology. Whether these pre-treatment characteristics are related with differential treatment outcome is not explored yet. Two independent samples were subtyped along dietary restraint and negative affect dimensions using cluster analysis and then compared on disordered characteristics. Three robust subtypes emerged: a dietary restraint/ negative affect subtype (DR/NA), a pure negative affect group as well as a non-dietary/ non symptomatic group. Individual characteristics like degree of dietary restraint and negative affect can be helpful in typifying youngsters with overweight seeking treatment, stipulating specific treatment guidelines and making differential prognoses.

IS-155: Recovery from work stress

Sabine Sonnentag (chair)

Job stressors impair health. Recovery is assumed to be a process by which the negative effects of job stressors can be alleviated. This symposium brings together researchers from six countries that present and discuss research findings on recovery. The presentations will report empirical findings on recovery during vacations and during daily life. Findings from studies that examined physiological processes and indicators associated with (low) recovery will be presented. Overall, the studies

presented in this symposium suggest that research on recovery is necessary to fully understand the implications of job stress.

Do we recover from vacation?

de Bloom, Jessica Dept. of Work and Organization, Radboud University Nijmegen, Nijmegen, Netherlands **Kompier, Michiel** Dept. of Work and Organization, Radboud University Nijmegen, Nijmegen, Netherlands **Geurts, Sabine** Dept. of Work and Organization, Radboud University Nijmegen, Nijmegen, Netherlands **de Weerth, Carolina** Dept. of Work and Organization, Radboud University Nijmegen, Nijmegen, Netherlands **Sonnentag, Sabine** Dept. of Psychology, University of Konstanz, Konstanz, Germany

The aim of this study is to investigate to what extent vacation has positive effects on health and well-being, how long such effects last after work resumption, and how vacation activities and experiences play a role in these relationships. Based on a systematic literature search (Pscinfo, Medline) and methodological inclusion criteria, we selected 8 studies to answer our research questions. The results indicated that vacation improves psychological health, but these effects seem to fade out rather quickly. Our research further demonstrated that vacation activities and experiences have hardly been studied. Based on our review, we come up with some methodological and theoretical recommendations for future research in this area.

Vacation fade-out in teachers

Kühnel, Jana A&O-Psychologie, Universität Konstanz, Konstanz, Germany **Sonnentag, Sabine** Universität Konstanz, Konstanz, Germany

Vacation, as a time off from work, offers the opportunity to recover from work demands. However, positive effects of vacations seem to fade-out quickly. One-hundred-thirty-five teachers filled in surveys before vacation, immediately, two weeks, and four weeks after vacation. Results showed the hypothesized increase of work engagement immediately after vacation which declined within two weeks. Emotional exhaustion decreased after vacation and reached its pre-vacation-level within four weeks. Experienced job stress after vacation fostered and experienced relaxation attenuated the fade-out in work engagement and emotional exhaustion. Our study suggests that accumulation of strains after vacation consumes resources gained during vacation.

Recovery experiences among Finnish employees

Kinnunen, Ulla Dept. of Psychology, University of Tampere, Tampere, Finland **Siltalooppi, Marjo** Dept. of Psychology, University of Tampere, Tampere, Finland **Feldt, Taru** Dept. of Psychology, University of Jyväskylä, Jyväskylä, Finland

The aim was to examine recovery experiences among Finnish employees in relation to potential predictors (job demands and resources) and consequences (burnout and work engagement). Specifically, four experiences, namely psychological detachment from work, relaxation, mastery and control, were assessed by 527 employees from a variety of different jobs. The recovery experiences showed moderate negative relations with job demands (e.g. work load) and positive relations with job resources (e.g. social support). The relations with burnout were stronger and in the opposite direction (i.e. negative) than those with work engagement. It seems that psychological detachment, due to its strongest relations, is the most relevant recovery experience.

Physical exercise as a daily recovery activity: A closer look on how it works

Feuerhahn, Nicolas Konstanz, Germany **Sonnentag, Sabine** Universität Konstanz, Konstanz, Germany

We examined the recovery potential of physical exercise during leisure on psychological well-being.

Based on earlier research we assumed that spending leisure time with physical activity will improve well-being before going to bed. Furthermore, we suggested that psychological detachment, positive experience, sense of belonging and physical self-concept mediate this relationship. One hundred and twenty-six participants from different occupations completed a diary twice a day over five consecutive workdays. Multilevel analyses showed that physical activity enhanced well-being before going to bed. Psychological detachment, positive experience, sense of belonging and physical self-concept were mediators in the relationship between physical activities and well-being.

Biological underpinnings of recovery from work in employed women and men

Lindfors, Petra Dept. of Psychology, Stockholm University, Stockholm, Sweden

This presentation summarizes findings from our studies on the biological underpinnings of recovery, asking respondents to complete a measure of self-rated recovery from work and to provide biological data. Examining the relationships between self-rated recovery and salivary cortisol in 25 white-collar workers revealed that high morning cortisol is associated with poor recovery. Analyses of linkages between self-rated recovery and biological dysregulation in 241 women employed within the health care sector showed that poor recovery increases the risk for biological dysregulation. These linkages between self-rated recovery and biological markers imply that poor recovery from work increases the risk for health problems.

Tell me why I don't like Mondays..

Walkowiak, Alicia Work and Social Psychology, University of Maastricht, Maastricht, Netherlands **Zijlstra, Fred** Dept. of Psychology, Maastricht University, Maastricht, Netherlands

In this study 70 participants kept a diary for 2 weeks, and reported sleeping times, working times, and so on, which revealed the weekly cycle of work and rest. Also on three days (before, during, and after the weekend) saliva samples were collected in order to determine levels of cortisol. The hypothesis tested in this study is that people start anticipating the demands of the week on Sunday evening. Our study findings appear to support our main hypothesis, and in particular ruminating about work seems to contribute to poor quality of sleep. Theoretical and practical implications will be discussed.

Stress and recovery of working parents in Berlin

Klumb, Petra Dept. of Psychology, University of Fribourg, Fribourg, Switzerland

This study investigated the antecedents of recovery processes in individuals facing high demands in more than one domains of life. With an intensive time sampling design, we observed 52 working couples with at least one preschool child. We collected data on productive activities on the labor market and in the household, mood and level of free cortisol over 6 consecutive days and modelled their relationships with multilevel analyses. Recovery processes as indicated by the decline of cortisol across the day and its level in the evening depended on characteristics of the productive activities, the person, and the couple.

IS-156: Dynamics of mind and body

Guy van Orden (chair)

Mind and body are traditionally explored as though they are separate entities. Recent findings of common dynamical principles begin to undermine this distinction as a working hypothesis, while an alternative hypothesis of interdependent systems gains credibility. The symposium presents representative examples of such findings.

Embodied cognitive dynamics in language comprehension

Spivey, Michael J. *Cognitive Science Program, University of California, Merced, CA, USA*
Saccadic eye movements and continuous reaching movements while carrying out spoken instructions have recently been providing rich insight into the online interaction between syntax, semantics, pragmatics, and even situational affordances. This presentation will describe several experiments that break down the barriers between these different information sources, and point to an account of language processing where perception, cognition, language, and action co-exist as a trajectory in a high-dimensional attractor landscape rather than being treated as a linear series of independent modules.

Cognition as the breaking and reforming of constraints

Stephen, Damian G. *Dept. of Psychology, University of Connecticut, Storrs, USA*

Our work deals with emergent cognitive structure in problem-solving research. In this paradigm, participants use a force-tracing strategy to determine the turning directions of the gears in an interlocking sequence of gears. With continued practice they discover an alternative strategy. We have modeled this discovery as a phase transition. The discovery of the alternative strategy can be predicted by changes in entropy and criticality of force-tracing motions (in hand and eye), using recurrence quantification analysis and power-law exponents, respectively. We propose a thermodynamic account of cognition as the breaking and reforming of constraints in a complex open system.

1/f scaling in speech

Kello, Christopher T. *Dept. of Psychology, George Mason University, Arlington, VA, USA*
Biological, behavioral and social systems are intricate beyond comprehension. Yet this complexity yields patterns of behavior that recur across scales and domains, suggesting fundamental principles at work. One such pattern is the scaling relation $1/f$ noise. This pattern is observed widely in the fluctuations of human brain activity as well as overt cognitive and motor behavior. Some explanations appeal to domain-specific mechanisms like the gating of ion channels or flux in vigilance or attention. I will present individual and dyadic speech data that contradict domain-specific explanations and favor instead common domain-general principles of coordination in biological, behavioral and social systems.

Coupling between cognition and locomotion

Riley, Michael *Dept. of Psychology, University of Cincinnati, Cincinnati, CT, USA*
Time intervals between treadmill strides are variable but not random. Stride variability carries a dynamical signature of healthy functioning called $1/f$ noise. Time intervals between cognitive responses share the same signature. Motor and cognitive tasks can be performed concurrently, resulting in well-known dual-task effects. However do concurrent task performances affect the respective dynamical signatures? Participants walked on a treadmill alone, while performing a cognitive task, or performed the cognitive task alone. Concurrent motor performance dramatically "whitened" the dynamical signature of cognitive performance, but not vice versa. Apparent spontaneous coupling between cognition and locomotion altered the dynamical signature of cognitive dynamics.

IS-157: The psychology of terrorism

Robert J. Sternberg, Karin Weis Sternberg (chair)
Hate is one of several precursors to terrorism. I describe in this talk a triangular theory of hate as

well as data generated to test that theory. The theory, proposed originally by R. Sternberg, posits three components of hate: negation of intimacy, passion, and commitment. Each proves to be a distinct factor. Convergent-discriminant validation provides further support for the theory

From the terrorists' point of view: What they experience and why they come to destroy

Moghaddam, Fathali *Dept. of Psychology, Georgetown University, Washington, DC, USA*
Contemporary Islamic terrorism will only be defeated by first understanding the collaboratively constructed and collectively upheld worldview of terrorists. The metaphor of a staircase to and from terrorism, with particular psychological processes characteristic of each level on the staircase, is used to explain the terrorists' point of view. Nine different specializations are identified within terrorist networks. The conclusion focuses on radicalization underway on the ground floor, and some practical paths toward de-radicalization.

Hate as a precursor to terrorism

Weis Sternberg, Karin *NPLI, Harvard University, Cambridge, MA, USA*
Terrorism has many causes, such as religious fanaticism, economic deprivation or desire for more resources, and misplaced idealism. I will discuss one origin of terrorism, hatred. I draw upon R. Sternberg's duplex theory of hate, according to which hate has two basic aspects: a triangular structure and stories that generate this structure. Hate is viewed as comprising three components: negation of intimacy, passion, and commitment. Stories are diverse, but among them is viewing the object of hate either as a terrorist, an enemy of God, and a morally bankrupt individual. Terrorism is one device to extract vengeance against such targets.

IS-158: Intelligence and cognitive control

Edward Necka (chair)

The cognitive approach to intelligence is usually understood as an attempt to reveal mental processes that account for individual differences in IQ. We assume that the human ability to exert cognitive control over one's mental processes is essential for the general mental ability. Cognitive control may affect not only working memory capacity, but also efficiency of attention in tasks that require inhibition or distraction suppression. The symposium will be an occasion to present and discuss the state of the art in the studies that underscore the importance of various aspects of cognitive control to human intellectual performance.

Working memory as trait and state

Engle, Randall *School of Psychology, Georgia Inst. of Technology, Atlanta, USA*
Early conceptions of cognitive limitations were based on a limited number of chunks such as 4 ± 1 . However, recent thinking also focuses on differences in cognitive control. It is further clear that working memory capacity (WMC) should be thought of as a construct that mediates between many other variables and other tasks in which control is useful. We can think of WMC as both a trait and state variable. Abiding individual differences are an important determinant of WMC but other variables from sleep deprivation to stereotype threat will lead to temporary reduction in capability for cognitive control in real-world cognition.

Intelligence, cognitive control, and working memory capacity: Three distinct relatives of selective attention

Cowan, Nelson *Psychological Sciences, University of Missouri-Columbia, Columbia, USA*

Many researchers have suggested that the control of cognition is a function of selective attention and that it is an important aspect of intelligence. My colleagues and I have suggested that the ability to save information in working memory also depends on selective attention. We review evidence on individual and developmental differences suggesting that the control and storage functions of selective attention overlap only partially, and that both of them are strongly related to intelligence.

Intelligence and working memory: A time accuracy function (TAF) approach

Brzezicka, Aneta *Socia Psychology, Warsaw School of, Warsaw, Poland*

The relationships between intellectual functioning and working memory have been investigated using different research paradigms. In the reported study, the time accuracy functions paradigm was used, which converts the presentation intervals into accuracy according to defined functions. Time accuracy functions were obtained on the basis of the PASAT test results. We compared performance of students with high and low Raven's scores. The findings of two experiments showed that students with lower intelligence scores were impaired in one aspect of performance only, namely the rate of processing. These results suggest that intelligence may be related to an ability to control the content of WM in spite of rapidly changing time intervals between consecutive trials.

Working memory capacity, attention control and conscious experience

Kane, Michael *Dept. of Psychology, UNC Greensboro, Greensboro, USA*

We present research on the relations among fluid ability (working memory capacity (WMC)), executive control, and attentional lapses. Prior research indicates that WMC variation predicts executive-control performance because lower WMC individuals fail to keep novel goals accessible in the face of competition from habit. Here we explored whether such "goal neglect" results from failures to keep conscious thoughts on task goals, which subjects experience as mind wandering. In both laboratory and daily-life studies, we probed subjects' thoughts at random intervals and found that WMC predicts mind wandering and that this association is partially responsible for the WMC-executive control relationship.

Executive control or focus of attention capacity? Working memory contribution to general fluid intelligence

Chuderski, Adam *Inst. of Psychology, Jagiellonian University, Cracow, Poland*

From two main theories of WM mechanism underlying general intelligence, one promotes the role of executive control, while the other – of the capacity to actively maintain and bind chunks. Our presentation reviews recent literature that shows these two views may not be mutually exclusive. We discuss our own results of n-back and dual-task experiments and structural equation models, which show that efficiency of control contributes to Gf. We will outline a theoretical model of intelligence as determined by the efficiency of control over mental processes.

IS-160: Contribution from psychology to active ageing

Rocio Fernández Ballesteros (chair)

From an evidence based point of view, it has been during the last decades, when from the fields of biomedicine and social sciences emerged the so



called "new paradigm" on the field of ageing: a positive view. The core of this new paradigm is a new construct: healthy, successful, optimal, active or positive ageing. After a systematic review on the field, four main psychological and behavioural domains emerged as the core of active aging: behavioural health and fitness, cognitive functioning, emotional and motivational functioning (affect, control, and coping), and social participation. The main objective of this Symposium is to examine some contribution from psychology on the field of positive ageing.

Lay concept of aging well: Cross-cultural comparisons

Fernández Ballesteros, Rocio Facultad de Psicología, Universidad Autónoma de Madrid, Madrid, Spain

Luis, García Facultad de Psicología, Universidad Autónoma de Madrid, Madrid, Spain **Digma, Abarca** NEN, National Elderly Network, Loja, Ecuador **Lida, Blanc** Facultad de Psicología, Catholic University of Uruguay, Uruguay, Spain **Julia, Lerma** Facultad de Psicología, Del Valle University, Cali, Colombia **Victor, Mendoza Nuñez** Estudios, Universidad Autónoma de México, México DF, México **Nidia, Mendoza**

Rubalcaba Facultad de Psicología, Autonomous Univ Guadalajara, Guadalajara, México **Teresa, Orosa** Facultad de Psicología, National University Cuba, La Habana, Cyprus **Constança, Paul** Facultad de Psicología, Porto University, Porto, Portugal

Ageing well is a relatively new domain of research in the study of aging. Trying to make cross-cultural comparisons in the elders' views, the same 20 items Questionnaire (plus a rank order for selecting the 5 more important aspects) used by Phelan et al. and by Matsubayashi, et al. was administered to elder adults in 7 Latin American (Brazil, Chile, Colombia, Cuba, Ecuador, Mexico, and Uruguay) and 3 European countries (Greece, Portugal and Spain). Finally, results support that the scientific concept of successful aging seems to be disseminated around the world and perhaps this fact is expressing a positive globalization of this concept.

Psychological distress in women: Implications for active aging

Constança, Oscar Facultad de Psicología, University of Porto, Aveiro, Portugal **Ribeiro, Paul**

Psychological distress (mainly depression) is frequent in old women, although figures varied a lot between studies. Reducing the amount of suffering and dependence due to poor mental health in old age is a priority requiring a good understanding of the determinants of psychological distress as it emerges in association with poor self-perception of health and well-being, high levels of disability and low levels of social participation. We study the psychosocial correlates of psychological distress and discuss the implication of these data for psychological intervention to prevent negative results during the aging process, and to promote active aging. Findings are discussed within a gender lens.

The promotion of the active aging: Evaluation of the multimedia program vital ageing

Caprara, Maria Giovanna Faculty of Psychology, La Sapienza University, Rome, Italy

The interest for the promotion of the active aging and the research on its more important determinants constitutes one of the most relevant issues in the field of the Gerontopsychology. The principal aim of the present contribution is to present the results of three different applications of the program "Vital ageing", a multimedia course designed to promote the active aging. Results support the efficacy of the program "Vital Ageing"; it produces significant and positive changes in different aspects of the daily life of the elderly people. In sum, the carried out study allows to test that the Program "Vital Ageing" is an effective

instrument to produce changes in different domains.

Aging stereotypes, self-stereotypes and active ageing

Bustillos, Antonio Facultad de Psicología, Universidad Nacional a Distancia, Madrid, Spain **Huici, Carmen** **Fernández Ballesteros, Rocio** Facultad de Psicología, Universidad Autónoma de Madrid, Madrid, Spain

Stereotypes are simplified conceptions with specific meaning held by one group of people about another. Aging stereotypes are images about ageing, age and the aged held by social groups, including the aged group. It is assumed that social stereotypes about aging are influencing self-stereotypes and, also, that self-stereotypes about aging are predictor of longevity, good health and, therefore, active aging. It is assumed also that negative performance in old age could be accounted by stereotypes. After a review of the literature, three experiments about the link between social stereotypes, group identity, self-stereotypes and stereotype threat are going to be presented.

IS-161: On the suitability of direct brain-computer interfaces (BCI) for communication, control of robotic devices, and improvement of cognitive functioning

Christa Neuper (chair)

Brain-computer interfaces (BCI) transform signals originating from the human brain on-line into commands that can control devices or applications. This is achieved without any involvement of peripheral nerves and muscles. After almost 20 years of development and testing in the laboratory, BCIs have been applied and adapted in the field. Within several training sessions users can learn to control their brain response to achieve a specific behavior such as communication, grasping with the aids of a neuroprosthesis, or improvement of cognitive and motor functioning. BCI control depends upon progressive practice with feedback and reward and hence engages learning mechanisms in the brain. This symposium provides an overview of current BCI approaches and upcoming applications.

Short introductory presentation: Towards brain-computer interfacing: Applications and perspectives

Neuper, Christa Inst. für Psychologie, Universität Graz, Graz, Austria

Brain-computer interfaces (BCI) transform signals originating from the human brain on-line into commands that can control devices or applications. This is achieved without any involvement of peripheral nerves and muscles. After almost 20 years of development and testing in the laboratory, BCIs have been applied and adapted in the field. Within several training sessions users can learn to control their brain response to achieve a specific behaviour such as communication, grasping with the aids of a neuroprosthesis, or improvement of cognitive and motor functioning. BCI control depends upon progressive practice with feedback and reward and hence engages learning mechanisms in the brain. This symposium provides an overview of current BCI approaches and upcoming applications.

Brain-computer interfaces and quality of life in locked-in patients

Kuebler, Andrea Clinical and Health Psychology, Roehampton University, London, United Kingdom
Brain-computer interfaces (BCI) provide a new communication channel for patients who lost motor control due to injury or disease. Patients learn by

means of neurofeedback to control a BCI through regulation of brain activity such as slow cortical potentials or sensorimotor rhythms. Another approach is to present patients with stimulation paradigms known to elicit specific event-related potentials in the brain such as the P300 or visually evoked potentials. Both approaches proved to be suitable for locked-in patients such that they were able to spell words, select items or surf the internet with a BCI. Quality of life in locked-in patients can be maintained despite disease progression and extremely limited active behaviour and neither quality of life nor depression are related to physical disability or the need of life-sustaining treatment.

Motor imagery and brain-computer interfaces for restoration of movement

Neuper, Christa Inst. für Psychologie, Universität Graz, Graz, Austria

The development of motor brain-computer interface (BCI) systems grounded on the idea to bypass interrupted motor pathways and therewith, allow restoration of movement in paralyzed patients. This is achieved through combining a BCI with intelligent peripheral devices and electrical muscle stimulation. Motor imagery and associated oscillatory signals from the sensorimotor cortex form the basis of the Graz-BCI, which has been successfully used for the control of neuroprosthetic applications in high spinal cord lesions. Moreover, BCI neurofeedback training utilizing motor imagery is a topic of current research in chronic stroke. This novel BCI-based approach is devoted to enhance neural plasticity and the recovery of the stroke-affected brain area.

Inducing neural plasticity in neurological rehabilitation: Brain-computer interface use for the treatment of autism spectrum disorders

Pineda, Jaime Dept. of Cognitive Science, University of California, La Jolla, USA

Training-induced neural plasticity is seen as an important outcome of brain-computer interfaces (BCI) as neurological rehabilitation tools. The mirror neuron system has been theorized to be foundational for how humans understand the actions of others, the development of theory of mind, empathy and language. Autism spectrum disorders (ASD) are characterized by wide variations in symptoms and devastating impacts on these types of social skills. One EEG index of MNS activity is thought to be the suppression of the 8-13 Hz oscillations, or mu rhythms, recorded over sensorimotor cortex. While typically-developing individuals exhibit mu suppression during both self-movement and the observation of another's actions, ASD individuals exhibit mu suppression only in response to self-movement. Recent results suggest that training of mu rhythms using a BCI effects changes in behavior and electrophysiology of ASD children.

Machine learning methods for fast interfacing between brain and computer

Tangemann, Michael Inst. Machine Learning, Technische Universität Berlin, Berlin, Germany

Brain patterns of one and the same mental task (recorded e.g. by EEG) vary substantially from trial to trial and also between repeated sessions of the same user. As the analysis of single trials is necessary for the online use of BCI systems, this data characteristic poses a serious problem for most statistical methods. Intelligent data analysis methods from the field of machine learning enable the Berlin BCI system (BBCI) to deal with this variance. The BBCI learns typical brain patterns of e.g. a motor imagery task based on a short calibration recording. It adapts individually to the signals of a new user and eliminates the need of the time-consuming user training. Moreover, these machine learning methods also provide the possi-

bility to monitor the mental state of a user during task performance.

IS-162: Gender, identity, and collective action

Vindhya Undurti (chair)

This symposium will focus on the shaping and nature of gendered identities forged in varied contexts of collective action ranging from the post-tsunami reconstruction process in Indonesia, to peace promotion initiatives in post-apartheid South Africa, and to socio-political movements in India. Panellists will first, foreground women's activism as it is generally submerged in the master narratives of social movements and second, will identify the role collective action in turn, plays in the social construction of gender.

Social identity, gender and collective action

Sonpar, Shobna Private Practice, Delhi, India

This paper examines the intersection of gender with threatened social identity and forms of collective action in the politically violent context of the Indian state of Jammu-Kashmir. Using qualitative analysis of data, the study shows how conditions of collective and personal trauma have led to Muslim Kashmiri identity polarization that cuts across gender. The traumatic affects of humiliated rage and loss tend to find expression along gendered lines. Yet, polarities like masculine-feminine and violent-nonviolent are both reinforced and challenged in the ways that men and women act to preserve social identity.

Women's activism in post-conflict South Africa: The intersection of identity, culture and social agency

Suffla, Shahnaaz CVI Lead Programme, Medical Research Council, Kenwyn, South Africa

Following the transition from apartheid to democracy more than a decade ago, the role of South African women as agents of peace has expanded and reconfigured to address the essential mission of building a peaceful society in which the structural arrangements and cultural narratives are directed at promoting human security, and reducing inequality and oppression. Against this backdrop, the paper will explore the interface between personal and collective identities, the influence of culture, and the pursuit of social justice as constructed by a group of local women engaged in peace promotion initiatives within a historically marginalised context in South Africa.

The Durueng resilience

Nurdadi, Surastati Dept. of Psychology, University of Indonesia, Jakarta, Indonesia **Purba, R.D. Marieta, J.R. Purba, Reno** Dept. of Psychology, University of Indonesia, Jakarta, Indonesia **Marieta, Josephine** Dept. of Psychology, University of Indonesia, Jakarta, Indonesia

This paper focuses on the collective efforts of women participating in the post-tsunami reconstruction process in Durueng in Indonesia. Since more than a decade, these women have also been living under the shadow of violent ethnic conflict in the region. The research questions raised are what has been the progress in the reconstruction process? What are the issues that the women encounter? How can they develop their own resilience during the turbulence?

Bare bodies and bare life: Identity in "body politics"

Akoijam, Bimol Dept. of Psychology, CSDS, Delhi, India

Identity is not merely a psychological fact; it is in a critical sense a politico-cultural reality. After all, our existence is deeply embedded in, and critically

mediated by, the politico-cultural milieu within which we exist. "Body", both literally and metaphorically, is a crucial site that registers the politico-cultural character of identity. Nothing seems to reflect this aspect of identity more expressively than in the case of women. Taking the case of women activists who protested against the Security Forces by baring their bodies on July 15 2004 in Imphal, Manipur (India), the present paper explores various layers of identity.

Guns and roses: Subjective well-being of women in the radical left movement in Andhra Pradesh, India

Undurti, Vindhya CESS, Hyderabad, India

Part of a larger project on social identity, self-efficacy, subjective well-being and gender in the context of a left movement in Andhra Pradesh, India, this paper explores the links between subjective well-being and participation in a movement that aims broadly to challenge existing relations of domination. Using qualitative research techniques, the study attempts to capture the process of engaging in collective action that fosters empowering and positive feelings of well-being and helps to explain the sustainability of women's involvement in further struggle. The implications are discussed with reference to the gender inequitarian culture in India.

S-044: Global promise: Quality assurance and accountability in professional psychology

Judy Hall (chair)

Changes in systems of education and training, ethical provisions, and licensing and credentialing of psychologists have been proposed, implemented or are undergoing change in many countries and regions. Presenters will consider how quality assurance and accountability are operating in one large region and one large country, followed by an overview of how ethical codes and standards contribute to accountability. Finally, how these developments currently affect mobility for psychologists will be presented. These developments will be framed in the context of the globalization of professional psychologists, today and tomorrow.

Quality assurance in the European Union

Lunt, Ingrid Dept. of Education, University of Oxford, Oxford, United Kingdom

The 27 countries of the European Union have developed very different education systems and arrangements for Quality Assurance. A number of recent developments have been implemented to achieve greater convergence and comparability across Europe. These include the formation of the European Network of Quality Assurance which brings together national QA agencies, the European process named the "Bologna" process which aims to create a European Higher Education Area by 2010, and a more psychology-specific initiative called the EuroPsy which has developed a European qualification or standard across Europe. The paper will present these developments and discuss the moves to greater accountability and quality assurance in psychology across Europe.

Quality assurance in Australia

Waring, Trevor Dept. of Psychology, University of Newcastle, New Lambton Heights, Australia

Australia's relatively small population of 21 million people is spread across a large continent governed by six sovereign states, two territory administrations and an overarching Federal Government. Professional psychologists train in one of 40+ universities and are registered with one of the state or territory Registration Boards each with its own standards of training and code of conduct. In such a

context the risk of compromising standards was high. This potential was addressed by way of cooperation between registering authorities, training bodies and the professional association and has now been ratified by the introduction of a common national registration requirement.

Ethical codes as vehicles of accountability

Ritchie, Pierre L.-J. Dept. of Psychology, University of Ottawa, Ottawa, ON, Canada

The historic context for the emergence of ethics as a central component of psychology's public accountability as well as psychologists' accountability to the profession is reviewed. Codes and standards in various incarnations are examined, particularly the development of recognized documents at the national and multi-national levels, including recent work on meta-codes and a universal declaration of ethical principles. The advent of cultural competence is the object of focal attention because of its increasing pertinence in a world characterized by greater mobility. Concluding comments are offered within the perspective that ethical codes are the ultimate expression of a profession's shared values.

Global promise? International mobility

Hall, Judy National Register of HSP, Washington, USA

Mobility for psychologists is an international issue. The co-author of a chapter on international mobility will address the many factors (education, training, licensure, & credentialing) that assist with mobility as well as identify what various organizations are doing to promote mobility for psychologists.

S-241: Analyzing interaction patterns in teams

Simone Kauffeld, Renee Meyers (chair)

This panel of European and American researchers will discuss five different research projects that all focus on interaction patterns in work team contexts. Results to be presented include investigations of the role of interruptions in group discussions, the impact of facilitator communication on group discourse, the role of moaning and complaining in decision-making work teams, the link between communication and outcomes in anesthesia teams, and the role of communication in promoting or inhibiting proposals in group discussion. Each presentation will describe and analyze the interaction patterns particular to their team context, and highlight the impact of communication on group outcomes.

Complaining and solution circles in group discussions

Kauffeld, Simone Inst. für Psychologie, Tech. Universität Braunschweig, Braunschweig, Germany **Henschel, Angela** Inst. für Psychologie, TU Braunschweig, Braunschweig, Germany **Hilpert, Alexandra** Inst. für Psychologie, TU Braunschweig, Braunschweig, Germany **Lehmann-Willenbrock, Nale** Inst. für Psychologie, Tech. Universität Braunschweig, Braunschweig, Germany

How does the mood of our colleagues affect our own mood in communication? We analyzed discussions of 50 real industrial groups from 2 companies with interaction coding (Cassel Competence Grid) and subsequent lag sequential analysis. We found evidence for complaining circles (continuous expressions of an inactive mood) as well as solution circles (continuous expressions of an active mood). Moreover, job characteristics (job rotation and autonomy) were positive predictors of solution circles and negative predictors of complaining circles. Theoretical and practical implications of these findings are discussed.



The influence of facilitator communication on the group discussion process

Lehmann-Willenbrock, Nale Inst. für Psychologie, Tech. Universität Braunschweig, Braunschweig, Germany **Kauffeld, Simone** Inst. für Psychologie, TU Braunschweig, Braunschweig, Germany

Facilitators are widely acknowledged to improve meetings by enhancing communication and providing procedures to make meetings more efficient. There is much written on the necessary skills for successful group facilitation. However, it is not clear how actual facilitation behaviors within a meeting affect the group process. We analyzed 59 real group discussions from 19 companies using interaction coding (Cassel Competence Grid, Kauffeld, 2006) and lag sequential analysis. The results show that structuring remarks such as goal orientation or procedural suggestions help to facilitate subsequent discussion. Implications for theory and practice in facilitation are discussed.

The role of interruptions in team decision making interactions

Meyers, Renee Dept. of Communication, Univ. of Wisconsin-Milwaukee, Milwaukee, USA **Kauffeld, Simone** Psychology, TU Braunschweig, Braunschweig, Germany **Lazarides, Katina** Dept. of Communication, Univ. of Wisconsin-Milwaukee, Milwaukee, WI, USA

The purpose of this study was to investigate interruptions in group decision-making interactions. Past research has typically conceptualized interruption behavior as dominant and inhibitive. In this study, we used the Cassel Competence Grid (Kauffeld, 2006) and lag-sequential analysis to analyze interruptions in 59 team discussions from 19 companies. Contrary to some past research, results showed that interruptions have the ability to enhance problem-solving and move groups in a positive direction. Conclusions touch on the dual nature of interruptions—both their inhibitive and facilitative characteristics. Implications for team decision-making practice and facilitation are discussed.

Communication in anesthesia teams

Kolbe, Michaela Organisation, Arbeit u. Technol., ETH Zürich, Zürich, Switzerland **Künzle, Barbara** Organisation, Arbeit u. Technol., ETH Zürich, Zürich, Switzerland **Zala-Mezö, Enikő** Grote, Gudela Organisation, Arbeit u. Technol., ETH Zürich, Zürich, Switzerland **Wacker, Johannes** Institute of Anesthesiology, University Hospital Zurich, Zürich, Switzerland

Anaesthesia teams have to handle high risks with failures potentially endangering human lives. Their ability to deal with work, which is characterized by routine as well as by rapidly shifting priorities, depends strongly on team communication. We analysed communication and performance in routine and non-routine events based on a taxonomy of communication and coordination behavior and a reaction-time based performance measure. Data were obtained from 15 inductions of general anaesthesia in a simulated setting where after minor changes in blood pressure an asystole occurred. We will present results of lag sequential and pattern analysis showing different communication patterns in well-performing groups and discuss implications for medical training.

The destiny of proposals in the course of group discussions

Boos, Margarete Inst. für Psychologie, Universität Göttingen, Göttingen, Germany **Strack, Michaela** Based on the structurational theory of Poole et al. (1986, 1996), group decision-making is conceptualised as a process where individual cognitive contributions are intertwined with local and global interaction dynamics generating structure. In group decision making, proposals and their related argu-

ments form the critical contributions. Data from 21 5-person-groups show that the acceptance of the 956 proposals is predicted by the input variable proponent's positional power. Positional power is mediated by the process variable mode of argumentation. Thus, the destiny of a proposal becomes open again.

S-242: Recent advances in video game violence effects on brain function, aggression and violence

Craig Anderson (chair)

Research teams will present results from five countries on the effects of playing violent video games on brain function and on aggressive and violent behavior. One presentation focuses on identifying neural areas that are activated and suppressed by violent and nonviolent action in video games. Three presentations include cross-cultural comparisons and context effects on aggression-related thoughts, feelings, and behaviors. Three presentations include longitudinal studies. One presentation focuses on factors that might reduce some harmful effects of violent games. Overall, the studies show remarkable consistency across cultures and ages, though there appear to be interesting context effects as well.

Media violence exposure and aggression among German adolescents: Individual and group differences

Möller, Ingrid Inst. für Psychologie, Universität Potsdam, Potsdam, Germany

The results of the first wave of a 4-year-longitudinal study will be presented. To examine the link between exposure to violent contents across different types of media and aggression and prosocial behavior, 2,000 7th and 8th graders were asked about their media violence consumption, normative beliefs about aggression, empathy and aggressive as well as helping behavior. Additionally, teacher nominations of aggression and prosocial behavior were obtained. The extent and type of media usage will be compared for German and migrant participants and similarities and differences of the relationships between the outcome variables will be examined.

The role of warning labels, wishful identification and empathy in reducing undesired effects from violent video games

Nije Bijvank, Marije Communication Science, VU University Amsterdam, Amsterdam, Netherlands

The relationship between violent video games and aggression has been established in numerous studies. Various factors may contribute to this relationship, leading to the question of how to protect minors who play those games. Our results show that the PEGI warning label system results in the opposite effect from what was intended, turning violent games into "forbidden fruits". We also find that players' "wishful identification" with an aggressive hero adds to aggressive behavior among adolescents. Finally, we show that a minor in-game manipulation can increase empathy with the victim. Implications for intervention techniques and media literacy programs will be discussed.

The long-term effects of presence and contexts of video game violence in Japan

Shibuya, Akiko Humanities and Social Science, Keio University, Tokyo, Japan **Sakamoto, Akira** Psychology, Ochanomizu University, Tokyo, Japan **Ihori, Nobuko** Psychology, Ochanomizu University, Tokyo, Japan **Yukawa, Shintaro** Psychology, University of Tsukuba, Tokyo, Japan

Japan is famous for a country of violent media but also with a low crime rate, and some researchers may wonder if there is no effect of violence media in

Japan. This presentation summarizes the video game violence studies in Japan, and indicates that Japanese children and adolescents are also influenced by video game violence. Authors also provide some empirical evidences that children in Japan are affected by the contexts of video game violence, possibly more than those in Western countries, and by their interpretation of violent scenes.

A cross-cultural comparison of violent video game effects on aggressive cognition

Gentile, Douglas Dept. of Psychology, Iowa State University, Ames, USA **Kho, Angeline** Psychological Studies, National Institute of Education, Singapore, Singapore **Liau, Albert** Psychological Studies, National Institute of Education, Singapore, USA **Brad, Bushman** Dept. of Psychology, University of Michigan, Ann Arbor, USA **Anderson, Craig** Dept. of Psychology, Iowa State University, Ames, USA **Huesmann, L. Rowell** Dept. of Psychology, University of Michigan, Ann Arbor, USA

This session will report on two large-scale correlational studies of elementary and secondary children in Singapore (N = 3034) and the United States (N = 900). Of violent video game exposure and multiple measures of aggressive cognition, including normative beliefs about the acceptability of violence, aggressive fantasies, empathy and perceived social and emotional competence. In both samples, violent video game exposure predicted aggressive cognitions, after controlling for several relevant potential confounding variables (e.g., sex, age, total amount of video game play). Similarities and differences between Singapore and the US are discussed.

Neural mechanisms of video game violence

Mathiak, Klaus Inst. für Psychiatrie, RWTH Aachen, Aachen, Germany **Weber, Rene** Dept. of Communication, University of California, Santa Barbara, CA, USA

Little is known about the neural correlates of playing video games. We provide an overview on past and ongoing research on neural substrates of playing violent video games. In two fMRI studies we analyzed the correlation between theory-based content analytical codings, cognitions after and during game play, and BOLD signal responses. The occurrence of violent episodes corresponded with a dominant activation pattern of the dorsal and deactivation of the rostral anterior cingulate cortex and amygdala. The interpretation of these findings, issues regarding the internal validity of our results, and the implications for current media violence theories will be discussed.

Violent video game effects: An overview

Anderson, Craig Dept. of Psychology, Iowa State University, Ames, USA

A new meta-analysis on the effects of violent video games will be presented. This meta-analysis is based on studies that meet stricter methodological criteria than past analyses. Included are studies using cross-sectional, experimental, and longitudinal designs from the U.S., Japan, Australia, and Western Europe. Results reveal strong support for the hypothesis that playing violent video games is a causal risk factor for aggression and violence, as well as for aggressive cognition, in both short and long term contexts. There also is evidence of significant effects on physiological arousal, aggressive affect, desensitization and lack of empathy, and prosocial behavior.

S-243: Neuro-cognitive mechanisms of conscious and unconscious visual perception

Markus Kiefer, Rolf Verleger (chair)

Elucidating human consciousness remains one of the greatest scientific challenges in the 21st century. Determining fundamental cognitive and neural

mechanisms underlying conscious and unconscious visual perception can contribute to this endeavor. We present evidence that identifies processes relevant for forming a conscious percept from the visual input. Important information can be obtained from conditions which prevent the formation of a conscious percept. It will also be discussed which factors determine whether unconsciously perceived stimuli are processed and are able to influence behavior. Convergent evidence may help to identify general computational principles underlying conscious and unconscious visual perception.

Decoding conscious and unconscious visual processing from brain activity in humans

Haynes, John-Dylan Bernstein Zentrum, Universitätsmedizin Berlin, Berlin, Germany
Recent advances in human neuroimaging have shown that it is possible to accurately decode a person's conscious visual experience based only on non-invasive multivariate measurements of their brain activity. Here several studies will be presented that directly address the relationship between neural encoding of information (as measured with fMRI) and its availability for awareness. These studies include comparisons of neural and perceptual information, unconscious information processing, and decoding of the "stream of consciousness". Taken together these studies help reveal how the contents of visual awareness are encoded in the human brain.

How to become unconscious: Restrictions in the processing of word forms in rapid serial visual presentation

Niedeggen, Michael Experimentelle Psychologie, Freie Universität Berlin, Berlin, Germany
Illusory words are induced by rapid serial visual presentation: Two subsequently presented real words share a string of letters (RIVER – BEAVER). The free floating word fragment induced (BEA) is likely to be linked with a subsequently presented fragment (CH) if they combine to a word (illusory word: BEACH). Our behavioral and EEG experiments demonstrate an asymmetry in the level of processing of the word not reported: An illusory word is transiently activated although it does not elicit semantic priming. A real word is not decoded in the system and leaves no trace in the lexical system.

Non-conscious perception and uncontrolled action in a split brain: A case-study of a patient with anarchic-hand syndrome

Verleger, Rolf Neurologische Klinik, Universität Lübeck, Lübeck, Germany **Friedrich, Monique** Psychological Institute, TU Chemnitz, Chemnitz, Germany **Binkofski, Ferdinand** Neurologische Klinik, Universität Lübeck, Lübeck, Germany **Sedlmeier, Peter** Psychological Institute, TU Chemnitz, Chemnitz, Germany **Kämpf, Detlef** Neurologische Klinik, Universität Lübeck, Lübeck, Germany
Following an infarct lesion to the corpus callosum, G.H. complains that the left hand does what it wants. In addition to extensive neuropsychological and neuroradiological examination, behavior and EEG-potentials were measured in a "Simon-paradigm" which task requires information exchange between the hemispheres. In the WAIS block-design test, G.H. evidenced split-brain behavior (video). EEG potentials recorded in the Simon task indicated that the right visual cortex was faster activated than the left, right centro-parietal areas were overactivated, and there was evidence of information transfer via the intact occipital hemispheric connection. Implications of this evidence for understanding the syndrome will be discussed.

Attentional capture by invisible colors and shapes

Ansorge, Ulrich Inst. Verhaltenswissenschaften, Universität Osnabrück, Osnabrück, Germany
Horstmann, Gernot Inst. für Psychologie, Universität Bielefeld, Bielefeld, Germany
We tested whether invisible (backward masked) stimuli capture visuo-spatial attention in a top-down contingent fashion. In line with that hypothesis, we find that masked color stimuli capture attention once they match the set of searched-for colors, regardless of the color of the current or preceding target (Exp. 1). We observe a very similar pattern of results with masked shape stimuli (Exp. 2 and 3). The findings are discussed with regard to explanations of attentional capture.

How smart is unconscious perception? Complex mental operations on visual stimuli do not require awareness

Vorberg, Dirk Inst. für Psychologie, Tech. Universität Braunschweig, Braunschweig, Germany
The experiments to be presented explore the complexity limits of actions to be facilitated or inhibited by stimuli outside awareness, addressing the issue of whether the unconscious is "smart or dumb" (Loftus & Klinger, 1992). By studying priming of performance in categorization of visual stimuli based on logical rules, we tested the Feedforward-Sweep hypothesis (Lamme, 2001), which specifies the necessary conditions for stimuli to remain subliminal. As predicted, strong effects from masked congruent or incongruent primes were found for AND, OR, XOR, and relational rules. If well practiced, even complex mental operations can be performed automatically.

Constraining unconscious cognition: Top-down modulation of unconscious priming

Kiefer, Markus Inst. für Psychiatrie, Universität Ulm, Ulm, Germany
In classical theories, unconscious, automatic processes are usually thought to occur autonomously and independently of any cognitive resources. However, refined theories propose out that the cognitive system has to be configured in a certain way for automatic processes to occur. In this talk, electrophysiological evidence with the masked semantic priming paradigm will be presented which shows that masked priming effects crucially depend (i) on temporal attention to the masked prime and (ii) on the task set immediately before masked prime presentation. These results suggest a top-down gating mechanism which orchestrates the unconscious information processing stream.

S-244: Social and cognitive barriers of knowledge exchange

Ulrike Cress (chair)

Various research on knowledge exchange revealed that people do not share information in optimal way. The contributions aim to elaborate conditions that support effective knowledge exchange in different contexts: in decision making, complex problem solving, information-exchange dilemmas, and Wikipedia. For instance, the importance of interdependence structure, (a)synchronicity, visual representation of participating individuals, social motivation, relevance and distribution of information, and instrumentality perception is stressed. Experimental and field research is presented. The symposium will bring together international researcher dealing with related research projects and, thus, will enable fruitful discussion.

The effects of interdependence structure and anonymity on decision making and information processing

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Most research on hidden profile assumes that all group members are cooperative. Less attention is paid to competitive and mixed motive situations. We conducted a 3 x 2 factorial design to investigate the effects of interdependence structure (positive vs. mixed-motive vs. competitive) and anonymity (anonymous vs. non-anonymous) on decision making and information processing. Sixty-six 3-person-groups participated in the study. Data were analysed using mixed models. Results show an interaction effect of the interdependence structure and anonymity on the decision quality. Furthermore, both a competitive interdependence structure and anonymity reduce the willingness to share information and influence the interaction process.

Impact of temporal extension, synchronicity and group size on computer-supported information exchange

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People's willingness to contribute information they have in a situation of computer-supported information exchange is influenced by the configuration of various circumstantial aspects. People's perception and their behavior depend on how long the period of cooperation persists, on whether the information exchange takes place synchronously or asynchronously, and on how large the cooperating group is. In an experimental laboratory study we investigated a prototypical situation of computer-supported information exchange examining those three factors: temporal extension, (a)synchronicity, and group size. With respect to each of these variables we describe their theoretical foundations and report their impact on behavior. Moreover we point out to the mediating influence of several psychological factors.

Application of SIDE: Different visual representation of group members and their effects on information exchange

Wodzicki, Katrin Knowledge Media Institut, Tübingen, Germany **Cress, Ulrike** KMRC, Tübingen, Germany
Two experimental studies elaborated what kind of visual representation of communicating group members is most effective in promoting exchange in information sharing dilemmas. For this purpose, we applied and expanded predictions of the Social Identity model of Deindividuation Effects (SIDE). In Study 1, no visualization was compared to visualization with personal pictures of all group members. In Study 2, no visualization was compared to visualizations with same-character and different-character pictures for all group members. The effects of the different visual representations depended on whether personal or social identity was salient. Only same-character visualizations enhanced knowledge sharing independently of salient identity.

Strategic information sharing: The effects of information sharedness, information relevance and social motivation

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Contributing information to a common pool is different from contributing money. Information can vary in quality (relevance; true vs. untrue). Thus, people can share several pieces of information to make a cooperative impression, but withhold the really important information. Social motivation is expected to moderate this behavior; proselves should withhold more relevant and unshared information than prosocials. In two experiments, social motivation, sharedness and relevance of information were varied. Experiment 2 also included the option to lie. The results showed that people tend to contribute shared and irrelevant information, and that this tendency is even stronger for proselves.

Information exchange and performance in dyadic complex problem solving

Meyer, Bertolt *Inst. für Psychologie, Universität Zürich, Zürich, Switzerland*

The study tested how the distribution of task-relevant information in a dyad influences its information exchange and performance in a complex problem-solving scenario. The members of 75 dyads received overlapping information on successful scenario control. Information overlap was altered over three conditions, information per group member was held constant. Dyads exchanged their information before working on the complex scenario. No information overlap led to more falsely communicated information than shared information. Analysis of variance reveals that dyads with partially shared information exhibited significantly better performance scores than dyads from other conditions. Implications for theories of informational diversity are discussed.

Voluntary engagement in an open web-based encyclopedia: From reading to contributing

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Hertel, Guido *Inst. für Arbeitspsychologie, Universität Würzburg, Würzburg, Germany*

Extending earlier research on active Wikipedia contributors (Schroer & Hertel, 2007), a longitudinal study was conducted to explore why Wikipedia readers would start to actively engage for Wikipedia. Online-survey data (N=256) were analyzed using PLS path modeling. Results revealed perceptions of costs-benefits, expected task enjoyment, and perceived instrumentality of personal contributions as main predictors of the intention to contribute. Active contributions 6 months later depended predominantly on costs-benefits and instrumentality perceptions, typically triggered by incomplete or incorrect Wikipedia articles in one's own field of expertise. Implications are instructive for organizational knowledge management and Web 2.0 websites.

S-245: The science of heuristics: Methodology and scope

Shabnam Mousavi (chair)

Heuristics are commonly perceived as second-best solutions, which result in inferior outcomes compared to exact methods such as optimization. We provide an overview of an alternative view: the fast and frugal heuristics program. We present philosophical and analytical arguments as well as experimental and simulation results demonstrating that even though heuristics do not conform to statistical or logical norms, they are not necessarily second-best solutions but are successfully and dominantly used by people. This session contributes to our understanding of how judgment and decision making relies on simple rules of thumb that exploit the informational structure of the environment.

Simple heuristics and the problem of strategy identification

Woike, Jan K. *Ökonomie und Business Admin., Universität Lausanne, Lausanne, Switzerland*
Hoffrage, Ulrich *Ökonomie und Business Admin., Universität Lausanne, Lausanne, Switzerland*
Hertwig, Ralph *Department of Psychology, University of Basel, Basel, Switzerland*

Decision strategies generate outcomes, but do outcomes allow for inferences regarding which strategy generated them? In a simulation study, various strategies (fast and frugal, linear, and Bayesian) solved paired-comparison tasks. We varied the percentage of missing cue values, of cue retrieval errors, and of strategy execution errors. Using a range of models, we subsequently modelled the decisions in an attempt to reconstruct the process that generated them. Because strategies often made identical decisions, they were barely separable. Thus, a good fit of a linear model does not necessarily exclude the possibility that a fast and frugal heuristic generated the decisions.

When cognitive processes exploit the environment rather than reflect it

Brighton, Henry *Max-Planck-Institut, Berlin, Germany*
 Mirrors, lenses, and scissors are metaphors for how the mind is shaped by the environment. For Roger Shepard, much of cognition is done with mirrors: Key aspects of the environment are internalized in the brain. Egon Brunswik proposed his lens model to capture how accurately judgment captures the outside world. Herbert Simon proposed that human behavior is shaped by a pair of scissors whose two blades are cognition and the environment. I show how simple heuristics operate like scissors, how they exploit the statistical properties of environments, and how this process of exploitation enables them to outperform other cognitive models.

Even "No" information can become an information

Zurbruggen, Seraphina *Inst. für Psychologie, Universität Zürich, Zürich, Switzerland*
Hausmann, Daniel *Inst. für Psychologie, Universität Zürich, Zürich, Switzerland*
Läge, Damian *Inst. für Psychologie, Universität Zürich, Zürich, Switzerland*
 Theoretical frameworks of decision making processes have not yet attributed any benefits to nondiscriminating cue information. In active and sequential information search, however, nondiscriminating information can substantially change the search order: Results from city inference task experiments show strong evidence that adaptive behaviour depends on the quality of nondiscriminating information (positive/positive vs. negative/negative cue values). We assume that nondiscriminating information points people towards city size classes such that they adapt their further information search accordingly, and explore whether this behaviour is influenced by the way they learn about cue information within a specific domain.

Heuristic processes in normatively superior judgment

Cokely, Edward T. *Max-Planck-Institut, Berlin, Germany*
Kelley, Colleen M. *Psychology, Florida State University, Tallahassee, USA*

Some individuals consistently make "better" judgments and decisions. Yet little is known about the exact cognitive processes that give rise to this variation in judgment. To identify precise mechanisms, individual differences were assessed and process tracing was applied (i.e., protocol analysis) in the context of judgments under uncertainty. Results indicated that variation in expected-value type choices principally arose from variations in heuristic search processes. Heuristic depth of search also fully mediated the relationship between cognitive abilities and judgment. Implications for current models of cognitive control (e.g., dual-process

models) and decision-making (e.g., priority heuristic) are discussed.

The unnecessary of a simplicity-accuracy trade-off for heuristics

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Mousavi, Shabnam *Adaptive Behavior & Cognit, Max Planck Institute for Human, Berlin, Germany*
Katsikopoulos, Konstantinos *Department of Mechanical Eng., MA Institute of Technology, Cambridge, USA*

In the tradition of cognitive illusions, heuristics usually violate rational norms and produce errors by trading accuracy for simplicity. The fast and frugal heuristics (FFH) program takes an altogether different approach by showing that heuristics represent reliable strategies when used in matching environments. This match represents the ecological rationality of FFH, which are not necessarily subject to the same trade-off. We elaborate this characteristic of fast and frugal heuristics by reviewing the Take The Best (TTB) strategy. Specifically, we demonstrate that TTB coincides with DEBA for a specific choice of weights but is not a special case of DEBA.

S-246: Vicarious emotions: Antecedents, processes and consequences

Andreas Olsson, Jamil Zaki (chair)

Responding adequately to others' emotions is key to a normal development and an adaptive social life. Recent research in the social cognitive and affective neuroscience has provided new and exciting insights into the underlying processes involved when we watch and imagine others' emotional states. Beyond a better understanding of empathy and mental state inference, this research has begun to specify how these processes are affected by specific antecedents, such as the observer's previous experiences and contextual manipulations. In addition, this new research has suggested links between these processes and specific behavioral consequences, such as empathic accuracy and learning outcome.

Using self-knowledge to infer others' preferences

Mitchell, Jason *Harvard University, Cambridge, USA*
 One useful strategy for inferring others' mental states may be to use knowledge of one's own thoughts, feelings, and desires as a proxy for those of others. These self-referential accounts of social cognition are supported by recent research suggesting that a single brain region – ventromedial prefrontal cortex (vmPFC) – is engaged both by tasks that require self-reference and those that require inferences about the minds of others. Additional studies suggest that one can increase vmPFC-mediated mentalizing by engaging in explicit perspective-taking of others. Together, these results suggest the vmPFC subserves both introspecting about one's own mind and considering the mind of others.

The role of the mirror neuron system in understanding emotional actions

Montgomery, Kim *Columbia University, Princeton, USA*
Seeherman, Kimberly *Dept of Psychology, Princeton University, Princeton, USA*
Haxby, James *Dept of Psychology, Princeton University, Princeton, USA*

Mirror neurons respond during the observation and execution of actions and may be linked to the capacity for empathy since empathy is the ability to understand another by simulating their experience and emotions (Gallese et al, 1996; Gallese, 2003). Here we show that in individuals with high empathy, but not in those with low empathy, the

human mirror neuron system (hMNS) is more strongly activated by the perception of emotional facial expressions than by the perception of socially-irrelevant facial movements. These results indicate that the hMNS is an important component of the neural basis of empathic ability.

I've got me under your skin: direct and vicarious experience of social touch

Morrison, India Göteborg University, Sweden

Recent research suggests that selective nerve-brain pathways encode the type of gentle touch that occurs during affective social interactions, likely underpinning the affective perceptual correlates of directly-experienced "social touch". These pathways may also provide the basis for vicarious representations of observed touch between other individuals. We investigated this by comparing subjects' brain responses to "social touch" with responses to videos of others being similarly stroked. Touch and vision selectively activated a region of insula targeted by the relevant nerves. Altogether, the results suggest that cortical and psychophysical responses to observed touch are constrained by processing in pathways encoding social touch.

Beyond association: The role of empathy in vicarious fear learning

Olsson, Andreas Dept. of Psychology, Columbia University, New York, USA

Observing another individual's fear expression provides an efficient indirect means of emotional learning. Across species, observational fear learning (OFL) may involve the same basic learning mechanisms as classical fear conditioning. However, to provide adaptive learning in complex human social situations, OFL needs to be sensitive to both bottom-up driven empathic responses and mental attributions. This talk will present research suggesting that OFL comprises a flexible learning system drawing on both the brain's fear learning circuitry centered on the amygdala and prefrontal areas associated with empathy and mental state attributions.

I have been there: The evolution and neural mechanisms of shared emotional experience

Preston, Stephanie University of Michigan, Ann Arbor, USA

Supporting evolutionary and neurophysiological theories of empathy, brain-imaging studies have consistently found overlapping activation for experiencing and observing emotion. However, because these studies utilize simple, common states (like pain), they discount the most defining feature of empathy – the need for the observer to have previously experienced the relevant state/situation. Across studies, employing real, everyday experiences of emotion, we have consistently found that a similar past experience in the observer increases overlapping neural and psychophysiological activation, empathy, and even help offered. The data particularly point to the role of the ventral temporal cortex for mediating such representations of past experience.

The role of shared affect in empathic accuracy

Zaki, Jamil Dept. of Psychology, Columbia University, New York, USA **Bolger, Niall** Psychology, Columbia University, New York, USA **Ochsner, Kevin** Psychology, Columbia University, New York, USA Previous work has demonstrated that perceivers sharing physiological arousal with social targets are more accurate about targets' affect. However, accuracy should depend on the coherence between targets' arousal and reported affect. We recorded autonomic arousal from targets discussing emotional events, who later rated the affect they felt while discussing. Perceivers then watched videotapes of targets and rated their affect. Coherent

targets were more emotionally readable by perceivers, an effect mediated by sharing of arousal between perceivers and targets. These results suggest that sharing arousal with someone may help us read their emotions, especially when their emotional state matches their arousal.

S-247: New developments in computer based assessment: Implications for competence assessment

Thomas Martens, Gilbert Busana (chair)

For the last ten years, empirical psychological and educational research has been concerned with the assessment of competencies. Particularly, the international comparative studies assessing students' achievement such as TIMSS, PISA and PIRLS have highlighted this subject. In order to assess and evaluate competencies, it is necessary to develop differentiated and proper diagnostic instruments. Computer-based test methods provide good conditions for this development, concerning objectivity, reliability, validity and economy. Furthermore, new item and test formats allow to assess complex and dynamic competencies often in more realistic situations. This symposium reports empirical results as well as future potentials of computer based assessment.

TAO: Paving the way to new assessment instruments using an open and versatile computer-based platform

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Patrick Technologies de l'information, CRP Henri Tudor, Luxembourg-Kirchberg, Luxembourg **Jadoul,**

Raynald Technologies de l'information, CRP Henri Tudor, Luxembourg-Kirchberg, Luxembourg **Busana,**

Gilbert EMACS research unit, Université du Luxembourg, Walferdange, Luxembourg **Swietlik-**

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The TAO framework provides a general and open architecture for computer-assisted test development and delivery, with the potential to respond to the whole range of evaluation needs. The TAO platform provides to all actors of the entire computer-based assessment process a comprehensive set of functionalities enabling the creation, the management, and the delivery of electronic assessments. In this contribution, we shall introduce the space of assessment needs from which are derived the required platform functionalities and architecture. Starting from the architecture, in a non-technical way, we shall then illustrate the numerous opportunities offered by the platform in terms of potentially new assessment instruments. <http://www.tao.lu>

A web-based system for the evaluation of information processing strategies in the domain of scientific literacy

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Ulrich Faculté LSHASE, Université du Luxembourg, Walferdange, Luxembourg **Reichert, Monique** Faculté

LSHASE, Université du Luxembourg, Walferdange, Luxembourg **Schandeler, Ingo** Faculté LSHASE,

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Université du Luxembourg, Walferdange, Luxembourg **Latour, Thibaud** CITI department, CRP

Henri Tudor, Luxembourg-Kirchberg, Luxembourg

We will present a web-based system for exploring information processing strategies for the use of web-based content. Measurement takes place in two phases. In phase one, initial knowledge for a certain domain of scientific literacy is evaluated using a

standard multiple choice test. In phase two, testees have access to various web-based contents (videos, graphs, texts) which they can explore for a fixed amount of time in order to correct their answers given in phase one. Behavioral data of this second phase are used to infer different types of information processing. The possible added-value of behavioral data will be discussed.

Developing items for electronic reading assessment: The hypertext builder

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Thomas pädagogische Forschung, Deutsches Institut für intern., Frankfurt, Germany **Naumann, Johannes**

pädagogische Forschung, Deutsches Institut für intern., Frankfurt, Germany **Rölke, Heiko**

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The competence in reading electronic texts has become an important aspect of reading literacy. To account for this, an electronic reading assessment (ERA) will be carried out in PISA 2009. We present a new graphical front-end tool for TAO, the "ERA Hypertext-Builder", which was developed for item authoring in the PISA 2009 study. The tool enables the rapid development of complex electronic reading stimuli, such as websites, e-mail clients, or forums. In addition to presenting the ERA Hypertext-Builder itself and demonstrating its features, we report first evidence on the validity of ERA stimuli and items.

A web-based system for mathematical problem understanding and solving

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Romain EMACS Research Unit, University of Luxembourg, Walferdange, Luxembourg **Langers,**

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This work presents a Computer Assisted Mathematical Problem Understanding and Solving (CAMPUS) framework integrated to TAO. CAMPUS offers an environment that allows the student to develop mathematical problem-solving strategies in complex situations. The tool imposes no restrictions to the resolution process of the learner, but avoids him/her taking obviously wrong solution steps. We will present the tool as well as its characteristics and the first results from the field trial.

Online adaptive versus paper-pencil testing

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This paper compares the advantages and disadvantages of traditional paper-pencil testing and online adaptive testing through the importance and power of assessment and feedback in learning and instruction. It shows the main steps from the fixed form of paper-pencil assessment to the flexibility of computer-based adaptive testing. It highlights the benefits and possibilities of using technology and IRT in testing and presents the perspectives and problems in computer based online adaptive testing.

S-248: Toward establishing common ground for an international evidence based psychology

Ann Marie O'Roark (chair)

The juggernaut of attention to evidence-based psychological practice (Levant, 2005) is driven by an interest in achieving accountability in applied



sciences, in medicine, education, public policy, and architecture. In his call to have psychologists consider how a broader range of research evidence can be effectively included in evidence based practice in psychology (EBPP), Levant stated that "The zeitgeist is to require professionals to base their practice to whatever extent possible on evidence" (Levant, 2005, p. 1). The policy subsequently adopted by the American Psychological Association fails to address the practice of applied psychologists and fails to provide the foundation for global and international scientific agreements. The International Council of Psychologists (ICP) presents a panel of psychologists to discuss the development of agreements regarding a broader range of research designs, intervention decision-making, integration of multiple streams of evidence relevant to applications in cross-culture, cross-border, and diverse contexts. The panel consists of representatives of several professional associations, each experienced in international networks and committed to advancing human well-being and scientific knowledge. ICP, founded in 1941, was the first association to establish liaison relationships with international and national professional associations and continues to advocate collaborative research and alliances among colleagues.

S-249: Judgments of frequency and duration

Isabell Winkler (chair)

Frequency and duration are key units of the empirical world. They are of fundamental importance in behavioral adaptation. The workshop presents new empirical results and theoretical approaches on judgments of frequency and duration. The contribution by Pachur examines the roles of two cognitive mechanisms of frequency estimation. Betsch, Winkler, and Renkewitz show how judgments of frequency and duration influence each other under certain circumstances. Finally, Sedlmeier's model provides a basis for explaining both judgments about frequency and time. In sum, the objective of the workshop is to analyze memory and judgment mechanisms underlying estimations of quantity.

Cue and instance sampling in judgments of event frequencies

Pachur, Thorsten Cognitive and Decision Science, Universität Basel, Basel, Switzerland **Rieskamp, Jörg** Adaptive Behavior & Cognition, MPI for Human Development, Berlin, Germany **Hertwig, Ralph** Cognitive and Decision Science, Universität Basel, Basel, Switzerland

We contrast two kinds of cognitive mechanisms for making inferences about latent event frequencies (e.g., the prevalence of a disease in a population). Cue-based inference uses knowledge of semantic features of the events that are correlated with population frequency. Instance-based inference uses knowledge of instances of the events in a person's social network. We find that although cue-based strategies allowed to judge latent frequencies more accurately, people's frequency judgments were better predicted by instance-based strategies. Specifically, people often seemed to be using a fast and frugal instance-based strategy that exploits the social network structure to guide and to stop search.

The asymmetry in estimating frequency and duration

Betsch, Tilmann Sozial- und Organisationswiss., Universität Erfurt, Erfurt, Germany

There is a debate about how duration and frequency are stored in memory. In five experiments, duration/frequency of visual stimuli were varied within subjects. Participants estimated how long and how often each stimulus was presented. A

symmetric judgment pattern (bivariate sensitivity in judgment; bidirectional biases) was obtained if task or stimulus features encouraged participants to attend to the stimuli proportionate to their actual exposure durations. If this was not the case, an asymmetric judgment pattern was obtained (memory-based sensitivity for frequency but not for duration; frequency biases on duration judgment). Implications of results are discussed with reference to memory models.

Judgements of frequency and duration in waiting situations

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Typically, judgments of duration are influenced by the frequency of stimuli but the reverse does seldom hold. This might, however, be due to the relatively artificial stimuli commonly used, which could prevent a thorough encoding of their duration. Two studies examined the relationship between stimulus frequency and duration in realistic situations. In Study 1, participants watched a traffic video including waiting situations. In Study 2, participants working on a task were interrupted by pop-ups of varying frequency and duration. Contrary to former findings, frequency judgments are influenced by stimulus duration, presumably because of the participants' higher attention to this variable.

The impact of encoding strategies on the interdependence of time and frequency processing

Renkewitz, Frank Erziehungswiss. Fakultät, Universität Erfurt, Erfurt, Germany **Glauer, Madlen** Erziehungswiss. Fakultät, Universität Erfurt, Erfurt, Germany

In several former studies frequency estimates on serially encoded events were observed to be robust against variations of stimulus duration. A potential explanation for this finding is that the participants did not use the complete available time to encode the stimuli effectively. We tested this explanation by manipulating the encoding strategy used by the participants (imagery instructions versus no encoding instructions). In the imagery condition stimulus duration had an impact on the discrimination of frequencies and the magnitude of frequency estimates. In contrast, frequency estimates of participants who received no encoding instructions were generally not affected by stimulus duration.

PASS-T: An associative learning model that simulates judgments of frequency and duration

Sedlmeier, Peter Inst. für Psychologie, Techn. Universität Chemnitz, Chemnitz, Germany
PASS-T(ime) is an extension of PASS (Sedlmeier, 1999), a neural network model that simulates judgments of relative frequency and probability. PASS-T operates in discrete time steps elicited by an internal pacemaker. It encodes events and objects by their features and learns by continually updating the association-strengths between those features. The model assumes that the amount and time course of attention directed towards stimuli influences the strengths of associations. Moreover, PASS-T includes a mechanism that compares current memory contents with knowledge in long-term memory, which allows it to produce judgments of absolute frequency and duration that correspond well with empirical results.

S-250: Factors mediating the link between students' migration background and school success

Bettina Hannover, Petra Stanat (chair)

School achievement studies converge with respect to the finding that students from immigrant families

perform less well than students from native families in most countries. The symposium addresses the question which factors contribute to this performance gap. While some presentations focus on the influence of structural features, such as school vacation or social networks, other emphasize the impact of students' individual features, such as attitudes towards female teachers, or language proficiency. The discussant will integrate the findings in terms of how they further our understanding of immigrant students' school success.

The role of school vacations for the development of achievement differences between immigrant and native students

Becker, Michael Inst. für Bildungsforschung, Max-Planck-Institut, Berlin, Germany **Stanat, Petra** Educational Research, Freie Universität Berlin, Berlin, Germany **Baumert, Jürgen** Inst. für Bildungsforschung, Max-Planck-Institut, Berlin, Germany

Based on the literature on causes of educational inequities, we examine the extent to which the out-of-school environment contributes to differential learning losses during the summer vacation in Germany, drawing on a sample of $N = 1592$ students from the city of Berlin and focusing on students from immigrant families. Controlling for prior achievement, we find disparities associated with ethnic background. These are partly, but not completely due to disparities in socio-economic background. Contrary to our hypotheses, specific differences in learning opportunities that may be associated with an immigrant background and children's activities were of minor importance.

The influence of social networks in multicultural schools on school performance

Fortuin, Janna Education and Child Studies, Leiden University, Leiden, Netherlands **Vedder, Paul** Dept. of Education, University of Leiden, Leiden, Netherlands

There is a long standing debate about the ways in which the social networks of youngsters influence their school performance. This debate is especially important in multicultural schools where migrant children face more obstacles on the road to school success than native children. We studied eight graders (14-year olds) in multicultural schools, to determine the effects that the social networks have on their performance. Preliminary analyses show that there is evidence for socialisation influences in the area of Dutch language competency. This effect is the same for both native and migrant students. Implications will be discussed during the presentation.

How students' sexist beliefs affect educational success

Rau, Melanie School and Teaching Research, Freie Universität Berlin, Berlin, Germany **Hannover, Bettina** School and Teaching Research, Freie Universität Berlin, Berlin, Germany

In German schools, native students outperform immigrant students and female students do better than male ones. School teachers are predominantly female, with the educational success of boys being strongly positively linked to the percentage of male teachers. We propose that (immigrant) boys cannot benefit as much from female teachers as from male teachers 1) due to the absence of a same-sex role model and 2) as a result of male students' sexist beliefs about female teachers, which should be particularly strong in immigrant students from paternalistic home countries. These assumptions were tested in a questionnaire study amongst 9th graders.

Evaluation of language assessment in pre-primary education

Roeder, Ute-Regina *Inst. für Psychologie, Universität Dortmund, Dortmund, Germany* **Puca, Rosa Maria** *Institute of Education, University of Bochum, Bochum, Germany*

Language support for children of immigrant families is an important topic in pre-primary education. One standardized observation survey (SISMIK) that is used in German speaking countries assesses linguistic proficiency and children's motivation to engage in language related learning activities. Data about the reliability and the validity of this instrument is, however, still sparse. In our study, 270 children from different kindergartens in North-Rhine-Westphalia (Germany) were repeatedly tested during a period of two years. Results from factor analyses and scale analyses are reported as well as correlations between the scores of the different SISMIK scales and scales of other language assessment tests.

Motivation and school perceptions among first and second generation immigrant youth: A cross-national comparison

Segeritz, Michael *Inst. für Bildungsforschung, Freie Universität Berlin, Berlin, Germany* **Stanat, Petra** *Inst. für Bildungsforschung, Freie Universität Berlin, Berlin, Germany* **Christensen, Gayle** *Education Policy Center, The Urban Institute, Washington, USA*

Despite the low performance levels of immigrant students in many countries, there is little research analyzing their school-related motivation from an international perspective. We explored aspects of motivation which are assumed to play an important role in educational success. Integrating different theoretical perspectives (immigrant optimism, assimilation, segmented assimilation), we tested three hypotheses using data from the PISA-study for 14 countries: 1) motivation is especially high among first-generation immigrants, 2) motivation is slightly lower among second-generation immigrants, 3) less successful immigrant groups show lower levels of motivation in the second-generation compared to native students. The findings largely corroborate our hypotheses.

S-251: Promoting environmental sustainability by effective social decision making

Susumu Ohnuma, Cees J.H. Midden (chair)

Sustainable development is in its essence a social issue requiring many social decisions and enduring commitment of everyone involved. This raises important questions for environmental sustainability like "what are good social decisions?" and "how should social decision processes be designed?" This symposium attempts to line out routes for addressing these complex questions. Issues of fairness and trust will be examined as well as dialogue factors that may facilitate or hamper the effectiveness of participation processes and information exchanges.

Effects of similarity and voice on procedural fairness and trust: Experiments in Japan and the Netherlands

Hiroshi, Nonami *School of Sociology, Kwansei Gakuin University, Nishinomiya, Japan*

Experiments were conducted in Japan and the Netherlands to clarify the effects of delegates' voice and opinion similarity on procedural fairness in public acceptance. In high voice condition where the delegates' voice reflected on the decision, fairness was higher in high similarity than in low similarity of opinion. On the other hand, fairness was low regardless of the similarity in low voice condition. In addition, the voice and similarity affected the trust in authority and delegates. Though these results were consistent both of the countries, the interactions were different. The

function of interaction between voice and similarity will be discussed.

When does procedural fairness influence acceptance of environmental plan? Moderating effect of trust in authority

Yukio, Hirose *Graduate School of Environment, Nagoya University, Nagoya, Japan*

Our surveys clarified that main determinants of public acceptance of environmental planning through citizen participation were procedural and distributive fairness. But trust in authority had no impact on its acceptance. Instead, the trust had moderating effect between procedural fairness and public acceptance, that is, procedural fairness had more impact on the acceptance for the citizens having lower trust. These results that when the citizens have less trust, they are more likely to pay attention to the decision procedure, yielding more strong effect of procedural fairness on their acceptance. We will discuss the function of trust in environmental sustainability.

Bias in the exchange of arguments: The case of scientists' evaluation of lay viewpoints on GM food

Cuppen, Eefje *Inst. for Environmental Psych., Vrije Universiteit Amsterdam, Amsterdam, Netherlands*

In public participation dialogues, participants articulate and evaluate different views and knowledge claims. In this study we tested how three specific characteristics of a claim may bias this evaluation. In a survey-experiment among 73 biotechnology-scientists the effects were tested of 1) the claim's favourability towards GM-food, 2) the phrasing and 3) the source of the claim. The results indicated that claims congruent with the attitude of the respondent and cognitively phrased claims were evaluated more positively than incongruent claims affectively phrased claims. Contrary to our expectation, scientists evaluated claims of the public more positively than claims of experts.

Effects of participation in the social decision process on social acceptance

Ohnuma, Susumu *Dept. of Behavioral Science, Hokkaido University, Sapporo, Japan*

We have demonstrated that procedural fairness through citizen participation increases social acceptance and trust in authority, even for those who do not directly participate. This presentation focuses on comparing determinants of procedural fairness between participants and non-participants. We predicted that antecedent factors proposed in procedural fairness studies (e.g. opportunity of voice) would be more relevant for participants, while heuristics (e.g. perceived value similarity) would be more relevant for non-participants, who are not involved in participatory processes. Results from a Bavarian survey of citizen participation provided support for these hypotheses. Functions of procedural fairness for participants and non-participants will be discussed.

Not fair (for me)!: The influence of personal relevance on automatic versus controlled social justice inferences

Ham, Jaap *Human-Technology Interaction, University of Technology, Eindhoven, Netherlands*

This contribution argues that for designing social decision processes, the social psychology of making justice judgments is highly relevant. Specifically, social decision processes should assess people's automatic judgments next to people's controlled judgments. We present evidence that these two types of judgments are differently dependent on an important social-psychological variable—personal relevance. Two studies suggest that justice-relevant situations described from a first person perspective lead to different automatic cognitive responses than when described from a third person perspective,

even though controlled responses show an independence of personal relevance. The importance of these findings for designing social decision processes is discussed.

S-252: Early, automatic processing involved in the causation of emotion and affective responses

Agnes Moors (chair)

Appraisal theorists hold that events and emotions are mediated by an appraisal process consisting of several appraisal variables like goal relevance, intrinsic valence, goal conduciveness, and coping potential. In this session, the contributors present behavioral and neurophysiological data to address the questions of the automaticity of appraisal variables (Agnes Moors), the timing of some of these appraisal variables using EEG (Didier Grandjean), and the role of goal relevance in early attentional deployment (Tobias Brosch). A related question is whether affective vs nonaffective features take priority at encoding (Justin Storbeck, Adriaan Spruyt). The discussant is Dr. Nico Frijda.

Investigating the automaticity of appraisal variables

Moors, Agnes *Dept. of Psychology, Ghent University, Ghent, Belgium*

To accommodate the observation that emotions can arise spontaneously, appraisal theorists have argued that emotion-antecedent appraisal can be automatic (Frijda, 1993; Scherer, 1993). Previous studies support the automaticity of individual appraisal variables such as novelty, goal relevance, intrinsic valence, and goal conduciveness. To study the automaticity of coping potential, we developed a variant of the sequential priming task in which primes are events in a pacman game (signaling low or high coping potential) and targets are words. I describe the first results obtained with this task. I also discuss the difficulty to disentangle coping potential and valence.

Investigations of temporal unfolding of emotion-constituent appraisal using EEG

Grandjean, Didier *Dept. of Psychology, University of Geneva, Geneva, Switzerland* **Scherer, Klaus R.** *Swiss Center for, University of Geneva, Geneva, Switzerland*

Despite a growing consensus among appraisal theorists on which dimensions constituting the appraisal process are necessary to predict human emotional reactions, the question of the temporal dynamic remains unsolved. The sequence of the various appraisals is, according to authors, fixed or flexible. Scherer suggested that the appraisal process consists of a very rapidly occurring sequence of hierarchically organized stimulus processing steps. We designed two electroencephalographic studies in which we manipulated novelty, intrinsic pleasantness, goal relevance and goal conduciveness. The results, based on event-related potentials and frequency analyses are in favor of a sequential process despite massive parallel processes exist.

Appraisal mechanisms and rapid attention deployment

Brosch, Tobias *Inst. für Psychologie, Universität Genf, Geneva, Switzerland*

An alternative to the view that during evolution the human brain became specialized to preferentially attend to threat-related stimuli is to assume that all stimuli with high relevance are rapidly prioritized by the attention system during a multilevel appraisal process. We examined whether the baby schema, a prototypical biologically relevant stimulus configuration, captures attention in a dot probe task. Both behavioural data and event-related potentials revealed highly similar rapid attentional modula-



tion toward threat-related and baby stimuli. The findings support the notion that a common evaluative process is responsible for the emotional modulation of attention to relevant stimuli.

Semantic processing precedes affect retrieval: The neurological case for cognitive primacy in visual processing

Storbeck, Justin Dept. of Psychology, University of Virginia, Charlottesville, USA

According to the affective primacy hypothesis, visual stimuli can be evaluated prior to and independent of object identification and semantic analysis. I will argue that the affective primacy hypothesis is not likely correct. Although people can react to objects that they cannot consciously identify, such affective reactions are dependent upon prior semantic analysis within the visual cortex. I offer a preliminary neurological analysis of the mere exposure and affective priming effects that is consistent with the claim that semantic analysis is needed to elicit these effects. Thus, the brain must know what something is in order to evaluate it.

On the viability of the automatic stimulus evaluation hypothesis: Goal-dependency effects in affective and nonaffective stimulus processing

Spruyt, Adriaan Dept. of Psychology, Ghent University, Ghent, Belgium

Affective stimulus information can be processed rapidly, with minimal effort, and outside the reach of consciousness. Accordingly, it has been concluded affective stimulus processing is a fairly automatic and unconditional phenomenon. I will present new experimental evidence which suggests that affective stimulus processing may not be the unconditional phenomenon that several researchers have claimed it to be. Additionally, I will demonstrate that goal-irrelevant non-affective stimulus processing can proceed in an equally 'automatic' fashion as goal-irrelevant affective stimulus processing, provided that feature-specific attention allocation is taken into account. Implications for the affect primacy hypothesis will be discussed.

S-253: Emotional intelligence and cognitive processes

Richard D. Roberts, Gerry Matthews (chair)

The role of emotional intelligence (EI) in understanding and managing the challenges of everyday life requires further investigation. This symposium examines how EI infuses critical high-level cognitions supporting decision-making, coping, and adaptation. Scherer reviews a general framework for understanding emotional competence. Roberts et al. present new approaches to assessment. Tursi reports on the role of EI in forecasting emotion. O'Sullivan discusses how expert lie detectors and controls may differ in emotion regulation. Zeidner addresses the role of EI in coping with threat. Finally, Schulze et al. present a meta-analysis of the relationship between EI and general cognitive ability and personality.

A functional approach to the definition and measurement of emotional competence

Scherer, Klaus R. CISA, Universität Genf, Genf, Switzerland

Work on "emotional intelligence" has suffered from the straightjackets imposed by the IQ and personality adjustment traditions respectively. It is suggested that emotional competence (EC) should be defined on the basis of the adaptive functions of the emotion mechanism. Based on the component process theory, three domains of EC are proposed: 1) Responding with appropriate emotions to pertinent events, 2) adaptation- and context-sensitive emotion regulation, and 3) efficient emotion recognition and communication. Relevant criteria

to measure competence and skills are discussed. In support of this new theoretical framework, data from experimental research and human resource assessments are presented.

Developing and validating situational judgment tests of emotional intelligence

Roberts, Richard D. Research and Development, ETS, Princeton, USA **Ralf, Schulze** Research and Development, ETS, Princeton, NJ, USA **MacCann, Carolyn** Research and Development, ETS, Princeton, NJ, USA

Previous research examining emotional intelligence (EI) has largely been restricted to numerous self-report instruments and the Mayer-Salovey-Caruso Emotional Intelligence Test. Neither measurement approach has proven entirely satisfactory; alternative assessments are needed. Four studies providing validity evidence for situational judgment tests of EI are reported. These EI assessments appear reasonably reliable, and with construct validity evidence demonstrated by relationships between EI and intelligence, personality (especially, Agreeableness), other emotions measures, and outcomes (e.g., grades). Although promising, the approach might be made more ecologically valid if use is made of multimedia technologies. We conclude with a demonstration of a video-based EI assessment.

Emotional understanding for self and others: The target makes a difference

Turß, Michaela Inst. für Psychologie, Humboldt-Universität zu Berlin, Berlin, Germany **Matthews, Gerald** Department of Psychology, University of Cincinnati, Cincinnati, USA **Scholl, Wolfgang** Department of Psychology, Humboldt-University, Berlin, Germany

Emotional understanding is a branch of the ability model of emotional intelligence. To overcome scoring problems and to establish incremental validity, emotional knowledge is measured in real life situations. In two subsequent studies, participants predict emotions for upcoming exams and a mutual project. Results show that it is stereotype accuracy with later reported actual emotions that is associated with emotional intelligence ($N=143$). When targets are further distinguished in a round robin design ($N=171, 42$ teams), accuracy for others relates to intelligence, emotional intelligence, and relationship success. Accordingly, emotional intelligence research can profit from the consideration of different targets.

Emotion regulation in the detection of deception

O'Sullivan, Maureen Human Interaction Laboratory, University of California, San Francisco, USA

Extensive cue utilization is one aspect of superior lie detection; another is the ability to regulate one's reaction to the knowledge of duplicity. Most people react negatively to being lied to: sadness or anger at betrayal, self-aggravation at being duped. One method of regulating these emotions is to pretend deception does not exist. This is consistent with the ubiquitous truth bias. Expert lie detectors, however, do not show a truth bias; they regulate the negative emotions involved in perceiving deception. The emotion regulation techniques used by expert lie detectors are contrasted with those of their matched controls.

Emotional intelligence and coping with threat

Zeidner, Moshe Dept. of Psychology, University of Haifa, Haifa, Israel **Olenik-Shemesh, Dorit** Dept. of Psychology, University of Haifa, Haifa, Israel **Matthews, Gerry** Dept. of Psychology, University of Cincinnati, Cincinnati, USA

This study examines the relationship between Emotional Intelligence (EI) and adaptive coping with stressful encounters in Israeli adolescents. EI was hypothesized to help adolescents cope more

adaptively with stressful situations, as mediated by social support, which, in turn, was hypothesized to improve well-being. The data ($N=200$) support the hypotheses. EI and its components were related to adaptive outcomes of coping with stress (even after controlling for ability and personality). Furthermore, social support was shown to mediate the effects of EI on adaptive outcomes. This research suggests that EI may predict adaptive outcomes, independent of other individual differences constructs.

Convergent and discriminant validity evidence for emotional intelligence tests and related measures: A meta-analysis

Schulze, Ralf Research and Development, ETS, Princeton, USA **Roberts, Richard D.** Research and Development, ETS, Princeton, NJ, USA **MacCann, Carolyn** Research and Development, ETS, Princeton, NJ, USA **Orchard, Benjamin** Research and Development, ETS, Princeton, NJ, USA

The availability of validity evidence for emotional intelligence (EI) tests is an important prerequisite to interpret and evaluate findings in this area of research. The results of a meta-analysis synthesizing the available validity evidence will be reported. This is done both for maximum performance EI tests and related self-report measures. The strength of relation between these two types of measures on the one hand and personality factors as well as traditional intelligence measures on the other will be reported. Valid EI measures are expected to evince strong relationships with other intelligence measures and weak relationships with personality factors.

S-254: Developmental aspects of text-picture-integration

Holger Horz, Nele McElvany (chair)

Most learning materials such as books, computer-based learning environments, worksheets etc. consists of texts and pictures. While the development of writing and reading skills has been examined extensively, the development of visualization ability and of combined processing of texts and pictures is a largely unknown field yet. This symposium aims at a deeper understanding of how cognitive processes involved in the combined processing and comprehension of text and pictures develops within individuals. Development of these processes will be focused from age of early childhood up to young adulthood.

The development of visualization ability

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How abilities of visualizing complex content develop within individuals is an unknown field yet. In a field experiment 3x10 participants (7th and 11th graders, university students) worked in dyads of same age and visualized facts of a text (1800 words). Visualization processes were videotaped and visualizations were qualitatively classified. Younger dyads communicated less, produced the same kinds of visualizations, but made more mistakes regarding content and formal representation. Overall younger dyads seem to have too little capacities to cooperate and to produce at the same time because their ability to visualization is not fully developed at the age of 13.

Development of reading literacy using PISA-like test

Vidal-Abarca, Eduardo Dept. of Psychology, University of Valencia, Valencia, Spain **Mañá, Amelia** Dept. of Psychology, University of Valencia, Valencia, Spain **Gilbert, Ramiro** Dept. of Psychology, University of Valencia, Valencia, Spain **Martínez,**

Tomás Dept. of Psychology, University of Valencia, Valencia, Spain **García, Victoria** Dept. of Psychology, University of Valencia, Valencia, Spain

We developed a test of reading literacy following PISA test structure. The test contains three continuous and two non-continuous texts (i.e., including diagrams and graphics), and it measures retrieving, interpreting and reflection-evaluation skills. 798 students from 7th to 9th grade answered the test. Differences among students from different grades were significant. Reliability score for the test was .792. An electronic version of the test has been prepared based on the software called Read&Answer, which records reading time measures and reading-answering question sequences. It aims at capturing developmental and individual differences on the question-answering processes.

Integrative processing of text and graphics by 5- and 6-graders at different levels of schooling

Schnotz, Wolfgang Inst. für Psychologie, Universität Koblenz-Landau, Landau, Germany **Horz, Holger** Inst. für Psychologie, Universität Koblenz-Landau, Landau, Germany **Ullrich, Mark** Inst. für Psychologie, Universität Koblenz-Landau, Landau, Germany

The competence of integrating text and graphics plays an increasingly important role in the acquisition of knowledge especially after primary school. However, reading and integrating verbal and pictorial information from multiple documents is not explicitly taught in many schools, and little is known about how this competence develops at different levels of schooling. In a field study with 48 classes of 5 and 6-graders from different school levels in Germany, we analyzed the effect of age and schooling on the development of competence of integrating text and graphics with science education materials. Results suggest alternative ways of instruction for schooling.

Text-picture integration in the school learning context: Teacher competence

McElvany, Nele Human Development, Max-Planck-Institut, Berlin, Germany **Hachfeld, Axinja** Human Development, Max-Planck-Institut, Berlin, Germany **Baumert, Jürgen** Human Development, Max-Planck-Institut, Berlin, Germany

While most learning materials in schools contain texts with integrated pictures, the combined processing of texts and pictures is not a common topic within teacher education. The study presented aims at A) the development of a theoretical framework and operationalization for teacher competence in this area, B) the investigation of teacher competence focusing on knowledge and diagnostic skills, C) the identification of determinants of inter-individual differences, and D) the analysis of the correlation between teacher competence and instructional quality. Data is collected in January 2008 from 144 biology, geography and German teachers (grades 5 to 8) within different school tracks in Germany.

A social psychological reading of multimodal scientific texts in online media

Roth, Wolff-Michael Applied Cognitive Science, University of Victoria, Victoria, BC, Canada
Reading multimodal (popularized) scientific texts predominantly is studied in terms of technical decoding skills said to be required (Street, 2008). In this paper I suggest that there are other interesting approaches to studying reading of multimodal (popularized) scientific texts grounded in social psychological concerns. These concerns include questions of what people read, how much they read, and the purposes and effects of reading" (Edwards, 2008). Here, I focus on reading practices and the kind of semiotic (meaning-making) resources (popularized) scientific texts in online media make available for the practices of reading, includ-

ing the way in which membership categories are used to link different aspects of the text.

S-255: Evaluation of competence development in counselling and psychotherapy

Arthur Drexler (chair)

In today's knowledge economy lifelong learning has increasingly become an important factor on the path towards individual and organisational success. As a result, further education and trainings are a booming market and the quality of such professional development in the fields of psychotherapy, coaching and counselling depends on the quality of the underlying training. The presentations in this symposium focus on specific characteristics and soft skills of psychotherapists and counsellors and an evaluative approach to measure their development during the respective training. All contributions intend to collect "hard facts" instead of subjective self-assessments of the participants. The applied instruments cover a wide range of methods and present a framework for evaluating further education and trainings in general.

Effectiveness of psychotherapy training: On the evaluation of psychotherapeutic concept competence

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We present a computer supported method evaluating the effectiveness of psychotherapy training by analysing written responses from two groups of psychodrama trainees (beginners and finalists) with a special program. We assume that in order to cause psychotherapeutic change, psychotherapeutic trainees should be able to develop a clinical concept including the aetiology of the patients disorder(s), derivate a treatment concept and holistically deal with higher order complexities of clinical cases (cf. Beutler et al. 1994, Kahl-Popp 2004). According to our results, finalists show more coherency in case interpretations, a higher degree of cross-linking different psychotherapy concept elements, finalists' case items are more interlinked and show more complex circularity.

Emotion and relationship within psychotherapy-trainees

Benecke, Cord Inst. für Psychologie, Universität Innsbruck, Innsbruck, Austria **Pauza, Elisabeth** Inst. for Communication, Universität Innsbruck, Innsbruck, Austria

Most therapeutic schools consider personality variables of therapists as important for therapeutic competence; therefore, the development of personality is part of therapists' training processes. Therapists are supposed to be empathic, capable of regulating their emotions, able to realise widespread relationship behaviour, etc. So far, there is no empirical evidence that these dimensions are developed through the training process. Aims: Investigation of the development of important dimensions like emotional experience, emotion regulation, emotion recognition, relationship patterns, introject-behaviour. Approximately 90 trainees from different schools are investigated at the beginning and the end of their training. We present first results of the pre-training-data-ascertainment.

Communication and interaction in the counselling of psychotherapy trainees

Stippler, Maria Inst. für Kommunikation, Universität Innsbruck, Innsbruck, Austria

Referring to Rønnestad & Orlinskys findings that supervision is considered as essential for professional development of psychotherapists this study aimed to identify the special communication styles

and interaction patterns that are regarded by psychotherapy trainees across different orientations as helpful for their development. Quantitative and qualitative methods were combined. Anonymous questionnaires were filled out by supervisors and supervisees in the middle of the supervision process and after the ending of the supervisory relationship. In addition supervisors were asked to record every fourth supervision session. The qualitative analysis combines different analysis methods (e.g. content analysis, interaction analysis). First results are presented.

Research into course evaluation: Professional coach training

Drexler, Arthur Inst. für Kommunikation, Universität Innsbruck, Innsbruck, Austria

In this study we present a model for the evaluation of coach trainings, which we observe as prototypical for further education programmes and which leads to "hard facts" of the effects and the quality of such trainings. Up to now evaluations of trainings and seminars are mostly based on participants' self reports following events. In this study we use a multifaceted form of examination and thus we refer to different theoretical concepts, e.g. knowledge and problem solving, personality and emotion theories. Our generic yet multifaceted model for the evaluation of coach trainings should produce valid findings of the development of the trainees during the course and the quality of such trainings and should help to improve educational practice.

How to become a counsellor: Pre-post-testing of trainees and their counselling competence

Möller, Heidi Fachbereich 4, Universität Kassel, Kassel, Germany

Counselling as a professional field of applied psychology is dealing with questions on what training has to be provided and how it has to be organized to meet the requirements. This presentation shows a reasonably integrated qualitative-quantitative research design and preliminary results. Our research project poses questions concerning basic issues similar to psychotherapy outcome research: How does the theoretical knowledge and traits of trainees change in the course? Do different personality types tend to choose different types of counselling schools and what are the consequences? In this long-term study, we measure differences between beginners and advanced trainees and the development of individuals during training.

S-256: Dynamic Testing (DT) and the assessment of cognitive modifiability: Recent applications and methodological developments in educational and clinical settings

Karl Heinz Wiedl (chair)

"Dynamic Testing" is a diagnostic approach that integrates interventions into testing to come to a more precise estimation of cognitive ability and modifiability, particularly in subjects with problems of cognition and learning. Typical theoretical concepts are learning potential, plasticity of rehabilitation potential. The presentations deal with methods of assessing learning in ethnic minority, immigrant and special education children, plasticity of memory functions in elderly subjects and modifiability of executive performance in schizophrenic patients as a predictor of rehabilitation outcome. Also based on clinical data, measurement of change using a typological approach and analysis of modifiability with neuroimaging technology are addressed.



Using dynamic criteria for the validation of a learning potential test of analogical reasoning

Hessels, Marco Inst. für Psychologie, Universität Genf, Genf, Switzerland

In this research, the validity of a standardized learning potential test (Hessels Analogical Reasoning Test) was examined with dynamic criteria. Two dynamic criterion tests were developed to evaluate how much pupils learned in a short training in Geography or Chemistry. The dynamic tests of school learning were used in two studies (N=570 and N=258, respectively) that included both Swiss and immigrant children, in mainstream primary education and special education classes. The results indicate an improvement of the validity, especially for minority children, as well as low achieving children and children in special education.

Dynamic testing in children: Individual differences and learning patterns in indigenous and ethnic minority children

Resing, Wilma Dept. of Psychology, Universiteit Leiden, Leiden, Netherlands **Tunteler, Erika** Dept. of Psychology, Universiteit Leiden, Leiden, Netherlands **de Jong, Froukje** Dept. of Psychology, Universiteit Leiden, Leiden, Germany **in't Velt, Arianne**

Aim of the study was to examine both learning patterns and strategy use in groups of children after dynamic testing. Participants were 1st grade indigenously Dutch (N=50) and ethnic minority (N=50) primary school children. A pretest-posttest control group design was used. The dynamic test was an adapted version of Tzuriel's SeriaThink Instrument. Additionally, Raven's PM and a math test were administered. Children verbalized steps of their solving processes. Repeated measurement analyses significantly showed both positive group and cultural differences as a consequence of dynamic testing, including variability in learning patterns. As expected, most progression was found in ethnic minorities.

Estimation of cognitive plasticity in elderly subjects using dynamic evaluation techniques

Navarro, Elena Dept. of Psychology, University of Granada, Granada, Spain **Calero, M. Dolores** Faculty of Psychology, Granada University, Granada, Spain **Objectives:** The present communication describes the techniques we have developed and results obtained from various practical studies designed to test them. **Method:** The experiments were carried out with Spanish elderly subjects from 60 to 95 years of age, who participated in diverse programmes of cognitive evaluation and intervention initiated by the University of Granada. **Results and conclusions:** These demonstrate that the techniques are useful for evaluating cognitive plasticity in old age, valid for diagnostic purposes, predictive of the efficiency of cognitive intervention measures for arresting cognitive decline, and prognostic with regard to the course of cognitive deterioration in elderly subjects.

Learning potential and rehabilitation outcome in schizophrenia: A longitudinal study

Watzke, Stefan Klinikum der Med. Fakultät, Universität Halle-Wittenberg, Halle, Germany **Brieger, Peter**

The relation between learning potential (LP) and the success of a vocational rehabilitation program in German community psychiatry was prospectively examined in n=41 schizophrenia patients. A dynamic test version of the WCST was completed at rehabilitation intake. Within a longitudinal study design, work capability, level of functioning, and vocational integration were assessed at rehabilitation intake, program course and termination and at 3-month follow-up. Hierarchical linear models showed that higher LP indicated better outcome in all measures during rehabilitation and at follow-up. LP added information beyond static cognitive

performance and, therefore, should be considered in the further development of rehabilitation programs.

Learning potential on the WCST: First results from fMRI, 1H-MRS- and genetic association studies in schizophrenia

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Objectives: Detailed instruction might remediate deficits on the Wisconsin Card Sorting Test (WCST) in some schizophrenic patients. **Methods:** 101 inpatients with schizophrenia (59 first-episode, 42 chronic) and 55 healthy controls completed a test-train-test version of the WCST as a measure of their learning potential. **Results:** "Nonretainers", who did not profit from detailed instruction, were identified in both schizophrenic groups, but not in the healthy control group. We present first results from a sub-sample in which we implemented imaging techniques (fMRI, 1H-MRS) and established associations with different genotypes. **Discussion:** Implications of the concept of 'learning-potential on the WCST' are discussed, considering the results of the brain imaging techniques.

Repeated administrations of the Wisconsin Card Sorting Test: A typological algorithm considering stability and practice effects

Waldorf, Manuel FB Humanwissenschaften, Universität Osnabrück, Osnabrück, Germany **Schöttke, Henning** Inst. für Psychologie, Universität Osnabrück, Osnabrück, Germany **Wiedl, Karl Heinz** FB Humanwissenschaften, Universität Osnabrück, Osnabrück, Germany

The Wisconsin Card Sorting Test (WCST) is a widely used measure in schizophrenia research. Although the specific deficits can be alleviated by means of a short training, the ascertainment of true change requires data concerning stability and practice effects in a pretest-training-posttest design. We carried out the WCST-64 three times without intervention. The sample consists of 100 non-psychiatric healthy participants with non-collegiate educational background. In contrast to earlier reports, the retest reliability of the WCST is satisfactory (i. e. $r_{tt} > .70$). A statistically sound assessment of change thus seems feasible. An appropriate algorithmic, typological approach is presented.

S-257: Advances in complex data analysis and modeling

Andreas Klein (chair)

Topics discussed here address areas of causal relationships and measurement. Mutz investigates a structural equation modeling framework for assessing self-reported competencies of graduates based on causal effects theory. Klein proposes a new probability weighting technique providing an estimation formula for direct and indirect causal effects in mediator models. Brand et al. investigate the performance of LMS in analyzing moderated mediator models. Steinmetz and Schmidt investigate the consequences of partial measurement invariance for analyses of sumscore differences. Lloret-Segura et al. apply IRT modeling to pairs of

opposite affect items in order to locate the responses along the latent scale.

Modelling self-reported competencies of graduates: Psychology as an example

Mutz, Rüdiger Geistes-, Sozial- und, Swiss Fed. Inst. of Techn., Zürich, Switzerland

This contribution aims at suggesting a structural equation modeling framework for assessing self-reported competencies of graduates, based on the theory of causal effects of Steyer (2007). Competency will be defined as ability to do (person) what is needed (environment). This definition implies four model components: a) a measurement theory component (CTT), b) a person-environment fit component, c) a causality component (different instructions) and d) a latent state-trait component (competency as trait). A panel-study of 1490 psychology students in Germany provides for data to illustrate the proposal.

The problem of causal inference in mediator analysis

Klein, Andreas Dept. of Psychology, University of Western Ontario, London, Canada

In this paper, we discuss the difficulties related to the causal interpretation of mediator models. The problem of causal inference arises from the fact that the mediating variable plays the double role of an independent and a dependent variable and as such cannot be randomized. We adopt Holland's (1988) critique on the causal interpretation of conventional mediator models. As the main result, a new probability weighting technique is proposed that provides a novel solution to the problem and includes an estimation formula for the direct and indirect causal effects. The approach is illustrated by an example using depression data.

Analyzing latent nonlinear mediation models with LMS

Brandt, Holger Inst. für Psychologie, Universität Frankfurt, Frankfurt, Germany **Schermelleh-Engel, Karin** Inst. für Psychologie, Universität Frankfurt, Frankfurt, Germany **Dimitruk, Polina** Inst. für Psychologie, Universität Frankfurt, Frankfurt, Germany **Kelava, Augustin** Inst. für Psychologie, Universität Frankfurt, Frankfurt, Germany **Moosbrugger, Helfried** Inst. für Psychologie, Universität Frankfurt, Frankfurt, Germany

This presentation focuses on the difficulty to differentiate between different types of nonlinear effects in mediation models. Until now nonlinear mediation models have not been investigated on the level of latent variables. Therefore a simulation study was conducted in order to investigate the performance of LMS in analyzing such complex models. We systematically varied the number of variables, the number of nonlinear effects and the multicollinearity. The results show that LMS is able to differentiate between all different effects in the models when the models are not too complex. Limitations of the study are being discussed.

Effects of partial measurement (non)invariance on manifest sumscore differences across groups

Steinmetz, Holger Arbeits- und Org.-Psychologie, Universität Gießen, Gießen, Germany **Schmidt, Peter** Inst. für Politikwissenschaft, Universität Gießen, Gießen, Germany

Although the use of structural equation modeling has increased in the last decades, researchers still rely on traditional methods (e.g., ANOVA) when mean differences between constructs across groups are being investigated. A main problem is that traditional methods are only appropriate if the measurement model is invariant across groups. Whereas partial measurement invariance is regarded as sufficient for analyses of latent mean differences, its consequences for analyses of sumscore differences is still unknown. A Monte-Carlo

simulation of multigroup analyses with varying noninvariant loadings, intercepts and latent mean differences reveals under which conditions partial invariance can bias sumscores differences.

S-258: Sleep, dreams, and emotion: Affective neuroscience approaches to the functions of sleep

Ullrich Wagner, Sophie Schwartz (chair)

Cognitive functions of sleep have been described since the beginning of experimental psychology. Only recently researchers have also begun to address this topic from the perspective of "affective neuroscience", investigating how sleep and dreaming specifically relate to emotional processes. This symposium will give an overview of findings from the internationally leading laboratories in this new field. Speakers will present data showing how sleep and different sleep stages affect emotional memory formation (Wagner, Payne), how emotional processes guide dream contents (Schredl, Valli), and how the brain processes emotional information in normally-sleeping healthy humans (Sterpenich) and in sleep-disturbed patients (Schwartz).

REM sleep and emotional memories

Wagner, Ullrich Inst. für Fundam. Neurowiss., Universität Genf, Geneva, Switzerland

Objectives: Sleep has been shown to support memory consolidation in many tasks. However, only recently researchers have begun to investigate also the role of emotions in this context. Methods: Recent studies will be presented which compared effects of sleep and different sleep stages (slow-wave sleep vs. REM sleep) on consolidation of emotional vs. neutral text contents. Results: Emotional as compared to neutral memories are particularly enhanced by post-learning sleep, especially by sleep periods rich in REM sleep. Conclusions: Emotional memories, critically depending on the amygdala, may particularly benefit from amygdala activations during sleep, which are selectively observed during REM sleep.

Sleep preferentially enhances memory for emotional components of scenes

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Central aspects of emotional experiences are often well remembered at the expense of background details, but little is known about how emotional memories evolve over time. We examined the development of emotional scene memories between 30min and 12hrs including either wake or sleep. Wakefulness led to forgetting of entire emotional scenes, while sleep preserved memory for emotional objects, but not their backgrounds, suggesting that the two components undergo differential processing during sleep. Emotional memories develop differentially across time delays containing sleep and wake, with sleep selectively consolidating those aspects of a memory that are of greatest value to the organism.

Dream emotions: Prevalence and their continuity to waking life

Schredl, Michael Schlaflabor, ZI für Seelische Gesundheit, Mannheim, Germany

Objectives: Emotions play a major role in the dream experience. The continuity hypothesis of dreaming predicts that waking-life emotions are reflected in dreams. Methods: 444 participants kept a dream diary over a two-week period and completed several

questionnaires eliciting current stress level. Results: The findings showed that stress exerts a strong effect on dream emotions but dream content (themes, images) are hardly affected and, thus, support the continuity hypothesis regarding emotions. Conclusions: Dreaming is a state in which emotions of the waking life are processed. Whether this has a functional significance has to be demonstrated.

Review of the threat simulation theory: Dreams portray the most salient emotional memory traces

Valli, Katja Centre for Cogn. Neuroscience, University of Turku, Turku, Finland

Objectives: According to the Threat Simulation Theory (TST) (Revonsuo, 2000), dreams have a strong tendency to simulate threatening events based on the most salient emotionally charged memory traces, in a way that suggests biological functionality. Methods: The TST has been tested in several empirical investigations (Revonsuo & Valli, 2000; Valli et al., 2005, 2006, 2007, in press). Results: The results of these studies mostly offer support for the predictions of the TST. Conclusions: In this presentation, the main results of the conducted dream content studies will be summarized and the TST discussed in the light of recent new evidence.

Sleep deprivation on the post-encoding night modifies the neural correlates of emotional memory retrieval after short and long retention period

Sterpenich, Virginie Cyclotron Research Centre, University of Liège, Liège, Belgium

We used fMRI to characterize the influence of sleep on the consolidation of emotional memories. After learning emotional or neutral pictures, subjects slept (RS, n=17) or were totally sleep-deprived (TSD, n=15) on the post-training night. Retrieval sessions took place 3 days and 6 months later. Responses were larger in RS than TSD group and more so for emotional items in the hippocampus and the medial prefrontal cortex (MPFC) after 3 days, and in the amygdala and the MPFC cortex after 6 months. Post-training sleep supports the reorganization of brain representations subtending emotional memory, with an increased recruitment of MPFC.

Reward processing during game-playing in narcoleptic patients: A functional MRI study

Schwartz, Sophie Inst. für Fundam. Neurowiss., Universität Genf, Geneva, Switzerland

Narcolepsy with cataplexy (NC) is a sleep-wake disorder, associated with reduced hypocretin/orexin (a hypothalamic neuropeptide). NC is characterized by episodes of transient loss of muscle tone, called cataplexy, typically triggered by strong, mostly positive emotions. Cataplexy therefore represents a striking example of how emotions affect behaviour and motor control. We used functional magnetic resonance imaging to understand why emotions might elicit cataplexy. NC-patients showed exaggerated amygdala response to emotional stimuli such as humorous pictures or positive reward. Our data suggest that the hypocretin/orexin system, which is deficient in NC, modulates amygdala response to positively-loaded emotional signals.

S-259: Working memory and arithmetic problem solving

Dietmar Grube (chair)

There is ample evidence showing that working memory has an impact on arithmetic performance. However, available evidence is only partly able to answer the question of which characteristics of working memory affect certain kinds of arithmetic

problem solving. This symposium includes further contributions to clarifying the relationship between working memory and arithmetic problem solving. The present studies included subjects from preschool age up to adulthood and followed experimental (dual-task) and longitudinal designs.

Development of arithmetical strategies in preschool age with and without promotion of numerical concept

Peucker, Sabine Inst. of Psychologie, Pädag. Hochschule Freiburg, Freiburg, Germany **Weißhaupt, Steffi** Inst. of Psychologie, Pädag. Hochschule Freiburg, Freiburg, Germany

This contribution investigates the development of arithmetical strategies in preschool age. In a longitudinal study 200 children were tested six months and two months before entering primary school with an instrument for assessing the development of numerical concepts (DEZ). For further analysis of children's strategies the assessments were recorded on video. Half of the children took part on a programme for the development of numerical concepts (FEZ). For the trained children quantitative analysis revealed a better improvement of mathematical knowledge (such as counting strategies, numerical representation, part-whole-concept). Qualitative analysis showed that trained children used more elaborated strategies that also may reduce demands on working memory.

The impact of working memory, intelligence and domain-specific precursors on mathematics and spelling

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Results of a longitudinal study will be presented that tried to analyze the impact of working memory and intelligence on mathematics and spelling when domain-specific precursors were controlled. During their last year in kindergarten 108 children were tested three times regarding nonverbal intelligence, working memory, phonological awareness and early numerical competencies. Later on in school, at the end of Grade 1, children's spelling and mathematical competencies were investigated. Results show, that there is an impact of working memory on domain-specific precursors, but beyond this, no direct effect on school performances was found. Furthermore, phonological awareness and numerical competencies interacted with each other.

Working memory and individual differences math achievement: A longitudinal study from first to second grade

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This longitudinal study examined the relationship between working memory (WM) at the start of first grade and later individual differences in math achievement in elementary school (N=106). WM-measures were administered at the start of first grade. Math achievement was assessed at the middle of first grade and the start of second grade. Results revealed that WM was significantly related to math achievement in both grades. Hierarchical regression analyses, controlling for IQ, showed that the visuospatial sketchpad and central executive were unique predictors of first-grade math achievement, whereas the phonological loop was the only



WM-component that uniquely predicted second-grade math achievement.

Development of solving simple addition problems in elementary school age: Changes in working memory demands

Grube, Dietmar Inst. für Psychologie, Universität Göttingen, Göttingen, Germany
Increasing knowledge of basic arithmetic facts is supposed to release working memory capacity involved in arithmetic problem solving. To test this hypothesis we had 54 first-graders and 50 fourth-graders solve simple addition problems (sums < 20) within a dual-task experiment. Performance was much more affected by simultaneous rapid tapping (secondary task) in first-graders than in fourth-graders. Error ratios were significantly increased by the dual-task condition only in first-graders. Results suggest that working memory load in solving simple addition problem decreases during elementary school years and that solving complex problems presupposes a certain quality of basic fact knowledge.

Children who perform poorly in arithmetic: Overload of working memory?

van Lieshout, Ernest C.D.M. Dept. of Special Education, University of Amsterdam, Amsterdam, Netherlands
Berends, Inez Dept. of Special Education, University of Amsterdam, Amsterdam, Netherlands
It was expected that disturbance during a calculation task would affect high (HP) and poor (LP) performing children differently. Arithmetic problems were presented to 72 9.4 years old primary school children (half of the children HP, half LP) during an articulatory suppression condition, a central-executive interference condition or a no-interference condition. ANCOVAs showed that the HP-group was the least accurate during articulatory suppression and the slowest during both disturbing conditions. This study strengthens the claim of studies relating arithmetic performance to (offline) working memory tests, that lack of working memory resources is an important factor in poor arithmetic performance.

Instruction effects in mental arithmetic: The role of working memory and the influence of gender

Vandierendonck, André Experimental Psychology, Ghent University, Ghent, Belgium
Imbo, Ineke Dept. Experimental Psychology, Ghent University, Ghent, Belgium

This study aimed at testing instruction effects on adults' arithmetic performance: What happens when people are asked to respond as quickly and/or as accurately as possible? The role of working memory and the influence of gender were tested as well. Males and females solved simple additions (Exp.1) or simple multiplications (Exp.2) under load and no-load conditions and provided trial-by-trial strategy reports. The instructions affected participants' accuracies, response times, and strategy choices. No main effect of gender was observed, but several interactions were detected (gender x instruction and gender x load). The relevance of gender differences in mathematics will be discussed.

S-260: Ethical issues associated with test development and use in rapidly developing countries

Mark Leach (chair)

Although test use is universal, the availability and use of tests differs considerably among countries. Test development and use is likely to be associated with various ethical issues, particularly in developing countries and when national professional associations have not developed and enforced ethical standards for testing practices. This presentation discusses test-related ethical issues in four

differing geographic locations, outlines strategies psychologists have used to address ethical dilemmas, and summarizes the results of recent studies of ethics related to test development and use.

Ethics and test use globally: Recent research

Leach, Mark Dept. of Psychology, Univ. of Southern Mississippi, Hattiesburg, USA
Although test use is universal, no research examined test development and use within international ethics codes. Testing standards in 31 ethics codes representing 35 countries were compared with those of the American Psychological Association's (APA) code. Ethics codes from approximately one third of the countries do not address test use, though there is overlap among some other countries ethics standards. Explaining results, using tests properly, and limiting their use by unqualified persons were most frequently found, while standards discussing test construction and restricting the use of obsolete tests were rare. Ethical issues impacting test development and use are discussed.

Conditions for testing equity in six sub-Saharan African countries

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Chireshe, Regis Educational Foundations, Great Zimbabwe University, Masvingo, Zimbabwe
Folotiya-Jere, Jacquiline Psychology, University of Zambia, Lusaka, Zambia
Mivanyi, Yuwanna Education, Kaduna Technical College, Kaduna, Nigeria
Shumba, Almon Education, University of Fort Hare, Alice, South Africa
Tchombe, Therese Education, University of Buea, Buea, Cameroon
Maluwa-Banda, Dixie Educational Psychology, University of Malawi, Zomba, Malawi
Objective. We investigated local constructions of equity in educational testing in Cameroon, Nigeria, Malawi, South Africa, Zimbabwe, and Zambia. Method. Fifty-nine educationists responded to a regional survey of equity in assessment measure (Male = 37; Females = 21; Mean age = 43.5; SD = 8.01 years). The domains of equity in assessment surveyed included: fairness of assessment, sources of equity, and conditions of equity. Results. Participants perceived equity with alternative ways in which students can demonstrate learning, use assessments where students can work together, and teaching students test taking skills. Conclusion. Learner oriented assessment is important for perceived equity of testing.

Testing and ethics in the United Arab Emirates and the Arab world

Alghorani, Mohammad Adnan Dept. of Psychology, United Arab Emirates Univ., Al Ain, United Arab Emirates

Based on the results of the study on the status of the ethical codes for test development and use in Arab countries (Mhaisin, 2007), there is a dire need to develop relevant ethical codes to the Arab culture which is heavily loaded with Islamic values. Accordingly, a content analysis of the available Arabic and Islamic literatures related to psychological tests and scales was conducted in this study to come up with codes that are relevant to Arab and Islamic cultures. The new codes were integrated with the western codes that are suitable to the Arab culture.

Testing and ethics in the United Arab Emirates and the Arab world

Nassar, Khalaf Dept. of Psychology, United Arab Emirates Univ., Al Ain, United Arab Emirates

The objective of this study is to investigate what ethical codes the Arab universities and psychological associations use while developing and using psychological tests and scales. A questionnaire was distributed to a number of Arab universities, psychological associations, and individuals involved with developing and using tests and scales. The

analysis of the data collected indicated that there are no locality-relevant ethical codes. However, they mostly refer to the western ethical codes when they have to address that issue.

Romanian psychologists' views on ethical test usage

Iliescu, Dragos Dept. of Test Publishing, D&D Research / Testcentral, Bucharest, Romania

Two major developments have marked the general environment of the psychological profession in Romania in the last 3-4 years. We now have a strong stream of test publishing and we now have a Psychological Commission, an institution based on statutory regulations, with the function of registering practicing psychologists and upholding ethical standards related to this profession. However, the attitude of psychologists towards test usage has not changed much. This paper is based on a survey of N~500 psychologists (from the ~3000 formally registered with the Commission), discussing their attitude towards test usage.

Test use and guidance in China

Yan, Greg Dept. of Psychology, Beijing Normal University, Beijing, People's Republic of China

China's three decade-old policy of economic reform and opening up to the outside world have lead to its great economic success. As a results, psychologists are being asked to play an increasingly important roles in the reconstruction of Chinese society. Psychological testing, a bridge that links theoretical advancements and application to real-life practice, is highly recognized by the society. This presentation reviews the stages of test development and use, summarizes the main challenges to be solved, and outlines new regulations and ethics codes for test-related professions.

S-261: Life times, timed life: The Berlin aging study

Ulman Lindenberger, Jacqui Smith (chair)

Longitudinal studies are pivotal in revealing individual differences and commonalities in lifespan development, and in delineating the causal structure, sequencing, and mechanisms of long-term ontogenetic change. Using data from the Berlin Aging Study (BASE), on on-going longitudinal study of 500+ individuals aged 70-103 years with up to 15 years of longitudinal observations, the various presentations in this symposium highlight conceptual and methodological advances in structuring the passage of time in longitudinal studies to arrive at multivariate descriptions and dynamic explanations of individual development in old and very old age. The discussion of Avron Spiro focuses on the promises and challenges of longitudinal studies to further our understanding of lifespan development.

Change in the third and fourth age: Overview of the Berlin Aging Study (BASE)

Smith, Jacqui Inst. for Social Research, University of Michigan, Ann Arbor, USA

Findings from the Berlin Aging Study (Baltes & Mayer, 1999) provide a multidisciplinary portrait of the differential aging and longevity of cohorts of young-old and oldest-old men and women (born between 1886 and 1920). Initial data were collected in 1990-1993 from a locally representative, heterogeneous, age-by-sex stratified sample of Berlin residents (M = 85 years). Six longitudinal follow-ups of the survivors have since been completed (1993-1994, 1995-1996, 1997-1998, 2000, 2004, and 2005). This presentation describes the study design, procedure, and sample evolution, and summarizes key psychosocial findings that reflect the combined influences of biogenetic factors and life history experiences.

Linking days to decades: Late life intraindividual variability across domains

Ram, Nilam Human Dev. and Family Studies, Pennsylvania State University, University Park, USA
Gerstorf, Denis Human Dev. and Family Studies, Pennsylvania State University, University Park, PA, USA
Lindenberger, Ulman Center for Lifespan Psychology, Max Planck Institute, Berlin, Germany
Smith, Jacqui Institute for Social Research, University of Michigan, Ann Arbor, MI, USA

Each person is a complex of characteristics, some of which are changing from moment-to-moment, some from year-to-year. Development is characterized by changes in structure and behavior over time – along multiple time scales. Using data from the BASE we illustrate how “bursts” of measurement, wherein participants complete a battery of measures on multiple occasions within a wave, can be used to understand short-term processes (e.g., reactivity), and how such processes may relate to long-term changes. Specifically, we examine how short term changes in cognition (learning) relate to long-term aging-related decline, and present methods for quantifying intraindividual variability, the “hum” of every day life, across multiple domains of function.

On the dynamic interplay between cognition and emotion in old age: Evidence for dynamic linkages?

Staudinger, Ursula M. Zentr. für Lebenslanges Lernen, Jacobs Universität, Bremen, Germany
Freund, Alexandra M. Institute of Psychology, University of Zurich, Zurich, Switzerland
Gerstorf, Denis Human Dev. and Family Studies, Pennsylvania State University, University Park, PA, USA
 Lifespan research has long been interested in studying associations between cognitive functioning and emotion regulation. In this study, we apply structural equation modelling to 13-year longitudinal data from the BASE in order to link level and change on indicators of positive and negative affect to both level of performance and trial-to-trial variability in perceptual speed. Our results provide evidence for dynamic cross-domain associations and also illustrate the role of health and personality variables for such relations. Our discussion focuses on conceptual implications and considers potentially underlying mechanisms.

Processes of decline in late life: Distance-from-birth vs distance-to-death

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Ghisletta, Paolo Faculty of Psychology and Educ, University of Geneva, Genève, Switzerland
McArdle, John J. Department of Psychology, University of Southern Califor, Los Angeles, USA
Smith, Jacqui Institute for Social Research, University of Michigan, Ann Arbor, MI, USA
Lindenberger, Ulman Zentrum für Lebenserwartung, Max-Planck-Institut, Berlin, Germany

Using longitudinal data from the deceased participants of BASE we examine if, how, and in which domains old and very old individuals exhibit terminal decline in at the end of life. Relative to chronological age, distance to death often accounts for more variance in interindividual differences in change than does age, suggesting that late life decline in some domains is driven by mortality-related rather than age-related processes. Further, methodological advances combining growth and survival models highlight how these processes may be intertwined. We review findings from multiple domains, highlighting both theoretical and methodological implications for the study of developmental and selection processes.

Does social participation attenuate cognitive decline in old age? On testing dynamic developmental hypotheses with longitudinal panel data

Lindenberger, Ulman Zentrum für Lebenserwartung, Max-Planck-Institut, Berlin, Germany

Cross-sectional and longitudinal studies have revealed associations between age differences and age changes among different aspects of behavior. Due to basic limitations of cross-sectional designs and a reluctance to disentangle antecedent-consequent relations in longitudinal data, the functional significance and dynamics of these associations have remained unclear. To overcome this impasse, BASE is using advanced structural equation models representing multivariate longitudinal change as a function of time-based directed relations. I summarize the results of bivariate and quadrivariate analyses addressing antecedent-consequent relations within and across sensory, cognitive, social, and self-related functional domains, and discuss the prospects and constraints of this data-analytic strategy.

S-262: On misery with company: Dyadic perspectives on stress, coping, and intervention

Nina Knoll (chair)

Living in close relationships entails benefits and costs. Both may arise when stress interferes with partners' adaptive capacities. Five studies highlight different stages of partners' stress and coping in contexts including depression of a spouse, academic exams, assisted reproduction, and bereavement. Two studies focus on dyadic support interactions under stress: partners' support mobilization and outcomes (mood, performance) of daily supportive interaction. Studies 3 and 4 examine partners' stress appraisals and perceived coping abilities as predictors of emotional adaptation to potential and severe loss events. A fifth study compares effects of three couple interventions on spousal depression in couples receiving psychotherapy.

Mobilization of social support in dyads: Determinants, consistency and relations to supportive action

Klauser, Thomas Inst. für Psychosomatik, Universität Rostock, Rostock, Germany

OBJECTIVES. Strategies of mobilizing social support were investigated with regard to their relations to gender, depression, relationship type and subsequent support as well as the consistency of self-vs. other-reports in dyads. **METHODS.** Subjects who had encountered a stressful event within the year before interview and their most important support sources were assessed using an item-parallel measure. The sample consisted of 133 dyads, 31 of them involving a depressive member. **RESULTS.** Depression and gender had independent effects on strategy use. Some mobilization strategies seemed to deter support. **CONCLUSIONS.** Implications for the design of coping interventions (i.e., mobilization trainings) are discussed.

Costs of daily support transactions: How long do they last?

Shrout, Patrick Dept. of Psychology, New York University, New York, USA
Barry, Heather Dept. of Psychology, New York University, New York, USA
Lane, Sean Dept. of Psychology, Columbia University, New York, USA
Stadler, Gertraud Dept. of Psychology, Columbia University, New York, USA
Paprocki, Christine Dept. of Psychology, Columbia University, New York, USA

During acute stress, daily emotional support receipt is associated with increased negative mood. Do these effects translate into worse performance on a professional examination and higher post-examination negative mood? Participants were 216 couples

where one partner was preparing to take an important examination. Both members of the dyad completed daily diary reports on support provision and receipt and mood for five weeks prior to the examination and one week following. Passing the examination was ascertained from public records. Receipt of emotional support during exam preparation was positively related to post-exam positive mood and relationship closeness but not to passing.

Situational appraisals and the transmission of depressive symptoms: A study with couples undergoing assisted reproduction treatment

Knoll, Nina Dept. of Medical Psychology, Charité Berlin, Berlin, Germany
Schwarzer, Ralf Dept. of Psychology, Freie Universität Berlin, Berlin, Germany
Kienle, Rolf Dept. of Medical Psychology, Charité Berlin, Berlin, Germany

Objectives: Partners' situational appraisals were investigated as indirect effects in the transmission of depressive symptoms in couples under stress. **Methods:** Situational appraisals and depressive symptoms of 82 couples undergoing assisted reproduction treatment were assessed at two times before and once after pregnancy test. Manifest pathanalyses were conducted. **Results:** Transmission of depressive symptoms from men to women was mediated by women's situational appraisals. Men were affected by their partners' depressive symptoms only indirectly via their partners' appraisals. **Conclusion:** Using a transactional dyadic stress framework for the study of emotional transmission should help to gain a better understanding of its underlying mechanisms.

A longitudinal approach to modeling individual differences in adjustment to bereavement

Burke, Christopher Dept. of Psychology, New York University, New York, USA
Shrout, Patrick Dept. of Psychology, New York University, New York, USA
 Bereavement research often focuses on adaptive versus maladaptive responses to loss. However, because few studies are longitudinal, many cannot distinguish transient reactions from long-term changes or chronic differences. Using data from a prospective survey of bereavement, we examined variability in trajectories of depressive symptoms from pre-loss to four years post-loss using nonlinear statistical methods. We found that higher pre-loss perceived coping ability predicted less distress overall and that greater pre-loss relationship satisfaction predicted less depression long after the loss but was unrelated to the severity of the immediate reaction. These results elucidate how the process of grieving unfolds over time.

Effects of coping-oriented couple therapy on depression

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Bodenmann, Guy Inst. of Family Research, University of Fribourg, Fribourg, Switzerland
Plancherel, Bernard Dept. of Psychology, University of Fribourg, Fribourg, Switzerland
Gabriel, Barbara Inst. of Family Research, University of Fribourg, Fribourg, Switzerland
Charvoz, Linda Dept. of Psychology, University of Lausanne, Lausanne, Switzerland
Meuwly, Nathalie Inst. of Family Research, University of Fribourg, Fribourg, Switzerland
Hautzinger, Martin Dept. of Psychology, University of Tübingen, Tübingen, Germany
Schramm, Elisabeth Dept. of Psychiatry, University of Freiburg, Freiburg, Germany

Interpersonal conditions play a crucial role for onset and relapse-probability of depression. Coping-oriented couple therapy (COCT) treats depression by improving dyadic competences - which at the same time help both partners to enhance relationship quality in the long term. Effects of COCT, Cognitive therapy (CT) and Interpersonal Psychotherapy (IPT) were compared. 60 patients



and their partners were randomized to one of the three treatments. Selfreport data over a study period of 1.5 years show that COCT was as effective in improving depressive symptoms as CT and IPT. Differential effects are presented and discussed with regard to clinical implications.

S-263: Time, space and culture: Chronogenesis in human life course

Tatsuya Sato, Jaan Valsiner (chair)

Time and space are central in all psychological existence. For long time there has been a tradition in psychology to view these categories as separate from everyday experiencing of the world by ordinary human beings, leading to infertile disputes about "Western" and "Eastern" understanding of the two concepts. We bring together international focus on time and space in real human life courses—and introduce the framework of chronogenesis for future psychological investigations. Basic human life activities include chronogenesis—in gender identity, desires for children, childbirth, and child-rearing. By creating new ways of acting human beings create actuality out of potentialities.

A dynamic system theory looks at gender identity

Ma, Chuan Dept. of Psychology, East China Normal University, Shanghai, People's Republic of China

The dynamic systems approach which provides a general framework for studying processes can be applied to the issue of gender identity. Presently, the interpersonal prospect is focused in research of it, though the prospects are multiform before, for instance, concept cognitive, scheme cognitive, social cognitive and etc. Gender identity is interactive with others and the circumstance, so the transition and the crisis emerge. The attractors hidden in them give the chance to explore the development of gender identity and the process is nonlinear. The methods of short-term processes, state space grid and mathematical models can assess it.

East Asian children and their pocket money: Development as negotiation of the cultural norm boundaries

Takahashi, Noboru Dept. of School Education, Osaka Kyoiku University, Kashiwara, Japan

Children who live in consumer society begin to know money at an early age. Money is not only a thing with exchange value, but also a cultural tool which mediates between children and other people. Young children use money under the strong parental control, but gradually they use money based on their own judgment, although they continue to behave in culturally adequate way. In this symposium, I will discuss how east asian children from the four countries become to use money in culturally appropriate way, though deviated from parental control, on the basis of our questionnaire research.

Transition and liminality: Changing identities of Sudanese refugees in Cairo

Mahmoud, Hala W. Social and Develop. Psychology, University of Cambridge, Cambridge, United Kingdom

Sudanese refugees in Cairo experience changes in their lives and identities as a result of their forced migration and the process of "waiting" for resettlement. Like other refugees, they are 'liminal' or transitional beings in the sense that they are no longer citizens of their home country but not yet citizens of another country. Their sense of suspension in time and place, and its associated disturbance in personal trajectories, both result in identities characterized by ambiguity and ambivalence. Those identity changes will be examined in

the light of time dynamics (past-present-future), and will draw on findings from my PhD fieldwork.

Time in life: Uncertainties in the infertility treatment in women

Yasuda, Yuko Graduate School of Education, Kyoto University, Hirakata, Kazakhstan

The aim of this study was to grasp women's experiences of infertility treatments up to stopping. From the viewpoint of highly developed medical science, only the success rate of treatments has become popular, but there are some women who still can't have children even after treatments. I investigated their infertility experiences by interview and narrative analysis. At first they placed all their hopes on treatments, but they gradually came to realize the difficulty in having children even with such treatment. Throughout the processes of treatments, they came to consider the meaning of having children and the view of their lives.

On chronogenesis

Valsiner, Jaan Dept. of Psychology, Clark University, Worcester, USA

Time can be viewed as proceeding irreversibly from the infinite past to the infinite future. In the course of evolution of physical, biological, and social systems this trajectory has become conditionalized through creation of quasi-stable periods in the development of these systems that turn irreversible time into periods that become characterized as homogeneous time units. The mapping of such time units onto actual (irreversible) time is possible through abstractive generalization (Karl Bühler) based on analogical reasoning. Time becomes curvilinear due to its links with the development of open systems in nature and society.

S-264: Top athletes' transition to new career horizons

Kiyoshi Takahashi, Toshihiro Kanai (chair)

The dual objectives of this research are to explore the intellectual developmental stages experienced by Japanese top athletes transitioning from sports careers to post-retirement career options, and to define the skills required for a successful transition. Interviews were conducted with ex-professional soccer players and Olympians. The intellectual stages for career transition correlate to those defined by Kübler-Ross (1969). Readiness for retirement and three kinds of skills by Kats (1955) are important to smooth transition. Conceptual skills and the human skills of top athletes are key components in coping with difficulties in retirement. Top athletes don't develop the necessary skills for career transition, and they need to develop them in the early period of post-retirement.

A narrative discourse of the developmental tasks for Japanese olympians

Toyoda, Norishige Biwako Seikei Sport College, Otsu, Japan

The objective of this study is to investigate the developmental tasks that confronted by the past Japanese Olympians. The study employed a qualitative research method, i.e., the simplified Grounded Theory Approach (GTA), administering a semi-structured interviews to five Japanese ex-Olympians who retired from the competition more than twenty years ago. The study found that the Olympians were encountered three developmental tasks in their processes of career transition; 1) changing of the self, 2) expanding of one's behavior, and 3) cultivating of relationships. Their distinctive, unique experiences were expressed in the narratives of 1) the changes of life patterns, 2) the formation of anchors, 3) the recognition of one's limit, and 4) the psychological sufferings.

Readiness and skills necessary for Japanese professional football players towards the retirement career

Takahashi, Kiyoshi Business Administration, Kobe University, Edinburgh, United Kingdom

Most of the top-athletes have a rough transition between athletic and occupational careers. Since they had been committed overwhelmingly to the sports, the loss of their loved objects hinders a smooth, successful transition. The purpose of this study is to investigate the transition processes among professional football players. Interviews were conducted to ex-football players in the Japanese league. Applying Kubler-Ross's (1969) theory of death and dying, the study found that professional football players experienced the resembling psychological process as dying with the optimistic view of the second life. It also suggested that the readiness for retirement as well as three skills i.e., conceptual, human, and technical skills (Kats, 1955) were important facilitators for smooth transition.

Overcoming incompatibilities with managers and professional players

Hattori, Yasuhiro Business Administration, Kobe University, Kobe, Japan

The objective of this study is to understand functions of compatibility between managers and professional players. Semi-structured interviews were conducted to ex-J League player. I asked them critical incidents with "the least-preferred manager" and "the most-preferred manager". The result showed that compatibility consisted of two dimensions: Cognitive compatibility refers to the awareness of (in)congruence in individual values and intentions between managers and players; Emotional/affective compatibility refers to individual affectivity and attachment to the other. Cognitive compatibility and emotional/affective compatibility influenced each other. To overcome incompatibility, one must attempt to communicate his values and intentions (that is cognitive compatibility) to the other person.

Internal support systems for Japanese top athletes in transition

Ogawa, Chisato Business Administration, Kinki University, Osaka, Japan

The purpose of this research is to explore the internal support systems required for a successful career transition by Japanese top athletes. Interviews were conducted with a randomly selected cohort of thirteen ex-professional soccer players from the Japanese professional football league. The data showed that they rarely explored alternative social networks during their sports careers, because they tended to be short-sighted about career choices outside of soccer. The key factor for the internal support systems is the courageousness in networking (Krumboltz and Levin, 2004). They also need to develop social skills.

External support systems for building a social network between athletes

Hara, Rie Business Administration, Kobe University, Kobe, Japan Ogawa, Chisato Business Administration, Kinki University, Osaka, Japan Sato, Yoshiaki Football Club, Osaka Sangyo University, Daito-shi, Japan

This research aims to investigate the key components of the external support systems supporting the transition from sports careers to post-retirement careers. Qualitative semi-structured interviews were conducted to thirteen retired soccer players in a Japanese league. The data showed that there was a gap between the players' conceptual and social needs to overcome hardship during the transition and the ability of formal career support functions to meet their needs. The most important factor was the approachability to the social networks of

persons who could accept them confidentially and discretely.

S-265: Psychological perspectives on cultural usability and human computer interaction

Torkil Clemmensen (chair)

This symposium analyzes the psychology of cultural usability. In industry, a wealth of usability evaluation methods is used to evaluate computer software user interfaces and other interactive products: Inspection methods, Workplace observation, Think-Aloud Usability Test, etc. Both in the industry and in research there is an interest in understanding cultural issues because there are many cultural factors that influence usability evaluation results. From an academic viewpoint, the psychology of 'cultural usability' should be analyzed within an expanded cultural and social diversity of users and contexts. The symposium will present current research into cultural usability.

Do Asian people take longer for warm-up during usability test?

Li, Huiyang Inst. of Psychology, Chinese Academy of Sciences, Beijing, People's Republic of China **Sun, Xianghong** Inst. of Psychology, Chinese Academy of Sciences, Beijing, People's Republic of China **Zhang, Kan** Inst. of Psychology, Chinese Academy of Sciences, Beijing, People's Republic of China **Clemmensen, Torkil** Dept. of Informatics, Copenhagen Business School, Frederiksberg, Denmark **Shi, Qingxin** Department of Informatics, Copenhagen Business School, Copenhagen, Denmark

Generally speaking, Asian people take longer time for warm-up during everyday communication. They need to ask each other some details about how everything is going before they discuss the topic they concern. Case is the same when they use instant message services on-line. Is this also true during usability test? In this paper, we analyze video record of usability tests in China and Denmark and encode the communication between evaluator and user. The whole process of usability test was divided into three stages: warm-up, formal test, and follow-up interview. It is found that Chinese people took longer in the warm-up stage, and also took longer in conversation management.

Effects of cultural influence while using likert scales in the context of product evaluation in China

Roesse, Kerstin Zentrum für Mensch-Maschine, Tech. Univer. Kaiserslautern, Kaiserslautern, Germany

Likert scales are among the most abundant instruments applied in product development. However various effects, e.g. the reference-group effect, are known to affect the validity of cross-cultural application of likert scales. We compared the application of two- to six-staged likert scales in China. After normalizing the data in order to allow direct comparison, effects of the width of the applied scale on answering patterns were observed of which some in turn can be traced back to cultural effects.

User analysis for South East Asia. Does that work? A cross-check of two methods and two cultures: China and Korea

Braun, Björn-M. Zentr. für Mensch-Maschine, Techn. Univer. Kaiserslautern, Kaiserslautern, Germany

Analysis methods applied in the earliest stage of the product development process are expected to differ in their applicability across cultures. Certain method-traits serve as cultural dependent facilitators of method application while others hinder the efficient application. Reliability, validity and value of user analysis strongly depend on maximizing the prior kind of traits while minimizing the latter for

respective target-cultures and methods. Objective here is to elicit facilitators and obstacles of puzzle interviews and inspiration card workshops for China and Korea.

Communication pattern and usability problem finding in cross-cultural usability testing

Shi, Qingxin Dept. of Informatics, Copenhagen Business School, Frederiksberg, Denmark

Communication plays an important role for the evaluator to find accurate usability problems in formative thinking aloud usability testing in the industrial area. This study tries to investigate the communication pattern of evaluators in the cross-cultural usability testing, and the influence on usability problem finding by doing experiments with Danish users and Chinese users. It will be based on Nisbett's culture theory and Hong's dynamic constructivist approach to culture. The purpose of this research is to propose an effective communication pattern for evaluators to do usability tests with western users or eastern users.

Is cultural factors affect both evaluator's and test user's thinking in a usability test?

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Nisbett found Asians and European people understand the world in different ways. In our simulated usability test, the pictures that Nisbett mentioned in his study were used as experimental material. Test users were asked to describe the content and evaluate them, then pick one of them to make a greeting card for his/her friend. All their description, evaluation the evaluator's analysis was recorded. It was found that, both Danish and Chinese people paid attention to the background and salient objects. It was different from Nisbett's study in which western people only noticed salient objects and not sensitive to background and relationship among objects. It was concluded that ways of thinking was task-dependent.

Usability issues on the Chinese fire information display

Zhang, Liang Inst. für Psychologie, Universität Hamburg, Hamburg, Germany **Sun, Xianghong** Institute of Psychology, Chinese Academy of Sciences, Beijing, People's Republic of China **Qu, Weina** Institute of Psychology, Chinese Academy of Sciences, Beijing, People's Republic of China

The Fire Information Display (FID) is an essential part of high buildings, which helps firefighters' detection more efficiently. Recently, it is getting more widely used with the city's construction developing in China. The experiment was conducted to explore the Chinese FID prototype's usability and practicability, with ten Chinese firefighters participants. The prototype contained four levels of map: vicinity, neighborhood, street, floor-plan, which are four typical levels in American FID, but didn't show the same significance for Chinese firefighters. The results also showed that the Chinese firefighters had the different understandings to the icons meaning and preference to the display frame.

S-266: User psychology and interaction design

Pertti Saariluoma (chair)

User psychology applies psychological knowledge in human-technology interaction design. It is not necessary to use psychological knowledge only in testing existent technologies or new prototypes. It is

also essential to apply it in designing new types of actions in ICT-environments. This is why psychologically grounded human requirements engineering shall be on of the important challenges for user psychological research. In this presentation a number of relevant problems shall be discussed.

From applied cognitive research to neuroergonomics: The quest for ecological validity

Velichkovsky, Boris M. Dept. of Psychology, University of Technology, Dresden, Germany

Recent progress in video-based eyetracking and in building virtual reality environments can be considered as a silent technological revolution in brain and behavioural sciences, approaching that of brain imaging methods. Both methodologies are of particular importance in the quest for more ecological validity. We demonstrate how eyetracking, virtual reality techniques and brain imaging can enrich each other by means of two lines of applied investigations. The first aimed at improving driving safety. The goal of our second study was to improve the productivity of computer-supported cooperative work. Both studies were done in collaboration with globally active automotive companies. Taken together, these studies demonstrate how productive the convergence of several technologies may be in usability research.

Modelling user psychology for efficient usability evaluation

Moeller, Sebastian Deutsche Telekom Labs, Berlin, Germany

In addition to its usefulness during system design and user testing, knowledge on user psychology might enable disruptively new evaluation techniques. For example, models which simulate user behaviour may be used for semi-automatic evaluation of interactive ICT services. In order to be successful, such models have to reflect the user psychology and take into account the perception processes, the user's aims and motivations, the previous experience, the user's mental model of the service, and other psychological factors. In this presentation, the need for such innovative approaches to evaluation is underlined, and the necessary steps for its implementation are outlined.

Emotion-based mobile services and content in public spaces

Saari, Timo Information Technology, Cognitive Science, Jyväskylä, Finland

Ubiquitous media is emerging based on mobile content and services as well as wireless sensor networks. However, what is lacking is a psychologically informed view on how ubiquitous, location-based mobile services evoke emotions and moods as part of the user experience and how this may explain the consumption and use of such services. In media studies, there is a vast literature on mood management, i.e. the motivation to use media to cancel or amplify certain emotional and mood states. A similar approach could be taken to conceptualizing and explaining uses of various mobile, location-based services and content. The presentation will address the relevant problems of emotion and mood-oriented ubiquitous media in public spaces.

S-267: Informal learning on the web: Individual differences and evaluation processes

Yvonne Kammerer, Peter Gerjets (chair)

Using the Web for information and learning purposes imposes high demands on the users. They have to determine their information need, navigate in Web sites and process conflicting contents. Particularly challenging is the evaluation of the



relevance and quality of available information. These processes are fundamentally influenced by individual differences of the users, e.g. prior knowledge, abilities, attitudes, epistemological or self-efficacy beliefs. Moreover, structure and design of the Web environment affect search and information evaluation. This symposium brings together empirical findings and theoretical perspectives that focus on the abovementioned aspects of informal learning on the Web.

What evaluation processes are performed during web search?: An eye-tracking study

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Werner, Benita Hypermedia, KMRC, Tübingen, Germany
Gerjets, Peter Hypermedia, KMRC, Tübingen, Germany

Evaluating information with regard to relevance and quality is a fundamental part of Web search. In a first study, we recorded web search behavior of 5 students (without prompting evaluation processes). Gaze recording allowed for identification of each evaluated hyperlink (i.e. selected and rejected). However, by means of verbal protocols it could be shown that only 5 % of these hyperlinks seemed to be consciously evaluated. This discrepancy between the amount of evaluated hyperlinks visible in verbal and eye-tracking data is currently investigated in a study with 60 subjects testing experimentally how evaluation prompts influence search and evaluation processes.

Teaching students how to evaluate information on the WWW

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Two educational programs based on two transfer theories have been designed and tested. The first theory advocates that transfer of complex cognitive skills is fostered through the development of a rich knowledge structure. The second theory advocates that transfer is fostered through the development of metacognitive skills. The complex cognitive skill central in the educational programs was evaluating results, information and sources while solving information problems using the WWW. Focus of the programs was on knowledge and use of evaluation criteria. Effects of the two programs on increase in knowledge and use of criteria and degree of transfer were determined.

Information search on the web and individual's epistemological beliefs

Kienhues, Dorothe Psychologisches Institut III, Universität Münster, Münster, Germany
Bromme, Rainer Psychological Institute III, University of Münster, Münster, Germany
Stadler, Marc Psychological Institute III, University of Münster, Münster, Germany

When people search the web for medical information, they commonly come across conflicting evidence. This exploratory study focuses on the interplay between epistemological beliefs, medication attitudes, and ability beliefs and dealing with medical information from the web. Participants were 28 German students who had to gain information on cholesterol. 15 pre-selected websites modeling conflicting evidence concerning cholesterol were provided. Results from log-file data, different questionnaires and a retrospective interview indicate that discipline-specific epistemological beliefs are affected by dealing with conflicting evidence on the web. Furthermore, Internet search differs depending on attitudes, ability beliefs, and personal epistemology.

Internet-specific epistemic beliefs and internet-based learning activities among Norwegian physics undergraduates

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A sample of 84 Norwegian physics undergraduates answered questionnaires concerning epistemic beliefs about Internet-based knowledge and knowing, Internet self-efficacy beliefs, and Internet-search and -communication activities. Using two dimensions of epistemic beliefs, one concerning the certainty and simplicity of Internet-based knowledge, and one concerning the evaluation of knowledge claims encountered on the Internet, preliminary analysis indicated that students' epistemic beliefs predicted their self-reports of Internet-search and -communication activities in better and more consistent ways than did Internet self-efficacy beliefs.

Memory for information spaces: Effects of visuo-spatial abilities and representational aids

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Vörös, Zsófia LMDC, CNRS - University of Poitiers, Poitiers, France
Nivet, Clément LMDC, CNRS - University of Poitiers, Poitiers, France
Fourmaux, Jérémy LMDC, CNRS - University of Poitiers, Poitiers, France
Le Bigot, Ludovic LMDC, CNRS - University of Poitiers, Poitiers, France
Plehl, Csaba Cognitive Science BME, Budapest University of Technology, Budapest, Hungary

Prior research suggests that visuo-spatial abilities may be involved in hypertext learning. We investigated whether site maps help low-ability users learn the structure of hierarchical hypertext. 32 university undergraduates explored simple hypertexts organized in a hierarchical but arbitrary fashion. In half of the trials, the hypertexts included an interactive content map. After navigating, the participants were asked to reconstruct the hypertext layout and probed for their memory of page contents. We expected an interaction between the inclusion of a map and the participants' level of visuo-spatial ability. Data were being collected at the time of proposal.

Web information search in sign language

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Web information search is a challenge for minority language users such as Sign Language (SL). In one study we compared two navigation mechanisms based on textual hyperlinks linked to embedded SL videos: Multi-Videoframe vs. Unique-Videoframe. Whereas a group of Deaf SL users were comparably efficient in Web search using both mechanisms, only the second one correlated with their verbal categorization abilities and reading comprehension level. These results were interpreted as a higher efficiency of the first mechanism to facilitate SL use. We discuss the necessity of considering users' individual differences in knowledge and language proficiency to improve information search.

S-268: An (environmental) psychological perspective on technology transfer to developing countries

Melanie Jäger, Friederike Arnold (chair)

The transfer of technological innovations to developing countries is often seen as a motor of social development and a key to increase life quality in

poor rural areas. But the requirements to realize this relationship are manifold and challenging. A goal of this symposium is to discuss these challenges to project partners, process design and the development and adaptation of technologies from the point of view of environmental and organizational psychology. Psychological theories and concepts to investigate the process of transfer will be considered as well as methods to monitor the transfer and evaluate the impact of technologies.

Everything flows: The importance of fluidity in rural electrification projects

Jäger, Melanie Inst. für Psychologie, Universität Magdeburg, Magdeburg, Germany

The nature scientific concept of fluidity, describing a substance or situation that can easily adapt itself or be integrated into something else is taken to evaluate a technological innovation in a rural electrification process in Madagascar. The adaptability of Renewable energy technologies to different environmental conditions, socio-cultural processes and human demands is researched in a field study using ethnographic methods and interviews with users and stakeholders. First results show the usefulness of the concept of fluidity to understand the different identities a technology can have on a micro, meso and macro level and also to describe social systems and individuals.

Supporting the transfer of water treatment technologies with the help of technology mediation

Arnold, Friederike Geographisches Institut, Humboldt-Universität zu Berlin, Berlin, Germany

When transferring water treatment technologies to so-called emerging countries, many problems may occur. Amongst the reasons for these problems is the fact that different phases of the innovation and transfer process take place at different places and involve different actors who have different perceptions, aims and habits. Intermediaries are persons or organisations who can bridge these differences. Within the Technology Mediation Approach (Arnold, Mieg & Hoffmann, 2007), the role of intermediaries is explored. Qualitative data on the functions and characteristics of intermediaries in the technology transfer process are presented.

Using the social network: Promotion of SODIS in a high density area in Simbabwe

Krämer, Silvie SIAM, EAWAG, Dübendorf, Switzerland

Solar water disinfection (SODIS), like other innovations to be introduced in developing countries, encounters problems in the uptake and usage process. For SODIS, untreated water in transparent PET-bottles is exposed to the sun for 6 hours. UV-radiation and heat cause microbiological disinfection of the water. To avoid slow uptake as experienced in past projects, social network and communication attributes have been analyzed and used to shape dissemination strategies. Results will be discussed. A pass-on-task will be compared with a request for talking about SODIS or to do SODIS and the impact of bottle centers to overcome bottle inavailability.

Successful long-term adoption of SODIS: Evaluating different commitment interventions in rural Bolivia

Tamas, Andrea SIAM, EAWAG, Aquatic Research, Dübendorf, Switzerland

SODIS (Solar Water Disinfection) is a simple drinking water treatment method designed for the use at household level. We conducted a study on the effective promotion of SODIS testing different commitment interventions to support especially habit formation. Interventions applied were prompts, public commitment, intention development, feedback and combinations. Investigation did

not only focus on the influence on behaviour change, but also included behaviour determining factors such as beliefs, attitudes, and social norms. Results show an interesting pattern of associations between those factors, habits and behaviour intensity depending on the intervention. Further discussion includes recommendations for future field applications.

Socio-technical system analysis in the field of rural electrification with solar energy: A contribution to quality assurance of development cooperation projects

Vogt, Gisela Freiburg, Germany **Schüpbach, Heinz** Arbeits- & Organisationsps, Universität Freiburg, Freiburg, Germany

Around the world, rural electrification projects applying solar energy face major problems in being implemented and run sustainably. This study links the paradigm of socio-technical system analysis with the total quality management concept of the European Foundation for Quality Management (EFQM Model). Results indicate that there is empirical evidence to regard these projects as socio-technical systems, which has implications for the planning and realisation of these projects. The EFQM Model proves to be a useful framework to study and structure quality criteria in a systematic way and to judge the overall sustainability of the projects. Further research on psychological quality criteria is needed to adapt these better to the given context to support technology transfer.

Social aspects in the introduction of renewable energy in rural Indonesia

Djuwita Chaidir, Ratna FKMUI, Universitas Indonesia, West Java, Indonesia

Objectives of the study were to explore social & economical factors that determine if a PV-Hybrid System is socially accepted and will function technically well. Questionnaire and group discussions were used as data collection methods. Data was collected among adult villagers in 2 remote villages (Kalimantan and Sulawesi) and one less remote village in Java. Descriptive and qualitative methods were used to analyse the data. The results show that energy consumption is higher in less remote villages and that not only technical but also social-cultural management and finance skill should be trained more to influence consumption.

S-269: Decolonizing transgender psychology: Transgender identities and issues within cultural contexts

Vic Munoz (chair)

Culture is central to understanding transgender people in ways that move beyond the dominant white Western views of what it means to be lesbian, gay, bisexual, and transgender. Through research which focuses on the interactions between gender, sexuality, and culture within decolonizing movements (Maori, Native Hawaiian) and research that critiques the hegemony of Western views on gender we will address transgender identities and issues in ways that offer new understandings of LGBT people of color (psychoanalytical, culturally appropriate, as critique of the dominant). Research shows culturally grounded approaches are needed to support the self-determination of LGBT peoples across cultures.

Exploring Takatapui identity within the Maori community and implications for transgender identity

Aspin, Clive Dept. of Education, University of Auckland, Auckland, New Zealand

Increasing numbers of Maori, the indigenous people of New Zealand, are reclaiming the term

takatapui to describe their sexual identity. The term derives from the pre-colonial past and encapsulates the cultural and sexual components of one's identity. For many, it is a preferred descriptor over terms which derive from Western paradigms. Research suggests that takatapui identity provides beneficial outcomes for Maori, including transgender people, who are often marginalized because of their sexuality. This presentation will describe strategies that can be used to facilitate access to culturally appropriate support systems for indigenous transgender people and others from sexual minorities.

The accident of gender in the shadow of culture

Gozlan, Oren Gozlan Psychology, Toronto, Canada
This paper considers the desire to be "normal" as inhibition that prevents experimentation with the accidents of gender. Inhibition is viewed here as a guard against the clash between desire and culture. Analyzing the gender "experiments" of the character "Calliope" in J. Eugenides' *Middle Sex*, this paper offers a conceptualization of gender as an existential dilemma, lack, desire and defense against trauma; that is played out in and affected by the social. The author turns to Lacan and Verhaeghe's emphasis on desire as a bridge between interiority and object relations arguing for a theory of gender that tolerates the inchoate.

A woman, ashamed: On shame, loss and mourning in transsexual transition within western culture context

Maurer, Offer Dept. of Psychology, Isr. Branch of Derby Univ., Tel Aviv, Israel

Many male-to-female transsexuals during a certain phase of the transsexual journey experience excruciating feelings of shame upon the realization of being a woman. Drawing upon clinical material I will demonstrate that this burden of shame stems from internalized western culture's views denigrating femininity. This intra-psyche conflict constitutes a normal phase of the transsexual transition; a phase resembling a gender-melancholic phase in the so-called 'regular' female development. In therapy, narcissistic losses of power and competence, subjectively felt to be 'naturally' masculine, need to be mourned, rediscovered and integrated as qualities existing also in the feminine.

Toward ethnic transgender psychologies: How can gender identities be decolonized?

Munoz, Vic Dept. of Psychology, Wells College, Aurora, USA

The master narrative of Gender Identity Disorder was written to make gender variance intelligible within a classed and racialized Western worldview. Globalization has further entrenched Western concepts of gender rigidity and the acceptance of GID. Using longitudinal data from the Gender Identity and Sexual Orientation Study and cultural psychological research this paper theorizes what it would mean to decolonize gender identities. Rather than affirm Western concepts of pathology and the abnormal, which have historically led to the marginalization of transgender people across cultures, this paper explores psychological self-determination and anti-colonial approaches to psychological health.

S-270: Depression in mainland China: Predictors, correlates and consequences

John Abela (chair)

Epidemiological studies suggest that the prevalence of depression in China has risen in recent decades - particularly among adolescents. With respect to adolescents, China has the second highest suicide rate in the world. Despite such alarming statistics,

little research has examined models of the etiology of depression in China. The speakers in the current symposium will present results from research examining the predictors, correlates, and consequences of depression in mainland China. Particular emphasis will be placed on highlighting both the cross-cultural similarities and differences between the findings presented and findings from research conducted in Western cultures.

Lifetime history of major depressive disorder in urban and rural adolescents in Hunan, China: Prevalence, course, symptom manifestation and correlates

Yao, Shuqiao Medical Psychological Research, The Second Xiangya Hospital, Changsha, People's Republic of China **Zhu, Xiongzhao** Medical Psychological Research, Second Xiangya Hospital, Changsha, People's Republic of China **Abela, John** Dept. of Psychology, McGill University, Montreal, Canada **Sun, Jiahong** **Starrs, Claire** **van Hammel, Anton** **Page, Gabrielle**

Epidemiological studies conducted within mainland China over the past decade suggest that depression is more common than was previously believed. Further, although no formal epidemiological studies have been conducted using child or adolescent samples, preliminary findings suggests that the prevalence rates of depression in these age groups exceed those seen in adults. The current study examined lifetime prevalence rates of major and minor depressive disorder in two samples of adolescents in mainland China: (1) 300 adolescents in urban Changsha and (2) 300 adolescents in rural Liuyang. In addition, we examined demographic correlates of depression in and across samples.

Chinese somatization and western psychologization: Is cognitive symptom emphasis a western culture-bound syndrome?

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The expectation that Chinese people present distress somatically is a central prediction of cultural psychopathology, but empirical research has been mixed. This study examined symptom presentation in Chinese (n=175) and Euro-Canadian (n=107) outpatients. Chinese outpatients reported more somatic symptoms on interview compared with Euro-Canadians, who themselves reported more psychological symptoms on both interview- and questionnaire-based assessment. The relation between culture and somatization was mediated by externally oriented thinking. Chinese somatization effects were weaker than Western psychologization effects, which were driven by cognitive rather than somatic symptoms. Other studies have shown somatization worldwide; cognitive emphasis may be unique to Western cultures.

Interpersonal vulnerability to depression: A multi-wave longitudinal study of adolescents in urban and rural China

Abela, John Dept. of Psychology, McGill University, Montreal, Canada **Sharp, Aaron** **Auerbach, Randy** Dept. of Psychology, McGill University, Montreal, Canada **Yao, Shuqiao** Medical Psychological Research, The Second Xiangya Hospital, Changsha, People's Republic of China **Zhu, Xiongzhao** Medical Psychological Research, Second Xiangya Hospital, Changsha, People's Republic of China

Interpersonal theories of depression posit that interpersonal factors serve as buffers against depression following negative events. Such interpersonal factors are hypothesized to buffer against



the deleterious effects of stress by enhancing one's coping abilities. The current study examined theories of interpersonal vulnerability to depression in samples of adolescents in both urban ($n=558$) and rural ($n=592$) China using a multi-wave longitudinal design. Results indicated that high quality interpersonal relations with both parents and peers buffered against the deleterious effects of negative events on depressive symptoms.

Cognitive vulnerability to depression in adolescents from mainland China

Auerbach, Randy Dept. of Psychology, McGill University, Montreal, Canada **Abela, John** Dept. of Psychology, McGill University, Montreal, Canada **Zhu, Xiongzhao** Medical Psychological Research, Second Xiangya Hospital, Changsha, People's Republic of China **Yao, Shuqiao** Medical Psychological Research, The Second Xiangya Hospital, Changsha, People's Republic of China

In the present study, we examined whether cognitive vulnerability factors moderated the relationship between stress and depressive symptoms. At Time 1, 411 adolescents completed self-report measures assessing cognitive styles, stress, and depressive symptoms. Follow-up assessments occurred every four weeks (Time 2-6), and participants completed measures assessing stress and depressive symptoms. Results of multilevel modeling analyses indicated that individuals who reported higher levels of cognitive vulnerability, as compared to lower levels, reported greater increases in depressive symptoms following the occurrence of stress. These findings suggest that models of cognitive vulnerability developed with Western samples may be applicable to mainland China.

Negative attachment cognitions as a vulnerability factor to depressive and anxious symptoms in university students in Hunan, China

Zhu, Xiongzhao Medical Psychological Research, Second Xiangya Hospital, Changsha, People's Republic of China **Yao, Shuqiao** Medical Psychological Research, The Second Xiangya Hospital, Changsha, People's Republic of China **Abela, John** Dept. of Psychology, McGill University, Montreal, Canada **Tong, Xi** **Auerbach, Randy** Dept. of Psychology, McGill University, Montreal, Canada

This study examined whether negative attachment cognitions confer vulnerability to the development of depressive symptoms. Participants included 662 first-year university students from Hunan, China. During an initial assessment, participants completed measures assessing attachment cognitions and depressive symptoms. Participants subsequently completed measures assessing negative events and depressive symptoms once a month for six months. When examined as a continuous variable, results indicated that higher levels of negative attachment cognitions were associated with greater increases in depressive symptoms following negative events. When examined as a categorical variable, results did not provide indicate an association between specific attachment styles and vulnerability to depression.

Rumination as a vulnerability factor to depressive and anxious symptoms in urban and rural adolescents in mainland China

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The current prospective study examined the applicability of the response styles theory of depression to

samples of adolescents in both urban ($n=558$) and rural ($n=588$) China. In line with hypotheses, in both samples, a greater tendency to engage in rumination in response to depressed mood was associated with increases in both depressive and anxious symptoms over time. Contrary to the response styles theory, and to results obtained in research examining the theory in samples of adolescents in Western countries, in both samples, girls did not report a greater tendency to engage in ruminative responses than did boys.

S-271: The wording effect: Structural models and consequences for validity

Wolfgang Rauch, Karl Schweizer (chair)

The symposium concentrates on methodological aspects of the effects resulting from including positively and negatively worded items into a scale. The prevention of acquiescence by means of such items has usually disadvantageous consequences: the structure of such a scale shows a deviation from the aspired unidimensionality. The presentations address the problem resulting from the combination of positively and negatively worded items from different perspectives: (1) in the search for the best representation of structure the appropriateness of various structural models is investigated; (2) the correlates of structural components are identified. (3) the dependency of the problem on the contents of the scales is considered.

The factor structure of self-report instruments comprised of positive and negative polarity items

Bors, Douglas A. Dept. of Psychology, University of Toronto, Toronto, Canada **Vigneau, Francois** Dept. of Psychology, Université de Moncton, Moncton, Canada

Using the multi-trait/multi-method technique we have analyzed several self-report instruments comprised of positive and negative polarity Likert items: Need for Cognition, Tolerance of Ambiguity, and the State-Trait anxiety measure. Using confirmatory factor analyses, these instruments were examined using various measurement models. In the trait/method model, the trait was defined as including all items for the particular scale, whereas the two method factors were defined by the polarity of the items. Using a range of indices, the trait/method model was consistently the best fit. These findings were consistent within a scale across languages (French and English) and across scales.

Personality correlates of method effects to negatively worded items on the RSES

Di Stefano, Christine Dept. of Psychology, University of South Carolina, Columbia, USA **Mottl, Robert** Department of Kinesiology, University of Illinois, Urbana, IL, USA

This paper used a path analysis strategy to investigate the presence and correlates of method effects associated with negatively worded items on the Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1989). Seven personality measures were included and a MIMIC model was run using sex as a grouping variable. Path models included scales related to social desirability, evaluations by others, and self regulation of behavior. Identification of predictors related to the presence of method effects may help researchers identify personality traits of male and female subjects who are more prone to exhibit this response set due to negative item wording.

The investigation of the dimensionality of social optimism by means of the fixed-links model

Schweizer, Karl Inst. für Psychologie, Universität Frankfurt, Frankfurt, Germany

The paper reports on the investigation of social optimism data by means of a combination of the standard structural equation model and the fixed-links model. The standard structural equation model serves the estimation of loadings and the fixed-links model the estimation of the variances of latent variables. The investigation starts with a comprehensive model that includes latent variables representing bipolar and unipolar social optimism and pessimism. Since the maximum likelihood estimation method provides standard errors for the variances, the statistical significance of the latent variables can be investigated. The results suggest the elimination of the unipolar social pessimism latent variable.

Investigating the effect of item wording using the method effect model

Pohl, Steffi Inst. für Psychologie, Universität Jena, Jena, Germany

When positively and negatively worded items are used for the measurement of a construct, method effects often occur. The method effect (ME) model is introduced which allows modelling method effects in multitrait-multimethod designs. The definition of the method effects is here in line with a causal theory, allowing under certain conditions a causal interpretation of the method effects and, thus, a straightforward interpretation. Different forms of the ME model are presented in which trait and method factors are modelled in different ways with different interpretations. Recommendations for choosing an appropriate model for a research question are given and illustrated on an example investigating the effect of item wording.

Ideal point response processes as an alternative explanation for the wording effect

Rauch, Wolfgang Inst. für Psychologie, Universität Frankfurt, Frankfurt, Germany **Luu, Johanna** Inst. für Psychologie, Universität Frankfurt, Frankfurt, Germany

Ideal point response models are explored as an alternative explanation for item-keying related factors. In ideal point models it is assumed that the probability of endorsing an item is highest when trait score and the item's position on the latent continuum coincide; in contrast, factor analyses assume that endorsement probability increases with increasing trait scores on the latent continuum and thus can be high even when trait score and item location are far apart. Data from an extended optimism questionnaire serve to illustrate the difference of the approaches and the consequences of assuming the wrong response model.

Temporal stability of wording effects: Empirical evidence from short-term test-retest designs

Vautier, Stéphane Dept. of Psychology, Université de Toulouse, Toulouse, France

Wording effects can be defined as true-score differences due to semantic nuances conveyed by the items used in rating scales. The effect of semantic nuances on the measurement process can be analyzed at the item level or at the level of composite scales. Wording effects can be viewed as individual difficulty parameters. We show that in short-term test and retest designs, temporal stability of method effects can be assumed, as shown by appropriate structural equation models. These models permit to assess how method effects do bias the measurement of inter-individual variability on target constructs.

S-272: Bologna process: New challenges on higher education

Edith Braun (chair)

45 European countries agreed upon the Bologna process: the adoption of comparable higher education degrees. During this process, university teaching is supposed to become more focussed on fostering key competences and employability. Furthermore, the quality of higher education is required to be proved empirically. We will bring together five national views: Looking at the relation of teaching aspects and enhancement of competences (Schaeper/ Germany), the relation between higher education and employment (Arthur & Little/ UK), the possibilities of competence assessment (Baartman/ the Netherlands, Bieri & Schuler/ Switzerland, Maier & Paechter/ Austria), and emotional resistance while the changing process (Braun/ Germany).

What is value of higher education?

Arthur, Lore Faculty of Education, The Open University, Milton Keynes, United Kingdom
Little, Brenda CHERI, Open University, London, United Kingdom

In the main, UK undergraduates spend less time on higher education and feel less prepared for work after graduation than those in most other European countries. UK employers, therefore, carry a considerable burden for staff development, again more so than is the case in most other EU countries. We will look at the value and purpose of higher education in light of Bologna and the relationship between higher education and graduate employment. The paper is based on recent findings of a major study "The Flexible Professional in the Knowledge Society" (REFLEX) within 13 EU countries and Japan (N=30,000).

Assessment of learning outcomes using competence assessment programmes

Baartman, Liesbeth Dept. Educational Sciences, Utrecht University, Utrecht, Netherlands

Higher education in the Netherlands increasingly focuses on competence development. Adequate methods to assess competence acquisition are therefore needed. This research focuses on Competence Assessment Programmes (CAPs), including traditional knowledge tests and methods such as performance assessments. Eight schools evaluated their CAP on twelve variables, including stimulation of self-regulated learning and effects on learning processes. Results show differences between "traditional" and "innovative" approaches towards competence assessment. Based on the results, a theory was developed to study the relationship between different learning environments, students' learning conceptions, and their learning outcomes in terms of learning activities (process) and test results (products).

Assessing future teachers' competence in an assessment centre

Bieri, Christine Entwicklung, Berufsidentität, Pädagogische Hochschule Zürich, Zürich, Switzerland
Schuler, Patricia Zürich, Switzerland

There is increasing interest in teachers' cross-curricular competencies as a result of reforms in teacher training and the "Bologna Process". Teachers need a variety of social skills in order to succeed in their professional career. At the University of Teacher Education in Zurich future students who do not have the appropriate formal qualification, are required to pass several examinations and participate in an Assessment Centre as well. The underlying model of competencies is currently being evaluated in a longitudinal study. The initial findings regarding assessment validity

and self-other agreement are presented. The implications for practice are discussed as well.

Emotion within change management of higher education

Braun, Edith Schul- & Unterrichtsforschung, Freie Universität Berlin, Berlin, Germany

It is argued that teaching that deals with learning as an active process of constructing knowledge ("student-focused approach") is more effective than teaching seen as the transfer of knowledge ("teacher-focused approach"). Hypothesising that teachers' behaviour is influenced by their conceptions of learning, we investigate the correlation between these conceptions and their use of teaching techniques. We go on to prove that students report higher gains in competences when their lecturers have adopted a more distinct student-focused approach. However, as found previously, teacher-focused and student-focused approaches are two independent scales in our sample.

Evaluation of university courses by students' assessment of gains in competences

Maier, Brigitte Inst. Pädagogische Psychologie, Universität Graz, Graz, Austria
Pächter, Manuela Inst. für Pädag. Psychologie, Universität Graz, Graz, Austria

A model for the evaluation of university courses is introduced which assumes that university education should impart the general competence to act and to solve problems. This competence comprises several spheres such as expertise in the knowledge domain, professional, social and personal competence, plus (in media-based courses) media competence. Questionnaires were developed in which students are to assess their gains in various competence domains in a course. The test quality of the questionnaires proved to be very satisfactory. Besides, bias variables such as prior knowledge or interest in the course topic have little or even no influence on students' assessments.

The role of key competencies in the Bologna process: Rhetoric and reality

Schaeper, Hilde Absolventenstudien, HIS, Hannover, Germany

The Bologna process places special emphasis on the outcomes of higher education in terms of employability and key competencies. Taking Germany as an example, the paper examines the question whether the higher education reform actually has led to an enhanced acquisition of key competencies. Based on constructivist learning theories we, in addition, test the hypothesis that an activating learning environment enhances both, the acquisition of disciplinary and key competencies. We use data of a survey among higher education graduates of the academic year 2005. The results of the linear regression analyses allow conclusions about the ingredients of a competence-oriented teaching.

S-273: Perception and performance in real, complex environments

Friedrich Müller (chair)

Experimental studies are introduced which deal with perceptual processes and performance in complex everyday life situations. The presentations focus on method and experimental designs which take the specific environments into account.

Assessment of occupational exertion and strain in laboratory- and real occupational environments

Müller, Friedrich Inst. für Exp. Wirtschaftspss., Leuphana Universität Lüneburg, Lüneburg, Germany
In order to obtain veridical level information of work related load, measures of physical exertion

and mental strain are proposed which are based on the Category Partitioning (CP) procedure. The requirements for the application of the CP-technique are introduced together with experimental foundations of the procedure and various examples of industrial applications which verify the reliability and validity of the proposed measures and demonstrate the successful use in real occupational environments.

Perception-action dynamics of locomotion with extension of the body

Higuchi, Takahiro Dept. of Health Promotion Sc., Tokyo Metropolitan University, Tokyo, Japan

I report several experimental studies regarding how individuals safely pass through narrow openings when the space required for passage is transiently extended with external objects (e.g., carrying a shopping bag) when walking, using a wheelchair, or wearing shoulder pads as American football players do). On the basis of on the results obtained from my kinematic and psychophysical studies, I will demonstrate that individuals are able to perceive altered action capabilities for aperture crossing under a variety of form of locomotion with extensions, although this is likely to occur only for well-learned actions performed in realistic settings.

Learning musical expressions using visual feedback

Sadakata, Makiko Inst. for Cognition, Radboud University Nijmegen, Nijmegen, Netherlands
Timmers, Renee Nijmegen Inst. for Cognition, Radboud University Nijmegen, Nijmegen, Netherlands
Brandmeyer, Alex Nijmegen Inst. for Cognition, Radboud University Nijmegen, Nijmegen, Netherlands
Desain, Peter Nijmegen Inst. for Cognition, Radboud University Nijmegen, Nijmegen, Netherlands

Expressive performance of music is a complex behavior and it is learned usually by imitation of master musicians. This learning process usually does not contain explicit instruction about the physical parameters of the sound, such as change in timing and loudness. We aim at developing a feedback system that monitors students' performance and provides real time visual feedback of these physical parameters. We examined the effect of providing different types of visual feedback on the success of imitation. In general, the method seems to be helpful, although size and direction of the effect depend on the types of visual feedback.

Reaction times in automobile driving under various arousal states

Mori, Shuji Fac. of Informat. Science, Kyushu University, Fukuoka, Japan

Driving automobiles is quite complex human performance, and erroneous performance is likely to result in serious consequences. Driver's arousal state is a crucial factor in automobile driving, and it affects driver's reaction times to external signals. This paper reports our ongoing study investigating quantitative relation between drivers' reaction times and their arousal states. We measured reaction times in simulated driving situation under various arousal states while monitoring temporal changes in width between lower and upper eyelid, or eye-opening rate, as a measure of arousal states. The results confirm close relation between driver's arousal state and reaction time.

Movement planning under risk, decision making under risk

Maloney, Laurence Psychology and Neural Science, New York University, New York, USA

I'll present a statistical decision theoretic model of ideal movement planning that takes into account a subject's spatial and temporal motor uncertainty. I'll summarize experiments in which subjects carried



out speeded motor tasks. Subjects consistently chose movements that were close to optimal. This outcome is surprising: these motor tasks are equivalent to decision making under risk and subjects making decisions under risk typically do not maximize expected gain. I'll describe recent work in which we translate classical decision making experiments (concerning the independence axiom) into motor form and compare decision making under risk to movement planning under risk.

Implicit processes in moral decision making: Why milliseconds matter

Marquardt, Nicki Inst. Exp. Wirtschaftspsychol., Leuphana Universität Lüneburg, Lüneburg, Germany
Höger, Rainer Inst. für Exp. Wpsy, Leuphana Universität Lüneburg, Lüneburg, Germany
Roidl, Ernst Inst. für Exp. Wpsy, Leuphana Universität Lüneburg, Lüneburg, Germany

The present study examines the relationship between implicit mental processes and moral decisions in business. Based on the dual-process view in implicit social cognition, it is argued that moral judgments can rely on two different modes of information processing (implicit vs. explicit processes). In order to test this assumption, several experiments were conducted. The participants were supposed to work on a complex ethical decision-making task. Implicit processes were assessed with latency-based measures (e.g. Implicit Association Test, Eye-Tracking). Different questionnaires were used to diagnose explicit judgmental processes. The results show that latency-based measures are a good predictor for moral decision making.

S-274: Large survey research on well-being and health: Similarities and differences in findings from Europe and the USA

Jacqui Smith, Felicia A. Huppert (chair)

Health is highly salient to a sense of well-being in the second half of life, but specific individual and societal contexts may influence the strength of the relationship. Speakers in this symposium present findings from three comparable representative surveys of over-50 populations: the Health and Retirement Study (HRS) in the USA, the English Longitudinal Study of Ageing (ELSA), and the Survey of Health, Ageing and Retirement in Europe (SHARE). Beyond the similar role of socioeconomic disparities in health in each country, variations in reported well-being are associated with nation-specific contexts and subgroup and individual differences in social roles and health dynamics.

Health and well-being: International comparisons in Europe

Boersch-Supran, Axel Economics of Aging, Mannheim Research, Mannheim, Germany
 The social gradient of health disparities is well-documented. Does this extend to well-being? We examined this question using comparable data on health and well-being from 11 European countries from the 2004 Survey of Health, Ageing and Retirement in Europe (N = 11,273). Older persons in the north of Europe are better off financially and are in better health, but this does not translate into corresponding mortality differences. The strong relation between health and socioeconomic status also holds for mental health and well-being. Europe exhibits large variations in health, well-being and socio-economic status, potentially caused by different welfare policies.

Health has different effects on well-being in England and the United States

Clarke, Philippa Inst. for Social Research, University of Michigan, Ann Arbor, USA
Weir, David Institute for Social Research, University of Michigan, Ann Arbor, MI, USA
Smith, Jacqui Institute for Social Research, University of Michigan, Ann Arbor, MI, USA

We compare psychological well-being among adults over age 50 in the United States (HRS) and England (ELSA), and examine cross-national differences in the effect of disability on well-being. In all age groups, American adults report lower life satisfaction than adults in England (controlling for gender, marital status, and race/ethnicity). However, in the young old (age 65 to 80) and in the midlife period, American adults report a higher sense of control. In both countries, disability is associated with lower life satisfaction and decreased control. Disability is more problematic for control among American adults than for their English counterparts. These results highlight the divergent consequences of disability for well-being across nations.

Emotional adaptation after the onset of a serious physical disability

Smith, Dylan M. Dept. of Internal Medicine, University of Michigan, Ann Arbor, MI, USA
Brown, Stephanie Dept. of Internal Medicine, University of Michigan, Ann Arbor, MI, USA
Kabeto, Mohammed Dept. of Internal Medicine, University of Michigan, Ann Arbor, MI, USA
Langa, Kenneth Dept. of Internal Medicine, University of Michigan, Ann Arbor, MI, USA

Although emotional adaptation - recovery of well being in the face of difficult circumstances - is a widespread phenomenon, recent studies cast some doubt about whether people can recover a substantial part of well being after highly adverse life events, such as new disabilities. We examined this issue using HRS data, and found a pattern consistent with hedonic adaptation; loss of well being just before and especially after the onset of a new disability, followed by an increase in well being over time. Respondents had regained about half of their lost well being by 6 years after the onset of disability.

Caregiving behavior is associated with decreased mortality risk

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Smith, Dylan Dept. of Internal Medicine, University of Michigan, Ann Arbor, MI, USA
Schulz, Richard Ctr for Social & Urban Rese, University of Pittsburgh, Pittsburgh, PA, USA
Kabeto, Mohammed Dept. of Internal Medicine, University of Michigan, Ann Arbor, MI, USA
Ubel, Peter Dept. of Internal Medicine, University of Michigan, Ann Arbor, MI, USA
Poulin, Michael Dept. of Internal Medicine, University of Michigan, Ann Arbor, MI, USA
Kim, Catherine Dept. of Internal Medicine, University of Michigan, Ann Arbor, MI, USA
Yi, Jaehee Dept. of Internal Medicine, University of Michigan, Ann Arbor, MI, USA
Langa, Kenneth Dept. of Internal Medicine, University of Michigan, Ann Arbor, MI, USA

Caregivers have been shown to be at-risk for health problems, including increased mortality. However these findings are based largely on studies that do not measure caregiving behavior separately from the circumstance of having an ailing spouse (spousal need). We examined the separate influences of caregiving behavior and spousal need on 7-year mortality risk using the HRS data. Results of models adjusted for health and other demographics demonstrated that high levels of caregiving behavior were predictive of decreased mortality risk. These results are consistent with the growing research on the health benefits of helping others.

Psychological well-being is associated with higher levels of cognitive function

Llewellyn, David J. Dept. of Clinical Medicine, University of Cambridge, Cambridge, United Kingdom
Lang, Iain Epidemiology & Pub. Health, Peninsula Medical School, Exeter, United Kingdom
Lang, Kenneth Dept. of Internal Medicine, University of Michigan, Ann Arbor, MI, USA
Huppert, Felicia Department of Psychiatry, University of Cambridge, Cambridge, United Kingdom

While depression is related to poor cognitive function, little is known about the relationship between psychological well-being and cognitive function. We investigated this in 11,234 non-institutionalized adults aged 50+ in the English Longitudinal Study of Ageing (ELSA). Psychological well-being, measured by the CASP-19, was positively associated with cognitive function after adjusting for depressive symptoms, physical health, health-related behaviors, and sociodemographic factors. Similar associations were observed for men and women, and across several different domains of cognitive function. These findings are consistent with evidence that positive mental states can improve cognitive processes, and may have implications for rates of cognitive decline.

S-275: Coping with cancer

Shulamith Kreitler, Marek Blatny (chair)

The symposium deals with coping with cancer, focusing on major themes concerning intervention methods in psychooncology: quality of life of children with cancer (Blatny et al.), a psycho-educational intervention for improving the quality of life of children with cancer (Last et al.), the application of hypnotherapy as an intervention method in the first phase for adults with cancer (Banyai), psychoanalytic approaches to helping cancer patients in the course of their disease (Ayzenberg), assessing the results of intervention methods with cancer patients (Kryspin-Exner et al.), and identifying patients who may benefit most from social support (Kreitler).

The Brno Quality of Life Longitudinal Study of Pediatric Oncology Patients (QOLOP): Results from the pilot study

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Kepak, Tomas Dpt. of Paediatric Oncology, Children's Medical Center, Brno, Czech Republic
Vickova, Irena Dept. of Pediatric Oncology, Children's Medical Center, Brno, Czech Republic
Pilat, Milan Dept. of Psychology, Children's Medical Center, Brno, Czech Republic
Jelinek, Martin Inst. of Psychology, Academy of Sciences, Brno, Czech Republic
Navratilova, Petra Inst. of Psychology, Masaryk Univ., Faculty of Arts, Brno, Czech Republic
Slezackova, Alena Inst. of Psychology, Masaryk Univ., Faculty of Arts, Brno, Czech Republic

Along with a growing number of child cancer survivors the late effects of anticancer therapy and the quality of life have become the focus of attention. In the first part of the presentation we give information about the Brno Quality of Life Longitudinal Study of Pediatric Oncology Patients (qolop) that seeks to identify the main ways in which the quality of life of child cancer-survivors is affected, both in terms of objective indicators (mobility, sensory functioning) and subjective perceptions of wellbeing. In the second part we give overview of results from the first year of study.

Positive effects of a psycho-educational group intervention for children and teenagers with cancer: A pilot study

Last, Bob Psychosocial Pediatric, Academic Medical Center, Amsterdam, Netherlands
Maurice-Stam, Heleen Psychosocial Pediatric, Academic Medical Center, Amsterdam, Netherlands
Grootenhuys, Grootenhuys

Martha Psychosocial Pediatric, Academic Medical Center, Amsterdam, Netherlands

OBJECTIVE: In two pilot studies the usefulness of a psycho-educational group intervention based on principles from cognitive behavior therapy was evaluated in children with cancer. **METHODS:** Evaluation of the group intervention was done by standardized measures. **RESULTS:** In study 1 a total of 20 patients (ages 12-18 years) participated. In study 2 a total of 11 patients (ages 8-12 years) took part. In both studies improvements were found in behavioral-emotional outcomes, social competence, information seeking, relaxation and positive thinking. **CONCLUSIONS:** The program appears to have a significant and positive impact on children and teenagers with cancer.

The "new look" in helping cancer patients: Conceptualizing cancer as a chance

Banyai, Eva Dept. of Psychology, Eötvös Loránd University, Budapest, Hungary

Since the shock of the seemingly life threatening diagnosis of cancer induces an altered state of consciousness, patients become extremely susceptible to suggestions. In this situation hypnotherapy and suggestive techniques may be especially helpful in making patients realize their chance for survival. Therapeutic cases from my practice illustrate how hypnotherapy can help patients make up their mistakes, straighten their relationships, set a new life-goal, promote experiencing the spiritual dimension of life, and facing death as the ultimate question of existence. Hypnotherapy is also very effective in communicating social support, thus it may help patients mobilize their inner resources.

Needs analysis and evaluation of psychosocial interventions for cancer patients

Kryspin-Exner, Ilse Inst. für Psychologie, Universität Wien, Wien, Austria **Winkler, Verena** Inst. für Psychologie, Universität Wien, Wien, Austria

Discrepancies exist between needs, offers and the requirement of psychological interventions for cancer patients. While a high percentage would need psychological support, only a few use appropriate offers. Reasons might be patients' fears of being labelled as mentally disordered and the incongruence between medical staff perceptions' and the actual patients' needs. The implementation of day hospitals and outpatient treatment necessitates psychooncological offers in this area. Therefore, outpatient psychological counselling services should be evaluated for enhancing their acceptance. To emphasize that, results of a pilot study evaluating psychosocial support offers for families with hereditary breast cancer will be presented.

When Kohut meets Sisyphus in oncology institute

Ayzenberg, Aviva Dept. of Oncology, Kaplan Medical Center, Rehovot, Israel **Efrat Ben Baruch, Noa** Dept. of Oncology, Kaplan Medical Center, Rehovot, Israel Significant lengthening of life expectancy in metastatic patients and improvement in life quality, create exciting challenges for psychotherapy. In these stages of illness a patient can be metaphorically described as image of Sisyphus: carrying a heavy rock up the hill, never succeeding in climbing the top. Could he be happy, facing his human existence and fate? Psychotherapy should represent encounter of two traditions: Existential stance which deals with issues of "being" and "meaning" and Self psychology which tries to work through narcissistic pain enacted by illness. A case study integrating elements of those two psychotherapeutic attitudes will be presented.

The benefits of social support

Kreitler, Shulamith Dept. of Psychology, Tel-Aviv University, Tel-Aviv, Israel

The goal was to identify in cancer patients psychological correlates of readiness to use social support. The participants were 167 patients of both genders, with different cancer diagnoses and in different disease stages. They were administered questionnaires assessing the use of different kinds of social support and a cognitive orientation questionnaire assessing motivational tendencies for using social support. Discriminant and multiple regression analyses showed that the cognitive orientation variables provided good predictions of the use of social support. The results enable identifying patients who can benefit from social support and those who need help for using this coping resource.

S-276: Assessing serotonergic neurotransmission with Intensity Dependence of Auditory-Evoked Potentials (IDAE): Neurochemical findings and clinical utility

Tilman Hensch, Ulrich Hegerl (chair)

This symposium will discuss recent progress in neurobiological underpinnings, methodological aspects and clinical applications of Intensity Dependence of Auditory-Evoked Potentials (IDAE). After an overview of IDAE research covering all data levels from genes to psychopathology (Hensch), animal (Juckel & Uhl) and human (O'Neill & Croft) studies validating the serotonin-hypothesis of IDAE will be reported. Biological influences that should be considered in study-design (Gallinat) will be discussed. Technical aspects must be accounted for in assessments of intensity dependence with simultaneous EEG/fMRI registration (Mulert). Finally, the clinical value of IDAE will be discussed: predicting treatment response to antidepressants (Hegerl) and assessing neurotoxicity of Ecstasy (Daumann).

Correlates of intensity dependence of auditory-evoked potentials (IDAE): From genes to behavior

Hensch, Tilman Inst. für Psychologie II, Technische Universität Dresden, Dresden, Germany **Brocke, Burkhard** Psychology II, TU Dresden, Dresden, Germany

This talk gives an overview of correlates of IDAE from genetic data, via biochemical, up to personality and psychopathology. The speakers' own recent results for each data level will also be given. The usefulness of IDAE will be outlined. The discussion will consider that the revival of IDAE only recently began when the theory of IDAE as an indicator of serotonergic neurotransmission was introduced, thereby explaining the various associations with serotonergic modulated traits and solving apparent discrepancies. Furthermore, new applications could be derived from that theory. Open questions will be summarized, and a standardizing of the paradigm will be recommended.

Preclinical studies on the relationship between IDAE and the central serotonergic neurotransmission

Juckel, Georg Inst. für Psychiatrie, Ruhr-Universität Bochum, Bochum, Germany **Uhl, Idun** Inst. für Psychiatrie, Ruhr-Universität Bochum, Bochum, Germany

Two animal studies validating IDAE as an indicator of serotonergic neurotransmission are presented. In cats, the firing rate of dorsal raphe nucleus neurons was reduced or increased by microinjection of a 5-HT_{1A} agonist and antagonist, respectively. AEPs were recorded from the auditory cortices. We found a stronger IDAE at the

primary auditory cortex after inhibiting the firing rate of serotonergic neurons, and vice versa. In rats, we found negative correlations between extracellular serotonin in the auditory cortex (measured by in-vivo microdialysis) and the IDAE recorded from the same area. These results support that IDAE is inversely related to serotonergic activity.

IDAE and the serotonin, dopamine and glutamate systems: Results from acute challenges in humans

O'Neill, Barry Brain Sciences Institute, Swinburne University of Techno, Hawthorn, Australia **Croft, Rodney James** Brain Sciences Institute, Swinburne Univ. of Technology, Hawthorn, Australia **Segrave, Rebecca** Brain Sciences Institute, Swinburne University of Techno, Hawthorn, Australia **Guille, Valerie** Brain Sciences Institute, Swinburne University of Techno, Hawthorn, Australia **Nathan, Pradeep J.** Dept. of Psychiatry, Cambridge University, Cambridge, United Kingdom

This presentation reports on five, double-blind, placebo-controlled repeated-measures studies, testing for effects of acute pharmacological manipulations on IDAE. Results indicated only partial support for the sensitivity of IDAE to acute 5-HT change, as 5-HT augmentation reduced IDAE in one but not a second study, and 5-HT reduction did not affect IDAE. Support for the selectivity of IDAE to 5-HT was indicated in that neither dopamine augmentation nor reduction affected IDAE, however, glycine reduced IDAE, suggesting that systems other than 5-HT can modulate IDAE. Results are interpreted in light of methodological issues (gender, and the acute/chronic and scalp EEG/DSA distinctions).

Genetics, biological aspects and environmental modulators of IDAE

Gallinat, Jürgen Klinik für Psychiatrie, Charité Medizin Berlin, Berlin, Germany

Genetic variations of the serotonin transporter linked polymorphic region (S allele as well as LA and LG alleles) have been implicated in the pathogenesis of psychiatric disorders, which are themselves linked to dysfunctional serotonergic neurotransmission. IDAE as a proposed in vivo indicator of central serotonergic neurotransmission has been shown to be abnormal in psychiatric diseases and is associated with genetic variations of the serotonin system. This presentation will focus on the retest reliability, heritability and methodology of the IDAE as necessary preconditions for use in intermediate phenotype research. Additionally, smoking, alcohol consumption, and other modulating factors of IDAE are discussed.

Multimodal data on intensity dependence: EEG and fMRI

Mulert, Christoph Inst. für Psychiatrie, Universität München, München, Germany **Pogarell, Oliver** Dept. of Psychiatry, University of Munich, Munich, Germany

Sound level dependence has been investigated for years with event related potentials (ERP). Recent fMRI studies described a pronounced intensity dependence only in the primary auditory cortex but not in auditory association areas. In the present simultaneous EEG and fMRI study we found a high correlation between the intensity dependent change of the extent of fMRI activation (number of activated voxels) and the corresponding changes of the mean current source density within the same region of interest covering the primary auditory cortex ($r=0.84$, $p<0.001$). Our findings suggest a close relationship between the fMRI signal and event-related potential activity.



Differential prediction of clinical response to antidepressants by IDAEP?

Hegerl, Ulrich *Inst. für Psychiatrie, Universität Leipzig, Leipzig, Germany* **Pogarell, Oliver** *Dept. of Psychiatry, University of Munich, Munich, Germany*

A considerable proportion of patients with major depression do not respond to the first antidepressant administered. Non-response constitutes an enormous burden to the patient, as therapeutic outcome cannot be assessed for at least two to three weeks and antidepressants often involve side effects. In previous studies IDAEP could predict treatment response to antidepressants. This talk will discuss the status and usability of treatment response prediction with IDAEP and will also present the speaker's own recent data, including differential response prediction to serotonergic versus noradrenergic antidepressants.

IDAEP in ecstasy (MDMA) users: Evidence for serotonergic dysfunction

Daumann, Jörg *Inst. für Psychiatrie, Universität Köln, Köln, Germany* **Gouzoulis-Mayfrank, E.** *Dept. of Psychiatry, University of Cologne, Cologne, Germany* Animal studies demonstrated neurotoxic damage to central serotonergic systems after exposure to 3,4-methylenedioxymethamphetamine (MDMA, ecstasy). A high intensity dependence of auditory evoked potentials (IDAEP) is associated with a low functioning of serotonergic activity. Therefore, we used IDAEP for a possible neurotoxic damage in 18 polydrug ecstasy users at baseline and after 18 months. Ecstasy use was associated with the IDAEP at both measuring times. However, we failed to demonstrate any significant relationship between interim drug use and AEP changes. These data suggest, yet do not unambiguously confirm the hypothesis that abstinent ecstasy users present with diminished central serotonergic activity.

S-277: Cultural influences on identity development

Ulrich Schmidt-Denter, Claudia Quaiser-Pohl (chair)

The symposium deals with cultural influences on personal and social development across the life-span. Papers presented focus on comparisons between different European countries. The studies analyze patterns of national identity and their relation to personal functioning, intergenerational transmission of attitudes towards minorities, sex differences in adolescence, cultural determinants of the transition to parenthood and acculturation orientations of naturalized immigrants. Results will be discussed in terms of the challenges of globalization and of multicultural societies.

Patterns of national identity in cross-cultural comparison

Schmidt-Denter, Ulrich *Inst. für Psychologie, Universität zu Köln, Köln, Germany*

The study examines the development of personal and social identity in ten European countries ($N = 4312$ adolescents and their parents). From intercultural perspective measures of national identity showed the most significant differences. Theories of national identity from the literature are critically discussed, because mostly an intercultural generalization has not been proved. According to our own approach data show that basic patterns of national identity are equal in all countries, but that there are also some specific differences. Across cultures similar relations were found between the types of national identity and variables of personal identity (e.g. self-esteem).

The role of intergenerational transmission for out-group rejection with female adolescents

Schick, Hella *Inst. für Bildung, Universität zu Köln, Köln, Germany*

The contribution investigates the effects of personal and familial variables on negative attitudes of adolescent girls towards foreigners and Jews. Personal variables (information seeking, self-evaluation, fear of future, tolerance) were considered in comparison to the agreement with the attitudes of their parents, education style and closeness of family relations. Relationships and mediator effects were examined by structural equation modelling ($N=200$). The proposed model explains 45% of the variance of out-group rejection. The transferability to several European countries is discussed. The results indicate that information seeking and the adoption of tolerant positions play a more prominent role than the parental influence.

Development of personal identity of adolescents in Austria in comparison to other European countries

Werneck, Harald *Fakultät für Psychologie, Universität Wien, Wien, Austria* **Rabl, Martina** *Faculty of Psychology, University of Vienna, Vienna, Austria* **Berger, Ute** *General and Social Psychology, University of Cologne, Cologne, Germany* **Maehler, Deborah** *General and Social Psychology, University of Cologne, Cologne, Germany* **Schick, Hella** *General and Social Psychology, University of Cologne, Cologne, Germany* **Schmidt-Denter, Ulrich** *General and Social Psychology, University of Cologne, Cologne, Germany*

The study presented in this paper is part of the research project "Personal and Social Identity in the Context of Globalization and National Differentiation". It focuses on the analysis of the development of personal identity, in particular on sex differences. Therefore a battery of questionnaires, taken from the framework project, concerning different aspects of personal identity was administered to 656 Austrian adolescents. The results show that girls score higher in self awareness than boys, corresponding e.g. with less self esteem and more being depressed. Besides female adolescents achieve earlier than male adolescents the status of identity achievement according to Marcia.

Parenthood from a cross-cultural perspective: Socio-cultural changes, values, and well-being of Spanish and German parents

Grohmann, Anna-Catharina *Institute of Psychology, Georg-August Uni. of Göttingen, Göttingen, Germany* **Quaiser-Pohl, Claudia** *Institute of Psychology, University of Siegen, Siegen, Germany* **Hasselhorn, Marcus** *Center Education & Develop, dipf, Frankfurt / Main, Germany*

In a questionnaire study the values and the well-being of 92 Spanish and 79 German parents during the first years after the birth of their child were compared. Contrary to expectation, Spanish mothers and fathers were more individualistic and less family-oriented, showed higher approval for traditional attitudes, and did not report higher parental well-being than German parents. These results can be interpreted with regard to changes in cultural and individual values accompanying the rapid development of the Spanish society during the last 30 years and against the background of the wide political discussion on day care in Germany nowadays.

Acculturation orientations of naturalized immigrants in Germany

Maehler, Debora *Inst. für Psychologie, Universität zu Köln, Köln, Germany*

The scope of the longitudinal study is the process of acculturation and identification of naturalized immigrants ($N=300$). This presentation deals with the acculturation orientations of "new Germans"

(first wave). Acculturation is based on the concept of Berry (1997), and is assessed by a two-statement method and analysed by a cluster-analytic and discriminant procedure. The analysis classifies three clusters: an integrated, an assimilated and an indifferent oriented group. The results do not exactly agree with Berry's assumption, rather a new profile is suggested. Moreover the different groups are distinguished by their socio-demographic background, motives for naturalization and identification.

S-278: Reactions to alarms and warnings

J. Elin Bahner, Monica De Filippis (chair)

Alarms and warnings indicate a state or situation that might result in danger. To prevent harm, an alarm has to be detected, understood, and complied with. Research focuses on different problems: First, warnings have to be noticed and understood. Open issues concern warning modalities and conveyed urgency levels. Second, no alarm system works totally reliable, therefore operators have to deal with false and missing alarms. This results in different levels of reliance and compliance. The symposium focuses on both, how an ideal warning should look like, and how erroneous warnings might affect human performance and trust.

Driving by the seat of your pants! A multisensory approach to capturing driver attention

Spence, Charles *Dept. of Psychology, University of Oxford, Oxford, United Kingdom*

The increasing availability of complex in-vehicle technologies means that 'driver inattention' still represent one of the leading causes of car accidents. The question therefore arises as to how best to alert 'distracted' drivers to potential road dangers. I will review the latest laboratory- and simulator-based studies from the Crossmodal Research Laboratory in Oxford detailing a novel brain-based approach to the design of auditory, tactile, and multisensory warnings signals. I will highlight the research that demonstrates the potential for improving driver behavior in potentially dangerous situations and so reducing the incidence of road traffic accidents that such multisensory warning signals offer.

Validity of uni-, cross-, and multimodal alarms: Effects on reactions

De Filippis, Monica *Inst. für Kognitive Ergonomik, Technische Universität Berlin, Berlin, Germany*

Alarms are signals of a system to a user on any status that might result in danger. Therefore, the ideal alarm is detectable, understandable and acceptable, resulting in an appropriate and accelerated reaction. We investigated benefits of multimodal alarms - i.e. alarms presented in two modalities simultaneously - for perception, understanding, and reactions in a dual task paradigm. Subjects performed a driving-like tracking task while detecting auditory and visual signals. Visual and auditory alarms were presented in uni-, cross, as well as multimodal conditions. Results prove, that multimodal warnings have to be applied carefully and weighed up against unimodal warnings.

Responses to warnings reconsidered: Reliance and compliance in discrete and continuous tasks

Meyer, Joachim *Dep. of Indust. Engineering, Ben Gurion University, Beer Sheva, Israel*

Predicting users' responses to warning information is a challenge, because warnings can affect behavior both when they are given (compliance) and when they are absent (reliance). The paper discusses the measurement of the two types of responses to warnings in discrete tasks, where probabilities of responses can be computed, and in continuous tasks, such as driving, in which the effects of

warnings are expressed as changes in driving speed. Experimental results supporting the distinction between these two responses in the different tasks are presented, and their implications for understanding the function of warnings in regulating behavior are discussed.

The effects of automation misses on reliance, complacency and automation bias

Bahner, J. *Elin Arbeits- und Org.-Psychologie, Technische Universität Berlin, Berlin, Germany*
Elepfandt, Monika *Work, Engin. & Organis. Ps, Berlin Univ. of Technology, Berlin, Germany*
Manzey, Dietrich *Work, Engin. & Organis. Ps, Berlin Univ. of Technology, Berlin, Germany*

Objective: The effects of misses of an automated alarm and fault diagnosis system (AFDS) on different manifestations of automation misuse were examined. Method: 24 participants interacted with an AFDS in a process control task. During training, they either experienced that the AFDS failed to detect a critical state or were only informed that such failures might occur. Results: Experience of misses reduced reliance on AFDS but did not affect complacency and commission errors in case of a correct alarm but false diagnosis. Conclusion: Results demonstrate the effects of failures on automation misuse and elucidate the interrelation of its manifestations in more detail.

The effects of automation bias and saliency on operator trust

Rice, Stephen *Dept. of Psychology, New Mexico State University, Las Cruces, USA*
McCarley, Jason *Dept. of Psychology, University of Illinois, Champaign, USA*

Objective: To examine the effects of automation errors on operator responses to alerts (compliance) and non-alerts (reliance). Methods: Participants performed a mock luggage screening task aided by imperfectly reliable diagnostic automation. Framing of the automation's recommendations was manipulated such that errors were either explicit or implicit. Results: When errors were explicit, compliance and reliance were both reduced by automation false-alarms and misses. When errors were implicit, compliance was compromised only by FAs, and reliance only by misses. Conclusions: Crossover effects of automation FAs and misses are mediated the framing of the automation's recommendations.

Pilots' response time to complete alarm procedures as a function of alarm relevance

Newlin, Elizabeth *Dept. of Psychology, Old Dominion University, Norfolk, USA*
Bustamante, Ernesto *Psychology & Communication, University of Idaho, Moscow, ID, USA*
Bliss, James *Dept. of Psychology, Old Dominion University, Norfolk, VA, USA*
Turner, Timothy *Dept. of Psychology, Old Dominion University, Norfolk, VA, USA*

Pilots often must prioritize task reactions. Past research has shown that low reliability degrades alarm reaction time. The purpose of this study was to investigate the role of alarm relevance on reaction time. Because cabin pressurization alarms occurring above 25,000 feet MSL are more relevant, we expected pilots to react to such alarms faster. Twelve commercial pilots completed a simulated flight using Microsoft Flight Simulator™. They responded to 20 pressurization alarms presented at different altitudes. Repeated measures ANOVAs indicated that pilots reacted to relevant alarms significantly faster. These results suggest that alarm relevance may supersede reliability in piloting situations.

S-279: Human-machine interaction (Part II): Reliability and validity of usability-tests

Kai-Christoph Hamborg, Jürgen Sauer (chair)

Usability testing is considered the gold standard of formative design evaluation. But up to now basic concepts in usability testing are ill-defined. Moreover, standards defining procedures and methods of usability testing are still missing. Hence, usability tests suffer from a lack of validity and reliability. This symposium addresses factors that impair the validity and reliability of usability tests as well as conceptual and methodological remedies. These include a psychologically motivated definition of the term "usability problem" as well as findings about the impact of contextual fidelity and strengths and weaknesses of special testing methods on the quality of usability tests.

Quality assurance in usability-testing: Problems and approaches to solutions

Hamborg, Kai-Christoph *Inst. für Psychologie, Universität Osnabrück, Osnabrück, Germany*
 Recent research has given reason to doubt the validity and reliability of usability tests. Beside lack of standardization of methods and procedures, one of the most serious reasons for this shortcoming is in our view, that the term "usability problem" is ill-defined. As a result theoretically derived criteria supporting a reasonable choice of testing methods and approaches for data analysis are missing. Therefore a psychologically motivated definition of the concept "usability problem" in terms of action theory will be presented, its application exemplified by empirical data and consequences concerning data gathering and analysis discussed from a methodological point of view

The concept of contextual fidelity in usability tests: Empirical evidence from a research programme

Sauer, Jürgen *Dept. of Psychology, University of Fribourg, Fribourg, Switzerland*
Sonderegger, Andreas *Dept. of Psychology, University of Fribourg, Fribourg, Switzerland*

Guided by the framework of contextual fidelity, this paper presents findings from three empirical studies that examined various factors that may threaten the validity of usability tests. Different interactive consumer products (e.g., mobile phone) were examined in typical set-ups of usability tests. The work identified aesthetics of design as a product feature that influences the outcomes of usability tests with regard to perceived usability and user behaviour. Prototype fidelity (e.g., computer vs. paper prototypes) emerged as a further factor that influenced user performance but did not show effects on attractiveness and perceived usability. The implications of the work for usability practitioners are discussed.

Constructive interaction method in usability testing

Sonderegger, Andreas *Inst. für Psychologie, Universität Fribourg, Fribourg, Switzerland*
Sauer, Jürgen *Dept. of Psychology, University of Fribourg, Fribourg, Switzerland*

In this paper, usability testing in pairs is compared with evaluation of individuals using the retrospective think-aloud method. In a 2x2 mixed design, testing method was used as between-subjects variable with 20 participants in the single evaluation condition and 20 dyads in the group condition. Task difficulty was varied at two levels: low and high (within-subjects variable). The results revealed an interaction effect of evaluation method and task difficulty with individuals performing better in simple tasks and groups in difficult tasks. The

implications on choice of evaluation method and tasks in usability tests are discussed.

Eye-tracking as a method in usability-testing

Burmester, Michael *Fakultät Information und Komm., Hochschule der Medien, Stuttgart, Germany*
Weinhold, Thomas *Informationswissenschaft, University of Applied Sciences, Chur, Switzerland*
 The objective was to clarify whether eye tracking offers added value for usability testing. A classical formative usability test was conducted using thinking aloud and behaviour observation. During the tests all eye movements were registered and in a retrospective thinking-aloud session the test participants had to comment their eye movements and behaviour. Qualitative analysis was applied to verbal and observation protocols and statistical analysis to eye movement data. All usability problems were already identified in the formative usability test. Eye-tracking and retrospective thinking-aloud provided additional information in order to understand some of the usability problems in a more comprehensive way.

Reliability of eye tracking data in usability testing

Lesemann, Elisabeth *User Experience, SirValUse Consulting GmbH, Hamburg, Germany*
Wilms, Ulla *PR- und Werbeagentur, Media Consulta, Berlin, Germany*

Gaze paths and attention distributions of different users on websites show a high degree of variation, rendering the reliability and validity of eye tracking results in usability testing doubtful. In a large study involving 393 users we explored the issue of sample size in eye tracking of homepages by comparing the results of increasingly smaller sub samples to the results of the whole sample using the equivalence test (as suggested by Schlittgen, 1996). Our results indicate that the required sample size is far higher than the typical sample size of 10-15 users (according to Heinsen & Scheier, 2003).

S-280: Learning with dynamic visualizations: Cognitive and design issues

Mireille Betrancourt, Tim Kuehl (chair)

Animations are often used in educational software. However, the research failed to show a clear superiority of dynamic over static visualizations for learning. This symposium will present studies that tackle the cognitive processes underlying the comprehension of dynamic visualizations. Boucheix & Lowe investigated how information is extracted from dynamic visualizations. Köhl, Gerjets & Scheier surveyed think aloud protocols from subjects learning with dynamic or other types of visualizations. The other three studies are dealing with related instructional factors - like realism (Imhof et al.), interactivity and learning setting (Betrancourt & Borer) and speed and cueing (Fischer & Schwan). From an educational perspective, the results of the studies can provide guidelines on how to design more effective multimedia instructions.

Eye tracking as a basis for improving animation design

Boucheix, Jean-Michel *LEAD, University of Burgundy, Dijon, France*
Lowe, Ric *Department of Education, Curtin University, Perth, Australia*

We explore the utility of eye tracking indicators such as fixations, transitions between areas of interest and "scan paths" as tools for understanding how individuals extract information from a technical complex animation. We report a series of experiments involving verbal description, the effect of cues on comprehension, and the development of comprehension during the course of the animation. The techniques used in these investigations and



their results will be discussed in terms of the opportunities that eye tracking approaches offer for studying the on-line processes involved in an individual's development of a high quality mental model from an animation.

Effects of dynamic and static visualizations in understanding natural science phenomena

Kuehl, Tim Institut für Wissensmedien, KMRC, Tübingen, Germany **Scheiter, Katharina** Applied Cognitive Psychology, University of Tübingen, Tübingen, Germany **Gerjets, Peter** Knowledge Acquisition with Hyp, KMRC, Tübingen, Germany The effects of dynamic and static visualizations in understanding physical principles of fish locomotion were investigated. Seventy-five students were randomly assigned to one of three conditions: text-only, text with static visualizations or text with dynamic visualizations. All subjects had to think aloud. Learning outcomes were measured by means of factual knowledge and transfer tasks. Learning performances did not differ between the static and the dynamic condition. However, learners of the two visualization conditions outperformed the text-only condition significantly for transfer tasks, but not for factual knowledge tasks. These results reveal the importance of visualizations for students understanding of natural sciences.

Realism in understanding fish locomotion from dynamic or static visualizations

Imhof, Birgit Institut für Wissensmedien, IWM - KMRC, Tübingen, Germany **Scheiter, Katharina** Applied Cognitive Psychology, University of Tübingen, Tübingen, Germany **Gerjets, Peter** Knowledge Acquisition with Hyp, IWM - KMRC, Tübingen, Germany The role of dynamism and realism in visualizations for knowledge acquisition in a dynamic domain (fish locomotion) was investigated. Eighty-nine university students were randomly assigned to four conditions (dynamic-realistic, dynamic-schematic, static-realistic, static-schematic). Learning outcomes were measured by factual-knowledge-tests, recognition-tests, and prediction-tests of future movement states. Data analyses revealed no differences in learning outcomes for factual knowledge. Learners recognized more fishes correctly in the dynamic than in the static conditions. And learners predicted more future states accurately in the schematic than in the realistic conditions. These results suggest a differentiated view of visualizations with regard to learning conditions and task demands.

Does interactivity benefit learning from dynamic visualizations in individual or collaborative setting?

Betrancourt, Mireille TECEFA Psychology and Education, University of Geneva, Carouge, Switzerland **Borer, Ruedi** TECEFA Psychology and Education, University of Geneva, Carouge / GE, Switzerland

This contribution reports a classroom study investigating the effect of the level of interactivity of dynamic visualizations explaining biological phenomena (osmosis and diffusion) on the memorization of explicit or incidental information. Two factors were involved in the design: the level of interactivity of the visualizations (interactive simulation or self-paced animation) and the learning setting (individual or in pair). The results show that in collaborative setting, interactivity did not affect learning performance for explicit information, while in individual setting, more interactivity decreased learning performance. These results are discussed in terms of cognitive processes involved in learning from dynamic visualizations.

Temporal manipulations for animation design: Presentation speed outperforms cueing

Fischer, Sebastian Inst. für Wissensmedien, IWM - KMRC, Tübingen, Germany **Schwan, Stephan** Knowledge Acquisition with Cyp, KMRC, Tübingen, Germany

Previous studies have shown that manipulating presentation speed of a clockwork animation affects distribution of attention and comprehension. To further investigate influence of attention guidance, normal vs. fast speed presentation was combined with cueing either relevant parts weight or pendulum, or an irrelevant gear, in a 2x3 between group design with 144 subjects. Results show whilst cueing had effects on subjective measures, comprehension measured by written descriptions of how the clock functions was solely influenced by presentation speed. We conclude that comprehension improvement through fast speed presentation is a result not merely of attention guidance, but of emphasising dynamic properties.

S-281: How political transitions affect the ethical practice of psychology

Michael Stevens, Jean Pettifor (chair)

Political events and forces impact the structure and dynamics of society. Psychology is susceptible to political transitions. Education, research, and practice in psychology mirror a society's political stability, health, and accessibility versus turbulence, dysfunction, and exclusiveness. Codes of ethics in psychology are not immune from political transitions. Ethics codes, designed to protect the public and guide psychologists, are often weakened by political transitions in ways that compromise psychological science and practice and, ultimately, may pose a threat to society. In this symposium, psychologists from five countries discuss the impact of political transitions on their country's psychological code of ethics.

Do ethics codes in psychology mirror political change?

Stevens, Michael Dept. of Psychology, Illinois State University, Normal, USA

I examine how political events and forces shape codes of ethics in psychology, particularly when these macro-level events and forces transform the structure and dynamics of the society in which psychology is situated. I illustrate how ethics codes are socially constructed by sampling from the general principles and specific standards of ethics codes in countries that have transitioned from communism, military dictatorship, or racist oppression or from peacetime to wartime status. I offer a conceptual framework with which to identify ethics codes at-risk; that is, countries where political events and forces jeopardize the ethical practice of psychology.

Political change and professional ethics of psychology in East Germany

Rösler, Hans-Dieter Inst. für Medizin. Psychologie, Universität Rostock, Rostock, Germany

To disclose consequences of the German reunification for the professional orientation of psychologists in East Germany programmatic statements of psychological committees were analysed. Psychology in East Germany was supposed to contribute to forming a socialist system and its cadres. In West Germany, psychology primarily serves the individual and emphasizes on vigilance towards influences leading to malpractice of psychology. These principles entailed ideological relieve to psychologists of the former GDR, but transition problems occurred regarding changed professionalism in a free-market economy. Now, precise ethical guidelines ensure political freedom for them and

contribute to competition with colleagues and related professions.

A South American experience of the transition from dictatorship to democracy

Ferrero, Andrea Dept. of Human Sciences, National University, San Luis, Argentina

When psychology was striving to get its legal recognition, a military coup that took place in 1976 stopped this process. From 1976 to 1983, Argentina lived under a dictatorship: the House of Representatives and the Senate were closed, and many people were jailed or made disappeared. As psychology became an almost persecuted profession, the few initial psychologists' associations were closed, and psychologists worked without any legal support as no ethics codes had yet been developed. In 1983 democracy allowed the previous process to continue, and psychologists' associations were finally legally recognized and developed their own ethics codes.

Ethical code for psychologists: Relevance to post-apartheid South Africa

Wassenaar, Douglas School of Psychology, University of KwaZulu-Natal, Pietermaritzburg, South Africa

South Africa has undergone dramatic political and social changes since 1994. A new democratic dispensation and progressive national constitution enshrining human rights have been adopted. Ethical guidelines for psychologists have not changed dramatically during this period, however. This paper examines whether revisions to the South African ethical guidelines are necessary in the light of these social and political changes, and, if so, explores the nature of any changes that might be indicated. Guidelines are expected to accommodate the expectations of a culturally, socially, economically and politically diverse society, and guide psychologists in a wide range of activities and settings.

Ethical code for psychologists: Relevance to post-apartheid South Africa

Mkhize, Nhlanhla School of Psychology, University of KwaZulu-Natal, Pietermaritzburg, South Africa

South Africa has undergone dramatic political and social changes since 1994. A new democratic dispensation and progressive national constitution enshrining human rights have been adopted. Ethical guidelines for psychologists have not changed dramatically during this period, however. This paper examines whether revisions to the South African ethical guidelines are necessary in the light of these social and political changes, and, if so, explores the nature of any changes that might be indicated. Guidelines are expected to accommodate the expectations of a culturally, socially, economically and politically diverse society, and guide psychologists in a wide range of activities and settings.

S-283: Research in aviation psychology

Claudia Marggraf-Micheel (chair)

In the field of aviation psychology new research has been done regarding safety and comfort. The first of the two key topics, which will be presented, focuses on the development and optimization of personnel selection in operational working fields (situational awareness, multiple task performance, interpersonal competence). The second key topic emphasizes the analyses of occupational stress factors and passenger comfort within aircraft cabins. An analysis of stress in service work, which points out relevant resources and stressors, and research concerning thermal comfort and passengers well-being will be presented.

Group assessment of performance and behavior
Zinn, Frank Aviation and Space Psychology, German Aerospace Center, Hamburg, Germany **Oubaid, Viktor** Aviation and Space Psychology, German Aerospace Center, Hamburg, Germany **Klein, Jennyfer** Aviation and Space Psychology, German Aerospace Center, Hamburg, Germany **Johannes, Bernd** Aviation and Space Psychology, German Aerospace Center, Hamburg, Germany

Safe and effective performance in operational working groups (e.g. pilots) demands, apart from excellent technical knowledge, pronounced interpersonal competence; such as the selection and distribution of information, cooperative goal orientation and decision making as well as skills in leadership and conflict management. The development of a computer-based group test system will be presented, in which objective behavior measuring, behavior observation and physiological strain measuring are integrated into an overall evaluation. Basis of the multi-level observations are taxonomic derived complex scenarios, in which up to six participants gradually receive assignments through individual Touchscreens and interact face-to-face within the given situations.

Development and evaluation of computerized test battery for multiple task performance in pilot selection

Albers, Frank Aviation and Space Psychology, German Aerospace Center, Hamburg, Germany
 The diagnostic of multiple task abilities in pilot selection is compulsory although there is no proof of a universal multiple task ability. A way of coping with this difficulty by developing a new modular battery of computerized cognitive and psychomotor tests will be presented. The tests were evaluated in test repetition studies with large samples (N>100 each) of pilot trainee program applicants. The evaluation provides reliable and valid results. Practice effects could be examined and have to be taken into account in the course of test evaluation as well as in the later personnel selection process.

Dyadic cooperation test: Predictive validity for captains upgrading

Stelling, Dirk Aviation and Space Psychology, German Aerospace Center, Hamburg, Germany
 Computer-assisted teamwork scenarios provide an opportunity to simulate specific job requirements and to analyse the abilities of the applicant in dealing with complex systems. Since 1995 the German Aerospace Center uses the Dyadic Cooperation Test (DCT) to diagnose performance, as well as working and communicative behaviour in pilot - selection. In an analysis of 92 of captain-upgrading assessment records, the performance in aircraft system handling, flying and ground handling performance was rated. Previous DCT observer ratings regarding cooperation, decision-making and stress management showed even after years, predictive validity.

Changing demands in military pilot selection

Noser, Philip Swiss Air Force, Institute of Aviation Medicine, Dübendorf, Switzerland
 Demands for military pilots in Swiss Armed Forces have changed significantly within the last ten years. Changes in the selection system were urgently requested. Pilot candidates start in Switzerland at the age of 17 and are undergoing a long sequential way of selection. A new system with computer based testing and a subsequent basic flying training have been introduced with good success. The outcome of the screening has been measured against the success in the basic training and shows good results. Feedbacks of flight instructors were excellent. Swiss Air Force can satisfy their needs in personnel employment even though the amount of candidates is sinking.

Stress in service work of flight attendants

Bamberg, Eva Inst. für Psychologie, Universität Bamberg, Bamberg, Germany **Ronzheimer, Sandra** A-B-U-Psychologie, Universität Bamberg, Bamberg, Germany **Sparre, Angela** A-B-U-Psychologie, Universität Bamberg, Bamberg, Germany
 Within two airline companies, one of them a traditional airline, one of them a low cost carrier, a study with 166 flight attendants was conducted. Results show that resources are especially important in predicting job satisfaction; stressors are important predictors of burnout. In this context task related stressors as well as customer- and emotion related stressors are relevant. In general, in the low-cost carrier organization, resources are higher and stressors are lower than in the traditional airline company.

Passengers subjective well-being in the aircraft cabin

Marggraf-Michael, Claudia Aviation and Space Psychology, German Aerospace Center, Hamburg, Germany **Jaeger, Sabine** Aviation and Space Psychology, German Aerospace Center, Hamburg, Germany
 The impact of air-stream and temperature to subjective well-being in an aircraft cabin was investigated in a mock-up (A380 Upper-Deck) with 70 subjects. The used instrument was validated inter alia, comparing subjective well-being with physical measurement in three climate-scenarios. Results of analyses of variance point out significant differences in experienced thermal comfort. It is shown that the degree of mental and physical well-being is lower for people with less emotional stability. In addition, airstream is more uncomfortable for less emotional stable persons and with regard to gender, women feel more uncomfortable with the affective climate than men.

S-284: Development of competencies during the transition from kindergarten to primary school

Bettina Hannover, Wolfgang Schneider (chair)

This symposium aims to bring together researchers studying the development of school-relevant competencies in children during the transition to primary school. So far, studies within Germany mostly dealt with children at the point of entry into primary school and mainly focussed on precursors of literacy acquisition, such as phonological awareness. To extend this research perspective, in our symposium we will particularly look at younger children (in kindergarten or preschool), at groups of children with disadvantaged learning preconditions (e.g., immigrants), on a wider range of competencies (e.g., mathematical achievement), and a wider range of factors potentially affecting the development of competencies (e.g., child-caregiver relationship quality, social skills).

Children's attachment to caregivers in kindergarten and the development of social behaviours supportive of learning

Glüer, Michael Erziehungswi. und Psychologie, Freie Universität Berlin, Berlin, Germany **Hannover, Bettina** School and Teaching Research, Freie Universität Berlin, Berlin, Germany
 How does child-caregiver attachment quality in preschool affect the development of behaviours that prepare the child for successful learning in school? We expected securely attached children to most likely cooperate with the caregiver and to develop positive attitudes towards learning. In 75 child-caregiver dyads, attachment quality was observed. Children's social behaviour supportive of learning was measured by a) observation of child-caregiver interaction during a teaching task, b) observation of the child while working on different performance

tests, c) caregivers' ratings of the child's behaviour. The discussion focuses on how to most effectively prepare children for school entry.

Prevention of math problems in school: Findings for the Würzburg kindergarten training program "Mengen, Zählen, Zahlen"

Schneider, Wolfgang Inst. für Pädag. Psychologie, Universität Würzburg, Würzburg, Germany **Krajewski, Kristin** Psychology IV, University Würzburg, Würzburg, Germany **Nieding, Gerhild** Psychology IV, University Würzburg, Würzburg, Germany
 We present first findings of an evaluation study dealing with the mathematics kindergarten training program "Mengen, Zählen, Zahlen" (MZZ: quantities, counting, numbers). During their last year in kindergarten, a total of 260 children participated in the training. Unspecific and specific predictor measures were assessed immediately before training and subsequently twice. The trained children showed considerable progress in the specific precursor variables of math competence (quantity assessment and counting). In contrast, non-specific precursor variables such as phonological awareness or working memory did not influence training success.

Prediction capability of early speech skills and working memory capacity on reading and spelling competencies at the age of eight years

von Goldammer, Ariane Inst. für Pädag. Psychologie, Universität Göttingen, Göttingen, Germany **Bockmann, Ann-Katrin** Educational Psychology, University of Göttingen, Göttingen, Germany **Mähler, Claudia** Educational Psychology, University of Göttingen, Göttingen, Germany **Hasselhorn, Marcus** Education and Development, Internat. Educational Research, Frankfurt, Germany
 Phonological awareness has been demonstrated as a powerful predictor of children's reading and spelling success during elementary school years. Less is known about the prediction capability of phonological working memory and early speech skills. Thus, 53 children took part in a longitudinal study, where related potential predictors were assessed at the age of four, five, and eight years. In addition, reading and spelling tests were administered at the age of eight by. The results underline the predictive power of early sentence memory and phonological working memory to explain later reading and spelling performance.

Development of school relevant competencies in preschool age: Effects of social status and migration

von Maurice, Jutta BiKS, Universität Bamberg, Bamberg, Germany **Weinert, Sabine** Psychology I, University of Bamberg, Bamberg, Germany **Dubowy, Minja** Psychology I, University of Bamberg, Bamberg, Germany **Ebert, Susanne** Psychology I, BiKS, University of Bamberg, Bamberg, Germany
 School relevant competencies are based on developmental processes, which reach back to preschool years. The paper presents data from the longitudinal study BiKS-3-8 following 547 children from entry to preschool up to grade 2 in primary school. Amongst others we used standardized tests for different aspects of language and cognitive competencies every six months as well as detailed sociodemographic information. The results of the first three measurement points show effects of social status and migration on competence development in 3 to 5 year olds that are of theoretical and practical significance and that differ depending on the competence area analyzed.



Children's attachment to caregivers in kindergarten and acquisition of competencies

Wolter, Ilka School and Teaching Research, Freie Universität Berlin, Berlin, Germany **Harwardt, Elena** Human Science, University of Cologne, Cologne, Germany **Glüer, Michael** School and Teaching Research, Freie Universität Berlin, Berlin, Germany **Ahnert, Lieselotte** Human Science, University of Cologne, Cologne, Germany **Hannover, Bettina** School and Teaching Research, Freie Universität Berlin, Berlin, Germany

This research addresses the question how relationship quality between child and caregiver in kindergarten affects the development of precursors of literacy and mathematics competencies. We expected securely attached children to profit the most from kindergarten's educational offers, such that they should start off particularly well when entering primary school. In 75 randomly selected Berlin kindergartens, attachment quality in one child-caregiver dyad was observed. Precursors of competencies were measured using standardized tests. Results provide evidence for our expectations. Also, we found that girls were more frequently securely attached than boys and outperformed boys in reading and writing performance.

S-285: Conflicts, errors and emotions

Werner Sommer, Annekathrin Schacht (chair)

In everyday life conflicts and errors can elicit strong emotions; these emotions may influence the way we deal with conflict or error prone situations. This symposium investigates the presence, functional role and neurophysiological substrates of emotional and motivational aspects of conflicts and errors. The experimental situations studied range from sensorimotor experimental go-nogo and word recognition tasks to and gambling and social situations. Emotions are considered from many angles: as intrinsic or extrinsic results of conflicts and errors, as contributing to conflicts, or as factors in adaptation processes.

Emotions in Go/No Go conflicts?

Schacht, Annekathrin Inst. für Psychologie, Humboldt-Universität zu Berlin, Berlin, Germany **Nigbur, Roland** Department of Psychology, Humboldt-University at Berlin, Berlin, Germany **Sommer, Werner** Department of Psychology, Humboldt-University at Berlin, Berlin, Germany

In four experiments we investigated emotional reactions in a Go/NoGo paradigm which is held to evoke elementary but strong response conflicts. Emotional responses were examined with skin conductance responses (SCRs), M. corrugator supercilii activity, and startle blink elicitation. Our results indicate that NoGo trials modulate activity of the autonomic nervous system: SCRs and startle blinks were reduced while corrugator activity was prolonged in NoGo as compared to Go trials. Therefore, we suggest that NoGo trials temporarily suspend the approach system set into action by Go commands but seem to be neither arousing nor aversive.

Post-error adjustments

Ullsperger, Markus Inst. für Kognitive Neurologie, Max-Planck-Institut, Köln, Germany

Performance monitoring research suggests that the rostral cingulate zone (RCZ) signals the need for adjustments, whenever action outcomes deviate from the goals (e.g., on errors) or when goal achievement is at risk. These adjustments occur at motor, cognitive, motivational and autonomic levels and vary in time course from immediate compensatory actions to long-term strategy changes and learning. The presentation focuses on EEG and fMRI studies addressing the implementation of post-error adjustments. The relationship of RCZ

activity, reflected in the error-related negativity (ERN) and hemodynamic signal changes, with post-error slowing, post-error reduction of interference, and learning from errors will be demonstrated.

The influence of punishment on action monitoring

Masaki, Hiroaki School of Sport Sciences, Waseda University, Tokorozawa, Japan **Ogawa, Keiko** **Sommer, Werner** Inst. für Psychologie, Humboldt-Universität zu Berlin, Berlin, Germany

We investigated the effect of punishment on action monitoring using the error-related negativity (ERN). In a series of experiments, we used a spatial Stroop task in which punishment sounds were presented for error responses. The first experiment suggested that the unpleasant and high-arousal sound might reduce the ERN. In the second experiment which compared 3 different sounds, the ERN was not influenced by punishment, although error rate became higher by delivery of noxious (vomiting) sounds. However, the ERN was larger with delivery of the neutral sound instead of punishment. These seemingly contradictory results will be discussed.

Adaptation to gain? Effects of winning probability on feedback negativity in a gambling task

Nittono, Hiroshi Faculty of Integrated Arts, Hiroshima University, Hiroshima, Japan **Otsuka, Yuka** Cognitive Psychophysiology Lab, Hiroshima University, Higashi-Hiroshima, Japan **Ullsperger, Peter** BAuA, BAuA, Berlin, Germany

To examine whether the processing of gain and loss depends on the context, we asked 16 adults to perform a slot-machine-like gambling task. Each time a button was pressed, one of six outcomes (+10, +5, +1, -1, -5, and -10) occurred. The outcomes were first assigned equal probabilities, and subsequently, either +10 or -10 was presented more frequently. As compared to positive outcomes, negative outcomes elicited a larger negativity peaking around 300 ms in the even and losing conditions, but not in the winning condition. The results suggest that people change the level of expectation according to the context.

Making errors together

de Bruijn, Ellen R.A. Nijmegen Institute for Cognition, Radboud University Nijmegen, Nijmegen, Netherlands

Humans are social animals and participate in joint activities like dancing or sports. From a neurocognitive perspective, these seemingly simple actions are highly complex. Individuals not only have to plan and monitor their own actions, but they also have to keep track of and anticipate the actions of the person they are interacting with. So far, however, research has predominantly focused on action-monitoring processes in individual action. Little is therefore known about these processes in joint action. I will present data from recent ERP and fMRI studies in which we investigate monitoring processes that enable adaptive behaviour in social interactions.

S-286: Adolescents' multiple goals and academic learning

Manfred Hofer, Thea Peetsma (chair)

During adolescence, students have to pursue many goals. Therefore, learning might compete with leisure activities. One question is whether motivational and achievement outcomes depend on the quantity or quality of extracurricular activities. From a differential perspective, groups of adolescents differing in their future time perspectives may develop differentially regarding academic variables. From an instructional perspective, the congruence

between teacher's and student's goals should be an important factor. Finally, the question arises which interventions can be developed to effectively help students avoiding school-leisure conflicts, reaching a better integration of their goals, and consequently living a balanced life.

Students' well-being and academic achievement as a function of multiple role engagement: Not quantity but quality matters

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To understand students' wellbeing and academic achievement it is important to consider the number, strength and quality of competing action alternatives, such as students' work and leisure activities. This study investigates effects of students' multiple role engagement on their wellbeing and academic achievement. An electronic survey was held in two samples (n=868 Flemish and n=539 Dutch undergraduates). Hierarchical regressions showed that the quality of engagement in (extra)curricular activities (i.e., type of motivation to engage in activities) is a stronger predictor than the quantity of engagement (i.e., number of activities; time spent in (extra)curricular activities). Theoretical and practical implications are discussed.

Types of students motivated for leisure versus school

van der Veen, Ineke SCO-Kohnstamm Institute, University of Amsterdam, Amsterdam, Netherlands **Peetsma, Thea** SCO-Kohnstamm Institute, University of Amsterdam, Amsterdam, Netherlands

Increasing future time perspectives on leisure have been found to undermine students' academic motivation and achievement. Recognizing types of students strongly in favour for leisure time, makes it possible to respond to this early in their school career. Participants were about 1200 12-13 year old students attending pre-vocational education. Questionnaires on leisure perspectives and school motivation were administered four times during a year and report marks were collected. We could distinguish two groups of students: one with moderate and stable, another with high and increasing leisure perspectives. The developments in achievement and academic motivation of both groups will be discussed.

Goal (in)congruence between teachers and students in informal learning environments

Minnaert, Alexander Dept. of Educational Sciences, University of Groningen, Groningen, Netherlands Secondary vocational education has undergone a major shift towards cognitive apprenticeship aiming at the acquisition and use of self-regulatory processes. Opposed to formal learning environments, informal learning pretends to be more realistic, learner-oriented, and in line with students' goals. The question remains open whether students' perception of informal learning settings are in line with teachers' goals. 192 students and 18 teachers participated in this study. Students perceived the learning context significantly less realistic and flexible than their teachers. The role of (dis)congruities between teacher goals and students' goal perceptions in promoting (self-regulated) learning is discussed.

The effects of a training program for minimizing school-leisure conflicts

Reiser, Goran Inst. für Kulturwissenschaften, Universität Bayreuth, Bayreuth, Germany

Pupils from the 6th, 7th and 8th grade (N=52) were trained with a self-regulation program in order to observe possible effects on motivational variables and homework according to the theory of motivational action conflicts (Hofer et al., 2004). In a

standardized dairy pupils had to note down the daily time spend for homework, learning and leisure activities as well as their attitudes toward homework and leisure. Both instruments were used before and after the self-regulation program. The results show positive effects on doing homework and the attitude towards it. Nevertheless the attitude towards leisure did not change. Keywords: Self-regulation, school-leisure conflict, homework

Resolving goal conflicts: An intervention study
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Conflicts between achievement goals and social goals of students can have negative consequences for goal attainment and subjective well-being. Based on an existing intervention, designed to foster students' goal achievement by increasing goal commitment and perceived attainability, a more comprehensive intervention was developed. The new intervention was tailored to help resolve goal conflicts by setting priorities. In a randomized control design 30 students received the new intervention, 29 received the original, and 26 served as a control group. Goal conflicts were only reduced in the group that received the new intervention. However, goal attainment and subjective well-being were not increased.

S-287: Assessing quality in higher education

Manuela Pächter, Edith Braun (chair)

Developments in Europe such as the declaration of Bologna and the European Qualification Framework have lead to a new view on quality in higher education. Quality is regarded from a holistic point of view as a process in which input, process and outcome variables are connected with each other. In the symposium approaches to will be presented which focus on the assessment of input variables (e.g., personnel, infrastructure) as well as process variables (e.g., teaching and learning processes) and outcomes (e.g., competences). Further-more, the contributions regard the acquisition of competences for life-long learning as a core aspect of educational quality.

Internships in Bachelor programmes: Perspectives of different stakeholders

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Objective: To identify supporting and inhibitory factors of successful students' internships against the background of the implementation of Bachelor programmes in Europe. Methods: An analysis of needs of different stakeholders involved in internships was conducted. Students, organizers at universities and supervisors in institutions were interviewed on expectations of internships and necessary competencies for successful performances. Results: Especially professional and personal competencies are required in internships. Students expect to gain professional and social competencies during internship. Recommendations about the organization of students' internships are derived, thus providing an important contribution to quality assurance in higher education.

Lecturer's expectations of academic course evaluation

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Braun, Edith Psychology, Free University Berlin, Berlin, Germany

According to the Bologna Process, universities should document the acquisition of competence as the outcome of the educational process. In 2007, 184 lecturers at the Freie Universität Berlin were surveyed to determine whether they judged key competences to have been sufficiently evaluated. In addition we investigated which evaluation items the lecturers preferred when being evaluated. Qualitative answers have been categorized and quantified. As expected, the areas of competence were rated as sufficient, but at the same time there was a preference for traditional process variables. We conclude that professional consultants are needed to train lecturers to meet the new demands.

German version of the Approaches to Teaching Inventory (ATI-R) for quality assurance processes in university teaching

Lübeck, Dietrun FB 12 - Psychologie, Freie Universität Berlin, Berlin, Germany **Soellner, Renate** Psychology, Free University Berlin, Berlin, Germany

Within the context of a study on academic teaching the revised version of the "Approaches To Teaching Inventory" (Trigwell, Prosser & Ginns, 2005) has been implemented as a web-based questionnaire that was completed by 620 lecturers of four universities in Germany and Switzerland in summer 2006. The study was aimed at conceptions (Kember, 1997) and associated teaching strategies of university lecturers in different teaching environments. Implications for quality assurance processes that focus on human resource development particularly for university lecturers will be discussed.

Course evaluations: New quality aspects in a questionnaire and three approaches for developing teaching skills

Lossnitzer, Tim Psychology, University of Jena, Jena, Germany **Schmidt, Boris** Psychology, University of Jena, Jena, Germany

Inspired by the Bologna Process, the functions and scopes of course evaluations in universities have changed. Formerly less recognized quality dimensions like learning outcomes are now being focused. We will present a recently developed questionnaire that integrates "traditional" and "modern" quality aspects. In three studies the goodness of this questionnaire will be analyzed, focusing on construct and criterion validity. Though commonplace, it is rarely implemented that course evaluations need to be integrated into specific approaches aiming at the development of teaching skills. Three such approaches are investigated in the finally presented interview study, involving superordinates, peers, and counselors.

Assessment of quality in higher education and vocational education and training in Austria

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2005 a new system for quality assurance was introduced for the Higher Education and Vocational Education and Training institutions in Austria. The quality assurance system defines quality objectives which refer to key aspects of vocational education. To support the evaluation process questionnaires for online surveys were developed. In an empirical investigation carried out 2006 more than 60.000 students and more than 4.000 teachers took part. Based on these data the test quality of the instruments was analyzed (e.g. reliability and validity analyses). Besides, recommendations for the interpretation of evaluation data and for the assurance of quality could be derived.

S-288: Repetitive negative thinking across emotional disorders

Thomas Ehring, Karina Wahl (chair)

Because of its widespread presence across emotional disorders, repetitive negative thinking (RNT, e.g. worry, rumination) has been suggested to be an important transdiagnostic process. In addition, there is evidence from prospective and experimental studies supporting its role as a maintaining factor. The symposium comprises current research into the phenomenology, causes and effects of RNT. The contributions thereby cover a wide range of disorders (depression, GAD, OCD, PTSD) and methodological approaches (phenomenological, correlational, experimental and intervention studies). As a whole, the evidence presented further supports the role of RNT as a transdiagnostic maintaining factor and provides innovative perspectives for future research.

Differences and similarities between obsessive thoughts and ruminative thoughts in obsessive compulsive and depressed patients

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Introduction. The objective of the study was to compare obsessive and ruminative thoughts in depressed and obsessive-compulsive patients. Methods. Thirty patients diagnosed with OCD and 30 patients diagnosed with Major Depression were asked to identify both a personally relevant obsessive and ruminative thought and to subsequently evaluate these thoughts on a modified version of the Cognitive Intrusions Questionnaire (CIQ, Freeston et al., 1992). Results. In OCD patients, ruminative thoughts were more common and more distressing than predicted. In depressed patients, obsessive thoughts occur infrequently. Conclusions. Rumination appears to be inherently linked to obsessive thoughts and mental neutralising in obsessive-compulsive patients.

Worry and rumination in real life: Do dysphorics prefer to ruminate instead of worry?

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Objective: Assessment of rumination, worry and response styles to daily hassles in dysphorics. Method: Dysphoric (n=68) and non-dysphoric (n=92) students (73% female, age: M=21.4 years) completed PSWQ-D, RSQ and the Daily Hassles Scale. Cognitive response styles to daily hassles experienced within the last month were assessed via retrospective self-ratings. Results: Preliminary analyses indicate that both, rumination and worry, are common in daily life of dysphorics. Discussion: The data can contribute to the identification of differential versus unique aspects of rumination and worry.



A test of a metacognitive model of rumination and depression in undergraduates and clinically depressed individuals

Roelofs, Jeffrey Dept. of Clinical Psychology, Maastricht University, Maastricht, Netherlands

This study sought to test out a clinical metacognitive model of rumination and depression in undergraduates and clinically depressed individuals. A total of 254 undergraduates of Maastricht University and 198 clinically depressed patients referred to the community mental health centre of Maastricht were included. Structural equation modelling was used to test the fit of the model in both samples. Following some modifications to the model, the model provided a good fit to the data in undergraduates and clinically depressed individuals. The findings have clinical implications including the implementation of metacognitive-focused cognitive therapy of depression.

The role of rumination and interpersonal behavior in depression

O'Mahen, Heather Mood Disorders Centre, University of Exeter, Exeter, United Kingdom

We examined pregnant women's willingness to disclose interpersonal needs on their perceptions of support, rumination, and depressive symptomatology. Ninety-seven women recruited in community obstetrics clinics who screened at risk for depression completed a clinical interview. Path analysis indicated that women with less social support, and higher levels of rumination and silencing the self, had more depressive symptoms. Women who reported less perceived social support endorsed stronger "silencing the self" views. "Silencing the self" views predicted level of rumination. The relationship between perceived social support and rumination was not significant. This study highlights specific interpersonal mechanisms involved in rumination and depression.

The role of reduced concreteness in trauma-related rumination

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Schaffrick, Christina Dept. of Psychology, University of Bielefeld, Bielefeld, Germany
Szeimies, Anna-Kristina Dept. of Psychology, University of Braunschweig, Braunschweig, Germany

Objectives: It was aimed to test the hypothesis that the negative effects of trauma-related rumination are partly due to its abstract nature. **Method:** In study 1, abstractness of rumination was rated from answers given by trauma survivors in a rumination interview. Study 2 experimentally manipulated abstractness of thinking in a subclinical group and investigated its short-term effects on mood and PTSD symptoms. **Results:** Results showed that abstractness of thinking was related to higher levels of PTSD symptoms in the correlational as well as the experimental design. **Conclusions:** The results support the view that reduced concreteness is a critical variable for the negative effects of repetitive thinking on emotional processing.

A targeted attention regulation training reduces intrusiveness of worrisome thoughts in subclinical GAD

Schönfeld, Sabine Inst. für Klin. Psychologie, Technische Universität Dresden, Dresden, Germany
Lange, Annika Department of Psychology, University of Bielefeld, Bielefeld, Germany

Generalised Anxiety Disorder (GAD) is characterised by intrusive worrisome thoughts. This symptom might be partly caused by a deficit in the ability to inhibit negative task irrelevant and intrusive stimuli. The present study investigated whether a training of attention regulation reduces the intrusiveness of worries. 47 high worriers were randomly assigned to either an attention regulation training (ART) or a placebo training (PT), which

took one week and included daily exercises. Both trainings significantly reduced symptoms. However, the ART was over and above successful in reducing intrusiveness of worries. These results suggest that such targeted interventions could address transdiagnostically occurring symptoms.

S-289: Glucose and glucocorticoid effects on human memory

Jonathan Foster (chair)

Increases in blood glucose have been associated with memory facilitation in humans. Manipulation of arousal level has also been demonstrated to regulate memory functioning, an effect likely to be mediated by adrenaline (epinephrine) and cortisol. Given that adrenaline and cortisol are known to promote an increase in blood glucose concentration, it is possible that the impact of glucose and arousal on memory are associated. This symposium will present recent findings in the glucose, arousal and memory literature, with the aim of exploring whether a formal relationship exists between glucose, glucocorticoids and human memory.

Brain imaging investigations of glucose and cognition

Riby, Leigh Division of Psychology, Northumbria University, Newcastle, United Kingdom

Using the temporal precision of ERP methodology, the current work aimed to investigate further glucose-mediated cognitive processes. In the first study participants completed a visual three-stimulus oddball task. Consistent with behavioural evidence of memory-specific effects, glucose moderated the magnitude and latency of the P3b ERP component (memory updating effect). However, glucose also interacted with the P3a and P2 components (attention effects). Further ongoing work presented here shows the feasibility of combining ERP methods with standardised neuropsychological measures of attention and memory (e.g. Stroop, Verbal Learning Task) to reveal in more detail the neuro-cognitive mechanisms that can benefit from glucose ingestion.

Acute stress, cortisol and memory

Smeets, Tom Dept. of Psychology, Universiteit Maastricht, Maastricht, Netherlands

Exposure to stressful events is known to trigger a variety of physiological reactions, of which many are related to the activation of the stress-responsive hypothalamic-pituitary-adrenal (HPA) axis. A plethora of research has revealed that the secretion of cortisol due to HPA axis stimulation may modulate memory functioning. However, the precise direction of stress-induced cortisol effects on memory performance is far from clear. In this talk, I will highlight some of the latest research from our lab and discuss some promising avenues for future research.

Processing of emotionally arousing memory materials: effect on cognitive and physiological processes

Scholey, Andrew Psychology & Sports Science, Northumbria University, Newcastle Upon Tyne, United Kingdom

Increasing mental effort can reduce blood glucose levels and impair performance while processing emotional material raises blood glucose and can improve memory. In one study 72 young adults were randomised to a memory task condition according to a 2 (emotional, neutral words) x 2 (+/- secondary task) design. Blood glucose levels changed according to previous literature but independently of memory effects. In another study glucose preferentially enhanced a tracking task but not concomitant encoding of verbal material. These data suggest that the relationship between blood glucose changes and cognitive performance requires

consideration of multiple physiological, neurohormonal and cognitive processes.

Effect of glucose ingestion on recognition memory for emotionally arousing stimuli

Sunram-Lea, Sandra Psychology, Lancaster University, Lancaster, United Kingdom
Brandt, Karen Psychology, University of Keele, Keele, United Kingdom

Previous data suggest that glucose administration facilitates recognition memory that is accompanied by recollection of contextual details and episodic richness. Research on emotion and memory has shown the presence of an emotional enhancement effect such that emotional stimuli are more memorable than their more neutral counterparts. This paper discusses whether the recognition memory facilitation effect associated with glucose would emerge for emotional material that already benefits from a memory advantage. The results suggest that the additive effect of glucose ingestion and a rise in glucose levels due to the emotional nature of the stimuli shifts the previously observed dose-response curve.

Stress, glucose and memory in adolescents

Smith, Michael Paediatrics and Child Health, UWA, Crawley, Australia
Foster, Jonathan Paediatrics and Child Health, UWA, Crawley, Australia
Hill, Hilary Neurobiology, ICHR, Subiaco, Australia
van Eekelen, Anke Neurobiology, ICHR, Subiaco, Australia

Glucose administration has been observed to facilitate memory in humans and rodents. A number of factors are thought to modulate this facilitation effect, including glucoregulatory efficiency and cognitive demand. In a series of recent studies, we have investigated the impact of stress on this effect. Specifically, the effects of glucose on memory were investigated in adolescents who differed in self-reported and physiological (i.e. basal salivary cortisol) baseline stress levels, a) under conditions of acute stress, or b) under standard testing conditions. The potential role of stress in modulating susceptibility for glucose enhancement of memory will be outlined in this talk.

S-290: Meaning and personal growth in the context of cancer

Crystal Park (chair)

Personal growth following highly stressful experiences such as cancer is an area of great interest, but much remains to be learned about the experiences of growth, including the determinants of growth, the meaning of growth in the lives of those who experience it, and the clinical implications of growth for cancer survivors. In this symposium, five scientists will present their cutting edge research regarding growth in the context of cancer and then our discussant, Dr. Carolyn Aldwin, will integrate these findings, highlighting the underlying themes regarding the personal and coping factors that determine personal growth in those with cancer and others, and the meaning of this growth in terms of psychological adjustment.

Correlates of anticipated posttraumatic growth among cancer patients

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Altmaier, Elizabeth Dept. of Psychology, University of Iowa, Iowa City, USA

The current study examines relationships between anticipated posttraumatic growth (PTG) and demographics (e.g., age, gender), psychological functioning, physical functioning, personality characteristics (e.g., optimism), coping, and social support. Study participants (N = 100) have been diagnosed with gastrointestinal cancer, acute myelogenous leukemia (AML), or a condition that requires an autologous or allogeneic bone marrow transplant, and received treatment. Study participants complete

three interviews: baseline (pre-treatment), 60 days, and 8 months after treatment. This is a correlational study: regression analyses will identify predictors of anticipated PTG. Data are currently being gathered; approximately 33% of patients have been enrolled to date.

Explanatory style and self-perceived posttraumatic growth among women with breast cancer in Hong Kong

Ho, Samuel Mun-Yin Dept. of Psychology, University of Hong Kong, Hong Kong, China, People's Republic of : Hong Kong SAR

Objectives: To investigate the relationship between explanatory styles and posttraumatic growth among women with breast cancer. **Methods:** This is a cross sectional study. 95 eligible patients completed a set of psychological inventories at the outpatient clinic. **Results:** Patients' tendency to attribute the causes of positive events to internal, global, and stable factors tended to have more self-reported posttraumatic growth. One's explanatory style for negative events was associated with posttraumatic stress symptoms but not with self-perceived posttraumatic growth. **Conclusion:** The explanatory style for positive events might affect later cognitive processing, such as meaning making, which will affect self-perceived posttraumatic growth.

Posttraumatic growth and posttraumatic stress in patients and their partners adapting to cancer

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Cancer patients' families are highly involved in the disease and its treatment. Few studies have examined the role of partners in adaptation or posttraumatic personal growth (PG), which involves increased personal strength, appreciation for life, compassion, and faith, and improved problem-solving abilities and relationships. With a longitudinal prospective design, we investigated the time-course of PG in 200 patients and partners assessed at diagnosis and six and 12 months post-diagnosis. Individual and dyadic factors predicting PG, including psychological stress, dyadic coping, and emotional, behavioral and cognitive reappraisal as well as cancer stage, treatment factors, and psychiatric medication will be presented.

Determinants and meaning of growth in cancer survivorship

Park, Crystal Dept. of Psychology, University of Connecticut, Storrs, USA **Blank, Thomas** Dept. of Family Studies, University of Connecticut, Storrs, USA **Edmondson, Donald** Dept. of Psychology, University of Connecticut, Storrs, USA

In a sample of 250 younger adult cancer survivors, we prospectively investigated, over a one year period, predictors of stress-related growth as well as the influence of growth on longer-term adjustment to cancer. Results suggested different models for men and women. For example, although religious coping was a strong predictor of increased growth over time for both men and women, emotional expression predicted growth only for women while a sense of control over the cancer predicted growth only for men. Additionally, controlling for time since diagnosis, growth was related to some measures of psychological well-being only for women.

The meaning of personal growth in the context of cancer: Research and clinical perspectives

Lee, Virginia Health Center, McGill University, Quebec, Canada

Learning to live a meaningful life within the limitations imposed by cancer or its treatment becomes the essence of many of the transitional

needs of cancer survivors from the moment of diagnosis and for the balance of his or her life. A number of meaning-oriented clinical interventions have emerged with varying outcomes. This presentation will critically review and discuss the theoretical and empirical questions arising from a research program examining the effects of a Meaning-Making intervention (MMi), using clinical examples from patients diagnosed with different types of cancer at various points along the cancer trajectory.

S-291: Career counseling in Europe: A future agenda for research and practices

Annelies van Vianen (chair)

Extant career theory, models and methods do not fit current and future job markets. Traditional career concepts and counseling practices refer to the notions of stability and predictability of people and environments. These notions will no longer hold. Europe in particular is facing demographic and job market changes that call for integrative approaches to careers. Yet, career theories and counseling practices within Europe seem diverge. This symposium includes contributions from five European countries that assessed their current career concepts and practices and seek to develop new career models and methods as a common basis for the training of career counselors.

Thinking global and acting local: Perspectives on career counseling with adults

Duarte, Maria Eduarda Fac. of Psychol. and Education, University of Lisbon, Lisbon, Portugal **do Rosário, Maria** Faculty of Psychology and Educ., University of Lisbon, Lisbon, Portugal

Objectives: Career counseling is examined along several approaches: the differential (do they impose constraints although allow freedom to counselee and counselor?), the developmental (do they stimulate exemption and therefore freedom?), the constructionism meta-model (do they respond to new challenges?), and the impact on guidance practices (do they restrain freedom?). **Methods:** A Portuguese adaptation of a Dutch Survey was administered to career counselors working in organizational settings. **Results:** The current aim of practitioners is to assess processes and outcomes as they occur in work environments. **Conclusions:** Evidence supports the role of the theorists, but suggests the need to construct contextualized models.

Career counseling and career counselors in Italy

Soresi, Salvatore Dept. of Developm. Psychology, University of Padova, Padova, Italy **Nota, Laura** Department of Developmental Ps, University of Padova, Padova, Italy **Ferrari, Lea** Department of Developmental Ps, University of Padova, Padova, Italy

Objectives: One of the biggest vocational guidance challenges in Italy is increasing the professionalism of practitioners who do not have the requisites required by the SIO (Italian Society of Vocational Guidance, established in 2004) and the IAEVG (International Association for Educational and Vocational Guidance). **Methods:** A group of 100 Italian practitioners were administered the Italian adaptation of a Dutch Survey. **Results:** Data will be presented on the type of action carried out in different professional contexts by comparing them to client typology and amount of specific training received. **Conclusions:** Implications for training of practitioners will be discussed.

Current developments in the field of counseling: Evolution of practices and professions in France

Cohen-Scali, Valérie INETOP, Paris, France **Bigeon, Christine** INETOP, INETOP, Paris, France

Objectives: Providing an overview of the current developments regarding guidance practices and professions in France. **Methods:** This overview is based on an analysis of existing literature and responses to surveys among diverse groups of counselors. **Results address:** (1) the increasing number of counselors in many professional fields who get involved in supporting others; (2) the professionalisation of counselors in the field of vocational guidance; (3) the growth of the company-executives' implication in the career development counseling. **Conclusions:** These results question the training of counselors (and particularly of the new actors) that obviously constitutes major economic, social and human issues.

Helping at-risk youth cope with multiple transitions: From career counselors to case managers

Massoudi, Koorosh Inst. für Psychologie, Universität Lausanne, Lausanne, Switzerland **Dauwalder, Jean-Pierre** Institute of Psychology, University of Lausanne, Lausanne, Switzerland

Objectives: Swiss statistics show a relatively new and risky phenomenon: a high rate of youth unemployment (Weber, 2004). Helping at-risk youth cope with complex and multiple transitions is a major challenge for career counseling. This presentation offers a review of current practices and a reflection about future needs. **Methods:** Impacts and specificities of different intervention programs (counseling, training, coaching) were studied. **Results:** Data analyze individual and environmental risk factors and counseling methods. **Conclusions:** The implementation of a case management system, aiming at the coordination of different interventions and a longitudinal follow up of at-risk youth during their life-span, is needed.

Current practices and future visions of career counseling in Europe

van Vianen, Annelies Work and Organizat. Psychology, University of Amsterdam, Amsterdam, Netherlands **de Pater, Irene** Work and organizational psycho, University of Amsterdam, Amsterdam, Netherlands

Objectives: The study summarizes current career counseling practices in Europe and the need for new approaches towards careers that fit recent labor market developments in Europe. **Methods:** Career counselors in Europe responded to a survey. Quantitative and qualitative analyses were performed among the participating countries. **Results:** Practitioners use traditional methods and instruments or develop new instruments that lack theoretical and empirical validation. **Conclusions:** European countries share many of their career guidance practices and they face similar changes in people's work lives, but are not yet prepared for these changes. Implications for career theory, concepts and methods are provided.

S-292: Partnership and parenthood in Germany

Sabine Walper, Johannes Huinink (chair)

This symposium informs about research questions, design, and findings of the priority program "Panel Analysis of Intimate Relationships and Family Dynamics" (pairfam). Pairfam addresses key issues in partnership development from mating to dissolution, fertility decision making, parenting, and intergenerational relationships. The piloting "Mini-Panel" employs a multi-actor and multi-informant design with three age cohorts of target participants (age 15-17, 25-27, and 35-37 years; n = 656) as well as their partners, parents, and children. The papers



presented in this symposium illustrate the range of research questions as well as key methodological options to invite additional users of this data base.

The intergenerational transmission of relatedness and autonomy in adolescents' and adults' romantic relationships

Walper, Sabine *Inst. für Bildung, Universität München, München, Germany* **Thönnissen, Carolin** *Inst. für Bildung, Universität München, München, Germany* **Wendt, Eva-Verena** *Inst. für Bildung, Universität München, München, Germany*

This study focuses on relatedness and autonomy in adolescents' and adults' romantic relationships. In addition to age and gender differences as well as effects of partnership type (non coresiding, coresiding, married), special attention is paid to the intergenerational transmission of partnership quality. Data come from a three-cohort longitudinal study (subjects aged 15-17, 25-27, 35-37 years) conducted in Germany. Dyadic data analyses include both partners' perspectives on relationship quality (relatedness, emotional security, autonomy) as well as parental partnership quality. Results point to distinct transmission effects for each feature of partnership relations, and a high salience of father-offspring relationships for romantic relationships.

Attachment representation, sexual motives and emotional intimacy in young romantic relationships

Wendt, Eva-Verena *Inst. für Bildung, Universität München, München, Germany* **Walper, Sabine** *Inst. für Bildung, Universität München, München, Germany*

This paper addresses influences of general attachment-representations on sexual motives in young couples, focusing on long-term effects on the relationship development. Data come from N=57 romantic couples (mean-age 22.7), interviewed 2005, 2006 and 2007. Both partners' general attachment-representations, sexual motives and the emotional relationship-quality were assessed. Results show that sexual motives are primarily influenced by one's own attachment security as well as by the interaction of both partners' security. In general a high level of security is related to more positive, approach oriented sexual motives. Couples with secure attachment representations develop more sexual satisfaction and more emotional intimacy over time.

Individual resources, couple match and relationship stability

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The present study investigates a variety of individual attributes as predictors of partnership stability, focusing on the role of partners' similarity (couple match). Effects of couple match are compared to those in terms of complementarity and independent additive effects of each partners' individual resources. Data come from 158 adult couples who participated in the PAIRFAM minipanel. Dyadic analyses suggest a positive effect of similarity for some characteristics (e.g., educational attainment), while for other domains the presence (or absence) of individual resources determines subjective relationship stability. A theoretical synthesis of the results is proposed considering processes at the individual and dyadic level.

Tenaciousness and flexibility in a model of childbearing intentions

Schröder, Torsten *Inst. für Soziologie, EMPAS, Universität Bremen, Bremen, Germany* **Maul, Katharina** *Inst. für Soziologie, EMPAS, Universität Bremen, Bremen, Germany* **Huinink, Johannes** *Inst. für Soziologie, EMPAS, Universität Bremen, Bremen, Germany*

Childbearing is a matter of resource intensive decision making. It frequently competes with other life projects (like work career). Sociological and economic models mostly focus on economic and normative factors, while the costs of failure to achieve personal goals remain largely unconsidered. The present paper closes this gap by using concepts of goal-management as suggested by psychological action theory. Based on a sample of $n = 226$ young adults (age 25 and older) our findings show that the effect of financial concerns on childbearing is moderated by tenaciousness and the salience of competing life goals.

Reasons to support old parents: Findings from the German study 'Panel analysis of intimate relationships and family dynamics'

Klaus, Daniela *Inst. für Soziologie, Techn. Universität Chemnitz, Chemnitz, Germany* **Nauck, Bernhard** *Inst. für Soziologie, Techn. Universität Chemnitz, Chemnitz, Germany*

Whereas many studies proved children as being the main caregivers for their aged parents the motivations behind their helping behavior are somewhat vague. The research question of this contribution is: To what extent grown-up daughters and sons are not only able but willing to care for their parents? Using data from a pre-study of the 'Panel Analysis of Intimate Relationships and Family Dynamics' four motivations are tested with respect to their relative power in explaining the degree of material and instrumental support given to parents. The findings suggest reciprocity as most decisive for parental support but also adult child's feeling of intimacy and altruism are uncovered as significant.

Parenting, coparenting and children's development

Geier, Boris *Social Monitoring, German Youth Institute, München, Germany* **Alt, Christian** *Social Monitoring, German Youth Institute, München, Germany*

Despite considerable international research on parenting and its relevance to child development, Germany still lacks representative data which allow to examine contextual influences on parenting styles as well as links between parenting and child outcomes. The present study seeks to provide appropriate instruments for assessing warmth and control in large-scale surveys. Based on nationwide surveys ($n = 5,322$ and $10,416$), with parents of children aged 0 to 17, newly adapted short scales have been tested. The results indicate satisfactory psychometric quality. Not only parents' individual parenting style but also couples' co-parenting strategies seem to affect child development.

S-294: Emotion-cognition interactions in aging and dementia

Katja Werheid, Hakan Fischer (chair)

Over the past decade, Social Cognitive Neuroscience has provided a wealth of evidence supporting the intimate relationship of emotion and cognition. A rapidly growing research area investigates the impact of healthy and pathological aging on the interaction of emotion and memory. This symposium gathers investigators from different countries to provide an overview of current research on the influence of emotion on cognition from a lifespan perspective, to obtain an integrative perspective on current research on emotion-cognition coupling in 'normal' aging and dementia, and to discuss the methodological and clinical implications that arise from our current status of knowledge.

Age differences in emotional memory

Mather, Mara *Dept. of Psychology, University of California, Santa Cruz, USA*

Recent findings reveal that with age an increasing proportion of what people remember is positive instead of negative. One question is whether this positivity effect is the result of an increased focus on regulating emotions among older adults or the result of age-related decline in processes that detect and monitor negative, potentially threatening stimuli. In the current studies, we found that older adults' positivity effect in initial attention requires full attention and is eliminated when we distract participants. These findings suggest that older adults use top-down control mechanisms to enhance processing of positive stimuli and diminish processing of negative stimuli.

How emotion affects older adults' memories for event details

Kensinger, Elizabeth *Dept. of Psychology, Boston College, Chestnut Hill, USA*

Emotional experiences often are remembered with tremendous vividness and perceptual detail. In this talk, Dr. Kensinger will present behavioral and fMRI research examining the processes recruited as young and older adults process positive and negative information, and how those processes correspond with the way in which the information is later remembered. The results demonstrate that the amygdala and orbitofrontal cortices, through their interactions with other medial temporal-lobe and visual processing regions, mediate the effects of negative emotion on memory vividness. The engagement of this emotional memory network remains relatively preserved across the adult lifespan.

Age differences in processing emotional and motivational information

Ebner, Natalie *Center for Lifespan Psychology, Max Planck Institute for Human, Berlin, Germany* **Lindenberger, Ulman** *Center for Lifespan Psychology, MPI for Human Development, Berlin, Germany*

Adults of all ages share the lifespan schema that young adults preferentially pursue growth goals, and older adults pursue loss-prevention goals. We used recognition memory to test: (a) whether young and older adults differentially rely on this schema when associating faces of different ages (young, old) with goals of different orientations (growth, loss-prevention); and (b) whether emotional expression (happy, sad) influences processing of face-goal associations. Individuals of either age group, but especially older adults, associated young faces with growth and happy expressions, and old faces with loss-prevention and sad expressions. Emotional and motivational aspects of lifespan schemata are discussed.

Remembering and forgetting of emotional information in the aging brain

Fischer, Hakan *Aging Research Center, Karolinska Institute, Stockholm, Sweden*

Forgetting begins immediately following the initial encoding of information and proceeds across time. The current objective was to investigate the neurobiological basis of the forgetting process by means of event-related fMRI. Of chief interest was the extent to which aging and the emotional valence of images affected patterns of brain activation. Memory performance and corresponding BOLD activations were measured on three occasions, with initial results indicating that both aging and emotionality influence the neural correlates of forgetting. The present results imply that the neurobiological basis of forgetting varies as a function of both age and the emotional content of images.

Emotional memory and memory distortions in Alzheimer's disease: Evidence from laboratory studies and the attacks of September 11th, 2001

Budson, Andrew Edith Nourse Rogers Memorial V, Boston University Alzheimer's, Bedford, USA

In two studies, emotional memory and memory distortions were investigated in patients with Alzheimer's disease. In the laboratory, patients and controls performed a false memory test in which they were tested on non-presented "lure" items that were semantically related to either emotional or non-emotional study items. Outside the laboratory, emotional responses to, and memory for, the 9/11/01 attacks were investigated in patients and controls in the initial weeks following the attacks, after 3 to 4 months, and finally after 1 year. Emotional intensity was similar between patients and controls, whereas memory distortions were more common in the patients.

Emotion-memory coupling in mild cognitive impairment

Werheid, Katja Inst. für Psychologie, Humboldt-Universität zu Berlin, Berlin, Germany

Recognition memory is sometimes distorted by emotion in terms of an 'emotion-induced recognition bias'. To examine whether this bias is robust to aging and memory decline we investigated recognition of positive, negative, and neutral faces in elder adults with amnesic Mild Cognitive Impairment (MCI), young and elder controls. Recognition performance was reduced in the elderly and even more so in MCI. The bias was preserved and pronounced for positive faces in both groups. Viewed together with findings on semantic relatedness of positive facial emotion and familiarity, biased recognition of emotional, especially positive, faces may serve as a compensatory memory strategy.

S-295: Positive and negative promotion of children's emotions

Victoria del Barrio (chair)

The aim of this symposium is to join different considerations about negative emotions in Spanish children found by the researchers in this field. They explore how the aggression in children is related to different types of mothers, how stressful life events and social skills deficits predict hopelessness, the link between empathy and prosocial behaviour versus emotional instability and aggressiveness and also how to improve emotional state in children affected by serious impairment like Asperger syndrome. The data from these studies will permit us to consider the positive and negative elements related with children's emotional adaptation in order to build a useful plan for teachers and parents of a balanced emotional education

Empathy and personal disposition versus emotional instability and aggressiveness in childhood

Mestre, Vicenta Psicología Basica, Universidad de Valencia, Valencia, Spain **Samper, Paula** Psicología Basica, Universidad de Valencia, Valencia, Spain **Tur, Ana** Psicología Basica, Universidad de Valencia, Valencia, Spain **Bádenes, Mireia** Psicología Basica, Universidad de Valencia, Valencia, Spain

We present an empirical study conducted on the Spanish population with a view to determining the link between empathy and prosocial behaviour versus emotional instability and aggressiveness from an intercultural perspective. Sample are 593 boys and 638 girls, aged 10 to 12. Instruments were the Inventory of Empathy for Children and Adolescents (Bryant, 1982), the Prosocial Behaviour Scale, the Emotional Instability Scale and the Physical and Verbal Aggression Scale (Caprara and Pastorelli, 1993; Del Barrio, Moreno and López, 2001). Results show significant differences in

empathy and aggressiveness depending on the type of school (some schools had a greater presence of students from other countries).

The relationship between rearing types of mother and aggression in children and adolescents

Ángel Carrasco, Miguel Personality Dept., UNED, Madrid, Spain

The present study explore how the aggression in children is related to different subtypes of mothers. The sample consisted of 524 children (45.2% girls and 54.8 boys) ranging from 7 to 14 years old (means 11.11; Standar Desviation 1.56). Children completed the Childs Report Behavior Parenting Inventory (Shaefer, 1965) and The Physical and Verbal aggression Questionnaire (Caprara et al., 1993). Cluster analysis identified three distinct groups of mothers: hostile mothers, balanced mothers and affective mothers. Mothers profiles differed significantly on physical and verbal aggression in children. Membership in hostile mother cluster (high control and high hostility and low affect) was related with higher scores in physical and verbal aggression. From a bidirectional perspective aggression.

Stressful life events and deficits in social skills as predictors of adolescents hopelessness expectancies

Rodríguez Naranjo, Carmen Personality Dept., University of Malaga, Malaga, Spain **Cano Gonzalez, Antonio** Basic Psychology., Malaga University, Malaga, Spain **Sanchez, Alicia** Personality Dept., Malaga University, Malaga, Spain

We explore an integration of the hopelessness theory and the social skills approach and test whether stressful life events and social skills deficits predict hopelessness expectancies. A sample of 642 students (12 to 18 years) completed the Life Experiences Survey, the Social Skills Inventory and the Hopelessness Scale. As expected, the regression analyses revealed that stressful life events, deficits in social expressivity, the tendency to be social sensitive, and deficits in social control skills, predicted hopelessness expectancies. Finally, stressful life events interacted with deficits in social control skills to predict hopelessness expectancies. These findings convey important implications regarding the focus of intervention for hopelessness depression in adolescents.

Assessment of emotional disorders by screening behavior in 5-to 12-year-old children

Maganto, Carmen Dept. of Clinical Psychology, University Basque Country, San Sebastián, Spain **Garaigordobil, Maite** Dept. of Clinical Psychology, University Basque Country, San Sebastián, Spain **Pérez, Jose Ignacio** Dept. of Clinical Psychology, University Basque Country, San Sebastián, Spain Clinical assessment in children is not devoid of difficulties due to the need of hetero-reports for accurate evaluation (Cova & Maganto, 2005; Harrington, 2002; Stice). The purpose of this work is to present the Children's Behavior Problem Screening Test (SPCI, Maganto & Garaigordobil, 2005), an instrument that provides information about 11 diagnostic categories. The sample is made up of 1272 males and females -5 to 12- with and without emotional disorders. Relevant statistical analyses of the diagnostic categories confirmed the capacity of the screening test to discriminate between children with and without emotional problems, as well as revealing statistically significant gender differences in these problems.

Coping with aggression among schomates

Forns, Maria PETRA, University of Barcelona, Barcelona, Spain

Peer aggression is a significant problem among adolescents. This study aims to analyze peer

aggression, adolescents coping strategies and how they influence adaptive functioning. Participants were 400 adolescents aged 11-16 years from Barcelona Secondary Schools. Data were obtained from three self-report measures: a peer aggression and bullying questionnaire (instrument created ad-hoc for this investigation), Adolescent-Coping Orientation for Problem Experiences (Patterson, J. M., McCubbin, H), and Behavior Assessment System for Children Self-Report (Reynolds, C. R. & Kamphaus, R. W.). The results suggest that successful adaptation is related to the type of coping strategies used.

S-296: Advances in objective personality test development and research

Tuulia Ortner, Manfred Schmitt (chair)

Research on Objective Personality Tests (OPT) as proposed by Cattell almost disappeared during the last three decades due to insufficient convergence of T-data with Q-data and L-data. The rapid development of computer aided assessment procedures and recent advances in implicit measurement have fuelled a revival of OPT research. The symposium brings together recent work done to explore the validity and utility of newly developed OPTs. Presentations cover various domains of individual differences such as stress resistance, vocational interests, achievement motivation, and risk propensity. Emphasis is on moderators of the convergence between OPTs and explicit as well as implicit personality measures.

Using questionnaires and objective personality tests in a single setting for the assessment of vocational interests

Häusler, Joachim Psychological Assessment, SCHUHFRID GmbH, Mödling, Austria **Proyer, René T.** Personality and Assessment, University of Zurich, Zurich, Switzerland

A test-battery for the assessment of vocational interests that consists of a questionnaire, a non-verbal test, and several objective personality tests is presented. It is suggested that each test-type has several advantages and disadvantages that make its usage preferable in a given situation. By incorporating measures of the vocational identity of the client and the degree of differentiation of his/her interest profile a sequential model of the usage of questionnaires, nonverbal tests, and objective personality tests is set up. The usefulness of the model is discussed with respect to the current literature.

New results on the validity of an objective test battery measuring the ability to work under pressure

Ortner, Tuulia Inst. für Psychologie, Humboldt-Universität zu Berlin, Berlin, Germany **Kubinger, Klaus D.** Psychology, University of Vienna, Vienna, Austria **Vormittag, Isabella** Psychology, Free University of Berlin, Berlin, Germany

Stress resistance is an important construct within occupational qualification. Due to problems of self report data as faking or introspective limitations, a behaviour based computerized battery was realized referring to the concept of objective personality tests. Following typical occupational demands, measured aspects are for instance: unfavorable working conditions; time pressure and stress resistance under aversion of working according to a plan. Results of different validation studies are presented, as predictive validity of aptitude assessment for university entrance, test data due to teacher's state of burnout and test characteristics of extreme groups. Hypotheses were only partly confirmed.



Would risk propensity be assessed using behaviorally-based tasks? A proposal for an objective personality testing of risk taking behavior

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Risk propensity has been usually assessed using self-reports. Recently, several behaviorally-based alternatives have been presented. In this line, a set of objective personality tests (OPT) for assessing risk-taking behavior has been developed. The current paper presents five tests: the Betting Dice Test (BDT), the Roulette Test (RT), the Crossing the Street Test (CtST), the Risk Propensity Dilemmas Test (RPDT) and the Skillfulness Risk-Taking Behavior Test (SRTBT). It is presented some of the results regarding reliability and convergent as well as criterion validity (guessing tendency in a multiple choice test, risk-taking behavior in a investment simulation task) of these five tests.

The validity of the Objective Achievement Motivation Test (OLMT)

Schmidt-Atzert, Lothar Psychology, University of Marburg, Marburg, Germany **Krumm, Stefan** Psychology, University of Marburg, Marburg, Germany

The OLMT is a computer based objective personality test for the assessment of effort under different motivational conditions. Incentives are the task itself, personal goals, and competition. Different studies were conducted to explore the validity of the test. Participants (university students, trainees) worked on other achievement motivation measures (personality questionnaires, a semi-projective test) as well as on different performance tests (intelligence, sustained attention). In addition, the OLMT was used to predict study and training performance. Results concerning the construct validity were inconsistent, while the criterion validity of the test was confirmed in different studies.

Moderated convergence among implicit, explicit and objective risk propensity indicators

Schmitt, Manfred Inst. für Psychologie, Universität Koblenz-Landau, Landau, Germany **Dislich, Friederike** Inst. für Psychologie, Universität Koblenz-Landau, Landau, Germany **Zinkernagel, Axel** Inst. für Psychologie, Universität Koblenz-Landau, Landau, Germany

Based on theoretical models and previous studies on the consistency and predictive validity of implicit and explicit personality measures, the assumption was tested that the convergence among implicit, explicit, and objective risk propensity measures will depend on the relative strength of controlled versus automatic processes. The convergence of explicit and objective risk propensity measures was assumed to increase with the availability of control resources and the motivation to employ them. The opposite effect was expected regarding the convergence of implicit and objective measures. Hypotheses were tested and partly confirmed using several functionally equivalent indicators of control resources and control motivation.

The assessment of self-attributed need achievement using experiment-based behavioural tasks

Wagner-Menghin, Michaela Psychology, University of Vienna, Vienna, Austria
Assessing variables of the self-attributed need achievement (McClelland, Köstner and Weinber-

ger, 1989), like aspiration level, endurance, frustration tolerance and accuracy, is relevant in educational psychology as well as personnel psychology. Very often these constructs are assessed using self report measures out of questionnaires, which are afflicted with the problem of intentional answer distortion (Kubinger, 2002; Viswesvaran & Ones, 1999). The tasks under discussion here are constructed following the principles of experiment-based behavioural assessment (Kubinger, 2006), and allow standardized observation of the relevant behaviour. The paper focuses on the development of measures out of these tasks and their reliability and validity.

S-297: Conceptualizing predictors of risky behavior engagement amongst adolescents and young adults

Randy Auerbach (chair)

Adolescents and young adults engage in the highest frequency of risky behaviors, and such engagement often results in both short- and/or long-term negative consequences. In an effort to develop more effective prevention, intervention, and treatment programs, recent research has begun to examine factors that may underlie engagement in risky behaviors. The speakers in the current symposium will present results from research examining the predictors, correlates, and consequences of risky behavior engagement in Canada, China, and the USA. Particular emphasis will be placed on highlighting proximal and distal risk factors that shape the frequency and type of risky behaviors individuals utilize.

A double bind for emerging adults: Predicting risky behavior engagement

O'Donnell, Katherine Dept. of Psychology, McGill University, Montreal, Canada **Auerbach, Randy** Dept. of Psychology, McGill University, Montreal, Canada **Abela, John** Dept. of Psychology, McGill University, Montreal, Canada

The study examined factors that moderated the relationship between hassles and engagement in risky behaviors. At Time 1, 141 emerging adults completed self-report measures of neuroticism, emotional regulation, hassles, and risky behaviors. Follow-up assessments occurred every week for five weeks, and participants completed measures assessing hassles and risky behaviors. Multilevel modeling analyses indicated that higher levels of both neuroticism and emotion regulation deficits were significantly associated with greater engagement in risky behaviors following the occurrence of hassles. Consequently, a double bind was created whereby individuals who possessed both vulnerabilities were more likely to engage in risky behaviors.

Predicting risky behavior during early adulthood: Pinpointing the critical distal, developmental periods and experiences

Jager, Justin Dept. of Psychology, University of Michigan, Ann Arbor, USA **Schulenberg, John** Dept. of Psychology, University of Michigan, Ann Arbor, USA

This study examined how experiences during high-school and the college-years uniquely predict to early-adulthood risky behaviors. The sample included 6,000 U.S. respondents assessed in two-year intervals between the ages of 14 and 24. Using piece-wise growth modeling, growth of heavy drinking, 12-month marijuana use, and depressive affect during high-school and college was assessed, and the relation of each to age 24 risky behaviors was examined. While intercept levels and both growth pieces all uniquely predicted age 24 risky behaviors, growth during high-school was the most meaningful. Findings suggest the predominance of high-school experiences on early adult functioning.

An examination of gender differences: What role does coping play in predicting risky behavior engagement?

Auerbach, Randy Dept. of Psychology, McGill University, Montreal, Canada **Abela, John** Dept. of Psychology, McGill University, Montreal, Canada
Past research has found that adolescent males engage in a greater number of antisocial behaviors as compared to females. In the present study, we examined whether coping deficits were associated with increased engagement in risky behaviors following the occurrence of academic- and peer-related stress. Further, we explored whether gender moderated such an association. Using a multi-wave longitudinal design, adolescents (n=143) from the greater Montreal area were followed over the course of six months. Results of hierarchical linear modeling indicated that males, but not females, with coping deficits reported increased engagement in risky behaviors following both academic- and peer-related stress.

Positive and negative reinforcement mechanisms underlying riskiness in early adolescents

MacPherson, Laura Dept. of Psychology, University of Maryland, College Park, USA **Reynolds, Elizabeth** Dept. of Psychology, University of Maryland, College Park, USA **Duplinsky, Michelle** Dept. of Psychology, University of Maryland, College Park, USA **Wang, Frances** Dept. of Psychology, University of Maryland, College Park, USA **Lejuez, Carl** Dept. of Psychology, University of Maryland, College Park, USA

Early adolescence is a vulnerable period for onset of risk behaviors. Although research emphasizes the role of novelty seeking (positive reinforcement), less is known about risk behavior maintained by negative reinforcement (riskiness to avoid/escape aversive internal or external stimuli). This study focused on the use of laboratory risk taking tasks tapping positive and negative reinforcement processes, combined with self reported personality as well as affective and cognitive functioning, in relation to real world risk behaviors (n=286; 51% minority, ages 10-12). Findings indicated the differential importance of both reinforcement processes across demographic subgroups in the occurrence of risk behavior in youth.

Childhood sexual abuse and experiential avoidance: Escaping painful self-awareness?

Sarin, Sabina Dept. of Psychology, Centre Addic. and Ment. Health, Toronto, Canada **Nolen-Hoeksema, Susan** Dept. of Psychology, Yale University, New Haven, USA

Child sexual abuse (CSA) may produce emotion regulation deficits – specifically, a ruminative response style - which heightens distress and fosters aversive self-awareness, thus increasing risk for engaging in harmful escapist behaviours. To test this theory, community participants completed measures at three time points, one year apart. CSA survivors reported more substance use and dramatizing behaviours. Distress and rumination partially mediated the relationship between CSA and these escapist behaviours, with the model including both distress and rumination accounting for the most variance in escape behaviour scores. Results suggest that CSA survivors engage in escapist behaviors to avoid distress and aversive self-awareness.

Understanding risky behavior engagement amongst adolescents from mainland China

Zhu, Xiongzhao Medical Psychological Research, Second Xiangya Hospital, Changsha, People's Republic of China **Yao, Shuqiao** Medical Psychological Research, The Second Xiangya Hospital, Changsha, People's Republic of China
Epidemiological studies conducted within mainland China suggest that the prevalence of adolescent depression is rising. While individual differences

exist in how adolescents respond to depressive symptoms, recent research has shown a strong association between such symptoms and broad-based engagement in risky behaviors (e.g., alcohol-use, unsafe sex, and violence). The present study examined risky behavior engagement amongst Chinese adolescents from Yue Yang, Hunan (n=411) using a multi-wave longitudinal design. Assessments occurred each month for six months (Time 2 – 7), and results of hierarchical linear modeling indicated that intrapersonal factors moderated the relationship between depressive symptoms and engaging in risky behaviors.

S-298: Ethics for European psychologists

Geoff Lindsay, Jean Pettifor (chair)

The European Federation of Psychologists Associations' Standing Committee on Ethics has worked from the early 1990s to develop psychological ethics across Europe. First came the Meta-code of Ethics, the template for the ethical codes of all EFPA member associations. This symposium is based on the latest venture, a book *Ethics for European Psychologists* which uses the Meta-code to provide guidance to individual psychologists in different European countries and cultures. Each presenter will develop a theme within the book taking into account similarities and differences among our practice contexts, with a discussion providing a Canadian perspective.

Generalisability of ethical principles across Europe

Lindsay, Geoff University of Warwick, Coventry, United Kingdom

How generalisable are ethical codes: principles and standards? And their implementation? Developing a pan-Europe ethical code and guidelines for psychologists forces us to consider similarities and differences, real and imagined, in both principles and standards. Freedom of movement within the EU should be an ethical as well as an economic process. I shall explore the commonalities and challenges for psychologists including those posed by new socio-political contexts such as large scale migration and perceived threats to national security. I shall also explore whether there is a particular 'European' dimension – or are the issues universal?

Procedures of ethical decision making

Lang, Fredi Referat Fachpolitik, BDP e.V., Berlin, Germany

Due to the nature of their work, psychologists frequently face ethical problems and decide on them in explicit as well as implicit ways. Guidance for decision making is given to them by ethical training, their National Code of Ethics and further available generic decision making models. The EFPA Meta Code on Ethics provides a high level of abstraction together with the coverage of all relevant ethical issues, both meaningful for decision making. This presentation will discuss models of guidance on decision making of the Canadian Psychological Society, Karl E. Tödt, an approach related to the EFPA Meta-Code, and others.

Decision making in a triad

Úvreide, Haldor Ifru, Oslo, Norway

The ethical codes for psychologists addresses first of all the respect and caring for the individual person with whom the psychologist interacts. However, humans find their personal identity in attachments and dependencies in relationships; in their families and culture. Professionals are also embedded in relationships that form their practice and responsibility. The free-willed and self-determined individual client, and the corresponding professional, can thus be seen as a myth. I will argue that the triad is a necessary format for assessing ethical challenges

and obligations. The concept of the Third face, in the Other, will be presented as an entity for ethical assessment, parallel to the encountered and experiencing individual I.

FP-360: Clinical aspects of cognition II

Specificity of information-processing biases in patients with current and remitted depression and in patients with asthma

Fritzsch, Anja Inst. für Psychologie, Universität Hamburg, Hamburg, Germany **Dahme, Bernhard** Psychology, Hamburg University, Hamburg, Germany **Gotlib, Ian** Psychology, Stanford University, Stanford, USA **Joermann, Jutta** Psychology, Miami University, Coral Gables, USA **Nutzinger, Detlev O.** Psychology, Medical and Psychosomatic Clin, Bad Bramstedt, Germany **Watz, Henrik** Center of pneumology and thora, Pulmonary Research Institute, Großhansdorf, Germany **von Leupoldt, Andreas** Psychology, Hamburg University, Hamburg, Germany

We examined whether information-processing biases for sad stimuli that were found in currently depressed individuals, also exist in formerly depressed patients. Because asthma is highly comorbid with depression, we also examined biases in asthmatics. Three information-processing tasks assessing biases in memory and attention for emotional stimuli were administered to 20 currently and 20 formerly depressed participants, 20 asthmatics and 20 healthy controls. Compared to healthy participants, both currently and formerly depressed patients, but not asthmatic patients, demonstrated specific biases for sad stimuli. Our results suggest that information-processing biases exist even after recovery from depression, thus supporting cognitive theories of depression.

Information processing and selective attention in female adolescence students with eating disorders symptoms

Moradi, Alireza Dept. of Psychology, Tarbiyat Moallem University, Tehran, Islamic Republic of Iran **Yousefi Asl, Soureh** Psychology, Tarbiyat Moallem University, Tehran, Islamic Republic of Iran

The purpose of this study is to investigate the selective attention in students with eating disorders symptoms. 53 female students with eating disorders symptoms (15 anorexia and 38 bulimia) and 46 normal students aged 14 to 18 years old who were matched by age and education participated in this study. All subjects responded to the computerized version of the dot probe task. The target words include food and body shape words. The results indicated that students with eating disorders symptoms showed attentional bias with avoidance from body shape stimuli, while no bias was found towards food stimuli.

The characteristics of emotion cognitive processing and regulation in alexithymia

Yi, Jinyao Central South University, Second Xiangya Hospital, Changsha, People's Republic of China **Yao, Shuqiao** Central South University, Second Xiangya Hospital, Changsha, Hunan, People's Republic of China **Zhong, Mingtian** Central South University, Second Xiangya Hospital, Changsha, Hunan, People's Republic of China **Ling, Yu** Central South University, Second Xiangya Hospital, Changsha, Hunan, People's Republic of China

712 university students finished the 20-item Toronto Alexithymia Scale, the Cognitive Emotion Regulation Questionnaire and the Short Affect Intensity Scale. 51 alexithymic and 54 nonalexithymic gave scores to three dimensions (valence, arousal and dominant) of 120 affective pictures. Compared to the nonalexithymic, alexithymic got higher scores on negative coping dimension, while got lower scores on positive coping dimension, which suggested that alexithymia has deficit in

emotion regulation. Alexithymic had lower scores on positive intensity and negative intensity than nonalexithymic, which suggested that alexithymic have less intense affect. Alexithymic rated positive pictures less pleasurable and negative pictures less unpleasant, which supported that alexithymic have deficit in emotion cognitive processing.

Executive function and memory in posttraumatic stress disorder: A study of Bosnian war veterans

Koso, Maida Dept. of Psychology, Filozofski Fakultet, Sarajevo, Bosnia and Herzegovina **Hansen, Stefan** Psychology, Institute for Psychology, Gothenberg, Sweden

The present study assessed neuropsychological functions related to attention, executive function and everyday memory in a group of men with a diagnosis of combat-related posttraumatic stress disorder. Twenty Bosnian male combat veterans with a diagnosis of PTSD were tested using the Sustained Attention to Response Task, the Hayling Sentence Completion Test, the Trail Making Test, Rivermead Behavioural Memory Test and Wechsler Adult Intelligence Scale. The study disclosed pervasive cognitive impairments pertaining to attention, working memory, executive function, and memory. We speculate that, in the present group, PTSD was associated with dysfunction of a higher-level attentional resource which in turn affected the activity in other systems concerned with memory and thought.

Overgeneralization of autobiographical memories and emotional processes in opioid-dependent individuals and in methadone-maintained individuals

Gandolphe, Marie-Charlotte Dept. of Psychology, University of Lille3, Villeneuve d'Ascq, France **Nandrino, Jean-Louis** Psychology, university of lille3, Villeneuve d'Ascq cedex, France

Objectives: To investigate the link between the strategies of overgeneralization of autobiographical memories and emotional processes in opioid-dependent individuals and in methadone-maintained individuals. **Methods:** The level of anxiety, depression, emotional awareness and the autobiographical memory of 30 opioid-dependent patients, 30 methadone-maintained patients and 30 control participants were measured. **Results:** Dependent individuals and methadone-maintained individuals retrieve more general emotional memories than control participants. Moreover, methadone-maintained patients recall more diversified memories than dependent patients. **Conclusion:** There is a link between overgeneralization processes and emotional disturbances in opioid-dependent individuals. The effect of substitution treatment on emotion regulation strategy is discussed.

A brief self-report scale on positive and negative affect in depressed and nondepressed subjects

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A 10-item Affect Scale (AS) is presented. The development of AS was based on a sample of 487 Brazilian participants. Factor analysis revealed two factors: Positive Affect and Negative Affect that explain 57% of the total variance. The scores of AS were significantly correlated with the scores of the Subjective Well-Being Scale of Albuquerque and Tróccoli and with the scores of Hamilton Depres-



sion Scale and Beck Depression Inventory. The external validity of AS was evaluated comparing scores of nondepressed and depressed individuals. The results show that AS is a reliable and valid brief self-report scale.

FP-361: Community, parenting style, and family relations

Family environment in divorced and non divorced families

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Cantón Cortés, David Developmental Psychology, Faculty of Psychology, Granada, Spain

The objective of the study was to analyse the differences in the family relationships depending on the home structure. The participants, 148 College student children of divorced families and a comparison group, completed the FES (Moos, Moos and Trickett, 1989). In order to analyse the data several mean comparisons and logistic regressions analyses were carried out. Results showed that divorced families had lower scores on Cohesion, Morality, Organization and Control and higher scores on Conflicts than the intact families. By the other hand, children of divorced families had higher scores on Autonomy and Recreational Orientation. To summarise, our data indicated that, overall, the family environment in divorced families was more negative.

Family education as part of an empowerment process: Helping parents raising healthy children

Berthoud, Cristiana Psychology, University of Taubate, Tremembe - SP, Brazil

The authors will present a preventive intervention conducted with low income families as part of a program for empowering communities. Parenting discussion groups last 8 to 10 sessions and are conducted in schools, social clinics or community associations by psychology students. The program is launched in every community at the Family Day – an event organized to promote family members interaction and to invite families to participate. Evaluation have shown that parents feel supported by the group and learn better alternatives to discipline and orient their children. After 5 years of implementation the program model can be considered a success.

The role of parenting style as perceived by children in the intrinsic motivation

Mesurado, Belén CIIPME, CONICET, Buenos Aires, Argentina

The purpose of this study is to analyze the effect of parenting style perception of children on intrinsic motivation and whether it changes with sex and/or age. The sample includes 270 participants, aged 9 to 10, of middle socioeconomic level, from Argentina. Parenting style was measured using Inventario de Percepción de Relaciones Parentales (Richaud de Minzi, 2007) and intrinsic motivation was computed according to Cuestionario de Experiencia Óptima (Mesurado, 2007). The regression analysis suggests that there is a strong influence of parenting style on the intrinsic motivation only for girls. Nonetheless, this effect decreases with age.

Predictors of family functioning amongst Malay single mother families in Malaysia

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The study determines what risk (RF) and protective (PF) factors influence the family functioning (FF) of Malay, single mother families in an urban area in Malaysia. The moderating role of PF on the relationships between RF and FF was also examined. Overall, the RF and PF accounted for 17-35%

of the variance in the FF. PF accounted for substantial variance in FF (28%); and greater than the risk measures (3%). The presence of PF tends to reduce the impact of RF. Parenting behavior provided the best protective barrier, and higher levels of PF seems to promote better FF.

Family therapy techniques and principles

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In the process of working with families, family therapy techniques and principles should be taken into consideration. The idea that family therapy is one of the types of group therapy should be excluded. It must be noticed that in this case techniques play an important role. Moreover, the factors of ethno-psychology and the service period of the family (first five years and more) are to be taken into consideration as well. Family conflicts differ depending on family service period and family members, as well as generations existing in those families. As a result of research it turned out that in the process of resolution of conflicts in families the proper selection of techniques is of great importance.

The impact of factors effected of divorce incidence in Falavarjan township (one of Isfahan township)

Zargar, Fatemeh Clinical Psychology, Tehran Psychiatric Institute, Tehran, Islamic Republic of Iran
Doost, Taher Neshat

The purpose of this study was investigate the factors effected in divorce from one of the Center of Prevention and Decrease of Divorce (CPDD) in welfare institute of Isfahan. The date were collected from all referred spouses in 1382- 1384 (march 2003- march 2005). The results of chi-square showed that the most cases were referred by Court. The most numbers of divorce appeal in females were in 28 to 31 years and in males were in 24 to 27 years. Divorce after 35 year was decrease in both of sex. The most important factors of divorce appeal were communication problems, addiction, interference of family and mental disorder of one or two couples.

FP-362: Psychotherapy - Research and treatment methods XI

The effectiveness of rational-emotional therapy to reduce depression in diabetes

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Ghalkhani, Zahra clinical psychology, Binesh, Tehran, Islamic Republic of Iran

OBJECTIVE— the purpose of this study was to compare the effective of to reduce depression in diabetes& the associations between gender; age. **RESEARCH DESIGN AND METHODS**- pre-post test of BDI was used to assess depressive symptoms in 96patients, at age 18-22 & 28-32, same gender. The treatment applies to Sample group. The theses were assessed by t-test, Mann-Whitney & two way analyses statistically& HSD. ($\alpha=95\%$) **CONCLUSIONS**— the therapy and age were significantly associated to reduce depression in diabetes after controlling for disease variables. No significant associations were found for gender in relation to depression in diameters. Farahnaz Hojatzadeh zahra Ghalkhani

Quantitative and qualitative comparative analysis of cognitive-behavioural and existential-humanistic therapist's speech

Kondratyuk, Nataliya Psychology, KNU, Kiev, Ukraine

The current study was aimed at reconstructing and comparing structure and semiotics of therapist's speech in cognitive-behavioural and existential-humanistic therapies. The research material was

published sample dialogues, transcripts and videos of therapeutic sessions of C. Rogers, J.Bugental, A.Beck, A.Ellis, D.Meichenbaum, A.Lazarus. The therapists' replicas addressed to a client were analyzed by means of quantitative (computer content-analysis, syntax analysis) and qualitative (conversation analysis) research methods. Major differences revealed in cognitive-behavioural and existential-humanistic therapists' speech are: structure of therapeutic interaction, level of directiveness and therapist's position, time dimension, frequency and usage of different pragmatic types of utterances (interpretation, restatement, question etc.).

The method of imagery communication psychotherapy

Yuan, Yuan Psychology, Beijing, People's Republic of China

Imagery communication is a unique psychotherapy method created by a Chinese psychologist named Zhu Jianjun in 1990s. This study tested that we could use imagery to communicate with a client in unconscious world to change his mental status and treat his psychosomatic diseases, and even improve his personality state. The clinical research methods showed that imagery is a living and a close relationship between imagery and psyche. We will cite house imagery and a relevant case in illustration of the method.

The effect of art psychotherapy based on cognitive-behaviour approach to raise self-esteem and self-efficacy orphan children

Zadeh Mohammadi, Ali Shahid Beheshti University, Family Research Institute, Tehran, Islamic Republic of Iran
Abedi, Ali Reza Shahid Beheshti University, Family Research Institute, Tehran, Islamic Republic of Iran

This exploratory, quasi-experimental study compared the impact of art psychotherapy cognitive-behavior approach on the self-esteem and self efficacy of 20 orphans' 13 to 16 years old. A control group pre-test/post-test design was implemented for this study. 10 children were provided cognitive behavior art psychotherapy services. Self Esteem was measured with questionnaire Rosenberg And self efficacy was measured with questionnaire Sherer. There were Significant differences on the questionnaire post intervention, With both groups. Result explained significant effects self efficacy and self esteem in $P < .05$ level in experiment group.

FP-363: Ethical issues

Academic-ethics in research methodology

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 This research investigated academic-ethics in research methodology of 66 doctoral and 434 masters students of Mahasarakham University; compared academic-ethics among students; and constructed equations of factors related to academic-ethics behavior. The instruments consisted of tests on academic-ethics knowledge, behavior, and attitude. The data were analyzed by descriptive statistics and MRA. The results showed: that students' scores on all dependent variables were at high level; that the scores of masters students and those of doctoral students were not different; and that academic-ethics knowledge and attitude could predict academic-ethics behavior. The R^2 was 0.908, and equations was $Z_{Beh} = 0.860Z_{know} + 0.081Z_{Att}$

Ethical dilemmas of the Portuguese psychologists

Coutinho, Vanessa Massamá, Portugal
Cláudio, Victor Psicologia, ISPA, Lisboa, Portugal

The objective of this study was to identify the ethical dilemmas of the Portuguese Psychologists taking under consideration the lack of an updated



Ethical Code that would stand as an efficient guideline for professionals facing dilemmas. The results showed firstly that the most significant dilemmas rise from confidentiality issues. On second hand, they also showed that the Portuguese psychologists have not developed their knowledge's on ethical issues nor do they search for advice on the obsolete ethical codes that were available at the time of the research study, supporting the need for the elaboration of the Portuguese Psychologists Ethical Code.

Ethical issues in psychological research with indigenous peoples: Lessons from aboriginal street youth in Western Canada

Brunanski, Dana Counselling Psychology, University of British Columbia, Vancouver, Canada

This presentation will explore ethical issues in research with indigenous peoples, drawing on the author's experience conducting research with Aboriginal street youth in a large Canadian city. Street-involved indigenous youth are an especially vulnerable population, therefore researchers must take special ethical considerations. Examples from a photo-engagement project, a population-based survey using a participatory research design, and an interview-based qualitative study will be used to illustrate crucial ethical issues in research, including power imbalances; risks of coercion and exploitation; cross-cultural competence; cultural sensitivity in determining appropriate professional boundaries and negotiating multiple relationships; and authentic community consultation.

FP-364: Dual-task processing

Synthetic assessment model of cognitive load in a dual task environment

Jinbo, Li Psychology of Science, Zhejiang University, Hangzhou, People's Republic of China **Baihua, Xu** Psychology, Zhejiang University, Hangzhou, People's Republic of China **Wuheng, Zuo** Psychology, Zhejiang University, Hangzhou, People's Republic of China

On the basis of subjective evaluation, primary-task measures, secondary-task measures and eye movement measures, four techniques, principal components analysis, regression analysis, BP artificial neural network and self-organizing feature map, were respectively used to set up the synthetic assessment model of cognitive load during a dual task of web-searching and mental arithmetic. The result showed that BP artificial neural network modeling possesses the optimal evaluation efficiency among the four modeling techniques. This provided evidence for the use of generalized classification models in multitask cognitive load assessment.

A cognitive model of multi-tasking while driving **Deml, Barbara** Human Factors Institut, Universität der Bundeswehr, Neubiberg, Germany **Halbrügge, Marc** Human Factors Institute, University of the Bundeswehr, Neubiberg, Germany **Neumann, Hendrik** Human Factors Institute, University of the Bundeswehr, Neubiberg, Germany

Understanding of how humans execute multiple, concurrent tasks is an important field of research. However, current literature on multi-tasking suffers mainly two problems: most often rather unrealistic settings are examined and most studies lack a proper theoretical foundation as they are limited to the analysis of experimental data. To overcome some of these constraints a common real-world task was studied here, namely driving on a highway while processing direction signs. By matching the experimental data (e.g. gaze behavior, lane keeping) acquired within a driving simulation with the results of a cognitive ACT-R model, it was possible to gain a better understanding of how everyday task-switching is controlled.

A cognitive model of visual search on direction signs alongside the Autobahn

Halbrügge, Marc Human Factors Institut, Universität der Bundeswehr, Neubiberg, Germany **Deml, Barbara** Human Factors Institute, University of the Bundeswehr, Neubiberg, Germany **Neumann, Hendrik** Human Factors Institute, University of the Bundeswehr, Neubiberg, Germany

Guidelines for the design of direction signs are currently based on heuristics only. In order to examine whether signs on the autobahn can be processed during the time they are viewable to the driver, we conducted an experiment in a driving simulator. 19 subjects answered questions about randomly generated direction signs while they were driving on a three lane highway. The analysis of reaction times and gaze behaviour yielded both conformance and interesting differences with the already well researched visual search in simple lists. Based on the results, we created a cognitive model with ACT-R that can be used for further research and prospective design in the car driving domain.

FP-365: Cognitive development II

Supporting giftedness in preschool children

Veraksa, Nikolai social psychology, MCPPU, Moscow, Russia

Investigation was devoted to the problem of the general mental giftedness of children aged 5 to 7. According to L.S.Vygotsky's theory, development of giftedness is connected with development of mental ability. Our hypothesis was that special organization of children's activity that could support their initiative - adequate presentation of projects by children and their utility for the child environment - will develop creativity of preschoolers. The children were diagnostically selected using special methods (E.Torrance) so that three groups (37 children) included children with high and moderate level of cognitive and creative abilities. After two years all children had high level of creativity, what means that they are considered to be gifted.

Does the maximizer-satisficer distinction explain why older adults do not want new artefacts?: A questionnaire study of older-and younger-adults comparison

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Compared with younger adults, older adults are hesitant to adopt new technologies. Previous research has suggested that older adults avoid new products, especially IT-based equipment, because reduced cognitive resources leads to difficulty using and understanding the new equipment. However, there may be another cognitive explanation: If older-adults tend to satisfice rather than maximize, and they are satisfied with their current products, they may not be motivated to adopt new ones. We tested this hypothesis, by administering the maximizing/satisficing scale along with questionnaires about technology product use and satisfaction to a large sample of younger and older adults.

Building self-efficacy among adolescents:

Assessing the role of parents and teachers

Mukhopadhyay, Lipi Centre for HRD and Beh Studies, Indian Inst. of Public Adm., Delhi, India

Self-efficacy provides the foundation for self-confidence, well being and personal accomplishment in all areas of life (Pajares, 2005). This belief was measured on Indian Adolescents from Metropolitan cities of Delhi and Kolkatta. High School

Students (100 Male and 150 Females) with high academic performance and low performance were compared on self-esteem, social cognitive perspective, self-regulating motivation and emotional stability. Impact of school environment, peers, teachers and parents was also measured through a check list and interview. Results show positive correlation between school environment, parents' self-efficacy and self-esteem among students. Academic achievements and self-efficacy were not linked.

The process of taxonomic hierarchy formation: Cultural-historical view of concept development in the school age

Dziurla, Rafal Psychology, SWPS, Warsaw, Poland

The presentation concerns the problem of concept development of the child in the school age interpreted within cultural-historical psychology of L.S. Vygotsky. In that approach the conceptual system, understood as generalizations, is based on operations and relations between signs. The main problem of generalizations development in that age is the transition from meronomic hierarchy to taxonomic hierarchy. The research was based on method used in quantitative, cognitive semantics concerning building experimental hiperonimic strings, conceptual and lexical nests. It showed that generalizations used by students in the school age functioned as hybrids of meronomic (compelxive generalizations) and taxonomic (preconceptual generalizations) hierarchies.

FP-366: Cognitive aspects of aging

Words learning, spatial pair associated learning and movement time, three cognitive tasks for early Mild Cognitive Impairment (MCI) identification

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Our purpose was to study the relevance of several cognitive measures for early diagnosis of MCI. 41 individuals older than 55 years who presented at primary-care-centres complaining of memory failure without prior diagnosis of psychiatric disorder or dementia participated in this study. A neuropsychometric examination, composed by CAM-DEX-R and CANTAB-eclipse batteries and the California Verbal Learning Test, was given. The criteria for MCI were those proposed by Petersen et al. (1999) but adding decline in any area of cognitive functioning. ANOVAs and correlations analyses shown free words recall, PAL errors and movement time as appropriate measures for early MCI identification.

Negative priming in younger and older adults: Selection or response effect?

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The response retrieval theory assumes, that negative priming (NP) effects are due to conflicts between prime and probe responses. But at measures of reaction times target selection and response generation processes are confounded. In our study with 64



younger and older adults we realized a choice reaction NP-task. Varying the distance between stimulus and comparison word we used eye movement to record both, the time until selection is finished and the time until response is given. This process dissociation leads to identification of different reaction patterns for younger and older adults, showing age related changes in the processing of NP-trials.

FP-367: Aesthetic perception

Neural aesthetics of beauty: An event-related fMRI study

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Observers ($n=14$) viewed and rated number of Japanese paintings (landscape, still life and portrait) that they appreciate to be beautiful prior to fMRI session. Selected stimuli in 3 categories were viewed in the scanner for 2-s with an ITI of 3-4-s. Observers judged each painting ugly, neutral or beautiful by pressing buttons in the scanner. Major differentially activated brain regions were right orbitofrontal and amygdala for ugly while left parahippocampal area for beautiful with sharing common activation regions in anterior cingulate cortex, frontal pole, and medial prefrontal cortex. Thus neural aesthetics of sensing beauty and ugly could be dissociable.

Aesthetic perception of web sites

Thielsch, Meinold T. Psychologisches Institut 1, Münster, Germany

Aesthetic perception of web sites has been explored in two studies: A qualitative study ($N=11$) identified key aspects (colors, fonts, images). These were tested in a subsequent experiment which fully crossed the three factors in a $2 \times 2 \times 2$ design. Based on a representative sample ($N=364$) the results showed that only the color manipulation has an effect on aesthetic judgements. Usability judgements are not affected, what conflicts with existing assumptions about the connection between both constructs; halo effects or effects of stereotypes caused by attractiveness can be rejected. Both constructs seem to be independent from personal variables like expertise or big five.

Aesthetic beauty and social justice in novels, histories and movies

Hector, Mark New Market, TN, USA

In her book "On Beauty and Being Just," Harvard aesthetics professor Elaine Scarry contends that the experience and contemplation of beauty leads to justice. She believes that "beauty assists us in our attention to justice." She illustrates how beauty and truth are closely allied; and when we encounter beauty we have a more capacious regard for the world. Scarry's contentions are examined in relation to Smith's novel "On Beauty," Suri and Bal's mathematical novel "A Certain Ambiguity," Gonzalez's historical biography "Sor Juana: Beauty and Justice in the Americas," and the German movie "The Lives of Others."

FP-368: Biases and reasoning

Perspective-taking in scientific and deductive reasoning

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Simply asking reasoners to think about evidence or inferences from another's perspective increases the

proportion of valid inferences (Thompson, Evans, & Handley, 2005) and reduces belief-bias (Beatty & Thompson, under review). We hypothesise that reasoning from another's perspective promotes decontextualised, analytic thinking. To test this hypothesis, participants reasoned from two perspectives and either drew conclusions from scientific evidence or inferences from conditional premises. We expected the perspective manipulation to reduce cultural differences in analytic reasoning preferences (Nisbett, 2003) and to reduce differences between high- and low-capacity reasoners (Stanovich, 1999).

Systematic irrationality: A link between confidence bias and additivity

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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. The overlap between miscalibration and non-additivity is systematic and suggests that there exist tendencies towards irrationality that are independent of overall ability level.

Belief bias in transitive inference depends on premise integration difficulty

Andrews, Glenda School of Psychology, Griffith University, Gold Coast, Australia

Belief bias involves accepting conclusions that are consistent with beliefs, irrespective of validity. We examined whether premise integration difficulty affects belief bias in transitive inference ($A > B$ and $B > C$, therefore $A > C$). Undergraduates read premises of the form, A-B, B-C, C-D, D-E then evaluated B-D conclusions. Belief bias was estimated from acceptance rates for four item types differing in conclusion validity and believability. Belief bias was significantly larger when premise encoding time was briefer, unaffected by conclusion evaluation time, eliminated when premise displays facilitated integration. Reasoners succumb to belief bias when premise integration is difficult.

A comparative study on two types of high: Probability conclusion effects in conditional inference

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This research examines and compares two different types of high-probability conclusion effects in conditional inference proposed by Oaksford et al and Qiu Jiang et al respectively. 139 subjects were first asked to give their acceptance ratings for each of eight conditional rules and then perform a probability rating task for each antecedent and consequent of the eight conditional rules. The results support Oaksford et al's argument as well as Qiu Jiang et al's argument, that is, both the conditional probability and the probabilities of antecedent and consequent are main factors that have influence on people's conditional reasoning.

FP-369: Clinical / counseling psychology VII

Psychoeducational program for parents of paediatric cancer patients in Malaysia: A pilot study

Othman, Azizah School of Psychology (CE), University of South Australia, Adelaide, Australia **Shah, Ashiq Ali** Psychology, Kwantlen University College, Surrey, Canada

Objective: To evaluate a psychoeducational program for parents of Malaysian paediatric cancer patients. Methods: Parents received either 4 x 50 minutes sessions of information on childhood cancer and coping strategies, ($n = 41$) or standard care ($n = 38$). Assessments were conducted before and four weeks after the program. Results: Analyses revealed increased knowledge about cancer ($p = .01$) and reduced anxiety ($p = .07$) in the intervention parents compared to standard care. Intervention parents improved scores on interactions with children and children's behavioural problems but these were not significant. Conclusion: This psychoeducational program, the first of its kind in Malaysia, has the potential to decrease anxiety for parents of seriously ill children.

The effects of a combined training program on children with Attention Deficit Hyperactivity Disorder in the classroom activity

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Abstract Attentional problems may lead to poor attainment in classroom because these children are recognized as troubled and impatient in school. In this research, effects of a combine training program (parent training, teacher training and child training) for classroom activity has been researched on tree children (aged 7-9) with ADHD. The aims of this research are to evaluate the effectiveness of combine training program on the children's behaviour problems in the classroom and effects on the teachers stress level. In this research single-case research design has been used. Collected data will be analysed by effect size method. The process of collecting data are being continued.

A contextually based intervention for victimized (bullied) children within elementary school settings

Kourkoutas, Elias Dept. Educational Psychology, University of Crete, Rethymno, Greece

The purpose of this paper is to present a contextually based intervention that has been applied in Greek primary school settings targeting victimized children. Fifteen children who have been systematically bullied by their peers have been included in this intervention program. The program lasted almost 2 years and more than 100 individual / group counseling sessions have taken place within school settings. Evaluation of children's emotional and behavioral states was carried with the use of CDI, RCMAS and ASEBA. Results of the intervention program, evaluated on the basis of a multisourced long term follow-up, suggest that a contextual resilient approach may be very useful in empowering victimized children.

FP-370: Communication and regulation behavior in intergenerational relationships I

The relationship between parental rearing behavior and mental health of undergraduate

Liu, Yingjie University, Inner Mongolia Normal, Huhhot, People's Republic of China **He, Jiaofei** Class 15, Grade 1, Hainan Middle School (senior), Haikou City, Hainan Province, People's Republic of China

Objective: To research the relationship between parental rearing behavior and mental health of undergraduate. **Methods:** 400 undergraduates were investigated with self-made questionnaire, SCL-90 and EMBU. **Results:** More than 20% undergraduates have the prevalence problems of mental. Correlation analysis showed that the total score and factors cores of SCL-90 had positive correlation with fathers' punishment, over interference, over protection, rejection, preference and mothers' over interference, rejection, punishment, preference. Parental warmth had negative correlation with the total score and factors cores of SCL-90. **Conclusions:** Parental rearing behavior is closely related to mental health in the medicinal undergraduate.

Relationship regulation between adult children and elderly parents across time

Wagner, Jenny *Inst. für Psychogerontologie, Universität Erlangen, Erlangen, Germany* **Neyer, Franz J.** *Department of Psychology, University of Potsdam, Potsdam, Germany* **Lang, Frieder R.** *Inst. für Psychogerontologie, Universität Erlangen-Nürnberg, Erlangen, Germany*

The project explored determinants of relationship regulation in intergenerational ties across a one-year interval. A total of 117 adult children and their elderly parents took part in the first assessment and the adult children in the follow-up. Traditional and non-traditional types of family situations of adult children were compared with respect to relationship-specific ratings of closeness and reciprocity in both generations. First analyses suggest a decrease in the perception of closeness to older parents but no change with regard to intergenerational reciprocity. Findings point to regulatory functions of closeness and reciprocity within a life-span framework of personality development.

Perceived sociocultural values of the elderly by the adolescents and young adults in Nigeria

Oluwatula, Olukunle Olusina Daniel *Dept. of Behavioural Studies, Redeemer's University, Redemption City, Nigeria*

The study examines the perceptions of Nigerian adolescents and young adults about the socio-cultural values of the Nigerian elderly. Relationships between psychosocial variables such as sex, age, religious affiliation, self-esteem, personality and the perceived sociocultural values were also examined. 250 Nigerians were purposively sampled with the aid of some psychological measures. Analyses show some strong relationships between the variables and the sociocultural values (repository of historical knowledge, grandparenting, and custodian of religious beliefs) of the elderly Nigerians. The study concludes that Nigerian elderly are valuable and the implications of the findings are discussed.

FP-371: Clinical research methods I

Paralinguistic aspects of vocal communication: Implications for psychotherapeutic relationships

Cawthorpe, David R. L. *Dept. of Psychiatry, University of Calgary, Calgary, Canada*

Objective: Current theory of paralinguistic sensory information processing contends that utterances are processed for survival value in advance of cognitive awareness of linguistic meaning, and, as such, mental contents are offered up to consciousness with affective and emotional valences assigned a priori. **Method:** A quantitative method of analysis was used to examine specified paralinguistic aspects of utterances derived from a psychotherapeutic assessment paradigm: Adult Attachment Projective. **Results:** The measured paralinguistic features of human communication were related to the adult attachment classification. **Conclusions:** Paralinguistic features of vocal communication may influence mental state regarding attachment and other hu-

man relationships, including psychotherapeutic relationships.

Apparent motion evaluation in early diagnostics of mental diseases

Nedospasova, Veronika *Dept. of Clinical Psychology, IEAP, Moscow, Russia*

The structure of autokinetic movement is a predictor of early disease for some categories of patients. Original psychophysical method of apparent motion evaluation detects characteristics of visual perception changes at normal and pathologic development. This method showed high correlations with classical methods of neuropsychology. Designed method reveals age dynamics of psychophysical characteristics of visual perception. Disorder of spatial characteristic of visual perception is one of specific mental disease symptoms. Shift of abstract visual perception characteristics e.g. coloration spaces was detected in certain cases of mental disease. Apparent motion evaluation has revealed certain evolution patterns of apparent motion characteristics.

Ego defense mechanisms and the issue of new research methods

Ochirjav, Myagmar *Department of Psychology, State University of Education, Ulaanbaatar, Mongolia*

The author has developed a new method on figuring out ego defenses based on the experiences of her 10 year research works. The purpose of the present scientific essay lays on the explanation of the aforementioned method. A questionnaire clearly showing each defense mechanism such as exclusion, projection, replacement, rationalization, counteraction, regression, denial, sublimation etc and attaching case studies was developed in the framework of the research. Subjects under the research were divided into three categories: high, medium and low defensive ones. Number of adults involved in the research has totaled 150. The result of the research clearly shows that the method was well suited for psychological counseling practices. **Keywords:** defense mechanisms, case questionnaire, level of defense

FP-372: Family issues: Parenting I

A multidimensional model of parental involvement in schooling

Lorenz, Fiona *Psychology, University of Bielefeld, Bielefeld, Germany* **Wild, Elke** *Psychology, University of Bielefeld, Bielefeld, Germany*

Both, the concept of authoritative parenting and self-determination theory specify characteristics of powerful learning environments. The present study integrates these approaches in a multidimensional model of parental involvement in schooling. In order to test the adequacy of this model, corresponding scales were administered to 133 German 3rd graders and their parents participating in a longitudinal study with annual measurements. Correlational analyses and confirmatory factor analyses support the construct and predictive validity of the four-dimensional model and substantiate requests for differentiated concepts of parental involvement in schooling.

The implicit beliefs about human nature and parenting behavior: The mediation process model

Lin, Wen-Ying *Dept. of Psychology, Chung Yuan Christian Univ., Chungli, Taiwan*

This study explores the unsolved contention that parenting beliefs do not have sufficient predictive power for parenting behavior. The mediation process model proposed that beliefs about human nature have a more important impact on parenting behavior than parenting beliefs via their influence on the attribution process. 525 participants completed scales measuring parenting beliefs and

general beliefs about intelligence and responded to 4 vignettes that measured contingent beliefs about intelligence. Findings supported the main predictions of the mediation process model. The real determinants of parenting behavior are contingent beliefs about intelligence, which lead to varied attributions and parenting behaviors.

Investigation into the parental nursing style of female drug addicts

Liu, Yumei *Dept. of Social Sciences, Hainan Medical College, Haikou, People's Republic of China*

Objective: To investigate the mental health and parental nursing style of female drug addicts. **Methods:** The female drug addicts in the Drug Rehabilitation Center of Hainan Province in China were investigated using SCL-90 and face-to-face interviews. **Results:** The frustration and experience of early life, an unhealthy family background, and society were the most influential factors. Their health was worse than normal women's in terms of somatization, obsessive compulsive and depressive disorders. The parental nursing style of female drug addicts increased the feeling of rejection and incidences of denial. **Conclusion:** the parental nursing style cannot be ignored.

FP-373: Collective identities and collective action I

Psychological factors of Poles' accession to European Union

Zaleski, Zbigniew *Dept. of Psychology, Catholic University Lublin, Lublin, Poland*

A sample of 1309 Poles responded to questionnaire either in favour of or against joining the European Union which took place before and after the Accession Referendum in 2003. The results showed that those who were in favour of accession displayed higher level of patriotism, future goal-orientation, conformism, political leaders' influence and similarity to Western Europeans. Negative attitude was linked to national pride and future anxiety. The post-referendum data from 507 Ss revealed the decrease of emotions and expectations bound to country's accession. The author discusses the results in a psychopolitical context of decision-making for future generations.

Social responsibility: Analyses of mass political actions participants' discourse

Naydonov, Mykhaylo *ISPP, Kyiv, Ukraine* **Grygorovska, Lyubov** *Psychol. - Monitoring Research, Inst. of Social and Political, Kyiv, Ukraine*

Mass political actions participants are the silent group since politicians adopt the right to speak on behalf of them. The aim is to study the diversity of the discourse formed within the participants' environment during a mass action that is not presented by politicians. The discourse analyses of the social responsibility (SR) issue has been conducted in interviews of the mass political actions participants in Ukraine in 2004-2005 (n=380). Four types of the SR represented in the discourse (political, media, grassroots, personal) have been defined. Intersubject SR form means responsibility for trust, promise, mobilizing, intrasubject - for choice, words, deeds.

Friends attitudes to mass political action: During and after

Naydonova, Lyubov A. *Psychol. of Mass Communication, ISPP, Kyiv, Ukraine*

The subject of this investigation is the influence participants' friendship relations on their emotional attitudes to mass political action. The sampling covered 965 participants of the Ukrainian mass moves. Method of modality and emotional strength evaluation and the implicit association test were applied. Those participants who took part in the mass political movement together with their friends



(N=319) have the differences in emotional states which decrease the risk of development of uncontrolled crowd spanned with negative emotions (panic, aggressive). The context of friendly relationships has the influence on participants' more extensive inclusion into the emotional spin of positive states.

FP-374: Conditioning II

Two behavioral measures to prevent (conditioned) nausea: Synergistic or antagonistic?

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 Latent inhibition (LI) and overshadowing (OS) are two conditioning procedures to reduce nausea. We tested whether they are synergistic or antagonistic. Methods: Rotation-nausea was induced in 32 subjects (16 women) randomly assigned to one of 4 groups: LI+OS+, LI+OS-, LI-OS+, LI-OS-. LI was induced by re-exposure to the rotation environment, OS was performed by providing salient drinks preceding rotation. Symptom ratings (SR), cortisol and TNF- α were compared between groups. Results: LI increased SR and cortisol, while OS reduced both. TNF- α decreased with LI, while it increased with OS. Conclusion: The combination of OS and LI has antagonistic effects on rotation-induced nausea.

I didn't feel like drinking beer but I don't know why: Evaluative conditioning changes drinking behavior and explicit attitudes

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 We used a conditioning paradigm to change beer attitudes and drinking behavior in students. Participants had to spot an irrelevant target picture in a series of trials in which many different stimuli were presented. In a number of these trials beer-related pictures (CS's) were paired with negative words and pictures (US's). After conditioning, an ANOVA demonstrated less positive explicit beer attitudes and less beer consumption in a bogus taste test in the experimental compared to control (no exposure to US-CS pairs) condition. However, there was no effect on implicit attitudes. Results are discussed in terms of causality and clinical usefulness.

Training procedures that eliminate conditioned fear in rodents and prevent fear relapse

Thomas, Brian Psychology, Baldwin-Wallace College, Berea, USA
 Rats were trained to fear a stimulus using a standard conditioned suppression procedure and were then given one of several different extinction procedures to see if fear could be eliminated and relapse prevented. Data from several effective procedures (explicitly unpaired, differential conditioning, conditioned inhibition, counterconditioning) will be presented and a theory of extinction learning will be described.

FP-375: Elementary information processing I

Differential connectivity of valenced person representations with and without subliminal priming of attachment-related stressors

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Surguladze, Simon A. Section Neuroscience & Emo, Institute of Psychiatry, London, United Kingdom
Phillips, Mary L. Section Neuroscience & Emo, Institute of Psychiatry, London, United Kingdom
 Objective The higher order cognitive networks of valenced mental representations of persons have not yet been elucidated. Methods We used an attachment priming experiment in fMRI with concurrent recording of skin conductance with single trials for positive and negative valence representations after a neutral prime or a stress prime in 12 healthy volunteer subjects and modeled effective connectivity. Results Increase in arousal was observed from positive to negative and from neutral to stress conditions. Model fits indicated shifts to subcortical regions in the stress condition. Conclusions Our results show that effective connectivity is altered for valence representations by induction of separation distress.

How to process a prime?: Semantic priming depends on task set

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Frings, Christian Cognitive Psychology Unit, Saarland University, Saarbrücken, Germany
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 In a semantic priming task, we found an interaction of category-type (natural vs. artificial) by sex: males showed positive priming for both category-types, whereas females showed positive priming for natural but not for artificial categories. We hypothesized that this difference is due to different prime processing: females might dominantly focus on perceptual features in contrast to functional features. When we made functional features more relevant with an additional task, females showed priming for artificial categories as well. Thus, the inclusion of a second task moderates category priming by making certain features more salient. In conclusion, semantic priming depends on task set.

Familiarity in the spotlight: Exploring the role of target familiarity in affective priming

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Silva, Rita
 Research in affective priming domain has mainly focused on how certain primes' characteristics may influence targets' processing, overlooking the role of the later. Given that some objects are able to automatically activate their associated evaluations, and that familiar objects' attitudes are taken to resist more to contextual influences, target's familiarity may moderate these effects. In a first study only the least familiar targets appeared to be evaluated in the direction of the activated valence. These results were then followed-up via an interference-paradigm, using valenced words as stimuli. Implications for affective priming research domain will be discussed.

FP-376: Cognition and work I

Cognitive load and human-machine interaction

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Cognitive load is a fundamental concept in explaining how people use technology to perform their tasks. It is related to the type and amount of resources required by the task, technology available and user goals. User efficiency and effort depend on the level of cognitive load. Therefore, new technologies must be designed to define new modes of interaction that reduce cognitive load. Methodological problems have limited research on measuring user's cognitive resources while performing a task. However, recent technical developments on psychophysiological measurement of cognitive load could now allow researchers and designers to evaluate on-line cognitive load during interaction with technology. Some of these techniques based on eye-movements parameters will be presented.

Assessing work-related knowledge using a free association technique and structure mapping: Validation studies

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 Organisations rely heavily on techniques that allow the assessment individual's domain specific knowledge, for example, to evaluate the effectiveness of training interventions. We present a number of studies that support the validity of two such techniques; free association and structure mapping. They are based on the assumption that knowledge is structured in semantic networks, that those networks can be accessed through a stimulus-association technique and structure formation techniques. Validation studies indicate a relationship between supervisor performance ratings and results of both techniques. For example, the number of associations and the diameter of the semantic structure developed by participants correlated with the performance rating.

Action regulation theory: Are the characteristics of well designed tasks valid for interactive jobs as well?

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 International standards (DIN EN 9241-2; DIN EN 614-2) demand compliance with "characteristics of well-designed tasks" in job design. However, for jobs including client or customer interaction - almost 70 percent of all jobs - the positive effects of job design in such manner have not been proven yet. Exemplarily 499 jobs in retail sales were examined using observation-based and subjective measures. Statistical analysis consisted in the comparison of differently well-designed retail jobs. The results recommend compliance with the standards for these jobs as well whereat adjustments for customer interaction especially with regard to the core characteristic "task completeness" are necessary.

FP-377: Determinants of environmental attitude and behavior

Responsibility for natural resources and the environment as a function of scientific competencies

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 Thorough comprehension of scientific concepts and processes is assumed to enhance persons' responsi-

bility for natural resources and the environment and to foster its maintenance. PISA 2006 collected data from 15-year-old students from 57 countries. We used regression analyses to investigate the predictive power of the students' scientific competencies for their responsibility for natural resources and the environment and for their cognitions on environmental issues. Implications for interventions will be discussed. However, the results are confidential until the release of the international PISA report.

The impact of social economic status-human agency link on pro-environmental behaviors

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A structural model was hypothesized reflecting pro-environmental behaviors as a function of the social economic status (SES) and human agency (environmental efficacy and outcome expectations) link. Using mixed method design, questionnaire data from 348 college students were analyzed using structural equations modeling. Interview data provided further qualitative depth. Findings indicated that SES was negatively related with pro-environmental behaviors and indirectly related with efficacy. Outcome expectation positively relate to efficacy and pro-environmental behaviors. Qualitative data implied that environmental behaviors are unconsciously enacted. It was concluded that environmental behaviors are mostly cognitive scripts embedded by positioning in a social structure.

New ways to explain environmental attitudes and behaviors: An exploratory study

Caillaud, Sabine Les Sables d'Olonnes, France

The aim of the study was to explore different ways people use to think the link between environmental protection and economical constraints and to understand how these different representations explain environmental behaviors. Focus groups were conducted in France with students and were completely transcript. The analysis was conducted with Alceste, a software for lexical analysis, and with a dialogical content analysis. Results show the important role of new variables such as equity and rejection of consumer society. Finally, this exploratory study proposes to take account of these new variables to explain the gap between environmental attitudes and behavior.

Effects of the nature of information about global climate change and uncertainty on perception and sustainable behavior

Stone, Asako Desert Research Institute, Las Vegas, USA

The objective of this study is to examine the effects of the nature of information and of uncertainty on human perceptions and sustainable behavior in the context of global climate change. The design of this study is 2 (information: logical vs. intuitive) x 2 (uncertainty: high vs. low) factorial experiment. The study hypothesized that logical information would be more effective than intuitive information to reduce uncertainty, change perception, and behavior relevant to global climate change. The results of the study will contribute valuable information to the current education and outreach efforts about global climate change.

Perspective-taking and the environment

Pahl, Sabine Dept. of Psychology, University of Plymouth, Plymouth, United Kingdom **Bauer, Judith** School of Psychology - Social, University of Erlangen, Erlangen, Germany **Zhou, Mi** School of Psychology, University of Plymouth, Plymouth, United Kingdom Three experimental studies followed up the recent idea of using perspective taking (PT) to increase pro-environmental concern or behaviour. Study 1 had three conditions: PT with a person in the

future, objective and control. PT increased self-reported behaviour and information search. Study 2 tested the role of individual differences in PT. Only when participants were low in chronic PT did PT instructions affect reported behaviour. Study 3 compared PT with flood victims between Chinese and British participants and found an effect of PT on pro-environmental attitudes (NEP) that was stronger in the Chinese sample. Implications for interventions will be discussed.

Psychosocial factors related to Thais' mobile phone usage and battery disposal

Choochom, Oraphin Behavioral Science Research, Srinakharinwirot University, Bangkok, Thailand

The purpose of this study was to investigate and predict Thais' mobile phone usage and battery disposal. The sample consisted of 2,176 Thai mobile phone users in Bangkok. The data showed that most mobile phone users kept used batteries in their houses. The second method of mobile phone battery disposal was discarded with other waste garbages. The result also indicated that mobile phone users who disposed used mobile batteries mixed with other waste garbages had less appropriate intention of mobile phone battery disposal, less appropriate attitude towards mobile phone battery disposal, less mobile phone-battery knowledge, and more extrinsic motivation on mobile phone battery disposal.

FP-378: Family issues: Marriage

The study of relationship between couple privacy and marriage successes

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The main purpose of this research is the study of couple privacy and marriage successes relationship. This research is a survey study. In this study 300 subjects selected via random sampling. The results of this research show that there is a significant negative relationship between two variables ($p=0.000$). It also has been indicated that there is a significant and inverse relationship between the age and the subject group point of view (including process of marriage status group, hold married status and in process of divorce) for privacy. Other findings of the study show that there is significant relationship between the subjects level of job, gender, age and their point of view for privacy.

Brazilian men and women in the family: Can we speak of role reorganization?

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This work presents the results of an exploratory study conducted with two Brazilian middle-class couples in which the husband and wife have a paid job, in order to see how they share household duties and child care. Our data suggest that, although men's participation in the house increased, it continues to be seen as a "help" and is mostly related to recreational activities and food shopping. Women are still seen and see themselves as the main responsible for the household duties and family care, which includes providing children an adequate nutrition and physical care and supervising their activities.

The old story of marriage: An attempt to understand jealousy in Turkey?

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This study examined the relationships of gender, infidelity type (emotional-sexual infidelity), and three dimensions of jealousy (emotional, behavioral, and cognitive) among 499 (264 female, 235 male) married individuals. Factorial MANOVA results indicated that gender and infidelity types have significant main effect on the linear combination of three dimensions of marital jealousy. However, no significant interaction effect was found. Posthoc analysis showed that males were more emotionally jealous than females, and individuals who find sexual infidelity more upsetting were emotionally more jealous than the ones who find emotional infidelity more upsetting. The results were discussed in the light of the existing literature.

The influence of marital adjustment on sexual health

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This study aimed to investigate the effect of marital maladjustment on sexual problems in street women and to compare it with marital adjustment in normal women in Mashhad. A comparative-causative design was used. The data collection was carried out using a DAS questionnaire. Sample group was composed of 80 women, who were randomly allocated into two groups. The data analysis was taken place using SPSS version and independent t-test was used. The results revealed that there was a significant difference ($\alpha=0/01$) between two groups in marital adjustment scores. The average marital adjustment scores in street women was lower than normal women.

The effect of communication skills training on communication patterns and positive feelings toward spouse on couples in Ahvaz, Iran

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This study has examined the effect of communication skills training on communication patterns and positive feelings toward spouse on couples in Ahvaz, Iran. 24 couples were randomly assigned to experimental and control groups. Communication Pattern Questionnaire and Positive Feelings Questionnaire were administered in this study. The experimental group was exposed to communication skills training. The collected data were analyzed by using multivariate analysis of variance. The findings show that communication skills training had increased positive feelings and constructive pattern and decreased demand withdrawal pattern and mutual avoidance pattern toward spouse. This study has implications for family therapists.

FP-379: Clinical neuropsychology II

Physiological and psychological stress responses in adult patients with Attention-Deficit/Hyperactivity Disorder (ADHD)

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The study examined psychological and physiological (salivary cortisol, heart rate, heart rate variability) stress responses in 18 adult ADHD subjects in comparison to 18 healthy controls under laboratory conditions (Trier Social Stress Test). Baseline levels in both groups were similar. While the ADHD group experienced significantly greater



subjective stress during the anticipation and stress phase, ANOVA results for the physiological variables were mixed. ADHD subjects revealed an attenuated HR during the stress phase. Trends were observed for the some HRV parameters and for cortisol, potentially indicating further alterations of specific aspects of the stress response in adult ADHD patients.

Electric brain patterns during pleasant and unpleasant emotions, induced by dangerous and neutral images in paranoid type of schizophrenia as intensification of instinct of self-preservation
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The hypothesis is the intensification of instinct of self-preservation caused by cortical-subcortical reciprocal interaction. A visual series of dangerous and neutral images, induced pleasant and unpleasant emotions, were showed to 7 patients with paranoid type of schizophrenia, 10 patients in remission and 10 healthy. Event related potentials and EEG coherent activity were studied with Mann-Whitney test. In group of schizophrenia and control group amplitude and latency of both components of evoked potential change between healthy and schizophrenic patients. Evoked potentials correlation and coherent activity of patients with paranoid type of schizophrenia differ from healthy when neutral images were showed and didn't differ when it was images, connected with danger.

Neurocognitive impairment of bipolar patients and their healthy siblings

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Patients with bipolar disorder have been found to have neurocognitive impairment. If this impairment is genetically transmitted, the healthy siblings of these patients will also have some degree of the neurocognitive impairment. In this study, 58 bipolar patients, 59 healthy siblings, and 36 normal controls were recruited. A computerized battery of neurocognitive tasks were administered to each participant. Results indicated that both the patients and their healthy siblings had impairment on Wisconsin card sort, backward masking, and Asarnow continuous performance task. It appears that some neurocognitive tasks might be the biobehavioral markers of bipolar disorder.

FP-380: Personality and individual differences

Assessing resilience in HIV-infected mothers and their children

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In this paper we discuss the construct of resilience and describe the process of developing and culturally tailoring measures of resilience in a longitudinal study of HIV-infected mothers [n=440] and their children in South Africa. We describe the 18-month pilot study in the Kgoro Mmogo project, where the initial instrument battery for assessing resilience was adjusted to a final instrument battery which included instruments that assessed for emo-

tional intelligence, stress and coping, spiritual coping, self-concept, depression and developmental and behavioral factors. We adopted an iterative process for adjusting the instrument battery. This included trial assessments, feedback-groups, individual interviews, reflections, translations, back-translations, instrument-notations and exploring alternative instruments.

Investigating hackers' personality characteristics
Atashpour, Hamid Psychology, Azad University, Isfahan, Islamic Republic of Iran **Salahshouri, Nasrin** Psychology, Azad University, Isfahan, Islamic Republic of Iran **Samsam Shariat, Mohamad Reza** Psychology, Azad University, Isfahan, Islamic Republic of Iran **Samavatyan, Hossein** Psychology, Isfahan University, Isfahan, Islamic Republic of Iran The purpose of this study was to compare the personality characteristics of internet hackers with normal users. Demographic and hacking desires as well as personality questionnaires were used. The collected data from 42 hackers and 33 normal users were analyzed and showed significant differences between the two groups ($p < 0.001$). Also, the relationships between hacking desire and gender, the level of responsibility, tolerance, and independence were significant ($p < 0.001$). The findings of the study would have some implications such as identifying the potential hackers on the basis of their personality.

Personality determinants of interpersonal professional behaviours in medical students

Munro, Don School of Psychology, University of Newcastle, Callaghan, Australia **Bore, Miles** School of Psychology, University of Newcastle, Callaghan, NSW, Australia **Powis, David** School of Psychology, University of Newcastle, Callaghan, NSW, Australia We have been exploring aspects of personality that may be used to predict the interpersonal skills of medical students and doctors, including those relating to the treatment of patients/clients and those concerned with relationships between medical professionals (e.g., Munro, Bore & Powis, Australian Journal of Psychology, 2005). We describe an extension of the work with ten further facets of personality that have also emerged as relevant, centering on mental health and self control factors. The results suggest a revised model using three composite dimensions. This model will be discussed in relation to existing theories linking personality and interpersonal behaviours.

FP-381: Person perception & impression formation II

Social evaluation theory

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Existing theories do not clearly postulate which types of persons might fulfill one's interpersonal needs and goals. To rectify this, social evaluation theory (SET) is introduced. SET posits that people routinely appraise the potential of others to fulfill their needs, and proposes the concept of need-satisfaction assessments (NSAs) to represent a taxonomy of eight archetypal person types. In 14 studies, scales for measuring NSAs were developed and located around a circumplex. Subsequent studies demonstrate that people do experience the need for these person types, and that NSAs play an important role in person perception and social interaction.

Dynamics of understanding others through a training session in social perception

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The purpose of our research was to detect the main directions and the character of changes involved in understanding other people and in which areas of

understanding these changes occurs. The main method of research was interviewing participants before and after the training session of social perception, using the G.Kelly's Repertory Grids. The obtained Personal Constructs were processed by using content-analysis and quantitative analysis. The results show certain dynamics in cognitive area (categorical semantic structure of understanding) and affective area (changes in attitudes to others).

Better when together? Effects of distributed cognition in impression formation and person memory

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In two experiments we examined impression-formation and person-memory as socially-distributed cognitive processes. Participants' (N=156) individual and collaborative impression-formation and recall were compared. Non-collaborative performed better than collaborative-recall groups. This effect disappeared when impressions were formed collaboratively. Additionally, participants encoding collaboratively outputted a set of comments that moderated recall performance (comments reflecting elaborated processing led to higher recall when compared to simple trait-encoding or less elaborated processing). More elaborated processing led to better recall even when performed by others. These results extend the socially situated cognition approach to person memory suggesting that impression-formation and recall are often socially distributed cognitive processes.

Mental representations of poverty among poor women in Southern Philippines

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How is poverty construed by poor women in Southern Philippines? Interviews among 373 women from rural (n=145) and urban (n=288) Southern Philippines revealed representations that included a shortfall of daily food resources, internal causation, and positive affect. Respondents who were able to meet their quotidian food requirements tended to externalize poverty and as such, defined themselves as non-poor. Positive appraisals of their condition were significantly correlated with long-term poverty, with uncontrollable and permanent conceptions of poverty's cause, with better-off judgments of their condition compared to their neighbors, and with perceived entitlement of the rich.

FP-382: Work system school

Levers of institutional transformation: System-level working hypotheses in international group relations conferences

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Aim: To document developing transformations of educational and learning models used in Tavistock group relations conferences, through recent verbal working hypotheses focusing on system behaviors and psychodynamics. Method: Qualitative analysis to document the degree and types of institutional transformation resulting from verbal communication of staff-formulated interpretations of primitive latent and overt stresses in interactions among multinational social systems. Results: Participants reported gaining increased understanding of dynamic organizational behaviors and acquiring experiential learning skills applicable in institutional management. Conclusion: Interpreting, understanding, and reflectively participating in institutional system events (ISE) may improve

collaboration in today's multinational world of intermingled commerce, ethnicity, religion.

The role of teachers' work values to the perception of principal's efficiency and behavior
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 Objective: To evaluate the links between the work related values and perception of principal's work. Methods: Case study limits the number of participants till fifty seven. The questionnaire measures principal's perceived efficiency, interpersonal behavior and personal work related values. Scales were composed using factor analysis. The connections were estimated using correlation analysis. Results: The values of control and respect are not connected with principal's perception. Workplace comfort and autonomy correlates with perception of principal's efficiency. Achievement and collaboration correlates both with efficiency and behavior. Conclusions: Values affect the perception of principal. He/she is perceived as a leader when he/she is displaying behavior congruent with teacher's values.

Study of a reform process: Problems in building an analysis system

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Inside Italian-speaking Switzerland is currently underway a reform process. Our purpose is to produce an analysis grid to study this process in four case studies and in whole school system. All the public documents on the reform and some interviews with privileged witnesses have been analyzed; to check reliability we use a double blind coding system. Analysis helps in refinement of theoretical frame and in producing a detection and analysis grid to study our educational institutions and school system. Import investigating models from different contexts may be problematical for the evaluation of real weight of each dimension in the phenomenon.

Organizational effectiveness of school managers in Ukraine through the competing values model approach

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Objective: To find out dominant models of school managers. Methods: The research was conducted on 230 school heads and deputy heads using R.Quinn Competing Values Instruments. Results: 1. School managers used Human Relations, Open Systems, Rational-Goal, and Internal Process Models; 2. Leadership roles influenced managerial effectiveness and organizational culture, with age and term in position being the main determinants. 4. 65% of the respondents had high performance and effectiveness in the Rational-Goal Model and Internal Process Model, 27% in Human Relations Model, and 7% in Open Systems Model. Conclusion: An effective management course has been successfully tested in the Central Institute of Post Graduate Pedagogical Training.

FP-383: Victims' reaction to violence and human rights violations

Post-conflict Aceh, Indonesia: Collectivism, worldview, and authoritarianism

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 Objectives: Civil war makes the world seem a dangerous place, which should mediate the relationship between vertical collectivism and authoritarianism. Methods: 215 Acehnese recalled brutal experiences from 1976-2005 military operations. Horizontal/vertical collectivism/individualism, Acehnese group identification, belief in a dangerous world (BDW), and right-wing authoritarianism (RWA) were also assessed. Results: AMOS modeling showed that wartime experiences predicted Acehnese identity [$\beta = .03, p < .002$]; and Acehnese identity predicted BDW [$\beta = .26, p < .001$]. BDW mediated the relationship between vertical collectivism and RWA. [RMSEA (.039), GFI (.97), and AGFI (.94)] Conclusions: Civil war predominantly influenced aggressiveness among vertical collectivists.

Identity salience: The contribution of trauma variables, collective identity commitment, and mental health to militancy and suicidality: The Palestinians case

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Why people, fearing death, kill themselves? ITMT suggests that the salience of identity, personal, and collective can explain. Using samples from Palestine' West Bank and Gaza, we developed a measure for collective identity salience. Exploratory and confirmatory factor analysis found two factors: Identity commitment and Militancy. Using measures of fear of death, annihilation anxiety, general anxiety, PTSD, CTD, depression and trauma types; multiple regression and path analysis revealed that personal identity trauma was associated with decrease in fear of death, mental health problems and increased clinical suicide and/ or militancy. Collective identity trauma, while it did not affect significantly fear of death, was associated with more of increase in identity commitment and militancy.

Reconciliation and mental health in traumatized victims of human right violations

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It is assumed that reconciliation has a positive effect on mental health in victims of human right violations. To assess the readiness to reconcile with the perpetrators a questionnaire was constructed. The interviewed sample (N=45) consisted of Kurdish refugees from Turkey. Factor Analysis revealed 3 questionnaire subscales. Reliability was high (Cronbach's $\alpha = .88$). Validity was proved with Monotrait-Multimethod. First analysis showed a low correlation between the readiness to reconcile and PTSD ($r = -.076; p = .65$), Depression ($r = -.284;$

$p = .115$), Anxiety ($r = -.275; p = .127$) and Quality of Life ($r = .174; p = .311$). Results indicate that there is only a low connection between the readiness to reconcile and mental health in Kurdish victims of human right violations.

Longitudinal study on mental health and living conditions of refugees who are returning to their country of origin

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 In a study among refugees from the former Yugoslavia we study the impact of voluntary assisted return programs (VARP) on mental health. We investigate the psychiatric status (M.I.N.I., PDS), quality of life (EUROHIS) and living conditions before and after return in N= 90 refugees (40 returnees, 50 'stayers'). The prevalence of psychiatric disorders among returnees is high before return (48 %). Nine months after return the rate increases to 71 %. In 60 % the decision to return is forced by immigration officials. The results call for a redefinition of VARP taking into consideration the vulnerability of the participants.

FP-384: Visual processes

The sampling strategies for 3-D figures

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The study was focused on the difference of sampling strategy between 3-D geometrical figures and their real objects. A eyelink system was used to record the eyes movements of subjects. The results were as follows: ① The first-sampling-point were mainly located at the critical features, such as corner, outline parts, both for 3-D figures and real objects. ② The scan-paths and the sampling order for figures were not different from their real objects. Most fixations located at the critical features and meaningful features. ③ The sampling orders were relative stable both for figures and their real objects.

Hue discrimination in the physiological meaningful DKL color space

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Hue discrimination has been traditionally investigated by measuring detectable differences between wavelengths. Here we investigate hue discrimination in a physiologically meaningful color space. Discrimination thresholds are measured for 32 subjects along the cardinal axes and along intermediate axes in the isoluminant plane of the DKL color space. No gender differences were found. Hue discrimination was best along the cardinal directions, suggesting an important contribution of precortical processing stages in hue discrimination. Discrimination was worse along the main diagonal, in particular for magenta. Interestingly, discrimination was also good along the second diagonal for yellow/orange, the color of various flowers and fruits.

Differential seasonal processing in parvo- and koniocellular visual pathways in depression

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Disruptive functioning of distinct parallel streams in the visual pathway can have important implications for understanding the pathophysiology of depression. Using noninvasive psychophysics, we



compared the spatiotemporal contrast sensitivity (CS) functions of non-depressed, seasonally depressed, and non-seasonally depressed individuals across seasons. Both depressed groups had an inferred parvocellular-mediated CS enhancement, with the NON-seasonally depressed showing neuro-visual CS shifts between summer and winter. Also, shifts in inferred koniocellular operations were noted. This, coupled with our narrow-band short-wavelength adaptation studies, suggest that S-cones, as part of a photopic gain system, are also involved with nontraditional koniocellular retinogeniculate projections. Possible depressive neural mechanisms are discussed.

Binocular unmasking is important for the detection, categorization and identification of noise-masked real-life objects

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Binocular unmasking refers to the improved detection performance of noise-masked simple visual patterns (e.g. grating) in the presence compared to the absence of 3-D cues (stereoscopic depth cues). Here we investigated whether binocular unmasking is also important when perceiving noise-masked real-life objects. Specifically, we measured the detection, categorization, and identification thresholds of real-life objects in the presence and absence of stereoscopic depth cues. We found that the detection, categorization, and identification of objects was significantly better in the presence than in the absence of stereoscopic depth cues using hypothesis tests. Hence binocular unmasking seems important for object perception.

FP-385: Training and manipulation of values and moral skills

Sports-based prevention of violence/bullying and promotion of social and moral skills in adolescents: "fairplayer.sport"

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Most of the programs developed to prevent violence/bullying and to promote socio-moral skills have been conceptualized for the school setting, leaving other domains of adolescent activities, like sports, unconsidered. We present a framework for a preventive intervention program aimed at promoting socio-moral skills within a team sports context. Adolescents (11 to 14 years of age) will take part in sequentially structured training sessions including physical and reflective elements. The preventive intervention will be evaluated using a randomized intervention-waiting-control group design. We will present data from the pre-evaluation study expecting improvements in a number of morally relevant skills like perspective-taking, empathy and emotion regulation.

Values and models of identification of adolescents and their parents

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The purpose of this study is to test the differences in value preferences and models of identification between adolescents and their parents. Three groups of hypothesis were tested. Subjects are 120 adolescents (14-20 years) and 240 parents (40-60 years). Significant differences ($p < 0.05$; $p < 0.01$) are found in value preferences and in the field from

which models of identification are selected, but not for characteristics of models. The results show that adolescents are less pro-socially oriented. With age more models are selected from culture, history and politics and less from sport and show-business. Subjects mostly choose characteristics from the group of humanity. Keywords: values, models of identification, adolescents, parents.

The unhappy moralist: Moral resilience and its emotional stress

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We would like to present research results on the phenomenon of the so-called "Unhappy Moralist" effect. In different research projects we found - in contrast to the "Happy Victimizer" (Nunner-Winkler, 2001) - that in situations, in which moral courage contradicts economical success, subjects are discontent with the result of their action (negotiation, deal, discourse). The disadvantage of being moral and thus having less success leads to negative emotions and to a felt unsatisfactory result. We present outcomes of studies with children/adolescents aged 7-15 years. They are based on moral vignettes, in which the moral dimension conflicts with the success dimension.

Religious and laics values: Different relationships with religion and modern spirituality?

Muñoz-García, Antonio Educ. and Developm. Psychology, University of Granada, Granada, Spain Values, as they are conceptualized by Schwartz's 10-value model, have showed a relatively pattern of relationships with religion (Saroglou et al., 2004): religious people tend to give high preference to values reflecting conservation (tradition, conformity) and limited self-transcendence (benevolence but not universalism), and low importance to values indicating openness to change and self-enhancement (self-direction, hedonism, stimulation, and in a less extended and systematic way, power and achievement). On the other hand, laics values (eg. tolerance, alterity, capacity of rebellion) are more and more relevant in secular societies and could be associated differently with religiousness and modern spirituality. We study those differences in preferences of values for religious and spiritual people.

FP-386: Development in adolescence and young adulthood II

Patterns of fulfilment in the domains of work, intimate relationship and leisure

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We investigated patterns of fulfilment in the domains of work, partnership, and leisure among 1,977 German respondents. Eight groups were formed based on the combination of perceived career progress (yes/no), having a satisfying partnership (yes/no), and perceiving flow during leisure activities (yes/no). Individuals with high levels of flow during leisure reported the highest levels of positive affect. Lowest levels of depression were found in respondents who fulfilled at least two criteria of success. We conclude that for minimizing depressive symptoms and maximizing positive affect, individuals should have leisure activities combined with a positive intimate relationship or career progress.

Emerging adulthood and level of voice in different relational contexts

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The researcher examined level of voice in relational contexts among 341 emerging adults at a Canadian university. Relationships between voice and relational context were found. In addition, differences in grade point average and level of voice in different contexts were uncovered. However, gender differences were not found on level of voice. Individuals ($n=9$) also participated in interviews providing rich information concerning their lives and experiences concerning level of voice. Results of this study indicate that emerging adulthood is truly a period where relationships and self-focus are of extreme importance and different contexts have been seen to affect level of voice.

Developmental trajectories from adolescence to young adulthood: The course of aggressive and rule-breaking behaviour

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Objectives: To examine trajectories of aggressive and rule-breaking behaviour and their concurrent and predictive validity. **Methods:** A longitudinal sample of 586 adolescents, four times of measurement. Longitudinal cluster analyses and semi-parametric mix-ture modelling. **Results:** Three similar trajectories were identified for both types of problem behaviour: persistent low levels, increasing and decreasing levels. A fourth most problematic trajectory began with a high level and continued with an increasing course of aggressive behaviour or had a late-onset-course of rule-breaking behaviour. Concurrent and predictive validity of these trajectories were established. **Conclusions:** Both general and specific processes in the development of aggressive and rule-breaking behaviour were observed.

FP-387: Communication and regulation behavior in intergenerational relationships II

Communication patterns perceived by adolescents about their mothers and adaptation variables

Armas Vargas, Enrique Person., Evaluat. & Psychology, Psychology Faculty, Tenerife, Spain This study investigated the relationship between Communication Patterns & Problem-Solving Skills Questionnaire (Armas-Vargas, E.) with a group of teenagers, how do they communicate themselves with their mothers and the relationship with 4 areas of Adaptation. 182 students (12-14 years old). Factor analysis and reliability was conducted on the CPC-RC, 45% variance: 1) Help to Argue; 2) Ask/Give opinion; 3) Ask/Give an explanation; 4) Active listening and Wait turn; 5) Difficulty to reach Agreements. When boys perceived that their mothers give them an Explanation (3, the same with factors 1, 2 & 4) is positively related to all areas of adaptation. Difficulty to Reach Agreement affects negatively to familiar environment and the Self-esteem.

Parent /child ethnic prejudice relationship: Emerging moderators

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Although the contention that children's relation with their parents has an influence in the inter-

generational transmission of prejudice has been supported for various studies (Carlson & Iovini, 1985; Sinclair, Dunn & Lowery, 2004), some investigation shows no relation between parent and child prejudice (Aboud & Doyle, 1996; Branch & Newcombe, 1986). Those inconsistent results illustrate the need for deeper investigation. The current study examines the interactive effect of parents' prejudice and parent/children congruity of expectations on children's explicit and implicit pro-White/anti-Black prejudice. Results provide evidence that parents' racial attitudes influence their children's implicit racial prejudice but not their explicit prejudice.

Exploring the co-parenting family types of school-age children

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This presentation focused on exploring the co-parenting family types. Questionnaire method adopted with a sample of 775 couples of school-age children in Dalian of China, exploring the co-parenting family types of which were acquired distinguishingly. At the same time, through situational observations, coding analyses and evaluating for 28 nuclear families' parents, co-parenting behavior's actuality, characteristics were shown. Cluster analysis of fathers' and mothers' scores on the three co-parenting factors suggested five "types" co-parenting families: Mother high participant, Father high participant, opposite, cooperative and low participant co-parenting family.

FP-388: Clinical research methods II

Measuring emotional (dys-)regulation

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The topic of our presentation will be the study revealing the difference between self-report measures and performance measures of emotional regulation and dysregulation in various populations. The first group of these methods implies existing the emotional self-knowledge and the second engages emotional processing in situations of emotion activations. There were questionnaire for emotional regulation and experimental performance test used. The investigation concerned two groups- disorder (ex. borderline personality disorder) and non-disorder. We selected them resting theoretical assumptions and empirical results, which indicate that emotional regulation process, proceed in distinct way. The results of ANOVA statistic would be discussed.

Turkish children's Bender Gestalt Test performance: The effects of social variables on visual spatial performance

Özer, Serap Dept. of Psychology, Dogus University, Istanbul, Turkey

The Bender Gestalt test is an important educational assessment tool in Turkey. The present study was undertaken to test the hypothesis that SES is an important factor in this task. 515 children who came from either private or public schools, ranging in age from 5 years to 11 years were tested using the Bender Gestalt test. Results indicated that children's visual spatial performance as measured by the Bender Gestalt test differed not only based on age but also as a result of socioeconomic variables as indicated by school placement. The importance of cultural and social variables in visual motor tasks is discussed.

The application of partial list squares in clinical research

Tarroja, Maria Caridad Dept. of Psychology, De La Salle University, Manila, Philippines

This study looked into the application of Partial Least Squares (PLS) in clinical research, particularly adoptive family research as Brodzinsky (1990, 1998) calls for a more theory-driven research, systemic and sound theoretical models. PLS allows the examination of multiple interrelationships in small samples and an examination of both direct and indirect links among independent variables, defined by multiple measures. In this study, PLS proves to be useful in looking into the significant factors that influence the behaviors of Filipino adopted children. Among the preadoption risk and postadoption factors, family functioning is found to be the most significant direct predictor of adjustment of the Filipino adoptees.

FP-389: Family issues: Parenting II

Emotional reactivity and emotional disturbance following in vitro fertilization failure

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Canavarro, Maria Cristina Faculdade de Psicologia e C. E, Universidade de Coimbra, Coimbra, Portugal The failure of an IVF treatment has proved to have a negative impact in infertile couples, generating stress, depression and negative emotional reactivity. The aim of the present work is to study emotional reactivity and psychopathology after an unsuccessful IVF cycle. 20 couples were recruited in a public medical centre, Psychopathology (BSI, Derogatis, 1993) and Emotional reactivity: (EAS – Carlsson et al., 1989) were assessed after an unsuccessful IVF cycle. Results obtained demonstrate that the failure in ART treatments has a deleterious effect in couples, indicating the presence of difficulties in adapting to IVF failure. Unsuccessful IVF treatments can have a negative impact in couples promoting adjustment difficulties.

Comparative study on the attachment style of the mothers who had abortion (induced and spontaneous) and mothers who had not abortion

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This research has compared the attachment style of the mothers who had abortion (induced and spontaneous) and mothers who had not abortion. 86 mothers who had abortion (42 mothers with induced abortion and 44 mothers with spontaneous abortion) and 45 mothers who had not abortion were selected and filled out the adult attachment style Questionnaire (Hazan & Shaver, 1987). Statistical methods such as descriptive analysis, chi-squared, ANOVA analyze and two way analyze were employed. Analysis revealed secure attachment in mothers who had not abortion had more frequent and insecure attachment in mothers who had induced abortion had more frequent ($P < 0.003$). Attachment styles have impact on mothers attitude toward parenting and kind of mothers relationship to child.

The impact of parents' migration from rural to urban areas on the mental health of their children left behind in China

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Objective: Exploring the impact of parents' migration from rural to urban areas on the mental health of their children left in hometown in China. Methods: Investigating anxiety and depression levels and some influencing factors in 876 children from three grades in rural schools in Chongqing and Guizhou. Results: Children left in rural areas have higher anxiety and depression levels than children whose parents don't leave. The quality and quantity of parent-child contact, as well as the family socio-economic status, influence child's mental health obviously. Conclusions: Children left in rural areas face more challenges during development, appropriate psychological interventions are needed.

FP-390: Collective identities and collective action II

Social identity and conflict intentions: The models of determination

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Numerous studies show that salient social identity leads to conflict. What are the factors that determine or moderate this impact? The paper analyze this question based on the results of survey (6,522 respondents) conducted in the autonomous republics of Russia and Ukraine. The analysis shows that different types of conflict intentions – discrimination, political mobilization, and quest for autonomy – have different models of determination: varying impact of social identities, including ethnic, religious, regional, and national identities as well as moderating effects of threats, intergroup trust, economic deprivation, confidence in public institutions, perception of fifth columns, and ethnic stereotypes.

The meanings of the antiglobalization movement as an expression of the new cultural discomforts

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This paper aims to analyze the collective action frameworks of the "antiglobalization movement" and its meanings, from a contextual perspective. From a socio-hermeneutical standpoint, the research presents a qualitative case study based on discourses produced and registered during selected collective action of this global movement. The results allowed the understanding of the most relevant psychosocial processes related with the configuration of collective subjectivity projects of the movement. The conclusions turn around its contribution to the new emerging forms of agency and social power in current democracies as an answer and expression of the new cultural discomforts.

Is third way possible? The national identity and its dilemma in Taiwan polarizing society

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National identity in Taiwan is facing a dilemma of double identity, as both Taiwanese identity and Chinese identity are viable. This predicament has deep historical roots, but controversies of identity have been increasing. There are also diversity of Nationhood Imagination in Taiwan. Politically, most people favor independence. Militarily, China uses force against Taiwan for Taiwanese's searching for independent nation. In this study, questionnaires were conducted and 300 data were collected. The results will demonstrate the various opposite of Chinese identity and Taiwanese identity. Then, what is best favored future imagination for cross strait relation will be discussed.



FP-391: Work safety

Organizational culture and safety climate in U.S. Veterans administration hospitals

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Objectives: To identify organizational culture characteristics associated with higher levels of safety climate in 30 Veterans Administration hospitals. Methods: We administered the Zammuto and Krakower survey to employees to measure organizational culture (total $n=1,428$). We performed multiple OLS regressions. Results: Stronger group and entrepreneurial cultures were significantly associated with higher levels of safety climate, while stronger hierarchical culture was associated with lower levels of safety climate. Conclusions: Organizational culture characteristics are potentially mutable and have an impact on safety climate. Hospitals should devote greater attention to activities that promote stronger group and entrepreneurial cultures and reduce hierarchy within their institutions.

Perceptions of personal vulnerability to occupational health and safety (OHS) hazards in the Australian construction industry

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Optimism bias is the belief that negative events are less likely to happen to oneself compared to others. Little research has been conducted on the presence of optimism bias, and its potential effect on safety practices in industry. 178 construction workers were surveyed regarding their perceived likelihood of workplace hazards occurring to themselves, and to the average worker of their age, doing their job. Significant optimism bias was observed for 7 of 10 events, including electrocution, falling from heights and being trapped in a confined space. Results are discussed in terms of their implications for workplace safety management.

The relationship between safety climate, safety performance and safety-related outcomes: A multilevel study in Chinese management context.

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The aim of this study was to explore the effect of safety climate (SC) on safety performance, as well as the negative outcome. Individual and unit level SC, safety compliance and safety participation, and the injuries history data were collected in a chemical company. 384 employees responded the survey. Results showed that cross-level effects of Unit-level SC and Individual-level SC on safety compliance and safety participation were significant. The effect of Individual-level SC on injuries was fully mediated by safety participation. Implications of the study for management and safety climate research were discussed.

FP-392: Elementary information processing II

The mechanism of two-digit comparison: Evidence from priming effect

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Are multi-digit numbers decomposed or represented and compared holistically in number comparison? This is the focus of the controversy about the mechanism of multi-digit comparison recently. In the present experiment, we used priming design to investigate this process. In the primer, the decades of the two numbers (e.g., 54-69) are same as those of the two numbers in target pairs (e.g., 53-62) respectively. The results provide evidence for the process in which numbers are not compared holistically. Comparing a same-decades number pair successfully primed the comparison of target pair. The correct rate and response time were both improved significantly. Key Word: priming effect, number comparison, two-digit numbers

Stimulus-response compatibility based on affective arousal

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This study investigated effects of congruency between emotional arousal and response force. Participants responded with weak or strong forces to pictures varying with respect to arousal, the lightness of a frame surrounding the picture, and horizontal position. For different groups of participants, either of these stimulus dimensions was task relevant, with stimulus-response mapping varying between blocks of trials. The stimulus-response mapping of the two respectively task irrelevant dimensions varied unpredictably. Only when affective arousal was relevant, there was an advantage of the mapping arousing-strong, not arousing-weak over the reverse mapping. A similar pattern was observed for the nonaffective stimulus dimensions.

A new approach to research on mental rotation

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The presentation deals with the issue of mental rotation, which is tested not as an outcome but as a process. There is still lack of methods which allow us to analyse the process of this operation on-line. The indicator of mental rotation proposed by the author, apart from reaction time and the correctness of task performance, is an eye movement trajectory. The basic assumption is that there is a similarity between eye movement trajectory during the visual perception of a stable object and its visualisation (Laeng, Teodorescu 2002). This similarity, relating to the object rotation, will be tested.

FP-393: Cognition and work II

Intuition: Situated cognition and implicit control in managing complexity

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The contribution summarizes the conclusions of our empirical studies about complex work activities of engineers, managers and spatial planners. The studies have shown that experienced professionals are often successful following their intuition without detailed planning and analysis. An information processing model was developed to explain how experts intuition works and on which information it relies. The main idea is that consciously planned behaviour is continuously embedded and modified

by a process of appraisal, which is based on implicit knowledge about critical signals for opportunities and threats. Conclusions for knowledge management, work design and change management have been drawn.

The relationship between shared mental models, team environment, and team creative performance: A field study

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This study examined the relationship between shared mental models (SMMs), team environment, and team creative performance (TCP) among 129 R&D and service teams of hi-tech companies. Results indicated that team environment moderated the relationship between SMMs and TCP. Specifically, the impact of SMMs on team TCP was more salient for teams that must react rapidly to the changing environment. In addition, SMMs and environmental requirements also influenced TCP in a subtle way. High level of both SMMs and environmental requirements jointly reduced task conflict, which in turn reduced relational conflict within teams, and finally enhanced TCP.

Critical aspects of cognitive performance under military working schedules

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The introduction of computer-based technology added increased cognitive demands to a broad range of military tasks. Aim of our study was to assess the impact of military working schedules on critical aspects of cognitive performance. 40 soldiers were subjected to a test battery in a virtual environment before and after their working day. Tests assessed performance in vigilance, short term memory, mental arithmetic and simple reaction time. Eye movements were also recorded. Preliminary results indicate that performance was negatively affected in mental arithmetic and reaction time only. Results are discussed in terms of contemporary models of information processing.

FP-394: Child and adolescent psychopathology V

Trauma, psychopathology and resilience in former Ugandan child soldiers

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Objective: To investigate the association of trauma, psychopathology and resilience in child soldiers. Design: Cross-sectional field study of 394 former Ugandan child soldiers (age 11-18) in a school setting, conducted in 2006. Results: Despite a high level of exposure to traumatic events (e.g., 88.8% saw someone being killed, 51% had to kill someone themselves) 39.6% of the population were free of clinical relevant symptoms (measured by YSR; Achenbach, 2001). Conclusion: The study highlights factors of posttraumatic resilience (e.g. religious coping, absence of guilt). Strengthening these factors is crucial to successful psychological treatment of psychopathology in child soldiers.

Psychometric properties of the strengths and difficulties questionnaire in a sample of Turkish children

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Strengths and Difficulties Questionnaire (SDQ) is a frequently used, brief questionnaire designed to evaluate the emotional and behavioral problems of children. The aim of this study was to evaluate the psychometric properties of the parent and teacher forms of the SDQ in a Turkish sample. According to the factor analysis, the Turkish version of the SDQ contained four factors, instead of five as in the original questionnaire. In general, the Turkish version of the SDQ showed reliable and valid results to evaluate the emotional and behavioral problems of children. Results will be discussed from a cultural perspective.

Cognitive behavioral intervention for childhood social phobia in a scholar setting

Gil Bernal, Flor Dept. of Psychology, UNAM, Mexico City, Mexico **Hernández Guzmán, Laura** Psychology, UNAM, Mexico, Mexico
In recent years the interest about the inclusion of social phobic children's parents in therapy has increased. Objective: To evaluate a 8 week CBGT program in a scholar setting and the additional value of a 4 session cognitive behavioral parent training program. Method: Twenty one children were assigned to a CBT condition. Ten parents were randomly assigned to a CB parent training program. Diagnostic interviews were conducted with parents and children separately before and after treatment and a 3 months follow-up Results: Children who received treatment as well as their parents showed more gains compared with the rest of the children. The gains were maintained at post-treatment and 3 months follow-up.

FP-395: Child and adolescent psychopathology VI

Bullying victimization in childhood and psychosis-like symptoms in a non-clinical population at 12 years of age: Results from the ALSPAC birth cohort

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Objectives: The aim of the present study is to examine whether bullying victimization in childhood predicts the presence of psychosis-like symptoms (PLIKS) in early adolescence. Methods: Analyses are based on 6437 participants of the longitudinal ALSPAC birth cohort in Bristol, UK. PLIKS were assessed at age 12 and bullying at 8 and 10. Results: Bully victims had an elevated risk for PLIKS independent of various confounding factors. Associations were strongest for chronic and severe bullying. Conclusions: These results suggest that bullying predicts the presence of later PLIKS and could be an important target for early intervention and prevention of psychotic symptoms.

Video and computer game addiction

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Computer games have become an ever-increasing part of many adolescents' day-to-day lives. To date, no reliable data for computer game addiction in Germany exist. The excessive usage of computer and video games can be seen as a rewarding behavior which can, due to learning mechanisms,

become a prominent and inadequate strategy for adolescents to cope with negative emotions like frustration, uneasiness and fears. Data of several psychophysiological studies show that excessive computer game playing seems to parallel the mechanisms of development and maintenance of addiction. Results indicate the necessity of the implementation of effective strategies in prevention and treatment.

Emotional intelligence in parents of children with pervasive developmental disorders

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Objectives: The aim of this study was to investigate emotional intelligence in parents of children with Pervasive Developmental Disorders (PDD). Methods: Forty-three pairs of parents with PDD child recruited from the Center for the Treatment of Autistic Disorders - Tehran. They were asked to fill in the Bar-On Emotional Quotient Inventory (1997), individually. A similar procedure was implemented on a sex, age and education matched control group. Results: PDD parents scored less than controls on general EQ and three components: interpersonal, adjustability and global mood. Conclusion: The results provide some evidence in favor of sub-threshold autistic like behaviors in parents of children with PDD.

Parent-personality, parental attitudes, child-temperament and parent-child interactions as aetiological factors in the development of child-psychopathology

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Research-question: How strong is the development of child-psychopathology determined by parent-personality, child-temperament, parental attitudes and specific types of parent-child interactions? Method: 241 parents with a child of 1.5-6 years completed questionnaires on parent-personality (SCL-90-R, MMPI-2, EPI), parental attitudes (DysPAS), child-temperament (ECBQ/CBQ) and child-pathology (CBCL). 86 parents additionally sent protocols of parent-child interactions for 21 consecutive days (categorized into specific interaction-types). Correlations and structural equation models show that mostly mothers personality (18 subscales), Child-Temperament (14 subscales), parental attitudes, conflict management and interaction time with the child are significantly correlated with child-psychopathology.

FP-396: Cross-cultural comparisons III

A cross-cultural study of scientific creativity in adolescents

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This study explored performances on 5 types of scientific creativity task in 1141 senior and junior high school students aged from 13 to 20 from China, Japan and England. Chinese students got the highest scores on problem posing, problem solving and scientific imagination, the lowest on product design and product improvement. Compared to figural task, Chinese students did better in reacting to verbal task, England and Japanese students performed reversely. In Chinese sample, the scores on fluency and flexibility are higher than that of originality, but in Japanese sample, the highest score was got on the dimension of originality.

Culture, illusory negative concerns, and social support seeking

Li, Chongliang Xili, Nanshan, People's Republic of China **Wang, Lei** Psychology, Peking University, Beijing, People's Republic of China

Our research aims to demonstrate that negative concerns in social support seeking are just illusions and exam its cultural difference. Study 1 found that the negative concerns in support seeking were indeed illusory that only shared by support seekers but not by the support providers. Moreover, Chinese were more illusive than Americans. In study 2, we reduced these illusions by role-image method and found that participants who imaged being asked for help showed more intentions for support seeking. Again, Chinese changed more for support seeking than Americans. Discussion centers on the theoretical and practical implications of the results.

The autonomous-related self among migrant and non-migrant students in Germany and Turkey

Otyakmaz, Berrin Özlem Inst. Bildungswissenschaften, Universität Duisburg-Essen, Essen, Germany **Kagıtcıbaşı, Cigdem** Psychology, Koc University, Istanbul, Turkey

Individualism is assumed to entail both separateness and autonomy, while collectivism often implies relatedness and lack of autonomy. These construals are problematic because they confound two underlying dimensions of 'interpersonal distance' and 'agency.' There is empirical evidence for the distinctness of these dimensions and the coexistence of relatedness and autonomy. The autonomy-relatedness scale developed by Kağıtçıbaşı, allows measuring the co-existence of autonomy and relatedness. It was applied to German and Turkish students in Germany and to Turkish students in Turkey in order to assess the 'autonomous-related self' in these groups.

FP-397: Instruction, construction, and learning: Specific trainings, teaching practices, text-books II

The importance of self-regulation procedures in writing strategies trainings

Glaser, Cornelia Educational Psychology, Justus-Liebig-University, Giessen, Germany **Brunstein, Joachim C.** Educational Psychology, Justus-Liebig-University, Giessen, Germany

In two curriculum-integrated training studies, 4th grade students who were taught genre-specific strategies for planning and revising narratives in conjunction with self-regulation procedures (N = 101) were contrasted with students who were taught the same writing strategies but received no instruc-



tion in self-regulation ($N = 94$). At posttest and maintenance measures, strategy plus self-regulation students surpassed the writing performance of strategy-only students and were better able to transfer the learned strategies to untrained tasks. Findings will be discussed in terms of a need for decomposing self-regulatory trainings to identify their effective elements and integrate these elements into the classroom teaching of writing skills.

How words influence the learning behaviour: The impact of terminology on communication and learning performance in cooperative writing

Paus, Elisabeth *Psychologisches Institut III, Universität Münster, Münster, Germany* **Jucks, Regina** *Psychologisches Institut III, Westf. Wilhelms-Universität MS, Münster, Germany*

This study analyses how the exchange of text specific information in virtual cooperative writing can be improved. Based on the psycholinguistic concept of lexical alignment, we tested with 64 students, if there was a positive impact of the use of different terminology on the transfer of knowledge, the working result and the learning outcome. As assumed, dyads who had cooperated with material containing different terminology asked more questions, gave more explanations and performed better in a following learning test than dyads whose learning materials contained the same terminology. Also, their documents were formulated more independently. Implications for selecting and creating learning materials are discussed.

Linguistic imperialism in academia

Themistocleous, Eugenia *Dept. of Liberal Arts, Intercollege, Limassol, Cyprus*

A study ($n=775$) was conducted at Intercollege, Limassol Campus to examine cultural bias in college textbooks. Questionnaires were submitted to students for each course taught in English at Intercollege. The findings indicate that, although students perceive a slight cultural bias in their textbooks, they indicated that it does not affect their ability to understand the material. This does not mean that cultural bias does not exist in textbooks, but rather that students are multi-culturally literate. What emerged very strongly from the study was the effect of language on student understanding, indicating a type of linguistic, rather than cultural, bias.

Classroom management: An analysis of pedagogical jokes, management definitions, and punishment techniques

Ochirjav, Myagmar *Department of Psychology, State University of Education, Ulaanbaatar, Mongolia*

The article focuses on classroom management, and explores concerns, beliefs, and practices in that area. The research compares the responses of lecturers, student-teachers and practicum teachers, and use that comparison to draw conclusions for the teaching practicum. The study has been conducted in Ulaanbaatar and Bayan-Ulgii Mongolia and draws from 140 interviews and questionnaires. It uses different kinds of qualitative data analysis techniques. The author has concluded that a lot of emphasis is placed on preparing student-teachers on subject matter knowledge and content, but not sufficient attention is given to strengthening student-teachers self-confidence and developing their pedagogical skills of dealing with the individual student in the classroom.

FP-398: Interindividual differences in the experience of emotion II

When remembering the good times doesn't cheer you up: Neuroticism and mood regulation

Siemer, Matthias *Dept. of Psychology, Miami University, Coral Gables, USA*

In two studies the author demonstrated that participants with high levels of neuroticism have difficulties to repair induced sad mood states with happy memories. There were no differences between participants with high and low levels of neuroticism in the initial reactivity to the sad mood induction or in the happiness of the memories recalled. Moreover, difficulties in participants with high levels of neuroticism to repair sad moods with happy memories were found for memories that differed in terms of self-relevance. The current results add to the notion that affective traits are not only related to affective reactivity but also to the ability to regulate affect.

The effect of mood and emotion on risky driving

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Two studies were conducted to explore the relationship between affect and risky driving. Study one used POMS to measured 500 drivers' mood states in recent two weeks, and found that, dejection is negatively related to risky driving attitude. Dejection and Anger are mediating factors between personality and risky driving behavior. Moods also moderate the relationship between risky driving attitude and risky driving behavior. Study two found drivers in the negative emotion, which was induced by video, showed more worry about involving in traffic accident. The impact of risk perception on risky driving attitude was moderated by emotion. The research displays the important role of affect in risky driving.

Behavioural activation and inhibition (BIS/BAS) are related to hippocampal volume

Cherbuin, Nicolas *CMHR, Australian National University, Canberra, Australia* **Windsor, Tim D.** *CMHR, Australian National University, Canberra, Australia* **Anstey, Kaarin J.** *CMHR, Australian National University, Canberra, Australia* **Maller, Jerome J.** *APRC, The Alfred, Melbourne, Australia* **Meslin, Chantal** *CMHR, Australian National University, Canberra, Australia* **Sachdev, Perminder S.** *School of Psychiatry, University of New South Wales, Canberra, Australia*

Objectives: Determine whether personality constructs representing the behavioural inhibition and activation systems (BIS/BAS) are associated with volumetric measures of the hippocampus and amygdala in humans. **Methods:** Amygdala and hippocampal volumes were measured in 430 community-based volunteers. Associations between brain volumes and the BIS/BAS measures were assessed using multiple regression, controlling for age, sex, and education. **Results:** Hippocampal volumes were positively associated with BIS ($\beta=0.167$, $p=.002$) and BAS sensitivity ($\beta=0.116$, $p=0.032$). No association was found between amygdala volume and BIS or BAS. **Conclusions:** These findings support a role of the hippocampus in the regulation of defensive/approach behaviours and trait anxiety.

Analyzing mood variability in daily life by mobile phones

Courvoisier, Delphine *Center for Affective, University of Geneva, Geneva, Switzerland* **Eid, Michael** *Faculty of Psychology, Freie Univ. Berlin, Berlin, Germany* **Lichetzke, Tanja** *Faculty of Psychology, Freie Univ. Berlin, Berlin, Germany*

Using computerized mobile phone assessment (CMPA), we collected data on momentary mood 6 times per day for 7 consecutive days in the German-speaking and French-speaking part of Switzerland ($N=308$). CMPA allows for collecting momentary reports of experiences or behavior, and thus minimize recall biases (e.g., "peak" and "recency" effects, use of semantic memory instead of true recall). Using latent state-trait models, we compared mood reliability and variability within work days, within week-end days and, more generally, within a week. We also analyzed whether intraindividual variability in mood differs between linguistic regions and between gender. Finally, we scrutinized the effect of weather on mood states.

FP-399: Interpersonal processes and relationship II

@ the tipping point: When "Enough is Enough" in email conversations

Svensson, Martin *School of Management, Blekinge Tekniska Högskola, Ronneby, Sweden* **Westelius, Alf** *IEL, Linköping University, Linköping, Sweden*

The reliance on IT-mediated communication involves interpersonal exchanges without face-to-face contact. However, this does not preclude emotional exchange. Have we not all at some point engaged in e-mail exchange where facts, fantasies and contagion caused us to get caught in spiraling exchanges of increasingly emotional and decreasingly rational e-mail? The purpose here is to explore e-mail conversations perceived as going awry, in terms of negative emotional escalation. Backtracking e-mail conversations using discourse analysis and interviews, factors leading to an "emotional tipping point" and beyond were identified. Concludingly, psychological and managerial aspects on how then to avoid emotional escalation are derived.

The relationship between relationship styles, coping strategies, identity development status and mental health among Chinese young adult learners

Leung, Cynthia *Educational Psychology, Counsellor, The Hong Kong Institute of Edu, Tai Po, China, People's Republic of : Hong Kong SAR* **Lung, Ching** *Educational Psychology, Counsellor, The Hong Kong Institute of Edu, Tai Po, China, People's Republic of : Macao SAR* **Moore, Susan** *Faculty of Life and Social Sci, Swinburne University, Melbourne, Australia* **Karnilowicz, Wally** *School of Psychology, Victoria University, Melbourne, Australia*

Objective: To test a model integrating theories of attachment, coping and identity development to predict mental health of Chinese adolescents in the context of romantic relationships. **Method:** 181 Chinese tertiary students aged 18 to 25 completed a questionnaire assessing attachment, romantic relationship style, coping, identity development, mental health. **Results:** Multiple regression indicated mental health was negatively predicted by avoidance and self-punishment coping strategies and positively predicted by accommodation coping and secure relationship style. Immature identity and insecure relationship styles were associated. **Conclusions:** Identity, coping and romantic relationship styles are important issues to consider in supporting adolescents facing issues of intimacy.

Reproduction of the Asch line-judgment experiment without using confederates

Mori, Kazuo *Inst. of Symbiotic Science, Tokyo University, Tokyo, Japan*

The Asch (1956) experiment was reproduced without using confederates. Twenty-six same-sex groups of four participated in the line judgment task. In each group, one participant saw different stimuli from what the other three saw without their noticing the duality by means of a presentation trick. The female minority participants showed a similar conforming tendency as Asch (1956); 28.6% of the responses were conformity errors. However, the male minority participants made far fewer conforming responses, 5.0%. It is notable that, contrary to previous findings, the conforming frequency was not affected by the breakage of unanimity among the majority group.

Cooperation and competition in the field of gene technology

Seuffert, Verena *Inst. für Psychologie, Humboldt-Universität zu Berlin, Berlin, Germany*
Schulze, Anna Dorothea *Institute for Psychology, Humboldt University, Berlin, Germany*

Our study examined the relationship between cooperation and competition and researchers' innovative success. 146 scientists in Gene Technology were asked about their competitive/cooperative orientation, success within the last five years and newness of projects. Results: High performers were externally more cooperative than normal performers. Success was correlated with internal competitive and external cooperative orientation, newness with internal cooperativeness not excluding competition. Results indicate that scientists competing cooperatively are most successful in a field characterized by both competition and necessity to cooperate. Besides, scientists were externally more cooperative in universities than in R&D companies and Start-Ups.

FP-400: Management styles and organizational culture II

The order conception of organizational culture

Aksenovskaya, Liudmila *Faculty of Psychology, The State University, Saratov, Russia*

The order conception views organizational culture as a complex socio-psychological order of managing interactions, which are constituted and regulated by the systems of ethical notions of interaction participants. Basing on this approach a socio-psychological model of organizational culture has been built. With metaphors the model fixes three types of managerial interaction. Following this model the technology of change in organizational culture has been developed. The technology allows for diagnostics and development of the main characteristics of the organizational culture. The technology has been successfully applied to the projects on the change of the organizational culture of some Russian organizations

Discourse of organizational culture

Kiseleva, Anna *Applied psychology institute, Kharkov, Ukraine*

Discourse of organizational culture Objectives: research content and structure of organizational culture, to clarify the metaphor, which underpin culture Methods: sample 52 managers from 6 organizations, discourse-analyses of interview texts according with such criteria as identification, modality, transitivity; Results : we observe such organizational metaphors of organization as "functional mechanism", "administrative-bureaucratic mechanism", "fields for competition", "family", "association of autonomic single entrepreneurs", "compromises". Personal passivity of manager position accompany by non reflexive and non critical behavior and active requirements to "stability of organizational mechanism". Personal activity of manager position accompany by passivity on forming of organization as a system.

lity of organizational mechanism". Personal activity of manager position accompany by passivity on forming of organization as a system.

Retirement preparedness and cultural differences

Franca, Lucia *Graduate Studies in Psychology, UNIVERSO, Rio de Janeiro, Brazil*

Brazil and New Zealand are contextually very different, especially in demography, cultural values, political, and socio-economical development. However both countries need to define policies to address the increasing numbers of retired people. This presentation is focused on how Brazilian and New Zealand executives from large organizations are planning for retirement. Factor analyses emerged four dimensions for Retirement Planning: (i) Personal and social activities; (ii) Work and network; (iii) Family relationships; and (iv) survival - finance and health. Family was evaluated as the most important dimension by both nationalities. Brazilians more than New Zealanders are concerned to personal/social activities and work/network dimensions.

FP-401: Neural bases of behavior II

Conscious and unconscious error processing

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Gibbons, Henning *Institute for Psychology, University of Göttingen, Goettingen, Germany*

Error processing requires conscious and unconscious processing. We investigated error negativity (Ne/ERN) and error positivity (Pe) as two event-related potentials indicating error-processing activity. In two experiments (n=30; n=10) applying a visual backward masking task, we varied the onset between response stimulus (<<<, >>>) and mask (◇◇◇) onset (SOA: 0, 17, 51, 84, 119 ms). We could demonstrate a variation in Pe amplitude depending on SOA suggesting conscious error-processing activity. Ne/ERN, however, was not sensitive to SOA variation in the mixed-SOA design (Exp.1) but in the blocked-SOA design (Exp.2). A model of conscious and unconscious error processing is proposed. [supported by DFG, STA 1035/1-1]

Oscillatory brain activity during encoding predicts beneficial and detrimental effects of an internal context change

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Hanslmayr, Simon *Experimentelle Psychologie, Universität Regensburg, Regensburg, Germany*
Bäumel, Karl-Heinz *Experimental Psychology, Regensburg University, Regensburg, Germany*

If after study of a first list and before study of a second list subjects change their internal context, List-1 recall declines on a later test, whereas List-2 recall inclines. Measuring EEGs during encoding of the two lists, oscillatory brain activity was found to be related to both detrimental List-1 and beneficial List-2 performance. Whereas increases in theta and gamma phase coupling were predictive of List-1 forgetting, a decrease in relative alpha power was predictive of List-2 enhancement. Median-split analysis revealed that the oscillatory effects were selectively related to the two behavioral effects. The results point to separate neural origins of the two behavioral effects of an internal context change.

Neural encoding of object categories with and without awareness: A challenge for signal detection models of human decision making

Bode, Stefan *Attention and Awareness, MPI CBS Leipzig, Leipzig, Germany*
Haynes, John-Dylan *BCCN Berlin, Charité – Universitätsmedizin, Berlin, Germany*
 Object identity is encoded in distributed patterns of activity in human lateral occipital complex (LOC). However it has remained unclear whether object recognition also operates when stimuli are rendered

invisible due to masking. Here 16 subjects categorized masked target objects at either high or low visibility. Using a pattern classifier we were able to decode the categories of visible but not invisible objects from distributed fMRI signals in LOC. Interestingly the signals underlying the subjects' choices shifted to a different cortical location between high and low visibility conditions. This is incompatible with current signal detection models of perceptual decision making.

A neural network model of task-dependent movement preparation

Herbort, Oliver *Inst. für Psychologie III, Universität Würzburg, Würzburg, Germany*
Butz, Martin V. *Department of Psychology III, University of Würzburg, Würzburg, Germany*
Hoffmann, Joachim *Department of Psychology III, University of Würzburg, Würzburg, Germany*

Humans adapt their movements to changing tasks with astonishing ease, partially due to the ability to integrate information about goals, task constraints, and the motor system when preparing a movement. However, neural network models of motor control often neglect the role of movement preparation processes. We presented a novel neural network model, which emphasizes the importance of movement preparation for behavioral flexibility (Butz, Herbort, & Hoffmann, 2007, Psychological Review, 114(4), 1015-1046). Now, we show that the model also accounts for recent experimental findings of a relationship between the duration of movement preparation and target distance.

FP-402: Assessment and prediction of the attainment of domain-specific and cross-curricular competencies II

Assessment of basic reading skill using IRT models for response times

Naumann, Johannes *Pädagogische Forschung, Deutsches Inst. für Internat., Frankfurt, Germany*
Richter, Tobias *Department of Psychology, University of Cologne, Cologne, Germany*

This paper compares different approaches of adding response speed parameters to IRT-models, both theoretically and on the basis of their application to a new computer-based reading skills test that assesses the efficiency of basic reading processes through an integration of response correctness and speed. Two subtests, addressing sentence-level and local coherence processes respectively, were administered to 587 university students and 214 high-school students (age 12-16). Results indicate that for the assessment of individual differences in basic reading skills, incorporating response times into the measurement model is of crucial importance, with results for different modeling approaches being comparable.

Predicting statistics achievement in undergraduate psychology students

Hood, Michelle *School of Psychology, Griffith University, Southport, Australia*

Australian 2nd-year psychology students were surveyed 4 times regarding their attitudes to statistics, achievement goal orientations, statistics self-efficacy, outcome expectancies, past performance, and statistics test anxiety. Data were collected in the 2nd and 12th weeks of 1st and 2nd semester (semester = 13). There were 161 participants at Time 1 (89.4% response rate), of whom 131 remained at Time 3 (the start of 2nd semester). Models predicting statistics performance from these belief and goal variables were derived from achievement goal and social cognitive theories. Results confirmed the importance of self-efficacy, attitudes, goals, and anxiety to statistics achievement in psychology undergraduates.



Predictive validity of high school performance with respect to academic achievement at the university level

Saad, Intisar Abunagma *Psychology, University of Khartoum, Khartoum, Sudan*

Predictive Validity of High School Performance with Respect to Academic Achievement at the University Level This study aims at comparing students from different systems (Sudan and Gulf Arab States), thus investigating the relative potency of each system in qualifying its students for university education. Co relational and causal comparative models were employed. sample 1794. Findings:- 1- High school percentage was a reliable predictor of the academic achievement at the university level. 2- There were significant differences in the academic achievement between students with Sudanese high school certificate and those with certificates from Arabian countries. 3- No interaction was found between student sex and student choice of programme of study regarding their relation to the academic achievement.

Construct validation of the multidimensional school engagement scale (MSES)

Awang-Hashim, Rosna *Dept. of Cognitive Sciences, University Utara Malaysia, Sintok, Malaysia* **Murad Sanj, Azlina** *Fac of Cog Sc & Education, University Utara Malaysia, Sintok, Malaysia*

The study examined the psychometric properties of the newly integrated Multidimensional School Engagement Scale (MSES). Data were gathered from 2,381 secondary school students (aged 14-16) from 40 day schools in Northern Malaysia. We posited an a priori hypothesis that the MSES could be explained by three first-order factors and also one second-order factor. Findings supported our hypothesis that the school engagement construct could be explained by one hierarchical factor comprising cognitive engagement, behavioural engagement, and psychological engagement sub-scales. Findings also showed acceptable internal consistency reliability for the overall scale and the three specific sub-scales of adolescent school engagement.

FP-403: Assessment and job performance II

Assessors' judgment policy in assessment centers: Further understanding of exercise effects

Li, Dezhong *Business Administration, Zhejiang School of Admin., Hangzhou, People's Republic of China*

The present study aimed to seek further understanding of exercise effects in assessment centers using data collected from 99 candidates who participated in a selection test for a high level management position conducted by a software company. The hierarchical linear modeling confirmed that assessors may identify one or more dimensions viewed as relevant to the task requirement. Noncompensatory strategies were the dominant mode used by assessors. A residual intraclass correlation of 21% suggesting that individual differed on the importance they placed on these dimensions. There were clearer differences in the information integration strategies among assessors in risky-choice task than in time-pressure task.

Development of an animated psychometric battery: Innovation to reduce traditional barriers to disadvantaged job seekers

Clifford, Ian *Research Dept., Ballymun Job Centre, Dublin, Ireland* **Whelan, Nuala** *Research, Ballymun Job Centre, Dublin, Ireland*

A Battery of Psychometric tools for a disadvantaged population was developed. These tools assist in matching individuals with appropriate vocational environments. This battery measures Career Interests, Personality and aptitudes. Tools were devel-

oped with a bottom-up approach using qualitative and quantitative techniques. Theories used include Holland's interests, the FFM model and Fleishman's Taxonomy. All items are online in written, audio and animated (flash) format. Psychometrics were tested using a sample of 400 participants in three languages English, Spanish and German. Results will be presented. The significance of these tools in the provision of appropriate career guidance to individuals will be discussed.

Big Five personality traits and educational choice of Serbian high school students

Hedrih, Vladimir *Psychology, Faculty of Philosophy, Nis, Serbia* **Nesic, Vladimir** *Psychology, Faculty of Philosophy, Nis, Nesic, Milica* *Medicine, Faculty of Medicine, Nis, Todorovic, Jelisaveta* *Psychology, Faculty of Philosophy, Nis,*

The goal of this study was to explore relations between Big Five personality traits and educational choices of high school students. 383 last year high school students were examined by using a Serbian army inventory for measuring Big Five personality traits and were asked about the type of university level studies they were planning to enrol at. Each of these studies was then assigned a Holland's category based on properties of jobs typically held by people with that type of education. The results showed that people choosing studies assigned to different categories differ on O and A Big Five dimensions.

The academic and career readiness questionnaire: An early warning strategy

Brand, André *Centre for Student Counselling, University of Stellenbosch, Stellenbosch, South Africa* **Du Plessis, Alten** *Traking System, University of Stellenbosch, Stellenbosch, South Africa*

An online demonstration will be given of the Academic and Career Readiness Questionnaire (ACRQ). The questionnaire measures the degree of academic and career readiness of first year university students, and provide scores on four subscales viz., career exploration, knowledge of the academic environment, study and thinking skills and career directedness. The ACRQ consists of 67 items, and can be used as a diagnostic instrument during the process of academic counselling. A set of predetermined advisory responses is available for students as they complete the questionnaire. Statistical analyses of data include correlation analysis, item analysis, and reliability analysis.

FP-404: Theoretical and philosophical psychology II

Applying Hilbert's conception of meta-science to psychology

Garber, Ilya *Dept. of Socio Economics, Saratov State University, Saratov, Russia*

The objective of the study is to describe an approach by which German mathematician Hilbert's conception of meta-science may be applied to psychology. It is based upon theories and methods that were introduced recently: meta-system transition (V.F. Turchin), cliometric meta-theory (P. Meehl), categorical analysis (M.G. Yaroshevsky, L.M. Vekker), meta-analysis. The three-level structure of meta-psychology is represented with specific methods on each level used. Such approach may help to resolve methodological paradoxes of psychology and lead to the core methodology of psychology (M.S. Burgin, V.I. Kuznetsov).

H.M.Tutunjan's scientific contribution to the development of history of psychology

Katunyan, Araksya *Psychology, Urartu University, Yerevan, Armenia*

1. The problem of psychological historiography in different countries is generalization and reappraisal of scientific and experimental data produced by

different psychological schools. Psychohistoriographic studies are not the end in itself. It is impossible to create common scientific psychological system without casting retrospective look on the history of psychology. 2. In that sense it is important to reveal the scientific contribution of H.M.Tutunjan (1918-1994), prominent historian and theorist of modern Armenian Psychology, to the development of history of psychology. Armenian psychological thought, being reserved for years on end, was not familiar with the history of psychology. By his investigations H.M.Tutunjan made a bridge between modern foreign psychological thought and Armenian psychological thought.

Levels of principle analysis in the study of B.F.Skinner's theory

Makhmutova, Anfisa *Psychological Dept., Moscow State University, Moscow, Russia*

One of the greatest theories of the XX century was the behavioral theory of B.F.Skinner. We decided to study it in the methodological way which was offered by Russian historical psychologist M.G.Yaroshevskij. Based on qualitative analysis of Skinner's works, we analyzed the origins of principles of his theory on different levels (personal, scientific, cultural). The results showed the coherence of information on these levels of principle analysis. Such approach helped to reveal the connections between Skinner's theory and theories of Russian psychologists.

Towards a psychological theory of situation

Mikhailova, Natalia *Social Psychology, Psychologisches Institut, Moscow, Russia* **Grishunina, Elena** *Social Psychology, Psychologisches Institut, Moscow, Russia*

The critical life situations were an object of our investigation. About a thousand probands were studied in the situations of unemployment, emigration and divorce. Our methods: Questionnaires, interviews, subjective scripts concerning the situation of life, expert assessments. The results: Cognitive representations and behavioural strategies are often not in accordance with each other. After a radical change in the life situation the chaotic-impulsive or a passive behavioural strategies predominate. Goal-orientated resultative behaviour of most probands is demonstrated in the second year of life in the new situation. CONCLUSION: the results influence the development of the psychological theory of situation.

FP-405: Teaching of psychology II

New guidelines for psychology courses in Brazil

Feitosa, Maria Angela *Inst. of Psychology, University of Brasilia, Brasilia, Brazil*

New curricular guidelines were established in Brazil in 2004. They have the standing of federal law and provide reference for values and attitudes, general skills, professional competences, and curricular contents. Curriculum design includes the establishment of reference duration of five years, with a minimum of 4.000 hours of activities, including a minimum of 600 hours of supervised practice. Courses are periodically evaluation by the Ministry of Education. The diploma entitles the psychology graduate to professional practice, provided a license in obtained from the Regional Psychology Council, which oversees standards of professional practice. Comparisons are made with EuroPsy standard.

Filling the gap in development of competences for different contexts of psychologists' activity: Undergraduate apprenticeship in communities of practice and situated learning of professional skills

Erasquin, Cristina Educational Psychology, Faculty of Psychology, Buenos Aires, Argentina **Basualdo, María Esther** Educational Psychology, Faculty of Psychology UBA, CAPITAL FEDERAL, Argentina

The work is focused on mental models tutors and students build in communities of practice for analyzing and solving problems in different contexts of psychologists activities: Clinic, Social, Justice, Labor and Research. Unit of analysis is examined through a four dimensions matrix, to study cognitive change in professional education. Questionnaires were administered to 45 tutors and 248 students of Psychology at the beginning and the end of Apprenticeship during 2004 and 2005. Results show diversity of competences built in different activity systems. The challenge is to widen social stages for the construction of heterogeneous and multidimensional profiles of professional skills

Clinical significance and reliable change in posttraumatic stress disorder: Supervisor instruction of meaningful change indicators optimizes outcome.

Rosqvist, Johan Professional Psychology, Pacific University, Portland, Oregon, USA

Traditional methods for evaluating treatment efficacy are problematic. Posttraumatic stress disorder is a phenomenon needing careful clinical decision-making to guide interventions. Correctly classifying patients as "changed" or "unchanged" help students optimize direct in treatment processes. Objectives: Using this robust approach for understanding patient progress aide student navigation to desirable end-states. Results: Patients met "recovered" status. Conclusions: Using meaningful change indicators facilitate student-delivered psychotherapy in producing "recovered" status, and increases student confidence in various treatment components for posttraumatic stress disorder. This mode of learning difficult cognitive-behavior therapy, while being a diligent empiricist, overcomes common obstacles to utilizing empirically supported treatments.

Dialogue in a critically oriented introductory psychology course

Sheese, Ron Dept. of Psychology, York University, Toronto, Canada

Typical North American Introductory Psychology courses rarely address historical and philosophical issues other than in a few brief pages of reading independently of all other course material. This presentation describes a York University course that introduces the subject matter of Psychology with an awareness of historical and cultural context, that problematizes the concepts of science, reductionism and universality, and does not limit itself to individualist, atomistic and apolitical methodologies. Emphasis will be placed on the means by which dialogue among students and instructors is facilitated in a manner that promotes integration of personal (cultural) experience and professional conceptions of psychological phenomena.

FP-406: Memory processes VI

The effect of enactment on frequency judgments

Olofsson, Ulrich Dept. of Behavioral Sciences, Linköping University, Linköping, Sweden

Enactment of action phrases improves recall and recognition of the phrases. The common view is that the effect is due to enhanced item-specific, rather than relational, processing. In the present study, the effect of enactment on judgments of frequency was studied. Action phrases were presented one, two or three times for verbal study or

enactment, and enactment resulted in significantly better frequency judgments. The results suggests that frequency judgments utilize item-specific information, and it is argued that this is more compatible with a recursive-reminding than a trace-strength explanation of frequency judgments.

Effects of emotional valence on memory for verbal and pictorial stimuli in Alzheimer's disease

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The contradictory effects of the emotional valence of the stimuli on their retention are reported with Alzheimer's patients. In order to better examine these effects, 16 moderate Alzheimer's patients and 16 controls performed two tasks: emotional judgment (assign negative, positive, neutral valence) and recognition. In the recognition task subjects discriminated new items from items (emotionally negative, positive or neutral) being presented in the judgment task. An effect of emotional valence of the stimuli (images and words) was observed for positive but not for the negative stimuli. The subjects were significantly faster for the positive than neutral items.

Cognitive processes in associative recognition: A multinomial modeling approach

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We introduce a multinomial model that disentangles the cognitive processes underlying associative recognition. The model provides parameters separately measuring encoding and retrieval of associations in addition to word recognition and guessing parameters. The model parameters have been validated in two experiments. As predicted, the results showed that (1) a 'levels of processing'-manipulation influences encoding of associations selectively, (2) a retention interval manipulation reduces associative retrieval, and (3) a manipulation of the proportion target test items affects guessing parameters only. Future applications of the model can be seen in cognitive aging research to shed further light on the cognitive processes underlying the associative aging deficit.

Factorial structure of a computer memory battery: A preliminary approach

Ferreira, Aristides IEP, Minho University, Carvoeira-Mafra, Portugal **Silva Almeida, Leandro** IEP, Universidade do Minho, Braga, Portugal **Prieto Adánez, Gerardo** Facultad de Psicología, Universidad de Salamanca, Salamanca, Spain

This study tests the construct validity of a computer memory battery formed by 6 subscales prepared to be used in adult population. These subscales intend to measure working memory (WM) and short-term memory (STM) constructs. Factor analysis has been conducted to assess their internal structure considering the results of 89 undergraduate students, and two orthogonal factors - STM and WM - have been found. This structure reproduces initial subscales organization. The Cronbach alpha coefficients showed acceptable to high internal item consistency levels for the 6 subscales. The potential utility of these memory tasks for psychological research and practice will be discussed.

FP-407: Categorization and conditional reasoning II

Categories are explained by causal reasoning rather than by associative learning

James, Nathalie Dept. of Psychology, UCLA, Venice, USA **Cheng, Patricia** Psychology, UCLA, Venice, CA, USA

To demonstrate that categories form around causal properties and that this cannot be explained by associative learning, participants examined objects whose features predicted either provenances or causal outcomes. Participants formed clearer categories around outcomes, a result that associative learning theories cannot explain. This suggests that causation plays a special role in category formation. Additionally, participants formed different categories to meet different goals set by the experimenter, indicating that categories are purpose-driven rather than merely descriptive. Finally, features that predicted goal-relevant outcomes (not provenances) weighed heavily on similarity judgments, indicating that similarity is a product of causal category formation.

On the nature of superordinate knowledge: Insights from superordinate and basic level feature norms

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The classical perspective on the nature of superordinate knowledge (e.g. Rosch et al., 1976; Tversky & Hemenway, 1984) was reevaluated from the analysis of superordinate and basic level feature norms. Contrary to the classical perspective, results show that, in comparison to basic level concepts, superordinate concepts are not generally less informative; have similar feature distinctiveness and proportion of individual sensory features; but their features are less shared by their members. Implications for the explanation of cases of superordinate advantage/disadvantage in the degradation of semantic memory are also discussed.

Conditional reasoning with a moral content

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We used conditional reasoning problems with a moral or neutral content to investigate social decision making. Subjects had to decide whether presented conclusions were logically valid or not. This decision took significantly longer and was more prone to errors if the logically correct conclusion was immoral or when a morally correct decision was logically invalid. Overall, a conflict between logic and moral resulted in decreased reasoning performance. In a second experiment, we trained the participants in logical thinking. With these participants no such conflict-effects were found.

When a learning theory predicts the wrong response: Error of the model or 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.

FP-408: 'Social Media': Social processes and social interaction in mass media II

Accuracy of impressions based on social networking (Facebook) profiles

Gosling, Samuel Dept. of Psychology, University of Texas, Austin, USA **Evans, David** YouJustGetMe, Psychster LLC., Kenmore, USA **Vazire, Simine** Department of Psychology, Washington University, St. Louis, USA **Gaddis, Sam** Department of Psychology, University of Texas, Austin, USA Social networking websites have become a major domain of social interaction. In two studies we examine the accuracy of impressions based on Facebook profiles. Study 1 draws on data gathered using a Facebook application, "youjustgetme" to examine impressions of over 4000 profile owners, comparing them with the profile owners' self-reports. Study 2 uses more extensive validity data to compare impressions based on 139 Facebook profiles with how the targets see themselves, how they are seen by close acquaintances and strangers. Results show generally strong patterns of convergence, although the accuracy correlations vary considerably across traits.

Does internet use reflect your personality?: Relationship between Eysenck's personality dimensions and internet use

Tosun, Leman Pinar Dept. of Psychology, Middle East Technical Univ., Ankara, Turkey **Lajunen, Timo** Psychology, Middle East Technical Univ., Ankara, Turkey

This study aims to investigate the relationship between three Eysenckian personality dimensions and the Internet use. A sample of 421 Turkish university students completed the Eysenck's Personality Questionnaire (EPQ) and an Internet Survey which contained questions about relational aims of Internet use, existence of "Internet only" friends, passion for Internet use, and the tendency to express one's self in the Internet communication. Psychoticism was found to be the only personality dimension related to establishing new relationships and having "Internet only" friends. Also, psychoticism and neuroticism were associated with revealing one's self in the Internet communication. Psychoticism was related to obsessive passion, neuroticism was related to harmonious passion, and extraversion was related to both types of passion for Internet use.

Proficiency and attitudes toward data analysis and information technologies use in psychology undergraduates

Cazares, Ana Technology and Education. Mod., National Pedagogic University, Mexico City, Mexico This study had two aims: first, to evaluate the proficient use of data analysis and information technologies in psychology undergraduates. Second, to investigate the relationship between their proficiency level and attitude toward the technology's use for academic, social and personal activities. Two hundred students were asked about these issues by means of two short Likert scales which shown a high internal consistency (Proficiency $\alpha=0.93$; Attitudes $\alpha=0.88$) and a coherent factorial structure. A regression analysis showed that the proficient use of simple technologies as well as an efficient information searching strategy, can predict together ($R^2=.537$) usage of complex technologies and abilities.

Relationships through ICT: A focus on Malaysian university students

Hashim, Intan H.M. School of Social Sciences, Universiti Sains Malaysia, Pulau Pinang, Malaysia This paper describes a preliminary analysis of a study on how a group of university students maintain interpersonal relationships via information and communication technology (ICT). Participants were 339 Malaysian university students. Questionnaires were used to assess background information; usage of mobile phones, electronic mails and internets for contacting people and respondent's level of loneliness. Findings show there are specializations in the way technology was used to make interpersonal contacts and there is a significant relationship between the time spent on mobile phones and loneliness. Findings are discussed within general relationship theories and those that are more relevant to Malaysian culture.

FP-409: Agreement and information sharing in groups II

Constructing a network of shared agreement: A shared reality network model of negotiation process

Jochemczyk, Lukasz Warsaw, Poland **Nowak, Andrzej** Faculty of Psychology, University of Warsaw, Warsaw, Poland

Negotiation can be examined from two perspectives: either static – the entire situation of the negotiation, or dynamic – the process of getting to an agreement. The static perspective is widely described in the negotiation literature and it is known how various factors of the negotiation situation influence the outcome of a negotiation. On the other hand we still lack much information about the dynamics of the negotiation process. We will present a SRN (Shared Reality Network) model of negotiation that fills this gap.

The effect of shared task knowledge on team processes and team performance

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Team cognition is a key component for successful teamwork. In this study the effect of one aspect of team cognition, i.e. the extent of team members shared task knowledge, on team performance and coordination has been investigated. Twenty-four 2-person teams performed a task under different levels of shared task knowledge. Team performances as well as team process variables were assessed by means of standardized observation protocols. As expected, teams with higher extent of shared task knowledge showed significantly ($p<.01$) higher performance (e.g. fewer errors) and more effective team processes (better coordination). Implications for team cognitions research will be discussed.

Effects of group incentives and status differences on knowledge sharing in computer-mediated groups

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In a laboratory experiment, we investigated the effects of monetary group incentives and its distribution strategies (factor I: equality strategy, equity strategy, no rewards) and status differences among group members (factor II: based on individual performance or age) on knowledge sharing in computer-mediated groups. Participants were divided randomly in 45 groups of three

persons and performed a knowledge pooling task via chat. Multilevel analyses and qualitative analyses revealed that equally distributed rewards have positive effects on pay satisfaction and knowledge sharing behaviour. Additionally, the perceived fairness of status differences within the group moderates the effects of group incentives on knowledge sharing.

Preference consistent information distortion during group discussions

Vogelgesang, Frank Inst. für Psychologie, Universität Göttingen, Göttingen, Germany **Simon, Sabia** Institut für Psychologie, Universität Göttingen, Göttingen, Germany **Mojzisch, Andreas** Institut für Psychologie, Universität Göttingen, Göttingen, Germany **Schulz-Hardt, Stefan** Institut für Psychologie, Universität Göttingen, Göttingen, Germany

Wittenbaum et al. (2004) argue that group members strategically spin information about their preferred alternative upward (making it seem more positive) and information about the nonpreferred alternatives downward (making it seem more negative). Similarly, Cruz et al. (2000) propose that group members defend their preferences by bolstering preference-consistent information and discounting preference-inconsistent information. We tested these hypotheses by reanalyzing the data of a recent hidden profile study (Schulz-Hardt et al., 2006). Our results suggest that preference-consistent spinning, bolstering and discounting are the result of the ideosyncratic interpretation of information prior to discussion rather than the consequence of strategic information exchange.

FP-410: Aging and health II

Patterns of change in Big-Five personality in "young-old" age

Schilling, Oliver Department of Psychological A, University of Heidelberg, Heidelberg, Germany **Schmitt, Marina** Dep. of Psych. Ageing Research, University of Heidelberg, Heidelberg, Germany Considering intraindividual change in Big-5 traits as interindividual differences variable, we asked whether persons in their "young-old" ages could be classified into different types in terms of Big-5 stability. We analyzed NEO-FFI measures from the Interdisciplinary Longitudinal Study of Adult Development. Significant interindividual slope-variation was found for extraversion and conscientiousness. A growth mixture approach in order to detect "clusters of change" in these traits revealed a three-group solution which further analyses suggested to be linked with physical health. The findings may be regarded as worth further research to confirm these patterns of personality change and its relation to physical health.

Examining satisfaction with retirement from a dynamic perspective

Potocnik, Kristina Dept. of Social Psychology, University of Valencia, Valencia, Spain **Tordera, Nuria** Social Psychology, University of Valencia, Valencia, Spain **Peiro, Jose Maria** Social Psychology, University of Valencia, Valencia, Spain

Grounding on the theoretical model of dynamic work satisfaction (Büssing, 1992), the main objective of the present study was to explore different forms of retirement satisfaction on a sample of 270 Spanish retirees. Applying a two-phase cluster analysis, we found different forms of retirement satisfaction, each showing a specific pattern. Furthermore, differences between clusters in potential antecedents of retirement satisfaction were explored. Results showed that members from each cluster differed in terms of their personal, work-life and retirement experiences, such as their intentions to retire, group norms, control over retirement, gender, or the level of retirement income. Our findings suggest that the nature of retirement

transition and pre-retirement experiences are related to different patterns of retirement satisfaction.

Educational level in the diagnostic of dementias: A research with elderly patients

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Objectives: To analyze the relationship between gender and the level of education in verbal and performance dimension results. **Methods:** The WAIS-III and the Zülliger tests were employed in 10 males and 10 females. **Results:** Data indicated that male subjects with higher education presented lower scores in the performance subtest when compared to verbal subtest. **Conclusions:** The female sample, with lower level of scholarship, no differences was detected. A covariance analyses indicated that education level was the responsible variable for this difference. Depressive traits in the male sample are based on the devaluation that the disease causes in the social role.

General health and loneliness in elders living with their own families in compare to elders who were living in nursing homes in Tehran city

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Aim of the study was to compare general health and loneliness between two groups of elders, living with their families or in nursing homes in Tehran city. Two hundred eighteen elderly consisted our sample. GHQ and loneliness questionnaires were administered on them. Results of two way analysis of variance indicated that General health of elders living in nursing homes were significantly lower and their loneliness were significantly more than elders who were living with their families. Based on psycho-cultural situation of elders in Iran, home based environment is the best place of nurturing psychological needs of elderlies in Iran.

FP-411: Aggression and violence at school II

Violence prevention at primary schools

Frey, Anne München, Germany **Speck-Hamdan, Angelika**

The present study analysis the results of a violence prevention program (called "aufschau") in German primary schools. 155 teachers were asked before, directly after, three month and one year after the training. In addition 207 pupils (class 1 to 4) were asked at the beginning and at the end of the school year. The trainers evaluate the program very positive. After one year the estimated potential of violence in class was significantly lower and the team spirit in class higher. Also the pupils perceive significantly less violent behaviour and the number of victims was reduced. Implications for prevention research will be discussed.

School climate as risk factor for microviolence

Pavalache-Ilie, Mariela Psychology, University Transilvania, Brasov, Romania **Cocorada, Elena** Psychology, University Transilvania, Brasov, Romania **Luca, Marcela Rodica** Psychology, University Transilvania, Brasov, Romania **Cliniciu, Aurel Ion** Psychology, University Transilvania, Brasov, Romania This correlational research is a contextualized approach focused on the school climate in evaluation settings and its interactions with personality variables involved in micro-violence. The participants are 629 students in 9 schools. An original 3-scale School Climate Inventory (Cocorada & al)

and usual personality inventories were used. The results indicate that the poor quality of school climate on the three dimensions – relational, equity and security climate is significantly associated with high scores for anger and dominance and low scores for control, responsibility and preference for exigency. The study gives a frame for preventing and treating micro-violence in evaluation settings.

Civil courage in schools: Perspectives on prediction and training

Pfetsch, Jan INSIDE, University of Luxembourg, Walferdange, Luxembourg **Steffgen, Georges** INSIDE, University of Luxembourg, Walferdange, Luxembourg **Gollwitzer, Mario** Inst. für Psychologie, Universität Koblenz-Landau, Landau, Germany

Civil courage is defined as a bystander's intervention reaction associated with potential risks in a situation where fundamental norms are being violated. The present talk reviews current research on civil courage and addresses two questions: (1) Which context- and person-variables predict civil courage? (2) How effective are civil courage trainings? Study 1 (N = 230) with vignettes shows that social responsibility and perceived costs for victims and bystanders are the most powerful predictors of civil courage. Study 2 (N < 1000) elucidates the individual- and class-level effects of a civil courage training that was implemented in different schools in Luxembourg.

Aggression and violence among school peers in basic education in Brazil: An exploratory research

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This paper presents a research about different manifestations of violence among school peers in the first part of basic education, in the Brazilian context. In line with the conceptual definition of bullying discussed in the psychological literature, we have designed a questionnaire using a set of four cartoons each portraying different scenes of peer bullying which are combined to objective questions. The violence at school has been examined both as a consequence of a set of inadequate school practices, and as one of the aspects that characterizes the contemporary society, particularly, a socialization marked by aggressions and petty crime.

FP-412: Aggression and sexual abuse II

Posttraumatic stress disorder and depression in a sample of sexual abused patients

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Objective As a result of the high incidence of sexual violence and abuse and the dearth of research on psychological outcomes of such trauma, this study investigated Posttraumatic Stress Disorder (PTSD) and depression in a cohort presenting at a general hospital. **Method** Adults and children who were sexually abused participated. A semi-structured interview, Depression Inventories and PTSD Scales were used. **Results** Adult participants obtained high scores on the measures. This was not so among children. **Conclusion** This paper highlights pertinent aspects of abuse among women, the difficulties researching sexually abuse in children and issues to consider in transcultural contexts.

The justification of the sexual violence against women and the attitudes toward rape

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The purpose of this study is to determine how ambivalent sexism toward women and general and gender related system justification tendencies are associated with rape myth acceptance. 323 participants completed Illinois Rape Myth Acceptance Scale (Payne, Lonsway & Fitzgerald), Ambivalent Sexism Inventory (Glick & Fiske, 1996), General System Justification Scale (Kay & Jost, 2003) and Gender Related System Justification Scale (Kay & Jost, 2005). Results demonstrated that gender related system justification, hostile sexism and benevolent sexism predicted rape myth acceptance. Hostile sexism and benevolent sexism mediated the relationship between gender related system justification and rape myth acceptance for male participants. For female participants only hostile sexism mediated this relationship.

In the aftermath: Interpersonal trauma and sexual health

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Domestic violence is a global problem (Amnesty International, 2005). Survivors are at a higher risk for developing multiple mental health and interpersonal concerns (Walker, 1994). In particular, sexual and domestic abuse can alter cognition and attitudes related to multiple aspects of sexuality. This study aims to examine the sexual functioning among survivors of violence. Using the Female Sexual Functioning Index (FSFI) and the Trauma Symptom Inventory (TSI), exploratory data, collected from an international sample of female survivors of violence, will be highlighted. Results will be discussed within the context of assessment and treatment of female survivors.

FP-413: The impact of students' family background on learning II

Media use and school achievement: A longitudinal intervention study

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OBJECTIVES: The study examines how electronic media use affects children's social behaviour and school performance. A school based media education concept is developed and systematically evaluated. **METHODS:** Four year longitudinal control group study with 1.059 elementary school children. **RESULTS:** Multivariate Analyses show significant relations between poor school performance, problematic social behaviour and a high degree of daily media exposure. Analyses also show significant effects of an intervention program. **CONCLUSIONS:** Our findings show the potential benefits of reducing the time spend on electronic media. School based media education programmes are strongly recommended.

Family influences on the creative experiences of children from grade five to six in China

Han, Cheng-Min Suzhou Vocational University, Suzhou, People's Republic of China

A sample of 823 children from different elementary schools was surveyed. It was found that, if parents preserved their children's works and valued children's creative ideas, their children would like to create, cherish their own works, be clear about the pros and cons of their works, and feel happy about their progress. Family's supportive climate exerted similar effects. If parents liked to design and decorate creatively their home, their children would also like to create novel things. Those findings have important implications for families as well as for schools with an emphasis on helping parents



nurture children's creativity. Keywords: childhood; creativity; family

School children's academic achievement: The effect of working mothers' role as home tutor/teacher

Singh, Priti Psychology, JB Shah Girls (PG) College, Jhunjhunu, India

This study examined the relation between the amount of home work put at home after school hours, teachers feedback and the growth of children's academic standing in class, knowledge enhancement over the year. Three main findings emerged. First, there were marked individual differences in children's conventional knowledge by 4 years of age that were associated with socio-economic status. Second, there were dramatic differences in the amount and quality of home work provided by working mother. Third, and most important, the amount of parental monitoring throughout the school year did matter but was unrelated to their cognitive skills and ability at the start of the academic session.

Academic performance and the use of slangs among city university students

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Language is an expression of the mind. The 'clearer the language, the more the understanding of the information communicated. Slangs is frequently used colloquially, for communication among tertiary students in Nigeria. The Objective of this research is to find out whether the use of slangs and its frequency affects the language skill of students' spoken and written english, and correlate the semesters results. using structured questionnaires, 200 students of the City University, would be interviewed on the use of slangs and its frequency cum science and arts and social sciences and male/female backgrounds.

FP-414: Psychological disorders VIII

An investigation of the aetiology of dental fear within the Cognitive Vulnerability Model

Buchanan, Heather Inst of Work, Health & Org, Nottingham University, Nottingham, United Kingdom Dental anxiety (DA) has been established as a common fear, of which there are adverse effects for both patient and practitioner. Recently, Armfield (2007) has proposed a cognitive vulnerability model (CVM) in order to explain fear acquisition and has applied this model to DA. The objective of the present study is to explore the self-reported origins of fear, within the context of the CVM, of 85 individuals who accessed a DA Internet support group and completed our online study. Findings showed that the CVM was a satisfactory model for explaining origins of DA, though some extensions to the model are proposed.

'Action-versus-state-orientation' and successful treatment of anxiety

Geissner, Edgar Abt. Psychology, Roseneck Hospital, Prien am Chiemsee, Germany **Kraft, Madlen** Psychology, Roseneck Hospital, Prien am Chiemsee, Germany

The study examines if 'Action-Oriented' (AO) vs. 'State-Oriented' contributes to treating anxiety. AO comprises of 'AO after failure', 'AO in planning', 'AO during activities'. 200 panic disorder / agoraphobia pts filled out several anxiety measures and HAKEMP for AO. Examinations were 3 mths before, at admission, discharge, 6 mths FU. Intervention was cognitive-behavioral therapy (CBT) with exposures. Results show strong effects

in all but one measures. Above there were conditional effects confirming the hypotheses: The more pts exert AO, the less their anxiety. Anxiety reduction is best predicted by increase in AO 'after failure' and 'in planning'.

Social phobia and the use of online communication services

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Objectives: Social phobia includes the fear of social situations in real life. Internet communication-services allow low-threshold, anonymous conversation. This study investigated the online habits of users suffering from social phobia. Methods: 918 unpaid volunteers filled out our online questionnaire, consisting of questions about online habits and the SIAS (Social Interaction Anxiety Scale). Results: 20.3% of the sample suffered from social phobia and they use online communication-services more than healthy individuals do. Conclusions: There is a considerable danger that these individuals may use the internet as their sole method of acquiring social contacts and thus loose relevant social skills in real life.

How does exposure therapy work? A virtual reality study in aviophobia

Mühlberger, Andreas Department of Psychology, University of Würzburg, Würzburg, Germany **Brütting, Johanna** Department of Psychology, University of Würzburg, Würzburg, Germany **Pauli, Paul** Department of Psychology, University of Würzburg, Würzburg, Germany

While there is great evidence for the efficacy of in-vivo and virtual reality (VR) exposure for the treatment of specific phobias, studies on treatment mechanisms are rare. To investigate whether distraction during in vivo exposure has impairing effects on fear processing 37 aviophobic participants were randomly assigned to VR-flights with instruction to focus on their fear or to solve working memory tasks. While the distracted participants had less fear during turbulent flight periods, no difference between groups during a VR-flight in a second session were found. Focusing on fear during exposure might not be necessary for fear processing in aviophobia.

FP-415: Psychotherapy - Research and treatment methods XII

A comparison of the four therapeutic methods of cognitive behavioral, drug, mixed (cognitive - behavioral + drug) and placebo in the treatment of the generalized anxiety disorder

Abolghasemi, Shahnam Dept. of Psychology, Azad University, Tonekabon, Islamic Republic of Iran In order to compare four therapeutic methods, 40 anxious subjects afflicted by generalized anxiety were assigned in the four therapeutic groups of 10 randomly. The methodology was a semi-experimental design, and the instruments to collect the data were two questionnaires (Zung and Tylor anxiety scales). Two ways of analysis include the simplified form of ANOVA and Tuki tests. The results suggested that each of 4 ways was effective to treat the generalized anxiety, but the move effectiveness of the mixed way compared to teach of other 3 ways was not confirmed.

Empirical studies on trauma and dialogue-ability

Butollo, Willi Psychologie, Ludwig-Maximilians-Universität, München, Germany

Among the many ways in which people react to traumatic experiences the decay of interpersonal skills and especially the inability to interact in a dialogical way are most striking. Dialogue-ability

implies sound self processes and the ability to establish personal exchange and contact. In a dialogical approach to trauma therapy ("dialogical exposure") different steps to re-establish dialog-ability are required. A multiphasic integrative therapeutic approach will be described which illustrates that healing traumatic impact implies step by step rebuilding and strengthening the abilities for dialogical encounters and contact-abilities. Now empirical results from applying this approach to trauma will be presented and discussed, with special focus on symptom reduction and changes in the contact process.

Comprehensiveness in clinical psychology: Why would we use it?

Carija, Martina Preventive Program, Association, Zagreb, Croatia **Kulas, Kristina** Preventive program, Association "Play", Zagreb, Croatia

A semi-structured interview will be applied to psychologists that work with individuals (counseling, psychotherapy, diagnostics, prevention,...). The goal is to find out an expert's opinion on the following questions: 1. What is comprehensiveness in the context of clinical psychology? 2. Is it important in working with individuals and in what way? 3. Can this kind of work be implemented in the clinical approach and how? 4. Some practical examples of a comprehensive way from our experience. A qualitative analysis of the collected data will be conducted and the results will be presented. Martina Carija, Kristina Kulas Association "Play"

Experience-based learning in psychotherapy

Wolf, Markus Mehl, Kilian Klinik Wollmarshöhe, Bodnegg, Germany

In a prospective controlled evaluation study on the effects of psychophysical exposure in 247 patients, the effects, effect sizes and processes of change through experience-based exposure to a ropes course were studied, the method being embedded in a multi-method inpatient psychophysical treatment concept. Instruments of evaluation were the routine quality control assessments conducted in our institution (Forschungsstelle Psychotherapie, Universität Heidelberg) as well as special instruments of higher sensitivity for measuring specific changes (locus of control, fear, depression, self-efficacy). Compared with controls, patients with exposure procedure showed significantly larger effect sizes with regard to impairment, depression, state and trait anxieties, locus of control and self-efficacy.

FP-416: Psychosocial problems and abuses in childhood and adolescence

Transgression and aggression. Object relations in street children

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The present investigation is based on the probability that Street Children coming from dysfunctional families with unsatisfied basic needs, traumatic early experiences and who live in permanent risk conditions which can all affect their integrity and survival, should show aggressive behaviours and signs of borderline or narcissistic personalities as a consequence of their early frustrations. Three instruments were used with the purpose of exploring the presence, nature, quality and levels of extra-punitive answers and different adaptive and psychopathological levels of object relations internalized by a group of 36 male Street Children aged 12, 13 and 14 years old.

Child sexual abuse perpetrator strategies and survivor adjustment

Canton Cortes, David *Developmental Psychology, University of Granada, Granada, Spain* **Cortes Arboleda, Maria Rosario** *Developmental Psychology, University of Granada, Granada, Spain*

The objective of the study was to analyse the associations between the strategies employed by the CSA perpetrator in order to ensure secrecy of the child and the Posttraumatic stress disorder symptomatology of the victim. The study was carried out with a sample of 76 College students from the University of Granada, who had a history of CSA. Regression analyses showed that the re-experimentation and avoidance of the victims were higher when were threatened with getting into problems, while arousal and total score on PTSD were higher when were also threatened with physical damage. We can conclude that PTSD symptomatology of CSA survivors is related to the strategies employed by the perpetrator in order to ensure secrecy.

Psychological abuse over adolescents and its impact on cognitions about the self

Iovu, Mihai-Bogdan *Valcea, Romania*
Objective: This study investigates the presence of psychological abuse in educational and familial environments and its relation with the cognitions about the self. Method: 245 highschool children completed two questionnaires regarding the potential abusive experiences and the attached cognitions. Results: We found a correlation coefficient of .500, $p < 0.01$ between the psychological abuse and the level of rationality. The abuse within their families had a deeper impact over the cognitions than those experienced within the schools ($r_{fam} = .453$, $r_{sch} = .425$, $p < 0.01$). Conclusions: From these results psychological abuse needs increased attention from the research community.

Features of psychological problems among adolescents of different social situations

Samykina, Nataly *Psychology, Samara State University, Samara, Russia* **Lisecky, Constantine** *Psychology, Samara State University, Samara, Russia*
In 2005-2007 the study of features of adolescents of different social situations has been conducted. 450 adolescents have been studied: children from at-risk, single-parent, two-parent families, as well as children in families with high financial income. Research Methods: questionnaires, analysis autobiographies, psychosemantic methods. Typical psychological problems for each group were identified and the ways of their solving were proposed. It was noted that the typical problems of adolescence are relevant to any social situations. Features concerns differences of their solving. Adolescents in single-parent families or children in two-parent families appeared to be more able to solve them constructively.

FP-417: Interpersonal and peer relations in childhood and adolescence

Building strengths by positive peer culture: Results of an evaluation

Steinebach, Christoph *Inst. für Angew. Psychologie, Universität Zürich, Zürich, Switzerland* **Steinebach, Ursula** *Inst. of Appl. Research, Cath. Univ. of Appl. Sciences, Freiburg, Germany*
Concepts of resilience and self efficacy highlight possible positive effects of mutual help by adolescents. Accordingly the concept of Positive Peer Culture developed by Vorrath and Brendtro in the 1970s relies on the experience to be able to help. To line out the effects of Positive Peer Culture 163 male adolescents, parents and 47 staff members in a foster home were interviewed in a longitudinal study. In six different surveys quantitative as well as qualitative methods, questionnaires as well as

interviews have been applied. The results show an increasing self-worth and decreasing behavioral problems. Consequences for youth welfare services are being discussed.

Popularity and aggression: Direction of influences

Xie, Hongling *Dept. of Psychology, Temple University, Philadelphia, USA* **Fleurant, Ngulula** *Department of Psychology, Temple University, Philadelphia, USA*

This study recruited 329 6th-grade students (mean age = 12 47% African-American; 33% European-American) from 3 urban middle schools in North-eastern USA. Individual interviews yielded narrative accounts of what factors promote popularity and what behaviors are displayed by popular peers. Attractive appearance and affiliation with popular peers were most mentioned factors promoting popularity, while aggression and antisocial behaviors were rarely mentioned. In contrast, children viewed popular peers as being mean, snobby (dominant), and displaying poor studentship. Popular boys were perceived as being aggressive. These findings suggest a stronger direction of influence from popularity to aggression than from aggression to popularity.

Peer relationship and purchase deception in adolescence: The moderating role of vanity

Lin, Mei-Kuei *Business Administration, National Taipei University, Sansia Township, Taiwan* **Hsu, Ya-Hui** *Business Administration, National Taipei University, Sansia Township, Taipei County, Taiwan* **Chen, Fang-Ping** *Business Administration, National Central University, Zhongli City, Taoyuan County, Taiwan*

Previous studies rarely examine the relationship between peer relationships and purchase deceptions in adolescence, and frequently neglect the moderating effect of vanity. This study fills the research gap by exploring the influence of peer relationships and vanity upon purchase deceptions in adolescence. The analytical sample comprises a total of 287 high school students. Using hierarchical regression analysis reveals that (1) peer relationships have a significantly positive effect on purchase deceptions; (2) vanity significantly moderates the relationship between peer relationship and purchase deception.

FP-418: Gender differences and management

Differences between Czech male and female managers

Pauknerova, Daniela *Manager. Psychology and Soc., University of Economics, Prague, Czech Republic*
Objectives: The aim of this research was to analyze differences in leadership traits and skills among men and women in middle level managers from the financial sector. Methods: Personality questionnaires and observation by trained psychologists and human resources staff of leaders' performances in model situations were used as methods. Results: Male and female managers were found to differ significantly on assertiveness, motivation, and risk taking ($p < .05$ based on t-tests). They were no significant gender differences on other personality traits. Significant differences between men and women were not found regarding their leadership and communication skills.

Brazilian women in leadership positions in organizations: Career development and management style

Rocha Coutinho, Maria Lucia *Dept. of Psychology, UFRJ / UNIVERO, Rio de Janeiro, Brazil* **Rocha Coutinho, Rodrigo** *Business, Strategy Consultat, São Paulo, Brazil*

This work presents the results of a study in which we interviewed 20 Brazilian women in leadership

positions in organizations, aged 25 to 45. The resulting texts were submitted to a discourse analysis. Our data indicated that it is harder for women to prove their competence and efficiency so as to reach the highest positions and that, in general, women are more worried about the functioning of the team, have more sensibility to deal with subordinates, better communication skills and have a greater ability to manage different tasks simultaneously than men.

An analytical study of employment of educated women in Iranian labor force

Jazani, Nasrin *Business Administration, Shahid Behshiti University, Tehran, Islamic Republic of Iran*
Purpose : Analysing structure and participation of educated female labor force in Iran. Methodology: Applied-description type, meaning that its results may find application in removing barriers, once they are located and appropriately described. Questions: 1. Why the rate of women's participation in labor force is low regarding a high rate of Iranian educated women ? 2. Is job segregation the main reason for lower rate? 3. What are the main barriers facing them ? 4. What mechanisms should be used to diminish gap between male and female unemployment and participation in labor force? 5. Is legality a barrier? Key words: unemployment, job segregation, division of labor

What about differences of gender in the perception of occupational health?

Barros Duarte, Carla *Faculty of Social and Human, University Fernando Pessoa, Porto, Portugal*
This study falls within the theoretical and methodological framework of Work Psychology and Ergonomics of Activity, and consists of a research that seeks to understand the relations between Work, Health and Gender. The main goal was the analysis of the effects of the working conditions on occupational health through gender. An epidemiological study (Survey/Inquiry 329 workers) reveal the need to conduct a more specify analysis of the regulation processes for the preservation and construction of their health (case study). The results revealed gender differences and the need to understand the gender differences through the specificities of work division and task distribution. Keywords: Work, Health & Gender

FP-419: Group dynamics

A group conflict in dance therapy: Attempt of a group dynamic integration

Burbiel, Ilse *Psychoanalyse, Deutsche Akademie für, München, Germany*
Dance therapy is a successful nonverbal facet of the therapeutic network of Dynamic Psychiatry in addition to the predominantly verbal individual and group psychotherapy. The author's concern is to show, how a so called committer-victim conflict, which had been developed in a dance session, can be worked through and finally solved by means of group dynamic processes within verbal and dance therapy. So the "committer-victim" conflict changed into a group conflict. The fear to be excluded from the group, experienced by committer and victim likewise, as well as the experienced sense of shame and guilt can be diminished in this way.

Dissent in group decision making: Contrary effects of interpersonal liking

Klocke, Ulrich *Department of Psychology, Humboldt University of Berlin, Berlin, Germany*
Dissent can be promotional for group decision making. Liking between group members has contrary effects on dissent and its consequences. Study 1 manipulated dissent in interacting decision groups (90 students) and measured liking before discussion. In study 2, 77 students anticipated a decision with a partner. The partner's likability and expression of



dissent was manipulated. On the one hand, liking reduced the perception of dissent (study 2) and enhanced opinion-consistent argumentation towards dissenting partners (study 1 and 2) presumably in order to reduce inconsistent dissent. On the other hand, liking enhanced a differentiated perception of the others' opinion (study 1).

Ultimate causes of egalitarianism: Factors influencing social order in Macaques and other primates

Lehmann, Hagen Computer Science, University of Bath, Bath Spa, United Kingdom **Bryson, Joanna** Computer Science, University of Bath, Bath Spa, United Kingdom

Primate social behavior is characterized along a continuum reaching from egalitarian to despotic. Despotic societies have strict hierarchies, few but intense aggressive interactions and less cohesive grouping. Egalitarian societies have less well-defined hierarchies, frequent but less violent aggressions, are more cohesive and group members execute a large repertoire of reconciliation behaviours. We present an agent-based computer model that describes this variation in terms of selective environmental pressures. Our model accounts for this variation entirely by adaptive environmental pressures that determine the optimal average distance between troop members. We validate our results by comparison to the social behavior of genus macaca.

FP-420: Industrial / organizational psychology

Factorial validity and consistency of Maslach burnout inventory: General survey across occupational groups in China

Li, Chaoping School of Public Admin., Renmin University, Beijing, People's Republic of China

First data from 294 employees was collected to validate the Chinese version MBI-GS. EFA analysis replicated the same three-factor structure as the original after item 13 was dropped. Then 1036 samples were got from four different occupation groups: nurses, teachers, policemen and IT employees. Both Separate CFA analyses of different occupations and combined analyses showed that the original three-factor model had a clearly better fit than the alternative one-factor and two-factor models. Alpha coefficients for all three subscales were above 0.80. The results support that MBI-GS provides a suitable measurement to assess burnout across a diversity of professions in China.

Psychological stress in the workplace: Measurement problems and integration of data into a physical and psychological stressor database

Windemuth, Dirk Research and Education, BGAG Institute Work and Health, Dresden, Germany **Stamm, Roger** BGIA, DGUV, Sankt Augustin, Germany

Psychological stress and strain in the workplace have received more attention. But how does one measure psychological stress reliably and scientifically but at the same time pragmatically? It appears that the current general consensus is for a graded approach with a minimum of scientific-based measurement. In the first part of the presentation these areas of contention will be outlined. In this relation there is a further question: How should the measurement results be interpreted and in which context? In the second part of the presentation a consolidated database will be presented as a possibility to handle these results.

Wording effects in the measurement of perceived organizational support

Xu, Xiaofeng CICP, Baoding, People's Republic of China **Zhang, Enyou** PSYCHOLOGICAL DEPARTMENT, Central institute justice pol, BAODING, People's Republic of China

Two researches explored the construct of Perceived Organizational Support (POS). Using a sample of 391 and 4402 employees respectively drawn from two of the largest SOEs in China, Study 1 and 2 examined the construct validity of 8 items SPOS developed by Eisenberger etc (1986). Factor analyses suggest separate factors associated with positively and negatively worded items. Confirmatory factor analysis (CFA) and Multitrait-Multimethod (MTMM) matrix were used to evaluate the effect of item wording. The results indicated that method effects associated with negatively worded items was significant and wording factors explained a significant amount of item variance.

FP-421: Individualism / collectivism III

Self-criticism, dependency, and sense of coherence among Arab-Bedouin and Jewish students

Abu-Kaf, Sarah Psychology, Ben-Gurion University, Beer-Sheva, Israel **Priel, Beatriz** psychology, Ben-Gurion University, Beer-Sheva, Israel

Objective: To examine cultural differences in self-criticism, dependency, and sense of coherence among Arab-Bedouin and Jewish students. Methods: 100 Arab-Bedouin and 105 Jewish university students completed the Depressive Experiences Questionnaire (DEQ), the Center for Epidemiological Studies Depression (CES-D), Sense of Coherence Scale (SOC), and a questionnaire on demographic variables. Results: Arab-Bedouin students were found to present lower levels of SOC and higher levels of self-criticism and depression. SOC mediated part of the relationship between self-criticism and depression. Conclusion: Self-criticism appears as a severe vulnerability to depression. Self-criticism affects SOC which in turn causes depression in both collectivistic and individualistic cultures

Coping among Chinese: Self-dependent problem-focused as most adaptive strategy

Wong, Celia Ching-Yee Dept. of Psychology, CUHK, Hong Kong, China, People's Republic of : Hong Kong **SAR Hui, Natalie Heung-Hung** Psychology, CUHK, Hong Kong, China, People's Republic of : Macao **SAR Lam, Fiona Wing-Chi** Psychology, CUHK, Hong Kong, China, People's Republic of : Macao **SAR Bond, Michael Harris** Psychology, CUHK, Hong Kong, China, People's Republic of : Macao **SAR**

Many studies showed that social support is a protective factor against adversity (Aspinwall, Taylor, 1997; Seeman, 1996; Thoits, 1995). However, previous studies claim collectivistic people are less likely to adopt social support. The present study aimed at investigating and explaining psychological outcomes of various coping strategies in Chinese collectivistic culture. Specifically, we compared psychological outcomes of self-dependent and other-dependent coping and further classifying as problem-focused and emotion-focused. Negatively influences of other-dependent emotion-focused coping on self-perceived interpersonal satisfaction was revealed to support the speculation that social support may disrupt harmony in collectivist culture (Mortenson, Liu, Burleson, & Liu, 2006; Triandis, 1989)

FP-422: Cross-cultural comparisons IV

A study on the effects of socio-cultural factors on gender role stereotypes of two ethnic groups of Iranian students

Khamseh, Akram Women Research Center, Alzahra University, Tehran, Islamic Republic of Iran

The aim of the present study is understanding that how ethnicity and gender can influence the gender role characteristics and stereotypes of female and male students of two ethnic groups of Iran. Bem sex role inventory- Persian form- and a general demographic questionnaire were administered. The data were gathered from 156 Kurdish and Persian female and male students. Results show that there are no differences between two groups of female students in gender role stereotypes. But there are significant differences between two ethnic groups of male students according to femininity ($t=2.5$) Data also show that both ethnic groups evaluate masculine traits more positive than feminine traits. Results have been discussed on different theoretical bases.

Cultural differences in friendship

Sacharin, Vera Dept. of Psychology, University of Michigan, Ann Arbor, USA **Gonzalez, Richard** Psychology, University of Michigan, Ann Arbor, MI, USA

We examined the concept of friendship in American and German samples using Lewin's (1948) conceptual analysis of friendship differences between those cultures. In a paper and pencil study, 74 Americans and 47 Germans checked applicable statements about their friendships (73 items). Germans reported closer relationships with their acquaintances than Americans. No cultural differences were observed for closeness to good or best friends. The result was replicated in an online study where 49 Americans and 37 Germans assigned relationship terms to circle figures with varying "self-other" overlap. Our result can explain why Germans name fewer friends than Americans (Sleeth-Kepler, 2005).

A study about the relationship between Shutaisei (self-direction) and feeling of adaptation in children: From comparison between Japanese and Canadian

Asami, Kenichiro Dept. of Human-Environment, Kyushu University, Fukuoka, Japan

In Japan, various research results indicate that many of the Japanese children's problems are related to children's lack of independence. Independence is "SHUTAISEI" in Japanese; it has a close meaning to "self-direction". I have created a scale to measure "self-direction" for children. I found out that there was a strong relationship between "self-direction" and "feeling of adaptation". This part of research is to collect the data in Canada, to find out the difference between Japanese and Canadians in terms of "self-direction" and "feeling of adaptation". For this statistical analysis, I distribute a questionnaire on the student's "self-direction" and "adaptation".

Self-disclosure as a relationship-strengthening strategy in Japan and the United States

Schug, Joanna Dept. of Behavioral Science, Hokkaido University, Sapporo, Japan **Yuki, Masaki** Behavioral Science, Hokkaido University, Sapporo, Hokkaido, Japan **Maddux, William W.** Organisational Behaviour, INSEAD, Fontainebleau Cedex, France

Various studies have shown that North Americans tend to self-disclose more than East Asians. We hypothesized that this difference could be explained by the adaptive role self-disclosure plays in mobile social contexts. In societies high in relational mobility—or the number of opportunities to select new relationship partners—individuals must invest

energy in the formation and maintenance of interpersonal relationships, and self-disclosure is a useful tool for this means. We addressed this hypothesis by investigating the relationship between relational mobility and self-disclosure in Japan, as well as through a cross-cultural comparison, and found strong support for this hypothesis.

Poster Session Friday Morning 09:00

Professional identity as a characteristic of professionals' subjective reality.

Abdoulleeva, Mehriban Psychology, Moscow State University, Moscow, Russia

The aim of the empirical study is to contribute to the investigation of professional influences on the self, including perceived and construed aspects in its mental representations (self-concept and self-construals). 81 subjects of different occupations: lawyers, therapists, accountants, couturiers were involved. Methods: the multilevel technology of job analysis, semantic differential, statistical analysis of the data obtained. The results show the different semantic components of construction "by myself" (presentation of my real professional qualities in estimations of "real I", "ideal I" and so on), that made it possible to discuss positive and negative characteristics of professionals' subjective reality.

Influence of perceived support on vocational motive and application related behavior among Japanese university students

Adachi, Tomoko Behavioral Science, Osaka Kyoiku University, Osaka, Japan

The purpose of this study was to examine influence of perceived contextual support on vocational motive and application related behavior. Questioners were administered to Japanese university students. Results of causal analysis using structural equation modeling indicated that perceived support influenced vocational motive which itself, influenced application related behavior, however, no direct linkage between perceived supports and application related behavior were obtained. Implications for career intervention for university students are discussed, including intervention using perceived support to maximize career decisions.

Altered representation of T-cell subsets in severely traumatized refugees with posttraumatic stress disorder (PTSD)

Aichinger, Hannah Klinische & Neuropsychologie, Universität Konstanz, Konstanz, Germany
Sommershof, Annette Immunologie, Universität Konstanz, Konstanz, Germany
Adenauer, Hannah Klinische & Neuropsychologie, Universität Konstanz, Konstanz, Germany
Catani, Claudia Klinische & Neuropsychologie, Universität Konstanz, Konstanz, Germany
Neuner, Frank Klinische & Neuropsychologie, Universität Konstanz, Konstanz, Germany
Engler, Harald Elbert, Thomas Klinische & Neuropsychologie, Universität Konstanz, Konstanz, Germany
Groettrup, Marcus Immunologie, Universität Konstanz, Konstanz, Germany
Kolassa, Iris-Tatjana Klinische & Neuropsychologie, Universität Konstanz, Konstanz, Germany

This study investigated changes in T-cell differentiation through chronic stress in 15 patients with PTSD, due to war and torture experiences, and 15 matched controls. Results showed that the proportions of naïve T-cells (naïve cytotoxic T-cells, naïve T-helper cells) and regulatory T-cells were significantly reduced while memory T-cells (memory cytotoxic T-cells, central memory T-helper cells) were significantly enhanced in PTSD patients compared to controls. Thus chronic stress seems to compromise the maturation of new T-cells in the thymus. The downregulation of regulatory T-cells in PTSD patients might constitute a risk factor for the development of autoimmune disorders.

Correlated change in personality traits over twelve years: A comparison of middle aged and older adults

Allemand, Mathias Department of Psychology, University of Zurich, Zürich, Switzerland
Zimprich, Daniel Department of Psychology, University of Zurich, Zürich, Switzerland
Martin, Mike Department of Psychology, University of Zurich, Zürich, Switzerland

This research examines correlated change in personality traits in middle-aged and older adults over twelve years. Data from the Interdisciplinary Study on Adult Development (ILSE) were used. The sample consists of 300 older adults (60 to 64 years). The longitudinal follow-up for the middle-aged adults (42 to 46 years) is still in progress. Personality traits were measured with the NEO-FFI. Correlated change in personality traits was examined utilizing latent change models. First results indicated a number of statistically significant medium effect-sized latent change correlations among personality traits, except for neuroticism. The findings indicate substantive commonality in personality trait change over twelve years.

Mental health and work in a national survey of farm managers in the United States

Alterman, Toni NIOSH-DSHEFS-SB, CDC, Cincinnati, USA
Li, Jia Contractor for NIOSH, SRA, Cincinnati, USA
Steege, Andrea CDC/NIOSH/DSHEFS, National Institute for Occupational Safety and Health, Cincinnati, USA
Petersen, Martin CDC/NIOSH/DSHEFS, National Institute for Occupational Safety and Health, Cincinnati, USA
Muntaner, Charles CAMH, University of Toronto, Toronto, Canada

This study examines associations between mental health and working from a nationally representative survey of farm managers in the United States. The General Health Questionnaire (GHQ-20), a screening instrument used in many languages and settings to indicate severity of depression and anxiety, was administered. Logistic regression models showed that physical health, cutting down on work activity due to emotional or physical problems, considering oneself disabled, emergency room visits, and hospital stays were associated with GHQ scores. These associations did not differ with race, ethnicity, or gender. Mental health should be considered an important component of occupational health.

The study of excellence in science, sport and art in Portugal: Preliminary results and findings from a research program

Araújo, Liliana Inst. Educação e Psicologia, Universidade do Minho, Braga, Portugal
Matos, Daniela Inst. Educação e Psicologia, Universidade do Minho, Braga, Portugal
Almeida, Leandro Inst. Educação e Psicologia, Universidade do Minho, Braga, Portugal
Cruz, José F. Inst. Educação e Psicologia, Universidade do Minho, Braga, Portugal

Trying to understand the development of excellence and exceptional performance, a Portuguese research team began a comprehensive study, searching for pathways for excellence in different achievement domains. The major goal was to integrate different theoretical approaches on excellence and superior performance, with data from participants' actual and past achievements, including their talent developmental process. Using a qualitative methodology, outstanding national scientists, athletes and artists were interviewed. Results suggest some core and common psychological characteristics ("what they are made of" and their "trademarks"), but also the important contribution of external factors to the development of excellence. Future research challenges are outlined.

Influence of consuming neurotoxic substances on prospective memory in a sample of teenagers and young adults

Arana, José M. Dept. of Psychology, University of Salamanca, Salamanca, Spain
Blanco, Cristina Psychology, University of Salamanca, Salamanca, Spain
Meilán, Juan J.G. Psychology, University of Salamanca, Salamanca, Spain
Pérez, Enrique Psychology, University of Salamanca, Salamanca, Spain

Prospective memory is required for many aspects of everyday cognition and is essential for the autonomy of a person in their daily life. Aims. Considering the importance of drug consumption on young people, we decided to study how neurotoxic substances influence prospective memory in this population with a prototypic polyconsumption profile. Method. We applied three neuropsychological tests, the PMQ, some cognitive items and an objective PM task performed on a computer in our sample (n=164). Conclusions. Stepwise analysis showed that an important percentage of the worst performance in policonsumers is explained by the quantity of tobacco smoked and the years consuming tranquilizers.

Everyday life heroes (in white): The end of a dream job? Burnout of general practitioners (GP)

Argyropoulos, Sophia Institut für Psychologie, Universität Innsbruck, Innsbruck, Austria
Iwanowa, Anna Institut für Psychologie, Innsbruck, Austria

This quantitative study focuses on the investigation of burnout and mental health by GP. Specific resources, requirements in the job and socio-demographic variables were explored by interviews and questionnaires. A total of 2,500 completed questionnaires out of 10,000, were returned and evaluated. Job burnout was measured by MBI-D (Büssing & Glaser 1992) and general health by the GHQ (Goldberg & Williams). A new questionnaire of specific job requirements was developed to test the linkage between job characteristics, exhaustion, cynicism, perception of low personal accomplishment and general health. The mediating role of burnout was tested with Structural equation modelling analysis (AMOS).

A neural network model of category specific semantic memory impairments: Self-organizing mapping formation mediated by both temporal lobe and hippocampus area

Asakawa, Shinichi Centre for Information Science, Tokyo Woman's Christian Univ., Tokyo, Japan

Semantic memory representation in temporal lobe have been shown to depend on both cortico-cortico and cortico-hippocampus circuits. After damage of temporal lobe, we could observe category specific impairments, which might be modeled by self-organizing principles. The different roles of these two circuits might result in temporal encoding manners of information. Here we review self-organizing mapping principles in temporal lobe in which external information could be learnt via slow (cortical) and fast (hippocampal) learnings. We then describe a simple neural network model that captures some key features of category specific memory impairments of brain damaged patients.

Dynamic of change of understanding of civil liberties in early adolescence

Atanassova-Trifonova, Maria Institute of Psychology, Sofia, Bulgaria

The purpose of the experimental study was to investigate the dynamic of change in the adolescents' understanding of civil rights at the abstract level and at the level of their application in concrete situational contexts. The sample of 284 subjects of three age groups- 12-, 13- and 15-olds, evaluated concepts of eight civil liberties with the semantic differential technique. The same subjects were presented with an inventory with a wide range of



situations comprising applications of these civil rights. The significant age and gender differences were revealed with a multivariate analysis of variance either at the abstract level of understanding of civil rights and for their concrete application.

Emotional intelligence and underemployment in the youth labour market

Bayona, Jaime Andrés Social Psychology, University of Barcelona, Barcelona, Spain

The main objective of this study is to identify the emotional intelligence subscales that differ between underemployed, employed and not-working individuals in the youth labour market. The research is based on a work continuity framework (employment-underemployment-unemployment). 103 Spanish students ranged between 18 to 24 years old were tested using the Trait Emotional Intelligence Questionnaire (TEIQue). One-way ANOVA showed significant differences among all groups on: emotional expression, assertiveness, stress management and social skills ($p < 0.05$). Implications of these results for the work continuity framework will be discussed as well as some relevant suggestions for future research.

Development of speech synthesizer for the blind capabilities in Slavic language

Benediktov, Sergey Department of psychology, Belarus State University, Minsk, Belarus

Naavgustova, Tatiana Department of psychology, Belarus State University, Minsk, Belarus

Shulga, Oksana Department of psychology, Grodno State University, Grodno, Belarus

We currently train Blind people to use speech synthesizer in Belarus. It is difficult for Blind to perceive the speech from PC. This aspect has relating to engineering psychology. Unlike well-known JAWS-system for Blind we designed an intellectual program "Search Echo" which has internal speech comments in on human acts and computer answers. It reflects the computer's dynamics, but not the monitor's static. We have developed training programs on a keyboard, on reading, writing. Results: We have found 3 psychological phenomena: concerning space images, speech synthesizers is more human-like, a perfect command of the oral form

University students' critical thinking dispositions and emotional intelligence as a predictor variable

Berkant, Hasan Güner Educational Sciences, Cukurova University, Adana, Turkey

Tümkiye, Songül Educational Sciences, Cukurova University, Adana, Turkey

Çelik, Metehan Educational Sciences, Cukurova University, Adana, Turkey

Aybek, Birsal Educational Sciences, Cukurova University, Adana, Turkey

The main purpose is to investigate the university students' critical thinking dispositions and to evaluate emotional intelligence as a predictor variable. The sample of the research consists of 205 students. Bar-On EQ Inventory, California Critical Thinking Disposition Inventory and Personal Information Form were used. T-test, one-way ANOVA, LSD test and multiple regression analyses were used. There is no meaningful difference between students' critical thinking dispositions according to their genders. There is meaningful difference between the students' critical thinking dispositions in favor of students attending to health science programme; between the students' critical thinking dispositions in favor of fourth grade students.

On the endogenous nature of personality traits: The continuity of adult personality and child temperament within the framework of Cloninger's model of personality

Blatny, Marek Dept. of Psychology, Academy of Sciences, Brno, Czech Republic

Jelinek, Martin Inst. of Psychology, Academy of Sciences, Brno, Czech Republic

Osecka-Pilatova, Terezie Inst. of Psychology, Academy of Sciences, Brno, Czech Republic

Preiss, Marek Dept. of Psychology, Prague Psychiatric Center, Brno, Czech Republic

The study deals with the prediction of adult personality from behaviors observed in the nursing and toddler stages. The sample consisted of 83 participants (35 men and 48 women aged from 38 to 44 years) who had taken part in the longitudinal research of children (1961-1980) and agreed to participate in the follow-up study of adults (2000-onwards). Only child inhibition showed to be significant predictor of adult personality characteristics: inhibition is connected mainly to facets of Harm Avoidance trait – Worry/Pessimism and Fear of Uncertainty.

Sociopsychological indicators of successful and less successful entrepreneurs

Blumberga, Solveiga Pedagogy and Psychology, University of Latvia, Riga, Latvia

The purpose of this research is to determine, which sociopsychological indicators allow to differentiate successful entrepreneurs from less successful ones. The following sociopsychological indicators of successful entrepreneurs have been studied: personality (achievement motivation, risk taking, locus of control), cognitive skills (including intuition), social and other skills, social support, coping strategies, psychological wellbeing (life satisfaction, happiness, job satisfaction). It was concluded that achievement motivation, risk taking, intuition, social skills, coping strategies and psychological wellbeing are indicators that significantly differentiate successful entrepreneurs from less successful ones.

Gender-dependent features of Heroin addiction in adolescents

Bokhan, Nikolay Addictive States Department, Mental Health Research Institute, Tomsk, Russia

There are no complex investigations carrying out comparative assessment of psychological and psychopathological peculiarities of gender-dependent addictive behavior. Taking into account the high social significance of the problem great significance is acquired by differentiated assessment of actual status and dynamic of dependence in this contingent, identification of typology and phenomenology of sex disadaptation, necessity of formation of differentiated graphic medication and psycho-correcting treatment programs. Among questions, which are supposed to be considered in detail, importance place will be allocated to features of phenomenology and regularities of clinical dynamic of gender-dependent heroin addiction in adolescents.

Psychological determinants of teacher's burnout

Borisova, Maria Dept. of Psychology, State Pedagogical University, Yaroslavl, Russia

The purpose of the research is to discover the determinants of a teacher's burnout. Methods: observation, expert assessment, documentation analysis; questionnaires: "Maslach Burnout Inventory", "Self-regulation", "Eysenck personality inventory", "Value Measuring", "Pedagogical activity management"; correlation and factor analysis, analysis of difference. 142 School teachers have taken part in the research. Results: teachers' burnout is mainly determined by neuroticism, inconsistency of values, lack of self-regulation, unsatisfactory psychological atmosphere, poor management of teachers' activity: poor autonomy,

irregular working load, poor work stimulation, insufficient professional growth and staying out of school running. These determinants prevent teachers' burnout from being corrected.

Activities of Daily Living (ADL's), depression, and social support in Turkish elderly citizens

Bozo, Özlem Department of Psychology, Middle East Technical Uni, Ankara, Turkey

Toksabay, N. Ece Ankara, Turkey

Kurum, Oya Department of Psychology, Middle East Technical Uni, Ankara, Turkey

The aim is to examine the effects of activities of daily living and perceived social support on the level of depression in Turkish older adults. 102 adults over the age of 60 participated. The hypotheses were (1) lower ADL's predict a higher level of depression; (2) an increased perceived social support would predict a lower depression; and (3) perceived social support would moderate the relationship between ADL's and depression. Both ADL's and perceived social support were significantly predicting the depression in Turkish older adults. Higher ADL's functioning and higher perceived social support predicted lower depression in older adults. The effect of ADL's-perceived social support interaction on the level of depression was insignificant.

Peer-parental influence, novelty seeking, reward dependence, risk taking, gender and alcohol consumption

Bozo, Özlem Psychology, Middle East Technical Uni., Ankara, Turkey

Nan, Burcu Psychology, Middle East Technical Uni., Ankara, Turkey

Güney, Mine Psychology, Middle East Technical Uni., Ankara, Turkey

The purpose of this study was to explore the relationships among peer-parental influence, risk taking, novelty seeking, reward dependence, gender, and alcohol consumption in young adults. One-hundred and twelve undergraduate students participated in the study. It was hypothesized that male participants high in risk-taking behavior, novelty seeking, and reward dependence, having parents and peers using alcohol would consume more alcohol than participants who did not have these characteristics. After multiple regression analysis it was found that peer influence, novelty seeking, and gender were significantly predicting alcohol consumption of young adults, while risk taking, reward dependence, and parental influence were not.

Experience of drug of choice: A phenomenological investigation

Carr, Erika Knoxville, USA

Hector, Mark Psychology, University of Tennessee, Knoxville, USA

Drug of choice is an experience that recovering addicts speak of frequently when in recovery. The purpose of this study was to investigate the experience of drug of choice by using a qualitative method of phenomenological interviewing with eleven recovering drug/alcohol addicts as research participants. Verbatim transcripts were prepared and analyzed using a hermeneutic/existential/phenomenological method. A ground and main themes that emerged from the data were: void, name of the drug/drugs, death, spiritual illness, obsession, and relationships. Uses of this research for practitioners will be discussed and the literature review will include quantitative as well as qualitative research.

The different patterns of relation to work: Younger and older generations in the labour market

Carvalho, Sandra CIS, ISCTE, Lisbon, Portugal

Soares, Célia CIS, ISCTE, Lisbon, Portugal

Passos, Ana CIS, ISCTE, Lisbon, Portugal

Castro, Paula CIS, ISCTE, Lisbon, Portugal

The study discusses the psychological implications and potential problems of the European labour

context at the generations' level. Based on the articulation between qualitative (interviews to young and older workers from different sectors) and quantitative data (past relevant surveys) the different patterns of relation to work will be discussed. First, the results of the interviews showing those different patterns will be presented. And second, the main results of relevant surveys will be brought into the discussion in order to better understand the intricacies of the European labour context and the difficulties that younger and older generations face.

Theta-coupling during working memory maintenance of configural information in Magnetoencephalography (MEG)

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We investigated interareal cortical synchronization (theta phase-coupling) during maintenance of configural information in working memory. In a delayed-match-to-sample MEG paradigm, configural maintenance engaged stronger theta-coupling between left lateral and posterior sensor groups during the delay period than non-configural maintenance. Increasing the number of items to be maintained during the delay, on the other hand, enhanced bi-lateral frontal synchrony. Additional behavioral testing after MEG revealed increased long-term recognition memory performance for configural stimuli compared to non-configural ($P < 0.01$). These results suggest that configural delay maintenance recruits a network of synchronous brain regions that is qualitatively different from non-configural and high-load maintenance.

The influence of language on spatial reasoning: The case of reading habits

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Van der Henst, Jean-Baptiste Psychology, L2C2 CNRS UMR 5230, Bron, France

In the present study, we explore how reading habits (i.e. reading from left-to-right in French or reading from right-to-left in Arabic) influence the scanning and the construction of mental models in spatial reasoning. In two experiments, we analyse the wording of the conclusion (Experiment 1) and the time required to integrate the premises (Experiment 2) with French and Arabic readers. Our results show a strong influence of reading habits for French readers and a smaller influence for Arabic readers. This cultural factor seems to interact with a universal bias that prompts people to explore and construct mental models from left to right.

Predictors of OCB among blue and white collar employees in Turkey

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Born, Marise Psychology, Erasmus University, Rotterdam, Netherlands
Derous, Eva Psychology, Erasmus University, Rotterdam, Netherlands

In a survey study using blue ($N=379$) and white collar employees ($N=120$) we examined the predictors of OCB namely, employees' general beliefs about world, their identification with their supervisor and colleagues, commitment to their career, colleagues and supervisors. Comparing blue and white collar employees' OCB was under-addressed therefore we aimed to examine the predictors of OCB among blue and white collar employees. Results showed that white collar employees were more committed to their career and they had higher scores on job dedication dimension of OCB than blue collars. Identification with the supervisor was an important predictor for blue collar employees.

Psychological response to collective and communicable responsibility among Chinese adolescents

Cen, Guozhen Applied Psychology, Shanghai Normal University, Shanghai, People's Republic of China

Aim: to explore the psychological response of adolescents to collective and communicable responsibility. **Method:** using projective method with situational stories for a sample of 386 Chinese adolescent students. **Results:** the psychological response to collective and communicable responsibility will depend on different ages, backgrounds ("not knowing the offender" and "not exposing the offender"), projections (general and role-taking) and events (three scenarios of school, society and history). **Conclusion:** adolescents in China showed their cognitive and effective responses, and a tendency to take responsibility for behavior to the collective and communicable responsibility.

Addiction's and Dependence's Test to the Mobile Telephone (TADTeMo)

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Villanueva, Verónica Psicología Básica, University of Valencia, Valencia, Spain
Tejero, Pilar Psicología Básica, University of Valencia, Valencia, Spain

The principal objective of this work is to develop a test to evaluate the abuse or dependence of the mobile telephone, following the DSM-IV diagnostics criteria. The population corresponds to all scholarly teens in educational centers, in ages understood among 12 and 18 years. We have accomplished a pilot study with 450 participants to depurate a first instrument of 101 items, that has remained reduced to 40. At the present time we are composing the definite test with principal diagnostic criteria of the disorder for dependence and abuse applied to the mobile telephone.

Chinese preschool children's literacy development: From creative to conventional writing

Chan, Lily Dept. Educational Psychology, Chinese Univer. of Hong Kong, Hong Kong, China, People's Republic of : Hong Kong SAR

Written Chinese has always been regarded as a logographic writing system. In recent years, theories of emergent literacy are beginning to have some impact in the teaching of Chinese writing. The present study introduces a unique learning experience of a 4 year old girl in Hong Kong who made a smooth transition from scribbles to conventional writing with full confidence and interest within a year. There is evidence that indicates that creative writing facilitated her understanding of the underlying principles of written Chinese, and in a later stage, she could understand both the forms and functions of strokes and stroke-patterns.

Determinants of alcohol use among university students: The role of stress, coping and expectancies

Chau, Cecilia Psychology, PUCP, Lima, Peru

The study explore the alcohol use among university students in Peru and the effect of psychosocial variables: perceived stress, alcohol consumption by peers/ parents, alcohol expectancies and coping styles. Questionnaires were administered to 1081 students. For the statistical analyses we used Chi-square, ANOVA, discriminant and Path analysis. The model for drinkers reported: best male best friends' alcohol use, gender, and the mother's and father's alcohol use all have a direct effect on the students alcohol use, while the best female friends' alcohol use has an indirect effect on alcohol use via positive personal and social alcohol expectancies. The effect of gender and of the best male friends' use is also modified by positive personal and social expectancies regarding alcohol.

The mediation effect of balanced need satisfaction on global life satisfaction

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The previous study showed that a balanced life had a positive effect on global life satisfaction, even after the mean score across various life domains was controlled for. In this study, the authors further investigated the mechanism of a balanced life. The result demonstrated that the positive effect of balanced life domains on global life satisfaction was mediated by balanced need satisfaction. That is, those who are happy were due to be satisfied with multiple life domains which contribute to satisfaction with different needs. Implications on balanced need satisfaction were discussed further.

Stability and change of inhibition from two to ten years: A longitudinal observation

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The present research aims to longitudinally explore the regularity of stability and change of temperamental inhibition from infancy to middle childhood. 31 children who assessed as extreme behaviorally inhibited and uninhibited children participated in this study. The children were observed in lab at 2 year, 4 year, 7 year and 10 year by using structured observation procedure, and questionnaire, mental tests, parent and teacher interview were used. Results show that the children's temperament is moderate stable from two to ten year, but there is an orientation that the inhibited or un-inhibited level regressed from extreme level to moderate level.

A survey on the relationship between job scope and sense of empowerment of career guidance counselors in Japanese special education schools

China, Aoko Sendai, Japan
Hosokawa, Toru Education, Tohoku University, Sendai, Japan
Kumai, Masayuki Educational Informatics, Tohoku University, Sendai, Japan

The purpose of this study was to investigate the relationship between job efficacy and sense of empowerment of career guidance counselors in Japan's special education schools for the intellectually disabled. A total of 303 guidance counselors (a 58.5% response rate) completed a questionnaire. A statistical analysis of 5 areas of the career guidance counselor's job scope: "assessment", "information dissemination", "job search/matching", "liaison", and "spearheading programs" was conducted. Results revealed a significant positive correlation between job efficacy and sense of empowerment. It was suggested that a framework providing a clear mandate for guidance counselors should be set up.

The effect of intervention messages on video lottery gambling perceptions and behaviour

Chua, Zhiren Singapore, Singapore
Tang, Catherine So-Kum Psychology, National University Singapore, Singapore, Singapore

This study investigates the effectiveness of intervention messages in reducing erroneous beliefs and gambling behaviour in undergraduate slot machines players. The hypothesis is: A new type of intervention message (containing elements besides warning information) has a greater impact and a longer effect on reducing erroneous beliefs and gambling behaviour than an intervention message with only warning information or a neutral message. Participants are required to complete questionnaires and play a slot machine computer game in a laboratory setting. A three month follow-up study is included. Data obtained is examined using factor analysis.



Preliminary results will be presented at the conference.

Impact of the mental disorders on the employability of the homeless people

Combaluzier, Serge *Dépt. de Psychologie, Université de Rouen, Mont-Saint-Aignan, France*

If the mental disorders have been studied for many years in the homeless populations, their impact on the employment of this population has been estimated in very few works. In the Centre for Men where this study has been done, only 10% have found a job six months after their entrance. 180 homeless men have been met in clinical interview at their entrance in a Centre for Men. Their admission in this Centre A multi-axial diagnosis has been done according to the APA. The estimations of measures of impact lead to the conclusion that the associations between clinical and personality disorders multiplies by 13 the risk of unemployment

Language functions in parent-child verbal exchanges: A comparative study

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Matte, Isabel *Linguistics, Université de Montréal, Montréal, Canada*
Leroux, Julien *Psychology, Université de Montréal, Montréal, Canada*

The present study attempted to explore relationships between sex of parent, and functions of repetitions and reformulations when addressing their five-to-six-year old child. The sample included 20 parent-child dyads: 10 mother-daughter dyads and 10 father-son dyads. Each dyad was given the task of completing a model design using MacPaint and each interaction was videotaped. A classification of 12 functions was adapted from the pragmatic functions of repetitions by Greenfield and Savage-Raumbaugh (1995). Results indicated few differences between mothers and fathers. Both parents play the leadership role both in the verbal exchange and in the task to accomplish.

A two level growth model examining risk factors for cigarette smoking in Canadian adolescents: Individual, family and school influences

Corbett, Bradley *Dept. of Sociology, University of Western Ontario, London, Canada*

This study uses data from Canada's National Longitudinal Survey of Children and youth to develop a growth model of adolescent smoking. Data was collected repeatedly from age 10 to 21 from a nationally representative sample of 4,500. The findings indicate smoking uptake for females is faster during adolescence but their rate of increase slows faster later in adolescence. Increased risk for smoking includes: being female, being francophone, having a mother and/or father who smokes, having lower family socio-economic status, knowing peer smokers at age 10, having lower self-esteem, and living with a single mother or with a stepparent.

Efficacy of a brief intervention for general hospital patients with prescription drug dependence: Does gender matter?

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Zahradnik, Anne *Psychiatrie und Psychotherapie, University of Luebeck, Luebeck, Germany*
Bischof, Gallus *Psychiatrie und Psychotherapie, University of Luebeck, Luebeck, Germany*
Rumpf, Hans-Jürgen *Psychiatrie und Psychotherapie, University of Luebeck, Luebeck, Germany*

Objectives: The prevalence of prescription drug dependence (PDD) is significantly higher in general hospital than in general population. Women are affected twice as often as men. **Methods:** In a

randomised, controlled trial the efficacy of Motivational Interviewing in a proactive recruited sample of general hospital patients with PDD is tested. Gender differences in outcome and TTM-constructs are analyzed. **Results:** Forty-six men and 80 women gave their informed consent to participate. First results of the 3-Month-Follow-Up will be reported. **Conclusions:** If gender-differences are revealed, these results might provide a basis for gender-specific intervention for patients with PDD.

"Mobbing at work": A new concept in Portugal

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Soares Martins, José *Faculdade de Ciências Humanas, Universidade Fernando Pessoa, Aveiro, Portugal*

Mobbing at work is a new concept in Portugal. In other European countries, mobbing is commonly used to describe situations where someone persistently over a period of time is treated in an oppressive way. We investigated the prevalence of mobbing in work context and the relationships between symptoms of burnout among 8 people, which 4 were workers in a multi-industrial unit and 4 were worker-students. We concluded that out of our 8 people we've studied, 4 had experienced mobbing (80%) when compared to the other 4 which hadn't suffered from any type of mobbing at work. Mobbed workers had significantly higher levels of emotional exhaustion when compared with non-mobbed worker

Motivations in entrepreneurial choices:

Successful and unsuccessful entrepreneurs

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Favretto, Giuseppe *Psicologia e Antropologia, Università di Verona, Verona, Italy*

Entrepreneurship represents an interesting path of professional development: people are driven to be entrepreneurs by different motivations. This research aims at detecting whether successful entrepreneurs have different motivations in entrepreneurial choices when compared to unsuccessful entrepreneurs. 100 users (representative of population) of the Chamber of Commerce's New-Entrepreneurial-Service in Verona were contacted via telephone interview. Results reveal that successful entrepreneurs are significantly: less willing to conciliate work and family, more intent upon realizing new ideas, and more oriented to working without a boss. Effects of age and educational qualifications are provided.

Event-related potential and behavioral evidence for life-span changes in resolving response conflict during a cued task-switching paradigm

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Nessler, Doreen *CEPL, NY State Psychiatric Institute, New York, USA*
Cycowicz, Yael M. *CEPL, NY State Psychiatric Institute, New York City, USA*
de Chastelaine, Marianne *CEPL, NY State Psychiatric Institute, New York, USA*
Horton, Cort *CEPL, NY State Psychiatric Institute, New York, USA*
Friedman, David *CEPL, NY State Psychiatric Institute, New York, USA*

The roles of conflict detection and resolution for age-differences in interference control were examined in children (9-10 years), young (20-25 years) and older adults (61-83 years). Participants responded to the questions "which" or "how many" numbers were presented in congruent (1; 333) or incongruent (3; 111) targets. In children and older adults, reaction time slowing for incongruent trials was pronounced, indicating heightened conflict detection. Children appeared unsuccessful in conflict resolution (i.e. elevated error rates). For older adults, a pre-response event-related negativity and

slow, but accurate responses suggest successful upregulation of control. Thus, age-differences in interference control depend on conflict resolution.

A formative program evaluation of a hospital-based Eating Disorders Readiness Program

Czincz, Jennifer *Dept. of Psychology, University of Ottawa, Ottawa, Canada*
Illing, Vanessa *Psychology, University of Ottawa, Ottawa, Canada*

Research has demonstrated that program evaluation is becoming an essential component of effective service delivery. A formative program evaluation was conducted for a hospital-based outpatient program that strives to prepare clients for an intensive eating disorders treatment program. A logic model was constructed to assess the program's inputs, activities, outputs, and immediate versus long-term outcomes. An evaluation matrix was then designed, outlining evaluation questions related to the rationale, design, delivery, impacts, and alternative strategies for the program. Methods included literature reviews, program database reviews, focus groups, and qualitative assessments of program sessions. Results and implications will be presented and discussed.

Moral development, moral audiences, and the enabling of terrorist behaviour

Day, James Meredith *Psychology, Université de Louvain, Louvain-la-Neuve, Belgium*

Empirical research has shown that moral behaviour is at once influenced by moral reasoning, and the discursive worlds in which moral terms are given meaning, and moral language linked to moral conduct. This presentation is drawn from empirical research with Belgian and English adolescents whose moral decision-making processes were studied using standard questionnaires, narratives of moral problems and decisions, and structure, qualitative interviews. Clear relationships exist amongst reasoning, discursive, religious attitudes, and parenting styles amongst those who excuse, justify, and, at least in some sense, justify terrorist behaviour.

The teaching of psychoanalysis in the university

de Barros, Rita Maria Manoso *Psicologia Clínica, UERJ / PGPSA, Rio de Janeiro, Brazil*

Objectives: To investigate the consequences of the teaching of psychoanalysis in the university. It intends to be woman in the thought of girls between 13 and 17 years old in the school and its meaning in the magazines direct to those girls. **Method:** Interview and questionnaires with students. We analyzed the students' discourses about their thoughts to psychoanalysis theories. **Results:** The most of them like and learn a lot of things about human soul and thinking that this knowledge helps them to understand their students too. **Conclusions:** The teaching of psychoanalysis theory is important for the future teachers of children.

A functional measurement approach to the estimation of the differential impact of reward satisfaction dimensions on turnover intention

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Mairesse, Olivier *I/O Psychology, Vrije Universiteit Brussel, Brussel, Belgium*
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Previous studies indicated a significant relationship between reward satisfaction dimensions (e.g. pay level satisfaction, raises satisfaction, psychological reward satisfaction) and turnover intention using hierarchical regression analysis or structural equation modeling. The aim of this study is to calculate the differential weights of each reward satisfaction dimension in predicting employee's turnover intention, by using functional measurement (FM)



methodology. In an experiment, participants estimate their turnover intention within a number of work-settings with changing satisfaction levels for each of the examined reward satisfaction dimensions. By means of FM the algebraic relation between different reward satisfaction dimensions can be investigated.

Gender differences in pay satisfaction: Testing the measurement invariance of the Pay Satisfaction Questionnaire

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Regardless of their lower salary, women are at least as satisfied with their salary as their male colleagues. Studies examining this 'paradox of the contented female worker' often used the Pay Satisfaction Questionnaire (PSQ). Whether this instrument is measurement invariant across gender, however, has not been previously tested. To avoid rash conclusions, the present study submitted PSQ data of 699 female and 448 male employees to a series of measurement invariance tests. The results supported the gender invariance of the measurement of pay satisfaction by the PSQ, assuring now that it is an appropriate instrument to examine the illustrated paradox.

Teaching behavioral assessment to teachers of nursery school in Kobe City's project

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Nursery school teachers in Japan are increasingly faced with the need to implement effective behavior management of their children. We conducted a three-day workshop for 15 supervising teachers of nursery schools and trained them in basic knowledge of applied behavior analysis, and then conducted practicum using videotapes in behavioral observation of appropriate and inappropriate child behaviors. We will report on the results of the workshop and follow-up.

Stress at work: A meta-analysis of longitudinal studies

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The number of studies on organizational stress has been increasing since decades. Several meta-analyses were already published. However, since most studies were still cross-sectional, authors of reviews and meta-analyses frequently called for more longitudinal studies. A few reviews of longitudinal studies have already been published, but a quantitative approach to existing longitudinal results is lacking. Therefore we present a meta-analysis of longitudinal studies on organizational stress taking into account potential curvilinear relations between time lag and effect size. We also test for reversed causation. The results provide evidence for both stressors reducing subsequent well-being and poor well-being increasing subsequent stressors.

Temporal acuity and working memory

Dreszer, Joanna UMK in Torun, Torun, Poland **Bedyska, Sylwia** Department of Psychology, SWPS, Warsaw, Poland

Objectives A number of papers have suggested link between temporal acuity and working memory. Methods To better understand this relation, the rhythmical synchronization-continuation tapping task and working memory O-Span task were assessed. In tapping task different inter stimulus intervals (ISI) were used: 450-2400ms. We analyzed the correlation between synchronization /continuation error (SE/CE) and O-Span. Results Results

showed correlation depending on the ISI duration between SE/CE and O-Span. Conclusion These findings offer support for the notion that the timing in the synchronization-continuation tapping is controlled by automatic and cognitive mechanisms. Moreover results indicate relation between both working memory and timing acuity.

A psychodynamically oriented comparative study of impulsivity and life event stress among injecting drug users

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Medication, Education and Training helps to overcome the conditions that facilitate the spread of HIV among (IDUs). Beyond this psychiatric medicine along with counseling can create the conditions of understanding that contribute to enhanced risk perception and being able to inculcate the risk reduction practices among them. In this context the Rorschach Ink Blot test (RIBT) and Life -Event Stress by Paykel were used for psychodynamic assessment on 100 IDUs and 100 normals. Psychodynamic assessment reflects that problem of IDUs are characterized by predominance of impulsive need, and loss of control in specific situations. Thus psychotherapeutic treatment is called for ameliorating maladaptive thoughts and actions among them.

Faces: A database of emotional facial expressions in young, middle-aged and older women and men

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Faces are widely used experimental stimuli, and interest in the development of their perception and processing is growing. Due to a lack of age-differential facial stimuli, most studies to date have exclusively used younger faces. We created a database comprising faces of young, middle-aged, and older women and men displaying six expressions (neutrality, sadness, disgust, fear, anger, happiness) and collected norm ratings from adults of different ages. This new database offers access to an age range of faces that is wider than that of other face databases and therefore more appropriate for the investigation of developmental research questions.

Asymmetry in the binding of verbal and spatial information in working memory

Elsley, Jane Dept. of Psychology, University of Plymouth, Plymouth, United Kingdom **Parmentier, Fabrice** Psychology, University of Plymouth, Plymouth, United Kingdom

We investigated the characteristics of bound verbal-spatial representations using a recognition task (Prabhakaran et al., 2000). Four consonants were presented simultaneously in locations followed by a single probe. In one task the identity of the single probe was judged, and in another the spatial location of the single probe was judged. Accuracy measures indicated binding when letters only were attended ($p < .01$), but not when locations only were attended ($p = .31$). The results suggest an asymmetry in association between verbal and spatial information whereby verbal information could not be processed independently of spatial information, while spatial information could be processed in isolation.

Mental models and activity systems for developing psychologists competences to teach psychology: Experiences and cognitions of tutors and students at university apprenticeship

Erausquin, Cristina Educational Psychology, Faculty of Psychology, Buenos Aires, Argentina **Basualdo, Maria Esther** Educational Psychology, Faculty of Psychology UBA, CAPITAL FEDERAL, Argentina

Garcia Labandal, Livia Educational Psychology, Faculty of Psychology UBA, CAPITAL FEDERAL, Argentina **Gonzalez, Daniela** Educational Psychology, Faculty of Psychology UBA, CAPITAL FEDERAL, Argentina **Ortega, Gabriela** Educational Psychology, Faculty of Psychology UBA, CAPITAL FEDERAL, Argentina **Meschman, Clara** Educational Psychology, Faculty of Psychology, CAPITAL FEDERAL, Argentina The work examines mental models to solve problems situated in school settings, built in communities of practice for teaching to teach Psychology. Descriptive ethnography includes quantitative and qualitative analysis. At the beginning and the end of Undergraduate Apprenticeship, one questionnaire about educational problems and another about conceptions on learning were administered to 22 tutors and 85 students. Results show differences between tutors and students in explicit knowledge, scientific hypothesis and professional involvement in activity systems. To raise awareness about diversity of interventions from psychologists and from psychology teachers is challenging for students. Developing competences to teach is challenging for University.

Relationship of critical thinking and thinking styles on college students of lima and Callao on Peru

Escurre-Mayaute, Luis Miguel Psychology, UNMSM, Lima, Peru **Delgado-Vasquez, Ana Esther** Psychology, UNMSM, Lima, Peru **Torres, William** Psychology, URP, Lima, Peru

Presents the relationships between attitude toward critical thinking and the thinking styles on college students. The participants were 830 college students of Lima and Callao, Peru. It was used Stenberg's Thinking Style Scale and a Scale was elaborated about Critical Thinking. The statistical analysis was done on three stages. The students mean age were 20.6 year old, and 62.5% were female and 36.5% male. The findings show validity and reliability related to Attitude Toward Critical Thinking Scale and the Thinking Styles Scale respectively. There are significant correlations concerning areas of the critical thinking and the thinking styles. There are statistical differences considering college, sex, and field of study

Building emotional strength in business A redirection-moving towards the pain

Faye, Sharon Clear Perceptions Pty Ltd., Perth, Australia **Hooper, Joel** Research, the humex project, Berlin, Germany

Building Emotional Strength (ES) is built on the premise that whatever a business owner is experiencing in his business is a direct reflection of his experience of his internal world. The owner's perception is externally focused, blaming his employees or a set of circumstances for his stress. We have observed that facilitating the owner to reengage his emotions leads to a redirection of his attention from external circumstances to internal states, resulting in the identification of fundamental self-limiting beliefs that are mirrored at every level of his organisation which impacts organisational performance.

Personality types as predictors of premarital sex among tertiary education students in Nigeria

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Counselling, Olabisi Onabanjo University, Ogun, Nigeria

Objective This study investigated thinkers and feelers as predictors of premarital sex among tertiary education adolescents. **Methods** Sample consisted of 407 adolescents randomly selected from two universities in Nigeria. Adolescent Personality Assessment Questionnaire and Attitudes towards Premarital Sex were used to collect the data which were analysed using Multiple Regression analysis and t-test. **Results** Both thinkers and feelers are prone to premarital sex, thinker is a major personality variable in adolescents' premarital sex, feeler has impact on adolescents' premarital sex, though not as serious as thinker, males predict premarital sex more than females. **Conclusion** Thinkers and feelers are both prone to premarital sex.

The undergraduate psychology course offered at University of Brasília

Feitosa, Maria Angela *Inst. of Psychology, University of Brasília, Brasília, Brazil* **Nunes da Cunha, Rachel** *Psychology Institute, University of Brasília, Brasília, DF, Brazil*

The Psychology Institute at University of Brasília has a 45 year tradition at offering education in Psychology. It currently offers an undergraduate course with three degree options, a bachelor, a teaching and a psychologist degree, and four graduate courses comprising the master and doctoral levels. The undergraduate course is well evaluated both by ex-students and the federal government, and is distinguished as providing a highly flexible and diversified curriculum, giving the students ample contact with research activities of the graduate programs. The presentation stresses how the Institute interprets and applies recently approved federal guidelines for psychology curricula.

Neural correlates of kinesthetic working memory

Fiehler, Katja *Inst. für Psychologie, Universität Marburg, Marburg, Germany* **Burke, Michael** *Psychology, Philipps-University Marburg, Marburg, Germany* **Bien, Siegfried** *Neuroradiology, Philipps-University Marburg, Marburg, Germany* **Rösler, Frank** *Psychology, Philipps-University Marburg, Marburg, Germany*

Separate neural pathways are proposed for somatosensory processing. A pathway for the guidance of action that terminates in the posterior parietal cortex can be dissociated from a pathway for perception and memory that projects to the posterior insula and to the posterior parietal cortex. In an fMRI study we aimed to test how the insular and the posterior parietal pathways contribute to kinesthetic movement memory by applying a kinesthetic version of a delayed recognition task. The results showed delay-related activity in the left intraparietal sulcus, part of the posterior parietal pathway, suggesting its important role in kinesthetic working memory.

Psychosemantic aspect of object relations in fishing vessel crews

Frantsev, Alexander *Tavryiski National Universitiy, Kiev, Ukraine*

Objective. To find out effects of semantic 'nuclei' on object relations in two fishing crews. **Method.** J.Kelly Grid (1969) and hierarchical cluster analysis. **Results.** Crew 1 and crew 2 statistically significantly differed in their psychosemantic areas: 1) the 'nucleus' of crew 2 consisted of three elements having 5, 2, and 2 hardly conscious meanings respectively which resulted in its heavy emotional charge compared to crew 1 which consisted of 4 elements of 2 hardly conscious meanings each; 2) work performance of crew 2 was much better than that of crew 1. **Conclusion.** More fused nucleus of hardly conscious meanings corresponds to object

relations of higher level and better work performance.

Motivational intervention for general hospital inpatients with unhealthy alcohol use

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Objective: To test the effectiveness of a brief intervention among non-dependent general hospital inpatients with unhealthy alcohol use, delivered by either a specialized liaison service or hospital physicians. **Method:** In a randomized controlled trial, 595 inpatients with unhealthy alcohol use were allocated to three groups receiving: counseling by a liaison service, counseling by physicians or no counseling. **Results:** Twelve months later the intervention resulted in increased motivation to reduce drinking and to seek formal help. All groups decreased their alcohol use significantly. **Discussion:** As the intervention was effective in increasing motivation to change, brief intervention in general hospitals is recommended.

The "Inner Patriarch": The exploration of an introjected part of our personality with the aid of drawings and qualitative interviews

Friedrich, Sibylle *Inst. für Psychologie, Universität Hamburg, Hamburg, Germany*

By using the technique of a Focusing Process, a form of superficial hypnosis, in a workshop situation males and females were exposed to their "Inner Patriarch", the part of our personality that defends the traditional patriarchal rules and values of our society. Afterwards the participants were asked to visualize whatever they had experienced in trance. Fifty drawings were analyzed. Additionally 20 qualitative one-to-one interviews were conducted with participants shortly after the workshops. Preliminary results indicate that the perceived relationships between parents are reproduced as inner matriarchic and patriarchal archetypes. Complete findings will be presented at the conference.

The effect of covering trauma: A study with Russian journalists

Friske, Oliver *Psychology, Humboldt-Universität zu Berlin, Berlin, Germany* **Weidmann, Anke** *Psychotherapie u. Somatopsych., Humboldt-Universität zu Berlin, Berlin, Germany*

Journalists are frequently sent out to cover possibly traumatic events such as war or disaster. Previous studies show that they are subsequently at risk of posttraumatic symptoms; however, these studies exclusively focused on journalists working in Western media systems. We present the results of a nearly completed study with about 30 Russian journalists in order to replicate and extend earlier findings. After exploring the level of traumatic exposure and posttraumatic symptoms, data analyses focus on associations with the level of social support, the way of coping, and several work-related variables (e.g. differences between independent and government-related media).

Action fluency through childhood and early adolescence

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Fluency measures are commonly used in clinical paediatric neuropsychology to assess executive function. Little is known about age effects on Action Fluency (AF) performance, a newly developed fluency task that is particularly sensitive to frontal systems damage. This study analyzes the effect of age and gender on AF in 89 children between ages 5 and 15, divided into five groups according to grade. Results revealed a significant age effect but no sex effect or age x sex interaction. Performance showed a clearly age-related improvement. The obtained developmental trend is similar to that reported for classical fluency measures.

Reactions to the professional injustices according to the statute and the gender of an Argentinean population

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The feelings of injustice can conduce to various reactions, some resulting in passivity, others in protest. We wanted to study here if the statute (salaried employees versus unemployed persons) and the gender (masculine versus feminine) had an influence on these reactions. Thus we presented, in a questionnaire, different cases of professional injustices to Argentinean workers, differentiated according to their statute and their gender, and we asked them to indicate the reactions that they would adopt. Our results, and their discussion, will be about the different types of reactions induced by our two independent variables.

Psychological symptoms and burnout in healthcare workers suffering aggressions

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Aggression against healthcare workers is a problem of important consequences. However, its possible effects on psychological health have not been studied sufficiently. **Material and methods:** 1,845 healthcare workers. **Instruments:** • Record of demographic and work data. • Questionnaire on aggressions. • Record of psychological symptoms. **Results:** Eleven percent reported having suffered at least one episode of physical aggression. Non-physical aggression affected 64%. These rates were much higher in large hospitals and in Services (Emergency and Psychiatry). The association between non-physical violence and anxiety, burnout and symptoms of Post-traumatic Stress Syndrome was seen to be statistically significant.

Measure of the imbalance in assistance relationships: Validation of the TEEM questionnaire (Fears and stress factors in the medical profession)

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To measure the degree of imbalance in assistance relationships, the TEEM questionnaire was designed. **METHOD** 1,845 health professionals **TOOLS** - TEEM Questionnaire... - MBI - List of psychological symptoms **RESULTS.** Alpha coefficient ($\alpha = 0.91$). Statistically significant correlations between the TEEM and the burnout dimensions. By means of COR showed high rates of diagnostic specificity/sensitivity. By means of a logistical regression analysis, predicted emotional exhaustion, depersonalization and the lack of professional satisfaction. A factorial analysis showed that the

questionnaire had two dimensions: Fear of being harmed (30.81% variance), and Fear of being accused of malpractice (29.36% variance).

Cognitive-Behavioral Group-Therapy for smoking cessation

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Aim of the study was to evaluate the efficacy and acceptance of a group-based behavioural-therapy for smoking cessation. A sample of 95 female and male smokers with different degrees of tobacco-addiction measured with DSM-IV and the "Fagerström-Test for Nicotine-Dependence", was repeatedly assessed for post-treatment smoking status and relapse during a period of 6 months. Using a One-Group-Design the participants smoking status was obtained by self reports. An intent-to-treat approach showed an abstinence rate of 72.6% at the end of the intervention decreasing to 35.7% after 6 month, indicating that this programme performs well compared to already existing ones.

The effects of psychosocial programs of harm reduction model on general health level in injection drug users

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Treatment for substance abuse problem is usually based on Harm Reduction Model as the third stage of prevention, in which a greater range of services are offered. It is viewed as a starting point for specially injection drug users (IDUs), who are not ready to change their high risk behaviors completely. So, 300 IDUs men within the age group of 20-50 were selected randomly and they completed the form of 28 items of General Health Questionnaire, voluntarily. The 100 of them that took psychosocial services. The GHQs were completed after a period of 6 months again. The analyses shows a significant difference between their general health level before and after taking these psychosocial services ($p < 0.0001$).

Efficacy of stress inoculation training in smellioration of depression and anxiety in multiple sclerosis

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Frist 65 definitely diagnosed MS Patients were selected from neurology clinic of different neurologist in city of Tehran. In second step they were tested by given three questionnaires of depression, anxiety, and Zung and psychiatric distress of Markham. Then from them thirty patients who fulfilled the criteria of depression, anxiety and distress were selected for our study. It was found the SIT group was significantly less depressed, anxious and distressed than control subjects ($\alpha < 0.05$). The study results suggest that SIT can be effectively applied as a therapeutic tool in stressed, anxious and depressed MS patients.

Not only performance: The link of emotional intelligence with organizational climate, workplace bullying, organizational context and socialization processes

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The following research aimed to analyze the emergent relations between emotional intelligence and diverse constructs. Particularly, one aim was to verify if higher emotional intelligence people should have perceived a better organizational climate than lower emotional intelligence people. Data was collected on a sample of 566 employees. The

findings confirmed the hypothesis. In order to verify this second aim data was collected on a sample of 412 employees. The bullying victims with lower emotional intelligence perceived more intensive and frequent negative acts. Also the relations of emotional intelligence with type of organization and socialization processes respectively were investigated.

The role of the motor coordination in the development of education ability at children of 3-6/7 years old: Pilot study of the PROMESD project

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Raluca, Sassu *Faculty of Psychology, Faculty of Sciences, Sibiu, Romania*
Pierre, De Hillerin *Human Performance, Sport Science Institute, Bucuresti, Romania*
Ioana, Bugner *Faculty of Sciences, "Lucian Blaga" University, Sibiu, Romania*
Dragu, Anca
Objectives: - Evaluation of the subjects' motor coordination capacity by exercises on simulators of conditions, devices for neuromuscular control; - Elaboration of motor coordinative profiles on age groups; - Determination of a relation between motor coordinative profiles, levels of development and the education ability; - Methodology of: tests of motor coordination, events to evaluate the motor coordinative behavior, observation protocols; The subjects: a representative sample of the pre-school population from the city of Sibiu; Debates: the study aims to identify the necessary conditions to initialize a program of early psycho-motor instruction, targeting the efficient adjustment to the educational environment.

Culture of substance consumption in university campuses: A field of meanings and the context of their manifestation

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Reidl Martinez, Lucy *Maria Psychology, UNAM, Mexico, City, Mexico*
Medina-Mora, Maria Elena *Psychology, UNAM, Mexico, City, Mexico*

Objectives: Analyze the alcohol and drug consumption culture in university students, using an ethnographic approach and oriented interviews. The survey was performed in fifteen stages of sale and/or consumption using observation and guided interviews. We try to identify and analyze actors, substances, practices, objects, rituals, rules, meanings, perceptions, physical conditions, control mechanisms, and accessibility to these substances inside university. From the results, a set of lines to be proposed were elaborated in order to contribute to the prevention of alcohol and drug consumption and the modification of the university environment, and reduce the presence of addictive behavior in students.

Neuropsychological assessment of Spanish-speaking adults with attention deficit/hyperactivity disorder

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Perez-Mojica, Deborah *Neuropsychology, Colectivo de Servicios Psicologicos, San Juan, Puerto Rico*
This study examined the sensitivity, specificity and discriminatory capacity of a combination of neuropsychological measures and self report scale to assess Attention Deficit/Hyperactivity Disorder (ADHD) in Spanish-speaking adults. We compared the performance of 50 adults (with/without ADHD) on a neuropsychological battery and Wender-Utah Rating Scale (WURS). Student's t tests, discriminant function analyses and logistic regression were used to develop a prediction model. Neuropsychological and WURS test scores were graphed on a Relative Operating Characteristic (ROC) Curve. The combination of neuropsychological measures

and self report evidenced an excellent discriminatory capacity (sensitivity 1.00; specificity .913). Clinical implications are discussed.

Ageism – a cause of personality, dominance or authoritarianism?

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Zick, Andreas *Social Psychology, University of Jena, Jena, Germany*
Research on personality and prejudice has shown that social dominance orientation (SDO), right-wing authoritarianism (RWA) and the big five significantly correlate with prejudices. However, only a few studies focused ageism. That is surprising since ageism is one of three big isms in many societies. We tested the link by a German version of the Fraboni Scale of Ageism (N = 121). Results indicate significant correlations and effects of SDO, conscientiousness, and openness to experience on ageism. RWA, extraversion, agreeableness, and neuroticism do not explain ageism. An explanatory model on the link between ageism and dispositions is presented.

Burnout assessment and perceived negative consequences of working conditions

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Objective: Assess perceived negative consequences of working conditions, by two means of burnout assessment. Method: This research surveyed 631 health staff (52.8% male, mean average 38.97 years, SD = 10.1). The participants were asked about personal and familiar impairment, medical errors and thoughts of giving up work. Burnout was assessed by a single item measure and with the Maslach Burnout Inventory (MBI). Results: Participants with higher scores in MBI and lower in single item measure presented more personal impairment, medical errors and thoughts about giving up work than those with lower scores in MBI and higher in single item measure. Conclusion: MBI scores seemed to be better related to negative perceived consequences of working conditions.

The Nestor-Effect: Extending evolutionary developmental psychology to a lifespan perspective

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Development has played a minor role in evolutionary theory until very recently. However, evolutionary developmental psychology has proven to be empirically fruitful. Yet the focus here still lies on maturing processes. Since human lifespan development is a result of evolution, human longevity begs for an evolutionary explanation. We argue for an interactive view of old age, focusing both on the adaptivity of grandparents and the cultural dynamics fueled by them, resulting in a better chance of survival for the grandoffspring and a culture that protects later periods of life and, thus, longevity.

Body's psychological meaning in risky groups

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Valdez, José Luis *CIENCIAS DE LA CONDUCTA, UAEM, Toluca, Mexico*
The objective was to obtain the body's psychological meaning in different risky groups. It was carried out with a purposive type, no probabilistic sample. It was formed by 120 people. They were divided in 4



groups: 30 physical fitness people, 30 artists, 30 sportmen and 30 people that don't do any previous activities. It was developed with a natural semantics nets technique, the application was realized in an individual way. The results determined that sportmen see their body as something that let them mobility, whereas, the artists group determined it as a projection aspect, and so on.

Pragmatic modulation in deontic conditional reasoning: An exploratory approach with prisoners

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The present study focus on a mental model approach of deontic conditional reasoning, and envisages its recent developments in terms of pragmatic modulation (cf. Johnson-Laird & Byrne, 2002). A series of sentences with deontic content were presented to a group of prisoners, in order to study, from their experience, with what extent they would represent differently what is forbidden and what is allowed, in terms of mental models. The consequences of these different representations were also studied through an inferential task. The results were discussed, in terms of the role of the pragmatic variables in conditional reasoning.

Experiment on optic cognitive ability development of 3-6 years old infants by cognitive drawing course

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The study examined infants' drawing education from the perspective of cognitive psychology and explored the effectiveness of drawing courses based on infants' cognitive development. A quasi-experimental design was conducted, and cognitive ability was measured from three aspects: optic memory ability, color perception ability, and figure perception ability. The results indicated an effective improvement of infant optic cognitive ability after accepting the relevant training for drawing skills. The study provided a kind of valuable way to the course development of kindergarten education.

Analysis of structural information in non-linear neural network models

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Based on simulation studies, methods of structural modelling for Neural Networks are presented and compared with respect to their ability to represent the structural relations in the simulated data and with respect to the risk of over-adaptation. Considering the results of the simulations, it can be concluded that the risk of over-adaptation to the data is not larger than it is for multivariate methods as long as the network architecture is determined on the base of parsimony indices. As well, structural analysis, beyond the point of selection of predictors and model complexity, appears possible based on a-priori pruning methods.

The defensive maintenance of egalitarian values: An idealistic fallacy

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The present set of studies investigated how people protect their belief in equality within their societies. In Studies 1 and 2 an American sample evaluated a minority group (Arab-Americans) significantly more negatively after being reminded of their egalitarian values, but only when that group was presented as receiving unequal treatment. Study 3 investigated the process underlying the phenomenon

and found activation of the concept of "threat" in the *egalitarian-threatening conditions. Study 3 also showed that the phenomenon emerges from identity-maintenance process, in that participants who received an esteem-boosting affirmation did not show the effect.

Education in psychology for Czech military health service staff

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The Czech Army is already in the transformation process. All their components are significantly changing in last few years. Not only this area is necessary to keep in view when planning the system of education in the Czech Army. The most viewable area for publicity is the abroad missions. Because of a membership in NATO, the Czech Army participates on the NATO operations, nowadays in Afghanistan, Iraq or Kosovo. The most exploiting part of Czech Army in these missions are the health care service units, especially field hospitals. Conditions, especially the psychological are very difficult and it is necessary to prepare soldiers properly before the deployment.

The relationship between the quality of prosocial behavior and intelligence

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This study attempts to distinguish the difference of several prosocial behaviors, and explores one of the relative stable determinations (cognitive ability). Participants were 200 university students. Their dispositional traits of prosocial behavior, the situational prosocial behaviors, the CCFT and Information processing ability test are examined. In the presence of the simpler prosocial tasks there is no significant difference of students' prosocial behavior between higher and lower cognitive abilities, while in the presence of the more complicated prosocial tasks children with higher ability have the higher probability to present prosocial behavior than children with lower ability.

Grounded theory examination of college student narratives

Hart, Alex *Psychology, Clark University, Worcester, MA, USA* **McGovern, Arthur** *Psychology, Nichols College, Dudley, MA, USA*

The goal of this research was to find what and how students write about when given the opportunity to express their feelings about the transition to college. Student narratives were examined using Grounded Theory. Students wrote on topics in three main areas- academics, socialization (about shyness and finding friends through commonalities and circumstance), and romantic relationships. Additionally, nearly all participants made concluding remarks at the end of the study- in an attempt to wrap up their thoughts and feelings. We discuss the implications of the students' experiences for college settings.

Teaching 'Counter Research'

Hart, Alex *Psychology, Clark University, Worcester, MA, USA*

The number of assumptions in psychology are numerous and growing. Students are taught rigorous methods of finding validity and reliability as a gold standard in many undergraduate courses. Students in one course were challenged to rethink the notions behind the empiricism of psychology as

a scientific discipline. Students were asked to engage in counter-research projects, those which do not fit the mold of standard research- to think critically about the most basic aspects of academic psychology. Students engaged in these projects with great joy and expressed higher levels of critical thinking about basic concepts. However, many students found this course difficult in confronting the apriori assumptions of traditional scientific, quantitative psychological methodology.

Progress and correlates of adolescent vocational development

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Vocational development reflects patterns of change in vocational behavior observed over time and considered in terms of degree and rate. A prospective longitudinal design was used to investigate degree, rate, and correlates of vocational development in an age cohort of high school students (21 girls, 21 boys). Repeated measures MANOVA and Reliable Change Index results indicated significant increases in vocational development with age. These gains directly correlated to academic achievement, work-family role salience, and Investigative and Enterprising vocational personality types. Consistent with theory, career choice readiness increases during high school and remains a key concept for comprehending adolescent vocational development.

Validation of the evaluation of Teaching Competencies Scale (ETCS): Its relationship to measures of leadership and school commitment attitudes

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We present a construct validation study of the newly developed Evaluation of Teaching Competencies Scale (ETCS) with students (N=660) at three universities. Students also completed measures of Leader Member Exchange (LMX), Transformational Leadership, as well as school commitment and intentions for involvement as alumnus. The ETCS substantially related to hypothesized perceptions of LMX ($r=.50$) and faculty's leadership styles of intellectual stimulation ($r=.51$), idealized influence ($r=.54$) and trustworthiness ($r=.49$). The ETCS also predicted school commitment ($r=.32$) and intentions for involvement as alumni ($r=.26$). These relationships are tested and reported within MR models as evidence of validity for the ETCS.

Work stress and causal attribution among hospital nurses

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To test a hypothetical model of path relationships between occupational attributional style and chronic work stressors, a sample of 934 Finnish hospital nurses was selected. In this study, negative pattern of occupational attributional style was assumed to be partly caused by chronic work stressors. The hypotheses of the study was mainly dealt with the mediation and moderation nature of cognitive coping, and in-group and out-group support, as the psychosocial variables along with work engagement, organizational identification, and turn over intention as organizational related affects. The results, in general, supported the existence of such processes of mediation for psychosocial and organizational related affects variables, and thus inline with the relevant theories and the expectations of the model.

An ERP study of naltrexone treatment for cue induced craving in opioid addicts

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We used ERP to explore the naltrexone treatment effective for opioid craving. Four groups subjects were recorded ERP when they saw two blocks pictures (drug relevant and neutral stimuli). The results showed that the latency and amplification of P200 for drug-cue reactivity in patients treated with naltrexone over 6 months did not differ significantly from healthy control; but addicted control and passive withdrawal group who abstained from drug over 6 months showed a significantly worse condition. The results suggested that patients treated with NTX showed normalization in P200.

Sense of coherence and quality of life measures among members of the narcotics anonymous fellowship

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The research concerns a comparison of a conglomerate of sense of coherence and subjective quality of life factors between people not addicted to drugs, and those addicted to drugs recovering in the Narcotics Anonymous Fellowship. Eighty participants were evaluated. Comparison has been done between forty pairs standardized in socio-demographic data (control group – research group). The research indicated that there were no significant differences in sense of coherence and quality of life measures between non-addicts and recovering addicts in the Narcotics Anonymous Fellowship. Certain significant statistical differences among particular sense of coherence and quality of life factors were observed.

Extraversion and its positive emotional core: Further evidence from neuroscience

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There is converging evidence from self-report data that extraversion and positive affect are systematically related. In the present study, we investigated whether positive affect forms the core of extraversion (as suggested by Watson & Clark, 1997) or vice versa. Baseline cerebral blood flow was measured in 38 participants and regressed to the personality and trait affect questionnaire scores. After partialing out the common variance of extraversion and positive affect voxel-based analyses suggested that positive affect forms the core of extraversion and not vice versa. The study thus demonstrates the usefulness of physiological data in evaluating psychological hypotheses.

Autobiographical memories and the role of involuntary memory in a case with hippocampal amnesia

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We report a case (Y.K.) with hippocampal amnesia since 1990. We conducted many neuropsychological tests and observed him carefully in his everyday life. The test results showed that his intellectual ability was within the normal range. He had severe

anterograde amnesia and could not recall specific autobiographical episodes from his remote memories. Through our observations, he could not remember virtually any episodes after his onset, but sometimes could retrieve his personal semantics 'involuntary' in his everyday life. We think that involuntary memory was very important for him because he actually referred to it to manage his everyday life.

The self-reported psychological profile of six jobs in Romania

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We researched the psychological profile of six jobs in Romania, as it is reported by the professionals themselves: landscape architect, bank clerk, technologist engineer, officer of the court, PR officer and journalist. As such, we constructed a questionnaire in which subjects from all the four fields of work were required to relate to a typical representative of the respective profession, on three dimensions: cognitive abilities, social personality factors (on three levels: sociability, social presence and responsibility), and supplementary professional exigencies. The sample included both professionals and people in these respective academic domains, from different institutions/work places in several major cities.

Vertical collectivism and bias against disabled persons: The mediation of disgust sensitivity

Holtz, Rolf Psychological Science, Ball State University, Muncie, USA **Gordon, Ellen R.** Psychology, Ohio University, Athens, Ohio, USA **Objectives:** The normative morality of vertical collectivism suggests that disgust mediates their bias against the severely disabled. **Methods:** 250 participants completed Triandis' (1996) horizontal/vertical individualism/collectivism measure, the Disgust Sensitivity Scale, and the Social Distance Scale (SDS) assessing bias against the severely disabled. **Results:** Regression analyses showed that only vertical collectivism (VC) predicted the SDS bias scores ($\beta = .08, p < .04$) and the disgust sensitivity scores ($\beta = .06, p < .001$). A Sobel test confirmed the complete mediation of VC-SDS by disgust ($z = 3.11, p < .002$). **Conclusions:** Disgust may elicit discriminatory practices within VC societies.

Creating monstrosity: How neo-nazi propaganda uses essentialist categorizations for the denigration of Blacks and Jews

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Psychological essentialism has become an important topic within the field of social psychology over the last two decades. We argue that because of the possible mutual exclusivity of essences, their inherence, and their immutability, essentialist categorizations are used in propaganda in order to create the impression of a social group being beyond any accepted category of things. This group is likely to be perceived as 'monstrous'. Evidence for the 'monstrification' of Jews and Africans in contemporary German Neo-Nazi propaganda is presented. The data derives from a qualitative analysis of app. 5000 postings in a German neo-Nazi online discussion board.

Analyzing the cost of prospective memory with the diffusion model

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Germany Voss, Andreas Institut für Psychologie, Albert-Ludwigs Universität, Freiburg, Germany **Event-based prospective memory (PM)** involves remembering to perform an action when an event occurs in the future. A current approach to detecting the potential cost of PM rests on the analysis of ongoing task performance. We used Ratcliff's (1978) diffusion model to analyze this cost to both speed and accuracy in an ongoing lexical-decision task. Model-based data revealed that PM intentions lowered information uptake and led to a more conservative response criterion in the ongoing task. This indicates that PM intentions can interfere with data-driven accumulation at an early stage and influence controlled processes in terms of strategic criteria.

The influence of self-efficacy and social support on occupational achievement and job satisfaction: Longitudinal analysis of middle school teachers enrolled in teacher training programs

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The purpose of this study is to examine the longitudinally the influence of self-efficacy and social support on occupational achievement and job satisfaction of middle school teachers enrolled in teacher training programs. A total of 431 teachers (119 males, 312 females) completed a questionnaire. Participants completed a questionnaire at three different phases: (1) prior to the onset of the training program, (2) after completing the training program, and (3) three months after completion of the training program. The results indicate that social support received from school administrators and fellow teachers raised their self-efficacy and job satisfaction. Self-efficacy has positive influence occupational achievement. Implications of the results for teacher training programs will be discussed.

Japanese life-patterns in the 2000s III: Full-time and part-time workers.

Ide, Wataru Humanities and Social Sciences, Osaka Prefecture University, Sakai, Japan **Hashizume, Hiroko** Research Institute, International Economy and Work, Osaka, Japan **Maeda, Hiromitsu** Graduate School of Sociology, Kansai University, Suita, Japan **The effects of full-time versus part-time employment status on attitudes toward performance appraisal** were examined. The survey was conducted in cooperation with a Japanese supermarket labor union, and 2,600 full-time workers and 4,000 part-time workers answered the questionnaires. Using hierarchical linear modeling, this study demonstrated that full-time workers reported lower satisfaction with performance appraisal, and both individual and organizational level conditions were significantly associated with satisfaction: perceived justice and subordinate's evaluation of supervisor explained within-organization variance, and perceived justice aggregated to the organization level explained between-organization variance. Employment status moderated the relationship between perceived justice and individual satisfaction.

The effect of emotional valences of schedules on prospective memory

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This study was conducted to investigate whether the emotional valences of schedules affect prospective memory in the same way as retrospective memory. Thirty-one undergraduate students were randomly assigned to the future condition to memorize pleasant, unpleasant and neutral schedules as future plans, or to the past condition to memorize them as



past events. The result showed that the emotional valences did not affect prospective remembering, whereas pleasant events and neutral events were significantly more recalled than unpleasant events in the past condition. This result suggests that the underlying mechanisms of prospective memory differ from those of retrospective memory.

Strategies for random key pressing under cat-and-mouse conditions

Itagaki, Fumihiko Dept. International Relations, Asia University, Tokyo, Japan **Turk, David** School of Psychology, University of Aberdeen, Aberdeen, United Kingdom **Itoh, Kenji** Speech and Cognitive Science, University of Tokyo, Bunkyo-ku, Tokyo, Japan **Miura, Sachie** Neuropsychiatry, Fukushima Medical University, Fukushima, Japan **Niwa, Shin-ichi** Neuropsychiatry, Fukushima Medical University, Fukushima, Japan **Kohno, Sou-ichi** Neuropsychiatry, Fukushima Medical University, Fukushima, Japan **Gotoh, Daisuke** Neuropsychiatry, Fukushima Medical University, Fukushima, Japan **Kawasaki, Singo** Optical Topography Group, Hitachi Medical Corporation, Kashiwa-shi, Chiba-ken, Japan Twenty-eight subjects performed random key pressing tasks under cat-and-mouse conditions. In the CAT condition participants attempted to predict the next number chosen by the computer. In the MOUSE condition participants attempted to outwit the computer that was attempting to predict their key press. Each condition required participants to make 163 key-press responses. Irrespective of the number key chosen, 18 responses were predetermined as hits (Cat wins and Mouse loses) and were accompanied by auditory feedback. Shifts in strategy between the CAT and MOUSE conditions are examined with relation to the activation of the frontal lobes measured by Near-infrared spectroscopy.

The relationship between job demands, job control, and subjective well-being (vitality, positive affect and negative affect, optimism) in job design among employees of a company

Jahanbakhsh Ganjeh, Madine Isfahan University, Isfahan, Islamic Republic of Iran **Orayzi, Hamid Reza** Psychology, Isfahan University, Isfahan, Islamic Republic of Iran **Molavi, Hosain** Psychology, Isfahan University, Isfahan, Islamic Republic of Iran **Nouri, Abolghasem** Psychology, Isfahan University, Isfahan, Islamic Republic of Iran

The purpose of this study was to investigate the relationship between job demands, job control, and Subject well-being (Vitality, Positive affect and Negative affect, Optimism) in job design among employees of a company. The participants were 100 employees who selected through a random sampling. The measurements were Desi and Rayan vitality questionnaire, Watson and Clark PANAS (Positive affect and Negative affect) questionnaire, and Wall at el job design questionnaire. Data were analyzed through multiple regression. Findings indicated both job demands and job control were significantly related to vitality, positive affect and negative affect, and optimism. Keywords: Job demands, Optimism, Vitality

The relationship between job demands, job control, and stress in job design among employees of a company

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The purpose of this study was to investigate the relationship between job demands, job control, and stress in job design among employees of a company. The participants were 110 employees

who selected through a random sampling. The measurements were Eliot Stress Questionnaire and Wall Job Design Questionnaire. Data were analyzed by multiple regression. Findings indicated both job demands and job control were significantly related to stress. Managers can reduce stress in employees by using Results of this study. Keywords: Job demands, Job control, stress, Job design

Exploring heterosexuals' experiences of being prejudiced toward gay men: An interpretative phenomenological analysis of homonegativity

Jewell, Lisa Dept. of Psychology, University of Saskatchewan, Saskatoon, Canada This study documented the prevalence of anti-gay attitudes and behaviours on a Canadian university campus and described the lived experiences of heterosexuals who are perpetrators of homonegativity. A mixed-methods approach was used where in a questionnaire was administered to 286 Canadian university students and interviews were conducted with eight individuals who are prejudiced toward gay men. Interviews were analyzed using Interpretative Phenomenological Analysis. The participants' lived experiences of homonegativity were characterized by their negative affective reactions toward homosexuality and their perceptions that gay men are feminine. Participants' homonegativity could best be understood in terms of their religious and gender role ideologies.

The study on Chinese children's sense of shame

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To examine Chinese children's understanding of shame, 4- and 5-year-olds children were chosen and the method of semi-structured interviewing was adopted in this study. The results indicated that in no hint situation, a significant age-related difference in shame expression was found, while disappeared in hint situation. The shame expression in task failure scene was much more than that in transgression scene. There are significant age-related differences in understanding of sense of shame. The categories of definitions, antecedents and action tendencies of shame were consistent in both age groups, but only different in quantity.

Moderating effects of coping in the context of unemployment and job insecurity

Körner, Astrid Inst. für Entw.-Psychologie, Universität Jena, Jena, Germany **Reitzle, Matthias** Developmental Psychology, Friedrich Schiller University, Jena, Germany **Silbereisen, Rainer K.** Developmental Psychology, Friedrich Schiller University, Jena, Germany

Following stress and coping theories, the present study on 1,764 employed and unemployed German adults investigated the moderating role of coping on the connection between unemployment and psychological well-being. It was expected that active coping styles would buffer adverse effects of short-term unemployment, whereas it would not do the same for long-term unemployment. Instead, disengagement strategies were supposed to weaken this link. Multiple regression models including interaction terms of duration of unemployment and coping style partly confirmed these hypotheses. Furthermore, it was tested whether coping styles would yield similar effects among employed people with different degrees of perceived job-related insecurities.

Retrieval-induced forgetting: Eliminated by psychosocial stress, not by oral hydrocortisone
Kössler, Susanne Inst. für Psychologie, Universität Konstanz, Konstanz, Germany **Kissler, Johanna** Department of Psychology, University of Konstanz, Konstanz, Germany

Retrieval-induced forgetting refers to the phenomenon that the repeated retrieval of a subset of previously learned material can cause forgetting of the nonretrieved remaining material. However, the degree of retrieval-induced forgetting varies markedly between different subjects and conditions. We investigated the influence of psychosocial stress on retrieval-induced forgetting and found that the effect disappeared when subjects were exposed to stress before the retrieval practice phase. Though, replacing psychosocial stress by oral hydrocortisone did not reduce the effect. These results suggest that not solely cortisol, but the interplay of sympathetic activation and cortisol may lead to the disappearance of retrieval-induced forgetting.

Effects of an extended contact intervention on preventing prejudice in elementary school children

Küchel, Julia DFG-Forschungsgruppe, Universität Jena, Jena, Germany **Beelmann, Andreas** Institute of Psychology, University of Jena, Jena, Germany The present study evaluates an extended-contact-intervention which aims to prevent prejudice and support positive intergroup relations. 38 elementary school children (mean age = 9) received the program, while comparable children served as control group (n=43). Several prejudice measures against black children and Russian German children were assessed prior, immediately after and six months after the intervention. In contrast to previous research, data revealed no significant differences between program and control group. These results are referred to the choice of the outgroup used in the extended contact condition and are discussed against the background of current research on prejudice development.

Truthful and untruthful behavior as a result of mental development in a pre-school age

Kankova, Alesia Department of Psychology, Belarusian State Pedagogical U, Minsk, Belarus The present abstract describes the phenomenon of truthful and untruthful behavior between 3 and 7 year of age. Methods of research: technique "Carlson's button", methods D1/D2, D2/D2, D3/D3, D4/D4. It was calculated the Phi-square, coefficient of Spearman's rank-order correlation. The results show that there are correlations between different forms of truthful and untruthful behavior and certain mental functions ($r=0.73$, $p=0.001$). So, the disciplined truthful behavior correlates with function «realization» ($\phi=1.0$, $r=0.001$). Undisciplined truthful behavior correlates with function «relation» ($\phi=0.5$, $r=0.001$). Lying behavior correlates with function «understanding» ($\phi=0.4$, $r=0.001$). Deceitful behavior correlates with function «reflection» ($\phi=0.4$, $r=0.001$).

Effects of video game playing on empathy

Karatsu, Akari Osaka, Japan **Katsurada, Emiko** Psychology, Kwansei Gakuin University, Nishinomiya, Japan

This study investigated effects of video-game playing on emotional empathy. Twelve 4th graders and 30 undergraduates were shown various pictures to elicit emotional empathy before and after playing a video game. The results indicated that girls' level of empathy on piteous scenes tended to increase after playing video games. Children who had heard alarms while playing the game tended to have lowered their empathy on worrying scenes. For undergraduates, it was found that their level of empathy decreased on angry scenes but increased on painful scenes significantly. It was concluded that video-game playing has different effects on children and adults.

Values-ideals development at the transition from preschool to elementary-school age

Kashirsky, Dmitry *Chair of Psychology&Pedagogics, Altai Academy of Economics&Law, Barnaul, Russia*
The study investigates the peculiarities of value-system development at the first stage of its origin- at the period of transition from preschool to elementary school age. The hypothesis was that qualitative changes in values-ideals take place at age 6-7 and are closely connected with changes in social situation of child's development. Subjects were 114 children aged 5-8. Values were measured with "Ideal Man" and "Happy Animal" projective techniques and with the help of interview. Statistical analyses of the data was performed. The study revealed that the basic values-ideals of 6-7-year-old children are security, recognition and communication. Implications of the findings for understanding the nature of 7-year developmental crises are discussed.

The meaning of working from employees' perspective

Kayaalp Ersoy, Esma Gorkem *Business Administration, Beykent University, Istanbul, Turkey*
Working has a central role to understand human behaviour. According to the many theorists and researchers, working is something more than achieving personal achievement. For this reason the aim of this paper is to investigate the attitudes of employees toward working. The relationship between working and psychology has a complex structure. In order to clarify this complex structure we create a questionnaire form about working life and its perception from the view of employees. Sample of this research is 200 academicians whom also work in cubicle office system so that the research points the effects of cubicle office system on employees psychology, organizational climate and effectiveness. To analyze the data SPSS for Windows 11.00 is used.

The relation between personalities and loneliness in adolescents: The mediating effect of interpersonal competence

Kejia, Qu *Psychological Department, Beijing Normal University, Beijing, People's Republic of China*
Hong, Zou *Psychological Department, Beijing Normal University, Beijing, People's Republic of China*
This study investigated the relations among interpersonal competence, personalities and loneliness. 784 adolescents in China were used as subjects to complete the questionnaires of interpersonal competence, FFP and loneliness. Results: (1) There was significant gender difference on scores of loneliness, and boys scored higher than girls; (2) Most of the correlations among interpersonal competence, personalities and loneliness are significant; (3) Positive predictive effects were found in neuroticism and openness for the loneliness, while the predictive effects of extraversion, agreeableness and interpersonal competence were negative; (4) Interpersonal competence had partial mediating effect in the relations between extraversion, neuroticism, openness and loneliness, while in the relation between agreeableness and loneliness, interpersonal competence had full mediating effect.

The transtheoretical model of behavior change (TTM): Validation of the stages of change

Keller, Roger *Sozial- u. Gesundheitspsychol., Universität Zürich, Zürich, Switzerland*
Hornung, Rainer *Social and Health Ps, University of Zurich, Zurich, Switzerland*
Objective To examine the validity of the Stages of Change (SOC) regarding the motivation for smoking cessation. Method A sample of 303 20- to 65-year-old smokers completed a questionnaire with smoking-specific TTM-scales. Data were analyzed by means of variance-, cluster- and discriminant analysis. Results At the precontemplation stage

three qualitatively different groups regarding their motivation to quit smoking could be identified. Differences emerged for twelve variables (e.g. readiness to reduce smoking, self-efficacy and processes of change). Conclusions The results show that the motivation of precontemplators for smoking cessation is underestimated when using the TTM. This misclassification impedes appropriate interventions.

Impact of family awareness and participation in educational program on successful cessation of illicit drugs.

Khasteganan, Noushin *Forsat Clinic, Rasht, Islamic Republic of Iran*
Aim: The present study examined whether family awareness were associated with successful cessation. Methods and Materials: A sample of 388 drug addicts was investigated at a quit addict clinic in north of Iran. Data were obtained from on site confidential interviews and individual drug use history was recorded. Results: The mean age of respondents was 31.6. 99.8% were male, 67.3% married. 84.5% were treated by agonists. Successful cessation was not associated with family awareness or participation of them in educational program. Conclusion: It seems that families did not play their important role in supporting their family members to quit of drugs.

Are children's and adolescents' intuitive judgments about distributive justice linked to different school systems?: A comparative study between Germany and Italy

Kienbaum, Jutta *Faculty of Education, Free University of Bozen-Bolza, Brixen, Italy*
This study examined which principles (equity, equality, need) pupils choose when allocating a reward. Participants were 188 students from Germany (a country which tracks students into schools for high or low achievers) and 72 students from Italy (where tracking does not occur). The students, aged 9, 12 and 15 years, divided a reward between two protagonists who differed on the dimensions of need and effort. The German high achieving pupils rewarded effort much more than did their low achieving counterparts. The same age pupils from Italy resembled the high achievers in Germany. School tracking seems to make low achievers devalue effort.

The advantage of small memory capacity: Amplified correlation or simple strategy

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Michimata, Chikashi *Psychology, Sophia University, Tokyo, Japan*
People with small short-term memory capacity show better performance than people with large capacity in correlation detection tasks. Previous researches suggested two theories to explain this phenomenon: amplified correlation theory and simple strategy theory. We conducted the correlation detection task in which ϕ is .50, dividing participants into two groups based on the their immediate memory spans (8). The result supported the simple strategy theory. Males tended to avoid misses whereas females tended to avoid false alarms in the correlation detection task. This might be resulted from the sex difference of the cost for propagation.

The impact of specific attention retraining after traumatic brain injury

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Kryspin-Exner, Ilse *Inst. f. Klinische, Biolog. un, Universitaet Wien, Wien, Austria*
The impact of a computerized cognitive training addressing four attention aspects was studied in patients with TBI. While 30 patients were specifically trained in attention domains, 20 patients received a non-specific training. Results indicate

that specific training led to a better performance in three attention domains, with alertness-training additionally enhancing quantitative performance in more complex aspects. Differences in the change of daily functioning and emotional state were absent. Improvements were also observed in single case analyses and mostly remained stable for 12 weeks. Results corroborate a hierarchic organization of attention functions and the necessity of each component being trained specifically.

The relationship between mental health, trauma dose, types, profiles and IQ discrepancy indexes in adolescents: The case of African-American and Iraqi refugees

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Chiodo, Lisa *Medicine, Wayne State University, Detroit, MI, USA*
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Extreme stress and traumas can cause brain atrophy and ultimately impair hemispheric synchronization and cause significant discrepancy between major IQ indexes. To explore the effects of different traumas, on IQ discrepancies, we conducted a study on 401 adolescents African Americans and Iraqi refugees' adolescents. We used WISC IV, cumulative trauma, PTSD, APS and other measures. We used t-tests to check the significance of differences between groups. We conducted multiple regression analyses controlling for age, gender, full IQ, cultural background and other relevant variables. We conducted path analyses to check the mediation model of PTSD in these relationships. The results suggest linear and non-linear relationships between some trauma variables, e.g., sexual abuse, mental health variables and IQ discrepancies.

Types of burnout and intention to quit and continue working in nurses

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Yamada, Yukiko *Faculty of medicine, Toho University, Tokyo, Japan*
Takeuchi, Shigeki
Burnout is one of the risk factor of turnover. We investigated the relationship between types of burnout and the intention to quit and continue working in nurses who work in a university hospital. 593 nurses answered the questionnaire involving MBI-GS Japanese version and the questions of intention to quit and continue working. The result of cluster analysis showed participants could be categorized into 4 types based on their burnout score, the result of ANOVA showed that high cynicism caused the intention to quit. Therefore, the cynicism seems the most important of all subscales of burnout for the intention to quit.

BIG5, motives and human capital variables have changing explanation power over the first five years of entrepreneurial success!

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Gese-Klier, Silke *SOL, EUROPEAN BUSINESS SCHOOL, Oestrich-Winkel, Germany*
Based on a still ongoing internet survey using as independent variables the BIG5, some motives, and aspects of human capital (experiences in industry etc.) with now more than 10,000 people, for the study to be presented we selected those who were/ are self-employed (n > 800) and asked for entrepreneurial performance (dependent variables) like number of employees, sales per annum for a time span of five years from start. Beside other results it seems to be, that over a time period of 5 years different sets of variables contribute to the yearly entrepreneurial success in different ways.



Interpersonal action synchronization across the lifespan: A dyadic drumming study

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Although the ability to synchronize one's goal-directed behavior with others' is a fundamental characteristic of successful social interactions, little is known about its lifespan development. We propose that this ability develops based on changes in sensorimotor and social skills. Using a dyadic drumming paradigm, we examined age differences in interpersonal action synchronization. Participants from four age groups (5, 12, 20-30, 70-80 years) synchronized their constant-rate drumming at self-chosen frequencies in dyads with one participant from each age group. Results indicate developmental differences in interpersonal action synchronization across the lifespan as well as a relationship between synchronization accuracy and sensorimotor skills.

The influence of priming and expertise in the time course of real-world observation tasks

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We tested the hypothesis that the temporal dynamics of scanpath patterns depend heavily on previous knowledge and expertise. Eye movements were collected from four groups of participants who viewed photographs of real-world scenes during an active search task. Experts (police officers) and laymen (students) who received preparatory scene priming were faster and needed fewer fixations than controls without any priming in order to detect dangerous objects in case- and security-relevant scenarios. Moreover, postidentificatory processes were significantly shorter only for experts who received preparatory priming compared to those without priming and to both control groups. We conclude that dissociable cognitive factors in the course of information processing account for typical temporal patterns of eye movement parameters during active search.

Young people and gambling

Koic, Elvira Psychiatry, General Hospital, Virovitica, Croatia **Per-Koznjak, Jasna** Psychiatry, General Hospital, Virovitica, Croatia

The aims of study: to examine the young people's attitudes about gambling. Material and Methods: The authors examined 213 subjects from nine different groups of high school students. The questionnaire used was designed for the purpose of this investigation. Results qualitative analyses how that young people experience gambling behavior as harmful. The authors conclude that, due to the size of the problem and its consequences, the prevention of pathological gambling is very important. The prevention can be carried out primarily through screening at the school level and primary health care services, whereas secondary screening may be conducted through the system of psychiatric care.

Computer modeling of concept-nets

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This study treats computer simulations from concept-nets to the knowledge representation in the semantic memory. An investigation with a system of 2500 connected real concepts is presented. The analysis ("activation spreading") took place with our program "Datamatrix". To that an experiment (N=50) is presented to the influence by term structuring on memory stability. Two questions were examined: 1. Are the conditions of scale-freeness fulfilled. 2. Has the term structuring an influence on memory stability. Methodical analyses showed that characteristics of scale-freeness are fulfilled. Real concept-nets make a higher robustness possible by the scale-freeness in relation to disturbances.

Drug addicted patients' social problem-solving abilities and goal during rehabilitation

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The aim of the present research was to investigate differences changes in the social-problem solving abilities and goals of drug-addicted patients in different phases of rehabilitation. An experimental group of drug-addicted patients (N=35, 18-27 years of age) was compared with a control group of drug abusers (N=34, ages 18-27 years). The results indicated that the Social-Problem Solving Abilities and the Goals Scales in subscales changed significantly over the six month-period in the groups with improvement in the group undergoing therapy and no improvement or deterioration in the drug abuser group, except Rational problem solving subscale.

An investigation of the cognitive processing in multiply handicapped persons using event-related brain potentials (ERPs)

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The purpose of this study was to investigate the cognitive processes of multiply handicapped persons especially on face perception. Stimuli consist of photographs of 5 kinds of objects including human faces were presented on monitor screen. Event-related brain potentials (ERPs) were recorded from 54 multiply handicapped persons during looking at the monitor screen. Face specific P170 ERP component was analyzed in its amplitude and latency. As the results, their appearance were not so relate with the degrees of severity by traditional classification scales but rather with the responsibility in daily life.

Gender-role conflict, job characteristics and psychosocial health: The case of male employees in female-dominated occupations

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Minority status may highlight the gender category. We hypothesized gender role self-concept and gender-role conflict to be important for psychosocial health. Hierarchical regression analyses based on survey data from 180 men working in female-dominated professions showed: Gender-role conflict predicted - as expected - depression, irritation, and low job satisfaction. Masculine, but not feminine gender role self-concepts were related to better health and higher job satisfaction. Furthermore, tenure and masculine gender role self-concepts were related to lower gender-role conflict, even though participants worked in female-dominated occupations. The impact of job characteristics as additional predictors will be explained.

A motivation to confirm is not necessarily problematic

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Trying to disconfirm a belief is said to be better scientific practice than trying to confirm it. To test this, we presented college students with several pieces of information that were causally consistent with an explanation, causally inconsistent with it, or neutral. Each participant was asked to choose information either to confirm or to disconfirm the explanation. Percentages of correct choices were analyzed with generalized estimating equations. When told to confirm, participants were more likely than when told to disconfirm to choose information that was either inappropriate or neutral. The motivation to confirm did not necessarily lead to better reasoning.

How children use language to express desires? Preliminary data on a Croatian sample

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Objectives of this study were to explore the linguistic means children use to express desires in Croatian, and to investigate developmental changes in their use frequency. The study was based on data from Croatian sample of children's speech utterances collected in the CHILDES database (McWhinney, 2000; Kovacevic, 2003). A number of linguistic means used to express desires was identified, and results revealed that their use frequency systematically varied from 10 to 38 months of age. Even very young children use a variety of linguistic means for expressing desires, and the number and frequency of used linguistic means changes during development.

Attention deficit hyperactivity disorder and substance use disorder: Is attention deficit hyperactivity disorder a risk factor?

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To assess the pattern SUD in adolescents with and without history of ADHD. In this case-control study, The participants were interviewed by a child psychiatrist and the measures included: k-SADS, Opium Treatment Index and GAF. adolescents divided to two groups: with history of ADHD (n=33) and without it (n=33). ADHD Adolescents had an earlier age of starting cigarette smoking, substance use, an earlier onset of substance dependence or abuse, more severe substance use and functional impairment. Early diagnosis and treatment of ADHD could be associated with better prognosis of SUD in adolescents and economically will diminish the costs of SUD.

Emotional and neuropsychological functioning in cardiac patients before and after surgery procedures with neuromonitoring during heart operation

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NIRS is a non-invasive, similar to pulseoxymetry technique based on near infrared spectroscopy; monitoring reflects the balance between oxygen supply and demand of the forehead cortex. This study was prospectively performed on 110 operated on CPB



patients. The purposes of this study are to introduce therapy targeted on maintaining rSO₂ at the preoperative level during operation and to examine the correlation between the risk factors, mood and neuropsychological complications. Before and after operation patients were tested with psychological assessments: HADS, MMSE, ASEM and BLOCKS from WAIS-R. The results emphasize the importance of psychological support and neuropsychological rehabilitation for these patients.

Job demands and burnout: Is recovery a mediator or moderator?

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The study specifies the energetic process of the Job Demands-Resources model, according to which job demands lead to burnout, by building upon the Effort-recovery model. More specifically, we examined whether recovery accounts for (i.e., mediates) or influences (i.e., moderates) the effect of job demands on burnout among 210 nurses. Data were collected using self-administered questionnaires. Results show that recovery partially mediates the relationship between job demands and burnout. That is, high demands are directly and indirectly (via the intervening effect of recovery) related to burnout. Therefore leisure activities which allow for recovery seem to be important in the burnout process.

Increase of the adequate use of separate counseling communication skills after basic and advanced microskills training

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Research into effectiveness of counseling communication skills trainings often reports overall effect sizes only. The aim of this study was to investigate the increase of the adequate use of separate basic and advanced counseling communication skills after respectively a basic and an advanced training. Participants were 583 bachelor students in psychology who took a video test. There were four groups: (1) freshmen, without receiving training in communication skills; (2) first year students, receiving basic skills training; (3) second year students, receiving advanced skills training and (4) a control group. All seven basic skills and four advanced skills showed large effect sizes.

Line motion illusion triggered by gradient bars: An end point hypothesis

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The goal of this study was to investigate the effect of perceived end point in line motion illusion, in which illusory motion was triggered by gradient bars. The contrast between the bar and the background was manipulated. Participants were asked to report if illusory motion was perceived as well as the motion direction. Results showed that gradient bars could induce line motion illusion. The perceived direction was from the low contrast end to the high contrast end, and luminance had no impact on perceived direction. These results suggest that the perceived end point could affect observers' perception of motion direction.

Anxiety and brain functional development

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Objective: To investigate the anxiety level, emotional stability, motor asymmetry and brain functional development in orphans. Subjects and Methods: 120 healthy children (age-specific groups: 6-8; 11-12; 14-15 years old) were participants. Russian versions of Spielberger Trait-State Anxiety, Luscher Color test, Shtambok Test were used. EEG was registered monopolarly from the left and right frontal, central, parietal and occipital lobes with closed and open eyes. Spectral-coherence analysis was made by Vildavski's EEGlab. Results and conclusion: The significantly higher anxiety level and the left-handedness score in orphans compare to control group were found ($p < 0.05$). The baseline brain activity testifies to differences of the brain functional development between orphans and control groups.

See no evil, there is no evil?: Controversial ethical dilemmas and the nature of morality

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Are good acts motivated by evil thoughts virtuous? This is the type of question not investigated in traditional moral development research. This study examined how parental conditional regard (PCR) and spiritual connectedness relate to traditional and more controversial moral dilemmas. Participants ($n=100$, 18-23 years) made judgments on traditional and controversial moral dilemmas. PCR was significantly correlated with higher approval of the controversial acts. Spiritual connectedness was significantly correlated with intrinsic motivation to act morally. This study shows that internal thoughts and personal choices relate to morality and emphasize the importance of investigating individuals' conflicting beliefs regarding the nature of morality.

Knowledge of dementia and the image of elderly people

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Purpose: Knowledge about elderly people affects their image. Relationship between knowledge of dementia and the image of elderly people was examined. Method: A test consisting of 10 items about dementia was administered to university students. According to the score, participants were divided into three groups: "Low", "Average", and "High". Result: The image of healthy elderly people and that of elderly people with dementia were compared among the three groups. Both images showed differences among groups. Conclusion: Knowledge of dementia has an effect not only on the image of elderly people with dementia but also on that of healthy elderly people.

Their stories: Group counseling with ten women of substance use

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The 10 women in this study were prisoners in a jail and all of them were charged for substance use, and other charges were added for some of them. The main purpose of this 10-session group counseling is to help them review their relationship with men because some of them were battered or mistreated by their partners or husbands before. The researcher expected to let the participants realize their rights and regain their confidence and self-esteem. Narrative techniques and psychodrama will be used in this study. Self report and evaluation will be the

research method. The entire program will be finished by the end of December 2007.

Educational technology: Graduation and research

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This study focalized educational practices on the psychological graduation, considering the social community around the university. The methods used were: needs raising of the different ages inhabitants, culture and behaviour diversity, and social relationship. The project's paper offers organization data of the period of probation and academic activities, social and educational interference of the University within the community, development of interventive research, production of multidiscipline knowledge and group behaviour, variable of health raise. It was based on the humanitarian values: dignity, social compromise, respect for economic and cultural differences, ethics. It also contributed for human collective development, new parameters of research and elaboration of health politics.

Physical and psychological stressors differently affect the level of interleukin-2 in the brain

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This study detected the effects of physical and psychological stressors on the levels of interleukin-2 (IL-2) in the rat brain. A two-day session of inescapable and escapable conditioning was administered for inducing psychological and physical stressors, respectively. IL-2 level in the prefrontal cortex and hippocampus was decreased when the rats encountered physical and psychological stressors simultaneously. All the physical, psychological, and the combination of these two stressors were able to reduce the IL-2 level in the amygdala and cerebral cortex. Acute physical stress caused the reduction of IL-2 in the pituitary gland. These results showed that physical and psychological stressors differently affect the IL-2 levels in the brain.

Classroom climate, future perspective, and academic outcomes of secondary students

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Past research has provided support for the influence of perceived classroom climate on academic outcomes. More recently, some authors have studied the role of future perspective on these outcomes. The main objective of the present research was to evaluate the mediating role of future perspective on the relation between classroom climate, motivational beliefs and academic engagement. Perceptions of 352 7th and 8th grade students were collected in their classrooms. Regression analyses showed that authoritative climate bore the highest correlations with academic outcomes, followed by authoritarian, and conflictual/disorganized climates. The mediating effect of future perspective was observed with authoritarian classrooms only.



Prospective memory and job instability: Their relationship in an Argentinean employees sample

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Objectives. To study the relationship between job instability (JI) and prospective memory (PM) and to describe subject's characteristics by occupational adjustment. **Methods.** A PM task, an IL questionnaire (IMPLI) and the OSI were administered to 46 employees from Buenos Aires, Argentina. Pearson correlations among Age, IMPLI, PM and OSI were conducted. Regression analyses were performed with PM as dependent variable and the rest as independent ones. **Results.** JI and Age significantly accounted for 29% of PM variation. **Conclusions.** Results seem to support the hypothesis that workers affected by JI have less available cognitive resources for PM tasks.

The relationship among locus of control, job search self-efficacy, job search behaviors and outcomes in China

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The purpose of this study was to examine the relationship among locus of control, job search self-efficacy, job search behaviors (informal and formal sources, job search intensity, and job search effort) and outcomes (job interviews, job offers, and employment status) in China. Questionnaires were used among a sample of 287 senior students. It was found that the relationships among locus of control, job search behaviors, and job search outcomes were vague. In addition, job search self-efficacy and job interviews can predict job offers. The implications of these results are discussed on the basis of Chinese labor market.

Conditions of disjunction effect

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One experiment investigated whether disjunction effect (violation of Savage's sure-thing principle) appears in one-shot Prisoner's Dilemma (PD) games in the domain of losses, because results of the previous studies about disjunction effect were obtained mainly in the domain of gains. In our experiment, participants took part in a one-shot PD game, in which domain (loss or gain) and certainty (opponent's choice: cooperation, competition or unknown) were manipulated. Results showed that disjunction effect is more likely to appear in the domain of gains rather than in the domain of losses. Implications were discussed.

Effects of presentation modalities on imagined object location judgment

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Imagined spatial working memory formed separately by literal and pictorial presenting modalities was compared, using Franklin and Tversky's experimental pattern. The response time in pictorial maps condition was the shortest in all the experimental conditions, while the accuracy and RT were

equal between the narratives and literal maps. The results indicated that besides the shape information, pure spatial information was stored as a reference frame in the visuospatial component while only the names of the objects were stored in the verbal component of the working memory. The results are somewhat different from "What" and "Where" theory of Landau and Jackendoff.

Risky choice behavior and stimulant drug

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Present study using animal investigated the effect of amphetamine on risky choice. In a T-maze, a goal arm was designated as certain low reward (CLR) arm providing 1 pellet of chocolate for every entry, whereas the other was designated as probabilistic high reward (PHR) arm providing 2 (or 8) pellets of chocolate to obtain based on a probability of 50% (or 12.5%). After training, the rats significantly chose more for CLR than for PHR as risk increased. Amphetamine (1mg/kg) treatment significantly produced more PHR arm entries. These data indicate that stimulant drug can facilitate the risky choice behavior.

Tug of war between intimacy and autonomy in romantic relationship

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Previous research has shown that individuals with stronger intimacy goal showed more concern for their partner when conflicts emerged and also experienced greater relationship satisfaction. However, it still remains unclear how relationships change when one's desires are incompatible with partner's expectation. This study explored the relationship between the conflict resolution strategy and adjustment in romantic relationships. Moreover, East Asian Cultures value relationship harmony, this issue especially call for an indigenous approach, which may affect how individual deal with the clash. Implications in cultural interpretation of autonomy and its effect on interpersonal relationships were also discussed.

Effects of pro-inflammatory cytokines induced by lipopolysaccharide on depressive-like behavior in rats

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To examine the role of cytokines in depression, the effect of pro-inflammatory cytokines induced by lipopolysaccharide (LPS) on depressive-like behavior and the sensitization effect of pro-inflammatory cytokines on depressive-like behavior induced by chronic cold swimming stress were investigated. The behavioral observations were carried out using saccharin preference test, open field test and elevated-plus maze. Data showed that LPS i.p administration could induce significant transient depressive-like behavior; no long-term effect in behavior was found. However, the stress-induced depressive-like behaviors in rats with LPS administration could be elicited earlier and kept longer than that in rats without LPS administration.

Event-related potentials' study of uncertainty monitoring

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New experimental task paradigm was used to explore cognitive and brain mechanisms of uncertainty monitoring. Perception group and monitoring group performed severally comparison task of black-white diamonds. The results were as follows: the reaction time of monitoring group was longer than that of perception group, and amplitude of N2 (160ms-220ms) in anterior brain area and P2 (170ms-230ms) in posterior brain area of monitoring group were larger than those of perception group, and components of ERP of monitoring group were more negative than that of perception group in anterior brain area (340ms-440ms and 440ms-540ms).

The coherence of moral thinking from developmental perspective

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The purpose of present research is to investigate whether the global coherence of moral thinking is increased by age. The author utilized four moral situations to evaluate the subjects' responses to two contradictory arguments concerning behavior. The correlation of the two responses indicated the degree of coherence. Since the material should be developed differently for younger children and older subject, the author designed two studies to study two age groups; Study 1 for elementary school children, Study 2 for older subjects. Taking study 1 and study 2 into account, coherence of moral thinking is increased by age which support the implication by Piaget and Kohlberg's theoretical hypothesis.

Am I your friend depends on how I interpret secret sharing priority

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Previous researches have shown that secret sharing helps individuals feel more intimate with friends. However, the previous result could be affected by the priority of secret sharing. This study explored the association between the friendship quality and the way individuals interpreted the priority of secret sharing. 41 participants completed a questionnaire which aimed at assessing their feelings, thoughts and friendship when they found they were not told the secret first. Results showed that individuals who viewed the priority as an index of the intimacy or importance of friends reported stronger negative impacts on friendships. Implications of interpersonal interactions were discussed.

Can anti-stigma campaigns be improved? A test of the impact of biogenetic versus psycho-social causal explanations on attitudes to schizophrenia

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Existing anti-stigma campaigns emphasize the medical view of schizophrenia. This study compares the impact of biogenetic and psychosocial educa-

tional interventions on stigma in medical and psychology students ($n=121$). Information was presented via information brochures and video case presentation. Explicit and implicit attitudes were assessed before and after interventions. Both interventions produced a significant decrease in stereotypes, compared to a neutral condition. The biogenetic intervention decreased the attribution of blame, unpredictability and social distance but increased negative outlook on prognosis. The psychosocial intervention reduced the stereotype of dangerousness and social distance. The proposal for anti-stigma-campaigns is to take a multidimensional approach.

System and personality: Ontopsychological aspects in the education of leaders

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The leader, intended as a person who carries the responsibility for the organisation of a social sector, needs not only technical, fiscal, administrative, marketing and management skills, but also instruments to verify if her/his choices are free from forms of individual stereotypes. The authors will explain the methodological aspects of the training of the leader to increase the knowledge of the real dynamics of relationship here and now, as well as the overcoming of the non functional interpretative styles of reality. Results in entrepreneurial, political and socio-educational field will be discussed.

A longitudinal study on the relationship between children's activity and parenting

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The purpose of this research is to explore the relationship between children's activity and parenting style by the longitudinal study. 101 children were studied by questionnaire, observation, and laboratory experiment. The results showed that: 1. there existed a certain stability on children's activities; 2. there was stable gender differences in Children's activity. 3. It was transformative between parenting and development of children's activity. Doting and activity which was still significantly positive correlation; and the permissive parents of children with different activity had stabilized.

Memory-based preattentive processing in visual mismatch negativity

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Objectives: To investigate whether visual mismatch negativity could be evoked by different light wavelengths. Methods: We designed an oddball task, and electroencephalograms were recorded, and visual MMN and attention specific N2-P3 complex waveforms were evoked and distinguished. Results: It is indicated that visual MMN was an occipital generation component with 270-310 ms peak latency, and N2b and P3a were in 310-400 ms and 400-600 ms range, respectively. All the VMMN, N2b and P3a components were affected by the amount of deviation between the infrequent stimuli and frequent stimuli. Conclusions: The study further proved that VMMN existed under preattentive condition.

Interactions between working memory and selective attention

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Event-related potential (ERP) was used to examine the interactions between working memory and selective attention. The ERP results revealed that both congruent and incongruent stimuli in the selective attention task evoked an N400 component. The N400 evoked by incongruent stimuli was more negative than that of congruent, which indicated the difference of semantic N400. Furthermore, working memory load had a significant influence on the N400 evoked by selective attention task in parietal region. And working memory load showed difference in the ERPs of working memory retrieval in central and parietal regions.

Emotional intelligence and academic performance: An overview

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Our society has spread the values of productivity in educational context, and therefore, there is now a great interest in the field of Emotional Intelligence (EI). Recent studies have been conducted to explore the relationship between EI and academic performance. Results are inconsistent due to the lack of consensus on the definition, construct and methodology. This work deepens this relationship as well as the need to further investigate the mechanisms through which the skills and emotional skills affect performance. Behavioural problems reflect the growing need to implement psychosocial programs to develop skills needed to cope with the emotional demands. Finally, we propose objectives and benefits that provide such programs and action to come

The use of Freudian concept of ritual in research of drug addiction in present-day Czech society

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Abuse of psychoactive drugs is often motivated by an internal/external conflict, feelings of failure and frustration and seeking for well-being restoration. Suppressed and tabooed desires and ambitions inducing inner psychological conflict can be calmed down by therapeutic effect of ritual (Freud, 1997; Turner, 1957). From this view we can approach abuse of marijuana and alcohol, which provide quick leaving of everyday social problems and frustrations. The present study aims to show how this ritual concept approach can help us to understand motivation for drug abuse and frustration coping among young Czech addicts.

Virtual reality, computer helmet: A new coil by Vigotsky in development of human image thinking

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According to Vigotsky's theory of filogenesis, ontogenesis thinking by images was supplemented with thinking by signs. Genesis of human skull volume limited further growth of cerebral cortex. Biological development was becoming impossible. While using the virtual reality helmet person get a possibility to think in computer 3D images. Thinking in images reaches a new third coil. Conclusions: in anticipation of a child's acquisition become the way to think relying on virtual reality. Prediction of image and verbal pathology phenomena is also possible. Human practical activity is going to lose its significance. Share of scholastic processes is going to become larger.

Traffic sign perception: Holistic and analytic strategies

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The aim of the present experiment is to generalize the hypothesis of global precedence to daily perceptive situations: vertical signalling perception -two traffic signs-. Participated 50 subject (24 men and 26 women), with aged between 19 and 25 years. All the statistics tests were used alpha 0.05, ANOVA for reaction time and regression logistics for accuracy. The results indicated interaction between the factors "Figure of the vertical sign" x "Element of the vertical sign" x "Colour of the vertical sign", in both dependent variables, which suggests the holistic and analytic strategies utilization in the traffic signs recognition.

Work in the Chinese restaurants: A qualitative research

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Before the globalization of McDonald, Chinese restaurants are already well-known in the world. In our research, we interviewed the workers of 3 Chinese restaurants. We found firstly, through the blood and family, they made the relationship between their personal needs and the objectives of organization; secondly, instead of specialization or formalization of works, they always spent their time to share their experience and knowledge to each other; and thirdly, in the restaurants, they tried to substitute customized and varied products for speed, because they hoped their customers could eat delicious and health food.

Interactions between spatial working memory and delayed interval interference task

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By event-related potential, we investigated interaction between spatial working memory and delayed interval interference task. Results were as follows: (1) P1 and N1 amplitudes in interference task in occipital lobe were larger in the congruent condition than in the incongruent condition. Compared to occipital lobe, the P1 and N1 amplitudes of both conditions in parietal lobe showed different trend. (2) P1 and N1 amplitudes in occipital lobe were larger in positive memory probe trials than in negative memory probe trials. Compared to occipital lobe, the P1 and N1 amplitudes of both memory probe conditions in parietal lobe showed different trend.

The effect of emotional contents on belief bias in category syllogism reasoning

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This study investigated the belief-bias effect in syllogistic reasoning contained emotional and neutral materials, and explored the cause of belief-bias effect in reasoning about emotional syllogisms. The syllogistic evaluation task and the children's gambling task were used with 163 children to test reasoning ability and executive function. The results indicated that children showed weaker belief bias in emotional condition than in neutral condition. Children with better executive function had stronger ability to overcome the belief bias in emotional



condition. The results suggested that belief-bias effect was existed in emotion reasoning, and might be caused by deficiency of inhibitory ability.

The compiling of faking detection scale in occupational selection situations

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The use of personality test becomes more and more popular in Chinese Occupational Selection Situations. However, its validity is challenged due to fake answers. The most commonly used method dealing with faking is to employ social desirability scale measure faking for controlling exaggerated scores or detecting faking candidates. However, SD Scale is unfit for measuring faking. Based on the special character of faking, this research developed "Faking Detection Scale". The scale is effective to identify faking candidates. However, there is a dilemma as to the setting of the cut-off score. Setting up higher cut-off score is suggested.

Executive cognitive functioning and reward sensitivity in relation to alcohol consumption by university undergraduates

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Undergraduates were administered the Alcohol Use Disorders Identification Test (AUDIT), Frontal Systems Behavior Scale (FrSBe), Sensitivity to Punishment and Reward Questionnaire (SPSRQ) and Wisconsin Card Sorting Test (WCST). AUDIT scores were correlated with total FrSBe scores and Disinhibition subscale. SPSRQ Reward Sensitivity scores were negatively correlated with age at onset of regular drinking. High risk drinkers had higher FrSBe, Disinhibition, Executive Dysfunction, and Reward scores than low risk drinkers, and made more WCST failures to maintain set. Findings show associations between indices of prefrontal cortex dysfunction and alcohol consumption, suggestive of traits that predispose to heavy drinking.

Cognitive-behavioral group-therapy for smoking cessation

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Aim of the study was to evaluate the efficacy and acceptance of a group-based behavioural-therapy for smoking cessation. A sample of 95 female and male smokers with different degrees of tobacco-addiction measured with DSM-IV and the "Fagerström-Test for Nicotine-Dependence", was repeatedly assessed for post-treatment smoking status and relapse during a period of 6 months. Using a One-Group-Design the participants smoking status was obtained by self reports. An intent-to-treat approach showed an abstinence rate of 72.6% at the end of the intervention decreasing to 35.7% after 6 month, indicating that this programme performs well compared to already existing ones.

AktivA: A social-cognitive group program to improve health for long-term unemployed

Mühlpfordt, Susann Arbeits- und Org.-Psychologie, Technische Universität Dresden, Dresden, Germany **Rothländer, Katrin** Arbeits- und Organisationspsychologie, Technische Universität Dresden, Dresden, Germany In a follow-up to a study from 2007 we tested whether a socio-cognitive training program, aiming to assist long-term unemployed persons, leads to a reduction in health complaints and an improvement in social-support, self-efficacy, and personal initiative. The program, 24 hours long, provides training in planning balanced activities, cognitive restructuring, social competence, and problem solving. A sample of 200 long-term unemployed persons

responded to a questionnaire at three different points of measurement: before, immediately after, and three month following the training. A pilot-study showed significant positive effects for the treatment-group –but not for the control-group.

Recognition memory in Parkinsons disease without dementia: Research implications

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Recent findings suggest that Parkinsons disease (PD) patients exhibit deficits in recognition memory. Thirty nondemented patients and thirty controls were evaluated with the California Verbal Learning Test (Spanish version). The groups did not differ in recognition memory scores and they did not show any relationship between recognition and disease severity. However, PD group performed significantly worse than controls on false positive errors and discriminability. Both measures were predicted by processing speed and verbal fluency. These results revealed that we will find recognition memory impairment depending on the performance of the clinical sample in processing speed and executive function measures.

Do what you want or do what fits best?: Job and academic outcomes related to congruence with overt vocational preferences versus covert RIASEC interests

Marcus, Bernd Inst. für Psychologie (I/O), Fern Universität Hagen, Hagen, Germany **Wagner, Uwe** Psychology, Chemnitz U of Technology, Chemnitz, Germany **Kitunen, Michelle Rae** Psychology, University of Western Ontario, London, ON, Canada Two studies related Holland's (1997) RIASEC vocational interests and conscious vocational preferences with job and academic outcomes (e.g., job performance, counterproductive behavior, job satisfaction, grades). In study 1 (272 German job apprentices), congruence with overt preference accounted for incremental variance beyond RIASEC congruence in five out of six criteria, whereas subjective and objective RIASEC congruence each were incrementally valid for only one criterion. Study 2, using a predictive design, largely replicated these findings in an academic setting in Canada (N = 81). These results point to the previously overlooked relevance of conscious vocational preferences for career counseling and applicant selection.

Evaluation of a self-instructional manual to teach instructors to conduct discrete-trials teaching to children with autism

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Early intensive behavioral intervention based on Applied Behavior Analysis (ABA) is the most effective treatment for children with autism. An essential component of ABA programs is Discrete-Trials Teaching (DTT). In Experiment 1 we developed and field tested a self-instructional manual for DTT with university students teaching confederates role-playing children with autism. Based on Experiment 1, we revised the manual, and replicated the study, and assessed generalization of DTT to a child with autism. Results indicate that the changes in the manual resulted in marked improvement in participants' post-manual DTT performance from Experiment 1 to Experiment

2, with good inter-observer agreement, treatment integrity, and social validity results.

Investigation of behavioral inhibition in association with maternal psychopathology and self regulation in toddlers

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Objectives: The aim is an assessment of the temperamental factor Behavioral Inhibition (BI) and the investigation of associations to early regulation disorders. Additionally, maternal factors, which may have an impact on the children's temperament, are examined. **Methods:** Based on the behavior observation paradigm of Kagan & Snidman (1991), the temperament is assessed in 30 toddlers. An interview with the mothers is used to clarify potential associations with maternal factors (e.g., maternal psychopathology during pregnancy, maternal BI) and early regulation disorders (e.g., excessive crying, sleep disorders, feeding disorders). **Results:** Results and implications for diagnostics and early preventative interventions will be presented.

Confirmation bias revisited: Prior belief influences the evaluation of research findings and explanations (whether explanations are present or not)

Masnick, Amy Psychology, Hofstra University, Hempstead, USA **Zimmerman, Corinne** Psychology, Illinois State University, Normal, USA

We examined two factors that could influence evaluation of research findings: having one's belief confirmed or disconfirmed by evidence, and presence/absence of an explanation for the findings. Participants (n=273) expressed a belief about a study's outcome before reading a research report. When belief was confirmed, the study's methodology was subsequently evaluated more positively, and findings were rated as more obvious, credible, interesting and important ($p's < .05$). Interestingly, when belief was confirmed, evaluations of the explanation's adequacy were higher, regardless of whether an explanation was actually present. Prior belief strongly influences the process of evaluating research findings (and explanations).

Attitudes of Italians toward African immigrants: Ingroup favoritism and acculturation process

Matera, Camilla Psychology, University of Florence, Firenze, Italy **Stefanile, Cristina** Psychology, University of Florence, Firenze, Italy

Intergroup bias, defined as the systematic tendency to evaluate the in-group more favorably than the out-group, was studied in reference to the acculturation process in Italy. Host community members (N=180) completed a questionnaire in which their attitude toward African immigrants was assessed, together with other variables. Hierarchical multiple regression showed the success of national identity, feeling of security as an Italian and acculturation attitude predicting in-group favoritism. This was confirmed for each of the acculturation attitudes considered (integration, integration with transformation, assimilation, exclusion, segregation and individualism). The study provides useful indications for intergroup bias reduction in inter-ethnic contexts.

Researching peer bullying in Brazilian basic schools

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The present poster describe a methodology of researching manifestations of violence among school peers in the first part of basic education, in

the Brazilian context. The peer bullying is defined as a kind of violence at school that has been analysed both as a consequence of a set of inadequate school practices, and as one of the aspects that characterizes the contemporary society, particularly, a socialization marked by aggressions and petty crimes. We analysed how the ethnography approach is basis to design a questionnaire using a set of images of different peer bullying scenes and objective questions directed to children.

Disabled students' experiences of higher education in Japan

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This study examined how disabled students experience higher education in Japan. Recent statistics showed they had a greater presence in higher education. But it is still unclear how they experienced these provisions, especially from their own perspectives. Hence, we conducted interviews to five disabled students in Osaka University. Interview data were analyzed by KJ method (Kawakita, 1967), in consultation with interviewees. Then, we extracted three categories from interview data; identity, education and equal opportunity. Consequently, we indicated that disabled students were forced to narrate the barriers by individualized and medical terms within the context of education that sights on individual students, though those barriers were structural in nature.

Development of a job-hunting anxiety scale for college students

Matsuda, Yuko Comprehensive Human Sciences, Tsukuba University, Tsukuba, Japan

The purpose of the study was to construct a scale to assess the job-hunting anxiety and to examine the relation between job-hunting anxiety and indicators of concurrent validity such as "a lack of information and confidence," and state anxiety. Questionnaires were completed by 288 Japanese college students who have started job-hunting. Explorative factor analysis extracted five factors such as "appeal anxiety," "a lack of readiness anxiety," "test anxiety," "activity persistence anxiety," and "support anxiety". Correlational analysis confirmed sufficient concurrent validity. These results suggested that job-hunting anxiety may be controlled by providing information about job and self.

Conceptual versus perceptual influences in picture detection

Matsukawa, Junko Dep. of Psychology, Kanazawa University, Kanazawa, Japan

Participants detected a target from picture stimuli containing natural or artificial common objects. The target and the other stimuli were from the same category, either natural or artificial, in the congruent condition, and were from the different category in the incongruent condition. The shape of the target was similar to or different from those of other stimuli on both conditions. The results showed that targets were detected more quickly in the incongruent than the congruent condition and were detected more quickly in the different-shape than the similar-shape condition, indicating the interference effects of semantic and perceptual contexts in picture detection.

The international communication of Japanese and Chinese in a 3D online virtual space: The effects of conversation topics and avatar costumes

Matsuo, Yumi Kashiwa, Japan **Sakamoto, Akira** Letters and Education, Ochanomizu University, Tokyo, Japan In this study, Japanese students communicated with Chinese confederates at "Second Life". And they talked about personal topics or cultural topics while their avatar (i.e., a vicarious agent) wore native

dress or daily cloths. Their feelings toward the partner such as trust and their attitudes toward Chinese people were measured. Results revealed that participants who talked about personal topics more greatly trusted their partner when they wore native dress than daily cloths. No such effect was indicated when they talked about cultural topics. In addition, the results also indicated that Japanese attitudes toward Chinese were improved after experiencing that communication.

Communication as an important factor for the establishment of fairness in small groups

May, Mareike Osnabrück, Germany

Which conditions are necessary for the establishment of fairness in a small group? To answer this question 120 participants took part in a social exchange experiment. Each group consisted of three players communicating by means of a computer network. The communication groups exchanged both money and messages. In the control groups only money could be transferred. After the experiment all participants received the amount of money earned by their group members during the session. The results show no significant differences in the outcomes of the communication groups because of the establishment of fairness strategies.

Pathological buying: An internet survey in a German sample

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Objective: Assessment of pathological buying and related syndromes including the validation of pathological buying questionnaires. Method: Internet survey with German versions of compulsive buying questionnaires (e.g., Compulsive Buying Scale, Compulsive Acquisition Scale), depression, anxiety, impulsivity, and obsessive-compulsive symptom measures as well as DSM-IV-based screenings for differential diagnoses. Results: Data of more than 500 participants (80% female, age: $M = 26.6$) have been collected. Data collection is still in progress. Conclusion: The results will contribute to the understanding of pathological buying and its relation to co-occurring syndromes.

Lightness estimation in real 3D scene

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We investigated the role of perceived illumination (PI) in lightness (L) estimation in real 3D scene. According to albedo hypothesis PI and L are coupled and their correlation depends on a perceived slant of a surface. Twelve observers viewed pictures attached to a surface perceived as convex or concave depending on conditions of viewing: through the pseudoscope or without it. Lightness illusions (LI) were used as pictures. Observers matched patches from pictures and Muncell neutral scale in lightness. The expression of LI (ELI) was measured for both conditions. Changes in ELI could be explained in accordance with albedo hypothesis.

Object substitution masking affects the visibility of equiluminant coloured stimuli

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In object substitution masking (OSM) a target becomes inaccessible to consciousness when a

lateral mask stays on the screen after it disappears. Similarity between target and distractors along certain properties, seems to affect this effect. Particularly, the role of inhomogeneous colours between target and distractors in modulating OSM is debated. This study was aimed to evaluate the magnitude of OSM on isoluminant stimuli in both colour and letter identification. Results show high individual variability on target detectability and the same amount of OSM on both color and letter identification tasks, suggesting that it affects feature binding as much as feature detection.

A dynamic 4-dot mask: The size of masking on coloured stimuli

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The visibility of a target is reduced when a lateral mask remains on the display after the target disappears. This effect seems to be independent of the image-level characteristics of the stimulus. This study would verify the efficacy of a 4-dot masking, in which an apparent motion illusion is added on coloured stimuli otherwise difficult to mask. Both localization and colour identification tasks are assessed, in both masked and unmasked conditions. Results show the efficacy of this dynamic masking on coloured stimuli, and seem to confirm the independence of 4-dot masking from the visual characteristics of stimuli.

Understanding motivational predictors in severely obese people

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In accordance with Self-Determination Theory and Regulatory Focus Theory, this study provides a comprehensive relationship between motivational regulations (autonomous and controlled), perceived competence and motivational focus (promotion and prevention). Participants were 30 severely obese individuals who enrolled in a weight loss program at a community hospital. SPSS analyses revealed that controlled motivation was associated with promotion focus, while prevention focus was correlated with greater feelings about behaving in healthy way. Furthermore, body mass index revealed negative association with autonomous motivation. Results indicate that two different theories can provide researchers new tools to better understand motivated behavior in obese people.

Psychological education in Russia: Student's ideas (knowledge, responsibilities) about future profession correspond with reality

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The purpose: understand differences between system of psychological education and needs of practice in Russia. Psychological education does not meet needs of practice. A method: the questionnaire Job analysis of psychologists. Sample: professional psychologists (241), students (91). The statistical analysis data was compared by criterion Mann-Whitney U. Significant differences on frequency of occurrence of responsibilities are revealed on 19 responsibilities. As a whole in representations of students the most rare responsibilities (supervision colleagues etc) meet more often, than at experts. The insignificant quantities of differences on content areas are revealed in all areas, except for area - Ethical problems.



A study of validating creative climate questionnaire

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A study is to develop CCQ (Creative Climate Questionnaire) which is valid and reliable as a norm of evaluating the elementary school classroom environment and to examine the relationship among creative thinking, personality and motivation. It included 266 elementary 6th grade students by conducting CCQ through exploratory factor analysis and reliability analysis. It shows that the CCQ was a valid and reliable Questionnaire. The names of CCQ's sub-factors are Support, Trust, Tension, Playfulness, Conflict, Challenge and Communication. And there were significant correlations among creative thinking, personality and motivation. Especially, creative motivation was influenced more by the environment.

Oscillatory-field computer modeling of perception and consciousness

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The proposed model of perception and consciousness is programmed as the system of auto-oscillatory elements cooperating through the uniform field. They are able to play different information-processing functions (sensory, memory, motor) and to self-organize dynamical relations through the field, creating classical cycles of informational synthesis of the sensory and memory content. Analogical experiments on model and man reveal analogies in reflecting stimuli: specific role of subliminal perception; stochastic misrecognizing; stochastic normal distribution of the response time; interferential, stroboscopic effects, priming effect and other features of perception. The conclusion is that the model reflects specific laws and mechanisms of human perception.

Stress and coping among Malaysian university students

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The study explored common stressors facing multicultural Malaysian university students ($N = 380$, mean age = 21.63) and their coping strategies. The most common coping strategies were direct problem solving, avoidance, cognitive shift, social problem solving, and social support. Coping strategy affected coping outcome and was predicted by stressor, race, general self-efficacy, and religiosity but not by sex and optimism. Religious coping was frequently used; it was predicted by religiosity and general self-efficacy but not by stressor, sex, race and optimism. Based on these findings, a stress-and-coping model was built. Cultural contexts for Malaysian students facing stress were examined.

Impact of age of onset of cigarette smoking on heavy drug use.

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Objective: the study presents data about age of onset of cigarette smoking and its association with later heavy drug use. Methods: A diverse sample of 388 drug addicts was investigated at a quit addict clinic in north of Iran. Data were obtained from on site confidential interviews. A Results: Opium and cannabis were used more than other drugs, respectively 51.3 and 31.7 percent. 67.5% patients were on methadone maintenance. Heavy use of substances is associated with use of cigarettes before 18 (OR = 1.6, CI: 1.3 – 1.9). Conclusion: Early onset of cigarette smoking users shows increasing probabilities of heavy drug use patterns.

Emotional intelligence and social-emotional learning program in schools

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Nowadays emotional intelligence has basic role in human interactions is effective in activities related to home, school, employment and other situations. Therefore it is not surprising if we claim that schools can take into account as centres for fostering of emotional intelligence schools are first social places that can reform shortages of children in emotions and social interactions. Therefore schools are face challenges to educate and reform emotional skills of children. This challenges can disappear replacement and eliminating existing ambiguities concerning emotions through administering education standardized programs that cause to foster and evolution emotional skills and their correct application. In this article will be stated emotional intelligence and social-emotional learning program educational applications.

The paradigm of preattention: A new method to study the effects of preattentional processing of grouped patterns on selective attention

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Our aim was to study the effect of preattentional grouping on selective attention by means of a new task called Paradigm of Preattention. This task is composed of two sequential stages: (1) preexposure of grouped patterns concurrent with a demanding rapid visual series presentation, and, (2) an identification or visual search tasks involving the grouped patterns. The results showed that preattentional grouping can enhance or interfere subsequent attentional task depending on the preexposure duration of grouped patterns. Grouped patterns can be processed without attention and influence selective attention as a function of the temporal course of preattentional processes.

A differential approach to prejudice and the religious beliefs and practices of Islam and Christianity

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The objectives of this research were: validate prejudice scales in the Spanish context, analyze the correlations between different measures of prejudice, and know the relationships between the religious beliefs and practices and the prejudice toward people of a different religion. We have analyzed two samples both Muslim ($N=210$) and Christian ($N=244$) samples. The variables analyzed: beliefs, anti-immigrants and pro-immigrants judgments, emotions, discrimination, favorability, linking, internal and external motivation to respond without prejudice. Our results show that there isn't a high level of prejudice in these groups. The study suggests that there is a correlation between Islam and some measures of prejudice.

Values system and ethical position as determinants of prosocial behaviour

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The main objective of this paper was to evaluate the influence of the Values System and Ethical Positions (absolutism and relativism) on Prosocial Behaviour. The participants were 700 young adults ranging in age from 18 to 30 years old, from both sexes. It was administered the following tests: Values Survey (Rokeach), Ethical Positions Ques-

tionnaire (Forsyth) and Prosocial Behaviour Scale (Caprara et al.). It was determined by regression analyses the values and ethical positions that influence positively and negatively, or not, on prosocialness, helpfulness, sharing, consoling, supportiveness, and cooperativeness. Besides, the values profile of relativistic and absolutists young adults were compared.

No category-specificity in Alzheimer's disease: An exaggerated normal aging effect

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Objective: Does Alzheimer's disease (AD) differentially affect semantic domains? The great variability across studies has been attributed to a failure to control for intrinsic variables and the issue of ceiling effects in control data. Methods: We examined category effects on tasks of picture naming, naming to definition and word-picture matching in 38 AD patients and 30 healthy controls. Results: AD patients showed a profound semantic impairment on all three semantic tasks, but we did not observe any evidence of a category-specific effect. Conclusions: Our results suggest that the category effect is not influenced by intrinsic variables, but is largely an exaggeration of the normal healthy elderly semantic processing.

Longitudinal patterns of semantic fluency impairment in dementia: A role for "nuisance variables"

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Objective: A strongly debated subject in Cognitive Neuropsychology arena is the possible occurrence of domain-specific semantic impairments in Alzheimer disease (AD) patients. Methods: We present longitudinal fluency data in 9 AD patients and 9 healthy controls evaluated in 14 semantic categories. Results: As expected, AD patients showed a profound semantic fluency impairment that gradually increased. We found no evidence of a domain effect (living-nonliving), but intrinsic variables (i.e. name agreement, familiarity) did affect fluency. Conclusions: Our results suggest an important role for intrinsic variables in contrast with the role of the semantic domain (living-nonliving).

Change of fixation point during Gestalt collapse of Chinese character

Mori, Terunori Engineering Dept., Tamagawa University, Machida, Japan

The eye movement during Gestalt collapse was measured in order to investigate the relation between the fixation point and the object recognition. The time when the Gestalt collapse happened, the first saccade time after stimulus presentation and the fixation point are measured. Result shows that the fixation point moved from the center of Chinese character to the center of a part consisting the character at 8.4 ± 2.8 sec before subject becomes aware the Gestalt collapse. The result seems to support the hypothesis that subject recognizes the object putting the fixation point on the center of selected object area.



Conformity among cowitnesses sharing same or different information about an event in experimental collaborative eyewitness testimony

Mori, Hideko Dept. of Nursery, Bunka Womens University, Nagano, Japan **Mori, Kazuo** Inst. of Symbiotec Science, Tokyo University, Tokyo, Japan Using the MORI technique (Mori, 2003), in which two different movies presented on the same screen are viewed separately by two groups without them noticing the duality, two experiments were carried out with a total of 138 undergraduates in groups of varying sizes to examine the effects of co-witnesses with the same or different information on witnesses' memory distortion. Experiment 1 investigated the co-witness effects in a one-versus-two situation, while Experiment 2 investigated the effects in a two-versus-two situation. Results showed that isolated eyewitnesses who had no supporting co-witnesses changed their minds more frequently in accordance with the majority, and when they had a co-witness who shared the same information, they tended to stick to their original reports even after being confronted with conflicting information in a discussion.

The relationship between stress and intervening variables for Japanese workers

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This study was undertaken to explore the problems of stress on Japanese Workers. We have strain as a dependent variable and Stressor as a independent variable, and have intervening variable that enter into relation between both variables. What relationship are found in their coping behavior, social support from leader or co-worker an intervening variables? Coping behavior is 3 types, active, passive, emotional coping type. Social support is 2 types, emotional and instrumental type. S's are office holders and company's workers.

Examination of relationship among negative rumination, interpersonal stress-coping, and depression in undergraduates, using a month longitudinal data

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The purpose of the study was to examine relationship among negative rumination, interpersonal stress-coping, and depression, using a month longitudinal data. 162 undergraduates completed negative rumination scale and Interpersonal Stress-Coping Inventory (ISI). ISI includes positive relationship-oriented strategies (PRS), negative relationship-oriented strategies (NRS), and postponed-solution coping (PSC). A month later, Self-Rating Depression Scale (SDS) was assessed. Path analyses indicated that negative rumination increases PRS and NRS, while negative rumination decreases PSC. They also indicated that PRS and NRS increases depression, while PSC decreases SDS. The findings suggest that interpersonal stress-coping have effects on depression and that interpersonal stress-coping mediates the relationship between negative rumination and depression.

Is spirituality always transcendent as is defined in psychology?

Muñoz-García, Antonio Educ. and Developm. Psychology, University of Granada, Granada, Spain Articles, edited and authored-book, and conferences about Spirituality have increased in last years as a element with specifics characteristics separated from religion although previously was included in literature about religion and Psychology. Recent literature show that spirituality has also different and more extended meanings than religion (eg. McDonald, 2004; Paloutzian y Park, 2005). On the other hand, some of those meanings particularly, could not have the sense of transcendence or could have a limited transcendence in a traditional sense. We analyze how transcendence is present in

traditional spirituality (religious) and definitions and dimensions of modern spirituality, and how this transcendence could not be the same in traditional and modern perspectives of spirituality.

Minority influence: The role of ambivalence toward the source

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This study aimed at providing empirical support for the theoretical assumption, advanced by the Conversion Theory (Moscovici, 1980), that minorities may indirectly influence group members by fostering ambivalent reactions toward themselves. Participants were exposed to a counter-attitudinal message advocated by a fictitious minority group. We focussed on two possible antecedents of ambivalence, consistency of the minority and personal relevance of the topic for participants. We found that ambivalence mediates the effects of the two factors on indirect influence. This study provides evidence of the importance of ambivalence in minority influence, an early assumption that still lacked in empirical support.

What is the most real for you? Predominant ontological orientations at different life stages

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According to the concept of ontological orientations, different people treat different things as the most real, and therefore most important. Presumably, things absorbing mostly our daily attention become a central elements of our subjective realities. Six orientations were distinguished: theoretical, economical, esthetical, social, political, and religious. To explore how they evolve along a lifespan, 1590 subjects (both gender), age 16-85, were administered RN-2002 method. They chose the most real "objects" in 58 different concept's sets. Results: in the youngest group (16-23) prevails social orientation, in the "intermediate age" (24-59) - economic, in the advanced age (60-85) - religious...

The effect of online conducted team building procedures on initial cohesion and performance of virtual teams

Muellner, Herbert confidere.at, Matzen, Austria

The aim of the study was to investigate the effect of team building procedures of exclusively online conducted kick off meetings on cohesion and group performance of virtual teams. Sixty-six ad-hoc three member groups of unacquainted and spatial separated students were randomly assigned to one of 4 experimental online conducted team building conditions. After attending the initial meeting, the groups had to accomplish a disjunctive group task via chat during a session of 25 minutes. The hierarchical analysis of variance revealed that the degree of cohesion depends on the extent the members became acquainted by virtual communication but teams with a medium degree of cohesion achieved the best group performance.

Converting of occupational stress to eustress:

Role of official hierarchy

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Occupational-stress (O.S) is perceived as threatening to the person's well-being and predictably reduces quality of work. There is also a positive side of stress, called eustress that refers to the healthy, positive, constructive outcome of stressful events and the stress response. Official hierarchy is found to play an integral role in perceptual overhauling of stress into favorable outcomes. On a sample of 400 executives from steel plants, 3x3 ANOVA was found between the variables. Findings show that

O.S does affect work-involvement in an inverse manner, but top-management significantly showcased positive outcomes of stress, ($F=3.59, p<.01$) confirming cognitive conversion of O.S to eustress.

Secondary exposure to trauma and self reported distress among young people orphaned by AIDS

Mumah, Solomon Psychology, Kenyatta University, Nairobi, Kenya **Muga, Richard** Community Medicine, Great Lakes University, Nairobi, Kenya

The research questions were: to what extent do AIDS orphans exhibit symptoms consistent with secondary traumatic stress; and to what extent are those symptoms explained by exposure to parents' trauma, personal history of trauma, and/or gender? Respondents were orphans aged 10-18, all of whom had been involved as caregivers. Using survey research design, 86% male and 81% females were found to be experiencing emotional distress consistent with STS. Caregiver role exposure and work-related personal traumas were strongly associated with presence of STS. Evidence suggests that levels of exposure on a short-term basis may contribute more to the development of STS.

Secondary traumatic stress: The effects of orphanhood on mind, body, and soul

Mumah, Solomon Psychology, Kenyatta University, Nairobi, Kenya **Muga, Richard** Community Medicine, Great Lakes University of Kisumu, Nairobi, Kenya

The study objective was to assess the prevalence and severity of secondary traumatic stress symptoms among a sample of young people orphaned by AIDS. Up to 86% male and 81% female respondents were found to be experiencing levels of emotional distress consistent with STS. Only 18% of the respondents enjoyed good quality of life, while levels of caregiver role related traumas were strongly associated with presence of those symptoms. To promote our understanding and potential to help orphans, we need further information about the process of how some orphans develop these symptoms, while others appear not to be in distress.

Children with disruptive behavior problems: Differences between subgroups on continuous performance test measures

Munkvold, Linda Faculty of Psychology, University of Bergen, Bergen, Norway **Manger, Terje**

Measures of executive function deficits, particularly response disinhibition, have been the main focus of the laboratory-based assessment inquiry into of AD/HD and oppositional defiant disorder/conduct disorder (ODD/CD). The continuous performance test (CPT) is a widely used instrument for this purpose, but its utility for distinguishing between sub-groups of children with disruptive behaviour problems is still unclear. The objective of this study is to compare ODD/CD-children with and without comorbid AD/HD on specific CPT-measures in a sample of 328 children (9-12 yrs old) derived from the population-based, longitudinal "Bergen Child Study" in Norway.

Luck resource belief in Asia

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Our research indicates that Luck Resource Belief (Murakami, 2004), which is the tendency to perceive luck as like resources, is believed popular in Japan. In order to survey Luck Resource Belief is unique to Japan, investigation was conducted in several Asian countries by interview method. As a result, the factor of society which people are whether or not able to grasp success with effort such as more social class have influence on aspects of "luck" than religion factor.



Nationalism, patriotism and national stereotypes in Japan

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This study examined how patriotism and nationalism shaped national stereotypes. Patriotism represents feelings of attachment to one's country but nationalism includes feelings of superiority over others. A model of stereotype content demonstrated that we perceived stereotyped groups on warmth and competence dimensions, based on structural relations between the groups. Japanese undergraduates rated 15 national peoples on bipolar scales and responded to a measure of patriotism and nationalism. Multiple regression analyses showed that in general patriotism related to the warmth positively, but nationalism predicted the competence negatively. We discussed these effects in terms of ingroup and outgroup relationships.

Electrophysiological correlates of object and spatial memory: Dissociations and interactions

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128-channel electroencephalography was used to record event-related potentials while participants performed an object and/or location recognition test. Using the 'Spatial Grid Task', objects were presented repeatedly in various locations during the study phase and participants were required to learn and remember each object in its specific location. In the test phase participants were instructed to respond to the object presented, its location or a combination of the two. Early results show the operation of disparate brain regions for each task as well as differences in waveform topography but areas of convergence also emerge as schemas interact.

Social selection or causation: A longitudinal assessment of social support and psychiatric symptomatology

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Social support and psychiatric illness are inversely related. Social Causation and the Social Selection theoretical models explaining the relationship between social support and psychiatric symptoms are evaluated. Literature supports both opposing positions. A Reciprocal Causation Model is proposed to explain divergent findings. Social functioning variables (socioeconomic status [SES], education, income, employment, and financial adequacy perceptions) were evaluated for impact upon social support and psychiatric symptoms. Response rate at Time-1 was 36%, $N = 232$ and was $N = 146$ at Time-2. Evaluation of data via path analysis using cross-lagged panel regression models demonstrated support for both Social Causation and Selection Theories, resulting in support for a type of Reciprocal Action Model.

Wanting more is not always better: Associations of goal-orientation with age, outcome vs. process focus, and subjective indicators of well-being

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A study of $N = 136$ young, middle-aged, and older adults investigated the relationship between age, goal orientation towards growth, maintenance, or prevention of loss and process versus outcome goal

focus. With increasing age, adults reported a higher goal orientation towards maintenance and prevention of loss. Moreover, maintenance orientation was negatively associated with focusing on the outcome of a goal and positively associated with subjective well-being and satisfaction during goal pursuit. In contrast, goal orientation towards growth was related to higher goal concreteness and higher difficulty of goal pursuit.

The effects of social support and social control on cardiovascular reactivity during problem disclosure

Nagurney, Alexander Psychology, Texas State University, San Marcos, TX, USA **Bagwell, Brandi** Psychology, Texas State University, San Marcos, TX, USA

This study compared the physiological effects of social support with those of social control. In a lab setting, participants ($n = 150$) disclosed a relationship problem to a same-sex or opposite-sex confederate who provided either supportive or controlling feedback. Results indicated that males were more reactive in the short run to social control but demonstrated better long-term recovery from control relative to females. Those participants who were controlled by a male rather than a female confederate demonstrated a similar pattern of results. In general, males and females did not differ in terms of their reactions to receiving social support.

Attentional bias for threat in infancy

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The purpose of this study is to investigate the temperamental basis for a bias toward affect in attention to threat in infants of about 12 months. The experiment required to infant to disengage from a central stimulus that was either a fearful, happy, or neutral facial expression. A peripheral attractive target was presented to the right or left of the fixation stimuli. The latency to make a saccade towards a peripheral target was measured. Three conditions were examined: overlap, no-overlap, and 300-ms gap. The results will be discussed in terms of possible interactions of attention and emotion in infant development.

Is rational person fair? The ultimatum game and logical reasoning

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Previous studies reveal that people weigh fairness principle even when it prevents them from the subjective expected utility maximization. Then, one question arises: How does rational person who can solve logical tasks behave when his/her maximization of the expected utility is not compatible with social rationality? We examined this question by using ultimatum game (Guth et al, 1982) and Wason's selection task (Wason, 1966). In this study, participants answered various kinds of the selection tasks and then performed the ultimatum game. The results indicated that, regardless of the performance of the selection task, participants opted for fair allocation.

An empirical study of the developmental process of infant intersubjectivity

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It has been hypothesized that infant intersubjectivity develops from the primary intersubjectivity at 2-3 months, via engaging objects at 4-5 months, to the secondary intersubjectivity at 9-10 months. However, none of empirical studies has been done. In this longitudinal study 50 mother-infant dyads were observed from 2 weeks to 10 months of infant's age.

Results showed that inter-relationships between the primary and the secondary intersubjectivity were not found, but they showed individual differences. The some infants showed preference to engaging objects from earlier months. Those results were considered as suggesting that the developmental process of intersubjectivity contains individual differences.

Relations among teacher's classroom management, classroom structure and children's multiple goals

Nakaya, Motoyuki Grad. Sch. of Human Sciences, Osaka University, Suita, Japan

In classroom settings, teacher behavior influences children's motivation and academic achievements, mediated by children's cognition of the classroom. This study examined the relations among teacher's classroom management behavior (e.g. explanation, affiliation), classroom structure (e.g. norms, commitments), and children's multiple goals (e.g. social, academic). Classroom observation and questionnaires were administered to 100 six graders and teachers in three classes. Results indicated that the relations between teacher behavior, cognition of classroom structure and children's types of goals differed for each class. The importance of social influence in children's learning processes was discussed.

Complexity matters: When natural frequencies are not enough

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We compared performance in probabilities and natural-frequencies versions of the classical HIV diagnose problem with a modified version using even base rates (50/50). In terms of computational complexity, this modification should make comparable the difficulty of both representation formats. Indeed, although according to the Frequentists predictions the advantage of natural frequencies should withstand this slight modification of the classical paradigm, all differences between probabilities and natural frequencies disappeared. Accordingly, computational complexity should be more carefully considered as a possible explanation for the classical superiority of frequencies over probabilities.

Social support and mental health among young Eastern European migrants in Germany

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Objectives and Background: Little is known about the social support and mental health of young Eastern European migrants in Germany. We examined the depressive symptoms and social support among the educational migrants in Germany. **Methods:** 102 Eastern European migrants and 159 Germans as control sample were surveyed using a standardized self-administered questionnaire. **Results and conclusions:** The prevalence of depressive symptoms in the sample was relatively high among the migrants. A significantly bigger part of the migrants showed higher clinical depression as compared to the Germans ($p = .029$), (29.3% in migrants and 16.5% in Germans with M-BDI score above 35). Higher depression scores were associated with little social support ($p = .045$).

Personality development in children that play theatre

Neagu, Diana-Elena Galati, Romania

This study focuses on the positive influence that theatre play as an extracurricular activity has on the development of children and adolescents. To this end we have measured by self-report scales features

described in positive psychology as psychological well-being, self-esteem, perceived social support and self-efficacy, as well as the ability to understand oneself and the others and to express oneself. It was a longitudinal study implying over 100 subjects (ages 9-16) and it analyses the correlations between being or not a participant in theatre clubs and the development of these features. The resulted interactions have practical implications in children's education.

Empirical dissociations between hindsight components

Nestler, Steffen Psychology, University of Leipzig, Leipzig, Germany

Two studies investigated a tripartite model of the hindsight bias, involving (1) increased foreseeability impressions, (2) increased necessity impressions and (3) memory distortions. In both studies, I manipulated a third variable that should lead to an increase in necessity impressions while memory distortions should remain constant (Experiment 1), and that should influence foreseeability impressions (i.e., the event outcome is perceived as unforeseeable) but not necessity impressions (Experiment 2), respectively. The results showed the expected diverging effects on the components, and they support the idea of separate hindsight components and contradict a unitary phenomenon view of the hindsight bias.

Psychosomatics in angiocardiology

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Objectives: Cardiovascular patho-physiology implies high complex interaction of psychic, neuro-hormonal, drug-factors, leading to arrhythmia, hypertension. Method: Psychophysiological effects after psychosomatic-training [9.&8.Eur.-Congr.-Psychol., Granada/CD:3493.html/2005, ISBN:923717-6-5; Psychol.-in-Österreich 2-3/221/2003; Urol.-70/3A/232-3/2007]. Cardiovascular animal-experiments [Acta-Physiol.-Scand.-191/S.658:49/2007]. Results: High positive influence on psychic items (patients: "polar-attitude-list"/n=31). Possible correlation with effects of psychotropic hormones/drugs, participated in cardiovascular-regulation/n=50). Conclusions: Recommendation for systematic investigations on psychophysiological effects of psychotropic hormones/drugs concerning angiocardial pathogenesis/therapy.

Prioritizing visual selective attention is not diminished by high concurrent working memory loads

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De Fockert et al. (2001, Science) postulated that working memory is crucial for reducing distraction by maintaining the prioritization of relevant over irrelevant information in visual selective attention tasks. This hypothesis was examined by assessing the influence of working memory load on visual attention in a dual selective attention and memory task. University students ignored famous faces while categorizing conflicting superimposed celebrity names, under low or high memory loads. Within-subjects ANOVAs showed that interference and negative priming effects were invariant, regardless of the memory load, suggesting that prioritization capacities were undiminished. A methodological resolution to the incompatible findings is provided.

How does expressive writing take effect?: Studying differential mechanisms of writing about stressful life events

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Writing about stressful events can lead to improvements in well-being, while the mechanisms behind these benefits from experimental disclosure are still not clarified. The present study investigated whether writing about stressful events would influence long-term measures of mental health. Furthermore, two possible mechanisms to which benefits might be attributable, namely improvements in self-efficacy or healthy emotion regulation strategies, were examined. The results indicate that writing diminishes hyperarousal and the occurrence of negative affect. Self efficacy and the use of different emotion regulation strategies cannot account for the observed improvements, albeit perceived intensity is proved to be a mediator.

Changes in job autonomy: The role of maladaptive routines

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When work environments change, routines have to be adapted to the new requirements. In an experiment with a simulated office task (n = 56), it was examined how persons with routines respond to an increase in job autonomy (i.e., selection, use of working methods) rendering a new working strategy optimal. Multi-level analyses showed that compared to participants with no change in job autonomy, participants with low autonomy tended to retain their suboptimal routine when job autonomy was increased. Thinking aloud protocols revealed that routines narrowed reflection about a new working strategy (planning and evaluating of strategy options).

Relation between worry domains and health related quality of life in medical sciences students, 2006

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The objective of this study is to assess relationship of worry domain with quality of life in Medical Sciences students. In this descriptive correlation study, 400 medical university students from 7 different schools completed corresponding versions of QOL and worry domain questionnaires. The results of the present study indicated that worry was in a severe level in 4.8 % and in medium level in 34.3% of students while the mean scores of QOL was 76.3 (from 100) and 5% of students had also low level of QOL. The results also indicated that worry and quality of life were negatively direct related.

Reducing effects of stress reaction with brainstorming card game

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[Objective] The purpose of this study was to develop a card game for Brainstorming, and to show by

means of evidence that psychological stress reaction would be alleviated with the card game. [Method] The card game had 50 TOI cards and 4 kinds of 10 cards for role-play; Defer Judgment, Strive for Quantity, Seek Wild and Unusual Ideas, Build on Other Ideas. 35 Subjects played it, and we measured the effects of stress reaction; depression and anxiety. [Result and Discussion] The results found that their depression reaction reduces with time going.

Shrinkage of functional field of view induced by emotion

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This study examined whether positive or negative emotion influenced the functional field of view. Participants' task was to identify a digit in any of four corners of an emotional picture on the display presented, while discriminating an alphabet on the center of the display. There were two conditions in stimulus onset asynchrony (SOA) between an emotional picture and a digit (500ms and 3000ms). In the result, only negative emotion disturbed the identification of digit in both SOA conditions. This result indicated that negative emotion shrunk the functional field of view, while positive emotion didn't.

The role of affective states in interpreting thoughtless behaviors taken by acquaintances

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The role of affective states in interpretation of acquaintances' behaviors was examined. A total of 204 participants were induced to positive, neutral or negative mood and were presented with vignettes describing behaviors that lacks in interpersonal considerations, taken by acquaintances. The participants were asked to rate to what extent they felt the behaviors lacked in interpersonal considerations. The behaviors were evaluated more negatively among the participants in the positive and negative affective states compared to neutral affective state. The authors concluded that people are more likely to rely on their subjective affect states when interpreting behaviors taken by their acquaintances.

Someone to watch over me: The effect of the egalitarian norms on gender stereotype-activation

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We hypothesized that the egalitarian norms can have automatic influences on stereotype-activation. The salience of the egalitarian norms was manipulated by presenting a picture of other person's faces which were looking at participants or not. Participants performed a gender role IAT in which either a face with direct gaze or that with averted gaze was presented. We found that the IAT effect was smaller in the direct gaze condition than in the averted gaze condition, only among the female participants who didn't express the attitudes as an egalitarian. The relationship between the salient norm and stereotype-activation is discussed.

The relationship between role stress and burnout syndrome in Japanese care staffs

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The purpose of this study was to investigate the relationship between Role stress and burnout syndrome in Japanese care staffs, and to examine licenses differences. 223 care staffs were asked to complete the questionnaire containing the measures of Role Questionnaire (RQ), Maslach Burnout Inventory (MBI), and licenses. 97 respondents got the national license. Analyses of Role stress scores indicated that care staffs got the national license in technical collage showed significantly higher score on "Role ambiguity" than others. All showed significant correlation between "Role ambiguity" and "Depersonalization". This study indicated that Role stress have effects on burnout syndrome.

Non-verbal memory in experienced actors and controls

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Objectives: Do actors perform better than controls in non-verbal memory tasks? **Hypothesis:** Actors use visual and spatial cues to remember scripts, resulting in experimentally-verifiable superior non-verbal memory. **Methods:** We tested experienced actors' short-term spatial (Corsi Blocks) and visual (VPT), long-term visual (RVDLT), and working memory (Reading & Operation Span). **Results:** Actors performed better on Corsi (meanA=17.90; meanC=16.00; p=0.0156), VPT (meanA=11.24; meanC=10.38; p=0.0351), Reading Span (meanA=56.05; meanC=47.79; p=0.0383), had greater improvement in RVDLT (meanA=8.00; meanC=6.13; p=0.0026), organized material more consistently. No difference in Operation Span. **Conclusions:** Experience in theatrical acting confers advantage in non-verbal memory.

Projecto integrado de intervenção precoce: Evaluation of fourteen years of early intervention in Portugal

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This investigation aims to collect and evaluate the information given by all the families, supported between 1989 and 2004, by the Direct Intervention Team of Coimbra, of the Projecto Integrado de Intervenção Precoce. Fifty-two families answered three questionnaires, and the data were analyzed using the software SPSS. Through the results, it is possible to reflect about the quality of the practice in Early Intervention, so that the services that are available to Portuguese children and their families resemble more the theoretical and practical guidelines.

Program of inductive methodologies of behavior appropriate in class

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This study is part of a wider research project greatly inspired by Rutter's work. It involves a program of educational intervention centered on the practice of inductive methodologies of behavior appropriate in class, based on the introduction of variability and reciprocal modulation. The researcher (psychologist) assumed the role of facilitator before the group of teachers. Initially, the target group was a group of students exhibiting lack of discipline, but the focus quickly fell on the class as a social unit. Analysis of the percentage differences indicates improvement in student behavior. The teachers

manifested satisfaction in having participated in the project.

Experiments on binocular stereopsis with inverting view glasses

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The assumption was "when both eyes are rotated 180 degrees at the center of the distance between both eyes entailing the optic chiasma, retinal images which have been turned over by each lens are reversed, and upright retinal images with normal stereoscopic vision can be obtained". Tasks were "writing", "walking", and so forth wearing inverting view glasses which can turn retinal images by crossing cords to connect video cameras with liquid crystal screens similar to the optic chiasma. Trials repeated 20 times. Errors and the required time were measured. Results showed that normal binocular stereopsis of reversed image was obtained and coordinated behaviors were established. The assumption was supported.

Sleeping time relates to perceived health and psychoneuroimmunological responses

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The present study was to assess the relationship between sleeping time and the health of mind-body. Subjects were 205 healthy university students. These subjects were divided by habitual sleeping time. Therefore we had 3 groups (35 adequate sleepers, 33 short sleepers and 28 long sleepers). Subjects completed the questionnaire of GHQ-28 while the saliva samples were collected. The results of this study indicated that sleeping time relates to perceived health and change in PNI function. Moreover, the results of change in PNI responses and GHQ-28 suggest that sleeping time is very important factor for prevention of stress disease and health promotion for university students.

Investigations on the evaluation estimation item groups in a young person group, a middle-aged group and an elderly group

Okuda, Hiroki Kinjo University, Hakusan-City, Japan This study examined the difference of recognition concerning development by the age of the subjects. A young person group (18-22), a middle-aged group (40-59) and an elderly group (65+) were asked to evaluate five development estimation item groups to see to what degree 1, 3, 5, 10, 20, 40, 60 and 80 year-old people could perform independently and adequately. Concerning 60 year-old, average scores of the five item groups of the middle-aged and elderly groups were higher than average scores of the young person group. This suggests that younger people evaluate the various abilities of 60 year-olds as relatively low.

Factors related to the students' image of elderly people

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Purpose: Improvement of nursing care for elderly people might be achieved by caregivers' expert knowledge and positive image of elderly people. The formation of the image of elderly people during developing years was examined. **Method:** The image of elderly people was measured in university students and the factors related to image formation were investigated. **Result:** Interactive experiences with elderly people including grand parents, and parents' attitude toward elderly people could affect

the image of elderly people. **Conclusion:** Having interactive experiences with elderly people in the developing stage of life, and growing up observing the positive attitudes of parents regarding elderly people are important.

The relationship of job characteristics with job involvement of personnel

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The purpose of this study was to examine the relationship between job characteristics and job involvement of personnel. The relevant sample consisted of 115 personnel of a company who selected through a random sampling. To measure variables has been used the Job Characteristics Inventory (JCI) of Sims et al, and Kanungo job involvement questionnaire. The results of multiple regression analysis showed that job characteristics have significant relationship with job involvement. The findings could be used for job design. **Keywords:** Job characteristics, Job involvement, Job design

The relationship of job characteristics with organizational commitment of personnel

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The purpose of this study was to investigate the relationship between job characteristics and organizational commitment among employees of a company. The relevant sample consisted of 100 personnel of a company who selected through a random sampling. To measure variables has been used the Job Characteristics Inventory (JCI) of Sims et al, and Allen and Meyer organizational commitment questionnaire. The results of canonical correlation showed that job characteristics have significant relationship with organizational commitment components (affective, normative and continuance commitment). The findings could be used for job design. **Keywords:** Job characteristics, organizational commitment, Job design

Emotional intelligence, occupational stress, and social support among Japanese workers

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Recent interests in emotion and emotional intelligence (EI) draw attention to the role of emotion in the stress process. The present study was designed to examine the role of EI on relationships between occupational stress and psychological response among Japanese company employees. A web survey was conducted and data was collected from 254 participants (113 men and 141 women). The mean age of the participants was 38.59 (SD = 11.00; age range 20-59). Structural equation modeling analyses revealed that higher EI was related to higher perceived social support, which in turn resulted in lower stress responses.

The effect of motion in depth on time perception

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The present study examined the effect of approaching and receding motion on time perception. We required participants to estimate the length of a short empty interval that started from the offset of the first marker and ended at the onset of the second marker. We changed the size of the markers



so that a visual object was perceived as approaching or receding. The empty interval was perceived as shorter when the object was approaching straight to the face than when it was receding. We conclude that anticipated collision decreased the perceived duration of the moving object.

Relation between the bullying term and social skill of bullies

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This study was conducted to test the hypothesis that bullies have some kind of characteristics to prolong their bullying behavior. We used questionnaires and asked 122 university students about their bullying experiences, suffering experiences, social skills and the bullying term during their junior high school period. The results indicated that the bullying tended to be prolonged when the score of the social skill was high in both Ringleader bullies and follower bullies (who join in the bullying). Thus, it appears that the length of bullying is related to the social skill on the side of the bullies.

Psychological distress in radiotherapy patients and needs for psychological support

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This study aims to measure attitudes towards the psychooncological outpatient clinic (POC) and to measure the distress and quality of life of radiotherapy patients. 108 radiotherapy patients including 24 clients of the POC were interviewed in this study. Data were assessed by the means of the Stress Index Radiooncology (SIRO), the Hornheider Questionnaire, the EORTC QLQ C-30 and an evaluation form of the POC. In general clients of the POC were more distressed than other radiotherapy patients. Only a few differences in distress and quality of life data were found between radiotherapy patients with and without psychological support.

Distinct mechanisms in "where", "what", and "how" visual feature processing

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Using a one-shot paradigm with visual search display, we examined differential accuracy in change blindness responding to localizing where target changed, discriminating what visual feature changed, and identifying how the feature changed. In the display with face or letter-string elements, the changed feature of a target was its orientation or swapping to same distracter element. The result showed an advantage in the order of identification, discrimination, and localization, regardless of changed feature and of stimulus type. The results indicated distinct mechanisms processing where, what, and how the target changed, irrespective of visual mechanisms pertaining to visual characteristics to be presented.

Researching on relationship between self identity and social identity of undergraduates

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Objective: Probing on relationship between self identity and social identity. **Methods:** 438 undergraduates are surveyed by "Chinese undergraduate self-identity status scale ($\alpha=0.871$)" and "social identity scale ($\alpha=0.908$)". Regression-linear analysis is used. **Results:** (1) Self-identity is slightly related to social identity, and self-identity effects on social identity about 12.4%. (2) The second layer of self-identity (especially, IDDIFF, IDFOR, INDIF, INMOR) makes the most great and directive influences on social identity. (3) Social identity influences self-identity very slightly. **Conclusion:** The second layer of self-identity influence on social identity

A relational study of attachment styles, emotional intelligence and quality of relationship

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The aim of this study was to determine the relationship between attachment styles emotional intelligence and relationship quality of university students. The sample of the study consists of 314 university students that selected randomly from Eskişehir Osmangazi University. Data were collected by "The Inventory of Close Relationship" that developed by Brennan and et.al (1998) and adapted by Güngör (2000) for attachment styles, "EQ-NED" that was developed by Ergin, İşmen and Özabacı (1999) for Emotional Intelligence and "Inventory of Relationship Quality" that adapted by Özabacı (2007) for relationship quality and Pearson Moment Correlation were used for analyze the data.

Event related potentials associated to distraction processes caused by events related to pending intentions

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This work aims to study the importance of attentional processes on the realization of delayed intentions (prospective memory). We analyze, through event related potentials recording, the attentional capture processes which occurs when recovering, spontaneously, a delayed intention when faced with an event related with the intention. Moreover, we have checked the type of attentional processes (automatic vs. strategic) used to remember the tasks to do. How deep is the processing of stimuli related with an intention? Is it only the switch of the attentional focus (orientation attention)? Or, on the contrary, is it a semantic processing of delayed task?

Work of preference and wellbeing in different types of permanent employees

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Previous research suggests that not having a work of preference has specially negative outcomes in permanent employees when compared to temporaries because it may be associated with feelings of being locked into one's job. This study investigates the influence of having or not a job of choice on the well-being of different types of permanent employees. Hierarchical moderated regression analysis indicated that lifelong civil servants were more negatively influenced by not having a job of preference than employees with an open ended contract. Results are discussed in relation to the "locked-in" phenomenon. Proposals to guide future research are discussed.

Attentional bias to smoking cues and reactivity to rewarding stimuli in nicotine dependence

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Nicotine consumption causes neuronal changes within the brain-reward-system that lead to the experience of craving, which includes an increased sensitivity for smoking cues and a decreased sensitivity for natural reinforcers. The aim of our study was to test the assumption of a substance-related attentional bias to nicotine-related stimuli and a reduced reactivity to primary and other secondary reinforcers in dependent smokers. We compared dependent and occasional smokers (according to DSM-IV criteria) to a matched control group of non-smokers in tests of attentional bias (emotional Stroop paradigm), decision making (go-no go-task with reward and punishment) and reward learning (probabilistic classification learning).

Work design and psychological work reactions: The mediating effect of psychological strain and the moderating effect of social support

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The aims of the present study were twofold: First, I examined the moderating influence of social support on the relationship between job design (job demands and job control) and psychological strain, job satisfaction and turnover intentions. Second, in providing a more comprehensive link between job design and work reactions, I examined psychological strain as a mediator of that relationship. Participants were 443 technical workers at Telecom Malaysia. Social support was found to moderate the job design-psychological work reactions. Moreover, psychological strain significantly mediated the job design-job satisfaction and turnover intentions. Implications of this study are discussed from theoretical and applied perspectives

Perceived intensity of physiological measures as a function of the degree of neuroticism under different levels of shock induced stress

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Differences between perceived and actual intensity of blood pressure, Galvanic Skin Response and heart rate were examined on 72 undergraduate students as a function of their stress level induced by electric shocks (0, 45, 90 Volt) and their degree of neuroticism, as measured by the Florida OCD Inventory. Physiological measurements followed by subjective estimations of intensity showed consistent overestimation of activation of the SNS and the heart rate but not blood pressure. Specifically, increasing levels of stress and number of obsessive-compulsive symptoms lead to greater discrepancy between perceived and actual physiological measures. Findings suggest that neurotic individuals exaggerate at the intensity of physical symptoms under stressful circumstances.

False memory due to working memory span and cognitive load

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This study examined the role of working memory span and cognitive load on veridical memory and false memory. Sixty undergraduate students performed a working memory span task and other



memory tasks utilizing DRM procedure. Cognitive load at encoding was experimentally manipulated within subjects. Without cognitive load, working memory span was positively correlated with correct recall and correct recognition. When there was cognitive load, however, subjects with shorter working memory span produced significantly more false memories. These results imply that working memory plays a role in generating false memory via executive function.

Do we all dream about balanced work-life?

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Work-life balance is often held up as an ideal for all employees. The hypothesis guiding this study is that different non-balanced work-life orientations exist in addition to balanced one. K-mean cluster analysis was used to develop a typology of work-life preferences using data from three surveys of work-aged population in Estonia (total $n = 2400$). In all samples ca 40% of employees preferred balanced work-life (work, family, leisure equally important) whereas 10% were predominantly leisure-oriented, 25% family-centered, and 20% work-oriented. Socio-demographic characteristics are important when predicting work-life orientations. Work attitudes also vary according to work-life preferences.

Semantic long-term knowledge leads to distortions in working memory

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In several studies we examined the effect of long-term semantic knowledge on working memory for briefly (1.5sec/pair) presented word-pairs. Immediately after the presentation of pairs, participants were asked to select the word that had been paired with a single word probe. Participants remembered pairs that were grouped according to expectations significantly more accurately than unexpected groupings. Participants tended to falsely group unexpected pairs to match semantic expectations. As unexpected pairs per trial increased, accuracy significantly decreased. Thus, contrary to working memory for single items, working memory for pair bindings relies strongly upon long-term semantic knowledge.

Coping and personality disorders in substance-addicts: Integration of Hobfoll's and Millon's models

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Hobfoll's Strategic Approach to Coping Scale – Dispositional Form (SACS-D), and Millon Clinical Multiaxial Inventory-II (MCMI-II) were administered to a clinical sample of 712 individuals diagnosed with substance abuse or dependence (heroin, cocaine, alcohol or cannabis). Participants started a rehabilitation programme in a public outpatient treatment centre for addictive disorders. The strategic profiles of coping in each personality disorder were explored. Results showed that each pathological personality faces the difficulties in a specific way, predominating the avoidance, indirect, instinctive, and antisocial coping strategies. Present results were discussed in terms of clinical implications for treatment in addictive disorders.

Clinical trial: Brief intervention programs for adolescents who initiate the alcohol consumption

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The Brief Intervention and Brief Advice programs have been demonstrated to be effective in reducing the alcohol consumption pattern of teenagers who have not developed a dependency. However, each program has been evaluated separately. The goal of this investigation was to compare the effectiveness of Brief Intervention and Brief Advice on patterns of alcohol consumption among teenagers, through a random clinical trial. We worked with 72 participants divided into four clinical groups and two control groups on the waiting list. The results indicated that the Brief Intervention and Brief Advice programs were effective in reducing the drinking pattern to safe levels compared with the control groups.

A study of the relationships among employees' fairness, job satisfaction and turnover intention in the state-owned enterprises

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This study focused on the relationships among employees' fairness, job satisfaction and turnover intention in the Chinese state-owned enterprises. The samples for this study were drawn from 417 employees of 7 state-owned enterprises in Chinese mainland, and the statistic techniques such as stepwise regression and path analysis were used for analyzing data. The conclusions are: 1. Distributive fairness, participation at company level and participation at job level had significantly positive impacts on job satisfaction; however appeal mechanism had not significant impact on job satisfaction. 2. Job satisfaction had a significantly negative impact on turnover intention.

Interest, group adherence and knowledge and their impacts in ufological beliefs

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This research aims to identify the beliefs shared by people who are taking part or not in ufological research groups. The variables studied for their influence on the belief in UFOs and aliens were degree of knowledge, interest taken in research and adherence to ufological groups, as well as religion, age, gender and education. The questionnaire was made available on-line and 617 people completed it. Results point to a differential adherence pattern, with participants with a deeper knowledge, interest, and linked to research groups tend to embrace the beliefs of other participants more faithfully than participants with dissimilar behavior.

Influence of attributions, motivation and self-concept on academic achievement

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Objective: To find out the extent of variance of the dependent variable, DV (academic achievement) that can be attributed to independent variables, IV (attributions, motivation, self-concept). Method: The participants were 201 girls in first year of Compulsory Secondary Education (average age, 12). The data was obtained from the qualifications attained by the students and through questionnaires such as "Self-Description Questionnaire I" (Marsh, 1988). Hierarchical Regression Analysis was used as statistical technique. Results: IVs were found to explain 62.8% of the variance of the DV. Conclusions: The IVs dealt with in our study must be included in the school curriculum.

Differential effects of self-efficacy and perceived behavioural control on skin cancer risk behaviours

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Objectives: to test the Theory of Planned Behaviour's (TPB) efficacy for understanding intentions to use sunscreen and sunbeds. Methods: Questionnaire data from 590 young adults were analysed using multiple regression. Results: The TPB accounted for 43% and 46% ($p < .001$) of the variation in intentions to use sunscreen and sunbeds respectively. Perceived behavioural control (PBC) was only a significant predictor for sunbed use, while self-efficacy (SE) only predicted sunscreen use. Conclusion: SE and PBC had different effects on intentions to perform skin cancer risk behaviours. Results support the conceptual distinction between the two components of perceived control.

Effect of sex stereotypes on school adolescents' sexual behaviour in south-western Nigeria

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The study investigated the prevalence of sex stereotyping and its effects on sexual behaviour of Nigerian adolescents. Participants were 658 adolescents selected randomly from secondary schools in South Western Nigeria. An instrument measuring the extent of the internalization of sex-stereotypes and another instrument measuring dimensions of sexual behaviour were administered. Findings revealed that male participants demonstrated a higher degree of sex-stereotypical behaviour than their female counterparts and that sex stereotyping had significant negative effects on sexual behaviour of male and female adolescents. The study highlights the need for virile and radical programmes of sexual re-conditioning for Nigerian adolescents

Peer sexual harassment and coping mechanisms of female students in a Nigerian university

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The study investigated the prevalence, nature and coping mechanisms of peer sexual harassment among 387 female students of the Obafemi Awolowo University, Nigeria. Participants selected by convenience sampling from three Faculties responded to a questionnaire on peer sexual harassment. Results indicated that verbal harassment was the most frequent type of peer sexual harassment and that victims did not report their harassment to authorities but adopted strategies that did not involve direct confrontation with their harassers. The study stressed the need for a virile counselling programme in Nigerian universities to stem down the incidence of peer sexual harassment.



Indexes of fatigue for the workers of a railway transport police

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Purpose: determination of basic factors of fatigue nature, analysis of dynamics of attention indexes and emotional states for the workers of railway transport police. Methods: questioning, tapping-test, Shulte's tables, M. Lyusher's modified test, correlation analysis. Results. The factors of fatigue: innomativ working day, stress loadings, absence of abilities, skills of states self-regulation. Research of parameters of attention (stability, switching) and dynamics of the emotional states for transport police before and after their duty testify to worsening. Relationship between the central nervous system force and fatigue indexes are set. Conclusions. Maintenance of perception is probed the workers from point of their emotional tension. Way of policemen functional states optimization: self-regulation receptions teaching.

The transmission of work affectivity and experiences from adults to children

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Children may develop vicarious orientations toward work that are appreciably influenced by family members' work experiences and emotions. Cross-sectional data from 100 grade-school children and confirmatory factor analysis are employed to assess new measures of work affectivity and experiences. Structural equation modeling is employed to test hypotheses suggesting that family work experiences and emotions influence children's orientation toward work. The results suggest that children's anticipated work emotions and experiences mediate the relationship between perceived family members' work emotions and experiences and children's school and work motivation. The family serves as an influential context for career development during the childhood period.

Changing counseling perspectives regarding older immigrants: Addressing diversity and provision of services in graduate education

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Older adult immigrants are perceived to be a growing population within the United States. The number of adults over 65 is expected to double in the next 40 years (2043), as well as increased ethnic diversity. By 2030, the older adults will consist of 25% of the population. The project is an educational component, designed to add an educational module in the Life Span Development course in graduate psychology. The project will increase awareness of future mental health clinicians regarding the effects of immigration, acculturation, and how to improve their counseling needs.

Infants do not imitate novel actions modeled by an unreliable person

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This study examined whether the credibility of an individual's gaze influences infants' decision to imitate novel actions modeled by that individual. Infants aged 16-18-months first observed an experimenter show excitement while looking inside an empty box. Infants then observed the same experimenter turn on a light-box with her forehead rather than with her hands. In contrast to previous

research with an unfamiliar experimenter, the majority of infants (76%) were more likely to imitate the action with their hands than with their forehead. This suggests that infants who mistrust a person's gaze infer that this person is not a rational agent.

Non-work activities and well-being

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Worker satisfaction with non-work activities was examined as predictors of well-being. Subjects, 180 health care workers, completed the Survey of Health Care Professionals (including 15 non-work activities and job satisfaction), the Life satisfaction, and the Fordyce Happiness Measure. Regression analyses examined the effects of non-work activities on well-being, controlling for age and gender. Different predictors for each well-being measure were found: satisfaction with exercise was the best predictor of life satisfaction, raising children best predicted happiness and balancing work/family responsibilities best predicted job satisfaction. Results are discussed in light of previous findings in the work and well-being literature.

Inverted event-related potentials response to illusory contour in boys with autism

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Objective: to study lower-level processing of perceptual grouping in boys with autism (BWA) aged 3-6 years. Methods: non-parametric analysis of event-related response to visual elements that either formed illusory contour or were arranged in a noncoherent way. Subjects: healthy boys (19 children) and BWA (19 children) aged 3-6 years. Results: healthy boys demonstrated the enhanced negativity of N1 peak whereas BWA demonstrated more positive N1 amplitude to illusory contour. Conclusions: we hypothesized that BWA were sensitive to difference between illusory contour and control figures basing on collinearity processing mechanisms implemented in neural circuitry of primary visual cortex.

Analyzing the student's point of view in school violence

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The general objective of the present research is to determine the relevance of different protective and risk factors in adolescences violence behaviour. Participants were 1.635 students (aged 14-18 years), from a representative sample of Spanish high schools. A combination of qualitative and quantitative approach was used. Students filled out questionnaires that included measures of several situations of violence (exclusion, verbal violence, physical violence and vandalism), different contexts (school and spare time) and the related roles (victim, aggressor and observant). Deep analysis, through individual interviews, point out several relevant variables like guilty feelings, attitudes, etcetera. The results are generally in line with previous studies, and the implications will be discussed.

Critical periods for visual and multisensory functions in humans

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The aim of the present brainimaging study in people suffering from early visual deprivation was to identify critical periods for the development of both visual and multisensory functions. Compared to normally sighted controls, patients treated for dense, bilateral, congenital cataracts showed significantly reduced lipreading-specific activations (fMRI) in superior and middle temporal cortex, accompanied by lower lipreading scores. The same patients did not show any enhancement of speech comprehension when stimuli were presented audiovisually as compared to auditorily. Therefore, adequate sensory input during the first months of life is necessary for a normal development of brain systems mediating higher visual and crossmodal functions.

Confirmed/disconfirmed expectation in success/failure attribution among Indian college adults

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Some unresolved effects of Confirmed/ Disconfirmed expectation of success and Attribution Dimensions on Success/ Failure attribution and subsequent behaviour were examined in two studies involving Indian subjects. Responses based on a scenario, as well as actual task performance, revealed a significantly higher Success attribution rating compared to Failure attribution rating. Contrary to predictions, the pattern of attribution in terms of various internal /external dimensions was similar between Success and Failure, with the exception of attribution to Task Difficulty. The implications of these findings for both cognitive and motivational interpretations of achievement attribution in the context of confirmed/disconfirmed expectations have been discussed.

Fluoxetine reverses disrupted activities of the extracellular signal-regulated kinase (ERK)-cyclic AMP responsive element binding protein (CREB) signal system and depressive-like behaviors in rats exposed to chronic forced swim stress

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The extracellular signal-regulated kinase (ERK)-cyclic AMP responsive element binding protein (CREB) signal system was proposed to be involved in molecular mechanisms of antidepressant actions. To investigate the hypothesis, the present experiment treated animals with daily saline injection, forced swim stress (FSS), fluoxetine injection, or FSS followed by fluoxetine injection for 21 days. The results demonstrated stress induced disrupted activities of the ERK-CREB signal system and depressive-like behaviors, and such effects were reversed by fluoxetine treatment, suggesting the normalization of the disrupted activities of ERK-CREB signal system may represent a molecular mechanism fluoxetine reverses stress-induced depressive-like behaviors.



Experiment study on three factors affecting schema induction and analogical transfer

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In this article, we adopt three-factor randomized experiment to investigate the influence of cognitive style, the clearness of problem structure, and content similarity on schema induction and analogical transfer. The main results are as follows: (1) field-independent subjects had better schema induction than field-dependent subjects. Further, this difference only appeared in ill-organized problem structure condition; (2) the subjects on the condition of well-organized structure had better performance of schema induction and transfer than those on the condition of ill-organized structure. The conclusion suggests that well-organized problem structure can improve field-dependent subject's schema representation and eliminate the negative influence of cognitive style. Well-induced schema isn't necessary condition for successful analogical transfer.

The influence of the effects of text signals on analogical transfer

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Since the artificial problems are presented in the form of text reading, we hypothesize the effects of text signals in text reading understanding is likely to affect analogical transfer. The experiment adopted three-factor randomized design. Three independent variables are macro-signals, micro-signals and no signal. The results showed that there were better analogical transfer performance in the macro-signals and micro-signals conditions than in the no-signal condition and the performance difference between macro-signals condition and micro-signals condition was significant. After further analyzing, we discover text signals don't directly influence analogical transfer but the quality of problem representation. Text signals would benefit to form high quality problem representation and facilitate the subsequent analogical transfer.

Optimism, pessimism and continuity: Individual differences in subjective temporal assessments of life satisfaction across adulthood

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We examined subjective trajectories of life satisfaction and biopsychosocial and demographic correlates of profile differences. 3631 adults (24-75 years) from the Midlife in the U.S. survey rated their life satisfaction at present, 10 years ago, and 10 years into the future on two measurement occasions 10 years apart. Cluster analyses of the temporal life satisfaction ratings identified three groups at both occasions, representing patterns of expected increase, decrease, and stability. Subgroups differed in age, mean levels, and 10-year change in biopsychosocial variables. Perceptions of continuously high satisfaction were more adaptive than optimism about future increases or low and pessimistic expectations.

The contribution of achievement motivation to Stroop interference: An event-related fMRI study

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Objectives: Stroop interference can be reduced after exposure to positive achievement-related word primes (Kazén & Kuhl, JPSP, 2005). The underlying neural mechanisms were investigated during fMRI. Methods: 25 men (age 20-28) participated. Induction of need-specific positive affect preceded each Stroop task. Data were acquired on a 1.5T Scanner and analyzed using SPM2. Furthermore, personality measures were assessed. Results: Focusing on a subgroup showing decreased Stroop interference after achievement-related primes, the superior prefrontal cortex displays an interaction of motivation and Stroop interference (uncorrected $p < .001$). Interference was significantly correlated with high implicit achievement motive ($p < .05$). Conclusions: Mastering the Stroop conflict can be dissociated from Stroop conflict per se.

The relationship between positive and negative symptoms and cognitive disorders in schizophrenia

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This study examined the relationship between positive symptoms, negative symptoms and cognitive disorders related to frontal lobe dysfunctions in schizophrenic patients (36 with negative and 32 with positive symptoms), using a series of tests related to frontal lobe dysfunctions. In opposite of the theories, t test revealed that schizophrenic patients with positive symptoms showed significantly more cognitive disorders ($P < 0.01$) than those with negative symptoms. It is concluded that frontal lobes' cognitive disorders in schizophrenia are not related to kinds of symptoms, but they could be explained using other factors like the severity of symptoms.

The study of parietal lobe disorders in schizophrenic patients

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Many studies have revealed that schizophrenic patients show cognitive disorders related to frontal and temporal lobes but not parietal lobe dysfunctions. This study examined the functional disorders related to parietal lobe in schizophrenic patients. Schizophrenic patients and the patients with unipolar psychotic depression, the last one as a control group, completed the Line Bisection Test a test sensitive to parietal lobe dysfunctions. T test showed that, schizophrenic patients had significantly ($P < 0.01$) more problem than depressive patients in this test. It is concluded that schizophrenic patients have parietal lobe functional disorders, specially in the right hemisphere of the brain.

The role of positive emotions in stress among student teachers and school teachers

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The role of positive emotions (PE's) in stress and coping is a neglected field of research. The purpose of this study is to investigate effects of initial PE's on later problems, cognitions, coping efforts, coping resources and negative emotions. The subjects of the study were student teachers ($n = 180$) and schoolteachers ($n = 316$). The data were gathered via a stress and coping questionnaire on two occasions during student teaching and school-teaching. Multiple regressions were used to find out whether PE's had predicted effects. The results indicated that PE's increase favorable cognitions and constructive coping efforts and decrease negative emotions. In conclusion, PE's shape mediating factors between problems and stress.

Impact of stress and daily hassles on mental health of children in public care in Croatia

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Study investigates in what way mental health of children in public care is affected with stress, daily hassles and ways of coping with it. A longitudinal study completed in 2007 (5 years between follow-up) was conducted with 139 children placed in public care. At the first study children were 12.65 years old in average and 17.71 years at the follow-up. In order to establish the level of stress, self-concept and children's mental health we used 6 questioners. Regression analysis showed that earlier seeking and getting social support and present more positive self-concept and less daily hassles prevents developing children's external and internal problems.

Stereotypes as threat in relationships: A comparative analysis between Brazilian and Polish society

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Stereotypes have for a long time been associated with the negative attitudes of an outgroup. Stephan & Stephan (1996) postulated that because NE represent negative expectations about outgroup, appear together with negative emotions towards the outgroup that intensifies negative attitude of outgroup. The present study investigates how stereotypes reflect the cognitive component of prejudicial attitudes in Brazil and Poland. To assess we applied the Negative Stereotype Index. Participants were asked to indicate the percentage of citizens of another country who possessed each of 12 traits. Results showed that negative stereotype traits in Poland and Brazil, when attributed to outgroup, resulted in more unfavourable evaluations.

Emotional intelligence and stress resiliency: A relationship study

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This paper delves into the relationship study between emotional intelligence and stress resiliency among students of technical institute. Pearson correlation and multiple stepwise regression analysis unfold positive relationship between emotional intelligence and stress resiliency and conclude with certain important guidelines for inculcating emotional intelligence and stress resiliency among students.

First evidence of positive effects of cognitive skill training on cognitive and psychosocial aspects in unemployed subjects

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Although there is some evidence that job loss may be associated with cognitive difficulties, it is still unclear if and/or how these difficulties can be managed. The present work investigates the effects of cognitive skill training on cognitive performance and on identified psychosocial difficulties. Results reveal clearly positive effects on most cognitive parameters, i.e. logical analysis, word fluency, verbal memory and psychosocial parameters. Integrating the neuropsychology-based cognitive training research into the existing research of unemployment represents a new scientific approach. Future perspectives of this new approach beyond unemployment research are discussed.



Madness, discontent and touristic's growth of cities: Challenges to contemporary social psychology

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Objective: To discuss the invention of urban's territory and styles of living in everyday life. **Method:** Theoretical discussion about relations between city/madness, city/discontent in psychologists work and city/contemporary and hegemonic process of privatization and turistification. **Results:** Contemporaneity has been characterized by creation of global and flexible identities that change according to market movements. **Conclusion:** There is a continuity between development of sociability and subjectivity, urban and subjective changes. There exist a very close relation between our style of live and subsist in cities and the possibility of resisting or not against effects of power, domination and formation of life.

Warri players and working memory

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This research investigates the role of working memory in warri players, mainly in Antigua. In experiment 1, players memorised a situation while performing (or not) a secondary task aimed at suppressing selectively one of the components of working memory. In experiment 2 players chose the best move in a given situation while performing the same secondary tasks. Results indicate that good players do not use specifically visual aspects in representing the situations both when they have to memorize a situation or to choose the best move. Tentative explanations of the contrasts with Robbins & al.'s results will be proposed.

The encoding and integration of premises in easy conditional and syllogistic deductive tasks

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Deductive reasoning can be applied to several problem types. We tested whether the same cognitive operations underlie solutions for them all. We used fMRI to compare reasoning-related activity associated with conditionals and syllogisms. Activity was assessed separately during the encoding and the integration of premises. The left-inferior frontal gyrus (BA44) was the only brain area active during integration, both for conditionals and syllogisms. No reasoning-specific activity was observed for encoding. The hypothesis that different kinds of deduction engage the same cognitive operations at the integration stage is corroborated. These operations involve BA44, an area linked to syntax and abstract rule application.

Parents underestimate the severity of stressful events and health symptoms reported by their children

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Elementary-school children (N=156) answered the Social Readjustment Rating Scale (SRRS) and the Scale of Physical and Psychological Symptoms

(SPPS). In addition, parents also answered both questionnaires for each of their children. Children reported having experienced more stressful events and more symptoms than those reported by their parents. The reports from girls, older children, and children from families with a low income were more consistent with their parents' reports than the reports from their counterparts. These results confirm previous reports that parents tend to underestimate the stress and the symptoms actually experienced by their children.

Age-related gains in empathy: Subjective and behavioral evidence

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Recent life-span theories have suggested that a deficit-model of social-emotional aging is inappropriate. This laboratory study investigated age differences in empathic concern on subjective and behavioral levels in a sample of 80 young and 73 older adults. Eight film clips, each depicting a person talking about a significant life event, were presented as stimuli. The age-relevance of the life-event was varied (young vs. old). First results suggest that older people report and express greater empathic concern toward others than young adults when being confronted with a life-event relevant in old age. This evidence gives a positive outlook on getting older.

Subsidized employment as predictor of personal initiative among long-term unemployed

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In Leipzig a program, called "Aktiv-Office" has been set up to promote the reintegration of long-term unemployed persons into the labour market. The aim of our study was to investigate the impact of this program on personal resources and well-being of participants. In a sample of 210 persons from this program, working for the public transport system, we could find that the time spent within "Aktiv-Office" was positively related to self-initiative and was negatively related to psychosomatic complaints. As a consequence it may have a positive impact on re-employment or at least the psychosocial situation of the participants.

Health and conflict in couples

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Various theories attempt to explain the development of close relationships. However, the way individuals react when their relationships deteriorate has not been systematically studied or reported. Hence, this study is aimed at studying the relationship between conflict, anxiety and depression in men and women. Three scales were therefore applied to 321 volunteers, 164 males and 157 females: the scale evaluating the content of conflict, Spielbergers Anxiety and Beck's Depression Inventory were applied. Results show that conflict is related to anxiety and depression, observing that the greater the number of conflicts, the more the former increase. Results can therefore be explained based on mishandling of anxiety produced by different couple situations, which are an important source of conflict.

Switching off from work: The role of psychological detachment and rumination in workplace bullying

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A recent number of studies have focused on the relations between psychosocial factors and sleep disturbances. Several models have highlighted the importance of cognitive factors in the development and maintenance of insomnia. The aim of this study is to examine the moderating role of psychological detachment and rumination on the relationship between workplace bullying and insomnia. We used a design in which we collected data at two points in time separated by 1 month. A total of 511 individuals responded to both phases. The results of the regression analysis provide evidence for the moderating role of psychological detachment and rumination in bullying process.

Visual and spatial memory in fibromyalgia patients.

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Fibromyalgia (FM) is a chronic, painful musculoskeletal disorder of uncertain etiology, that it seems related with cognitive alterations, as memory and attention. This study evaluates FM patients for the presence of visual and spatial memory deficit using traditional neuropsychological test and a virtual reality test. Neuropsychological assessment was conducted on twenty women with FM. Assessment include measures of working memory, attention, spatial memory and intellect, relating performances with age and demographical variables and clinical signs. Cognitive data were also correlated with performance on a new virtual task to evaluate human place learning, showing a decline in the speed of processing and in some cases, low execution group, a deficit in the spatial learning. **Keywords:** Fibromyalgia, memory, attention, virtual reality

Temporal preparation facilitates perceptual identification of letters

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Recent evidence suggests that perceptual processing of single stimulus features improves when participants are temporally prepared for the occurrence of visual stimuli. In this study, a visual backward masking paradigm was employed to investigate whether the benefit of temporal preparation generalizes to perceptual identification of more complex stimuli such as letters. Visual discrimination performance improved when participants were temporally prepared. Therefore, the present results support the notion that perception benefits from temporal preparation not only at the feature level but also at subsequent levels that integrate feature information.



Executive processes and overgenerality in non-clinical population

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The present study investigates the role of executive processes plays in overgenerality (OGM) in non-clinical population. 50 young adults and 46 older adults took part in the study. We obtained measures of working memory, short-term memory, sustained attention and specificity of autobiographical memories. Data were analyzed with the statistical softwares SPSS 14.0. and AMOS 6.0. Older adults showed more OGM than young adults ($F(1,93) = 5.80, p = .018$). There was a positive correlation between specificity and working memory ($r = .31, p < .01$). The findings showed that OGM increases with normal ageing and it is negative correlated with working memory.

Posttraumatic stress disorder: Supervising student-delivered exposure therapy for optimal clinical outcome.

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Posttraumatic stress disorder is often disabling, and a complex phenomenon commonly recalcitrant to treatment. Fortunately, empirical evidence supports using exposure therapy, but many practitioners shy from using this robust approach. In fact, dissemination has largely failed. Objectives: Novel dissemination method better prepares students to use this gold-standard procedure. Methods: "Live" training was delivery model for exposure therapy, and end-state functioning was used to gauge clinically meaningful change. Results: Patients met "recovered" status. Conclusions: This form of teaching exposure therapy overcomes common utilization obstacles, and does not interfere with outcome. "Live" training may represent true dissemination, and may actually enhance outcome.

Psychosocial stress: Negative life events in TEDDY (The Environmental Determinants of Diabetes in the Young)

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TEDDY is an international study to identify environmental triggers of type 1 diabetes in genetically at-risk children, identified at birth. Children were enrolled in TEDDY prior to the age of 4.5 months. The aim was to evaluate frequencies of occurrence and categories of negative events affecting mothers (N=3755) and children during pregnancy and the first three months after birth. Negative life events were more common during pregnancy than during the three postnatal months but the proportion of different negative life events was similar during both time periods. Half of negative events were health-related. Events differed between the participating four countries.

The effect of a hardiness program on call center agents' restorative well-being

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Several studies correlated shift work with stress. Stressful events are assumed to decrease life satisfactions. Such events may increase a shift worker's vulnerability to burnout. Burnout may lead to physical and mental health problems and emotional exhaustion. This study sought to determine the effect of a hardiness program on call center agents' well-being recovery. Findings of this study showed that there is a significant increase in all levels of the Multi Dimensional Wellness Indices of the experimental group after the intervention program. This study confirmed that the hardiness program facilitated the use of coping appraisal and adaptation. This in turn has positive effect in the recovery process of their well-being.

Eye-tracking the classic Sally-Ann task: A real-time investigation of adult theory of mind

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Two experiments investigated Boaz Keysar's claim that egocentricity is an automatic bias in adults and Theory of Mind only a correction mechanism. I tested adults (allegedly as a control group) on a computer version of the Sally-Ann task for children, incorporating eye-tracking. The story included a control True Belief condition and two critical False Belief conditions, each with a mind-reading question. No errors were expected. Response times, gaze direction and fixation latencies were recorded. Eye-movements showed that, despite being sometimes the dominant initial response, the egocentric perspective is not an automatic bias across conditions. Moreover, Theory of Mind does not operate as an effortful correction mechanism, even though curse-of-knowledge effects were observed.

Increasing levels of students' self-realization

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Objective. Finding effects of student psychological support training on students' self-realization. Method. The investigation was done on a sample of 30 university students in Mykolaiv in 2006 using the Self-Actualization Test (SAT) and SPSS. Results. The investigation found statistically significant differences between the respondents' pre- and post-training scores on the following SAT scales: time competence ($p=0.042$), support ($p=0.0001$), value orientations ($p=0.003$), behavioral flexibility ($p=0.001$), sensitivity ($p=0.041$), self-respect ($p=0.0001$), self-perception ($p=0.0001$), synergy ($p=0.0001$), aggression admittance ($p=0.025$), sociability ($p=0.0001$), cognitive needs ($p=0.0001$), creativity ($r=0.049$), and self-control ($p=0.0001$). Conclusion. The student psychological support program proved to be effective in enhancing students' self-realization.

Description of sexual harassment that occurs to young adulthood women in Jakarta

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Aim of this study is to get an information on the sexual harassment toward young adulthood woman. Sexual harassment is an unwanted sexual behavior that harms the victim, that consist of verbal, non-verbal, and physical. There are 336 women (20-40 years old) from all level of society. The result 200 are a victim. 20% as a victim of heavy sexual harassments. Commonly type of physical sexual harassment is a gaze/glimpse with sexual desire. The side effect that arises are emotional imbalance, insomnia. Most of the victims tend to ignore and doesn't take action to against

their sexual harassment Keyword: sexual harassment, young adulthood woman

Comparing the long-term predictive power of a single-item of perceived work stress on need for recovery for managers and manual workers

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This study analysed the predictive power of one work stress item ("In general, how do you find your job; 1=not at all stressful—5=extremely stressful") to long-term need for recovery for "managers" ($n=216$) and "elementary trades" ($n=100$). There were no group differences in need for recovery managers reported significantly higher baseline work stress. Controlling for baseline need for recovery and demographic factors, the work-stress item significantly predicted outcome need for recovery ($R^2=0.51$; $df=1,93$; $p<.01$) for manual workers but not for managers. Possibly managers may perceive their job demands as positively challenging which may explain the different reactions to work stress.

Types of social desirability effect on the multifactor tolerance inventory scores

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Aim of present study: to investigate how questionnaire-measured tolerance level is affected by social desirability. Validated on more than 1000 subjects, authors' Multifactor Tolerance Inventory was used, comprising scales of 2 types: "objects of tolerance" and "subject variables". 242 Moscow students of both sexes aged 14-16 years completed the questionnaire twice, with the second instruction suggesting socially desired answers. While the social desirability significantly augmented the tolerance summary index, there were scales "religion" and "strangers" that decreased. Moreover, the summary index decreased in 32% of the sample. Conclusion: depending on subject, social desirability induces opposite changes in the manifested tolerance.

Development of emotional traits in early childhood: Relationship between primary emotions and the self-regulative functions

Saiki, Hisayo Takarazuka, Japan

Relationship between primary emotions and self-regulative functions, as well as the developmental process in early childhood was investigated. The participants were 253 children (aged: 43-78 months). Their homeroom teachers were asked to rate them on 12 items measuring emotional traits and seven items measuring self-regulation. Children with high self-regulation showed high "fear," "acceptance," and low "surprise," "disgust," and "anger." Those with high self-assertiveness showed high "acceptance," "joy," "disgust" and "surprise," and low "fear," and "sadness." Moreover, 5-6 year-old children were ambivalent in emotional regulation.

Intention to change organization and to change occupation: From a view point of mental health

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This study aimed to examine differences between intention to change organization and to change occupation from a viewpoint of mental health. A questionnaire was administered to 231 Japanese young adult workers (age 25-39) who engage in work more than 40 hours a week. Partial correlation analyses showed that "intention to change organization" has significant negative correlation with subjective happiness, and that "intention to change occupation" has significant negative correlation



lation with self-esteem and significant positive correlation with general health questionnaire and anxiety for the future. Results implied that "intention to change occupation" is more maladaptive than "intention to change organization".

Does face stimulus capture both young and older Japanese adults' attention?

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This study examined age-related differences in attentional capture for the face stimulus. Participants were instructed to move their eyes as quickly as possible to a color singleton target and identify whether a small face or sign was located inside it. The two age groups were analyzed individually. However the tendencies were alike. Namely, for both groups, eye saccadic latencies to the face stimulus by the eye mark recorder were equal to the sign. On the other hand, response times to the face stimulus were shorter than to the sign. These contradictory results are discussed in terms of peripheral vision.

Gender and occupational class differences in the effect of work stress on depressive symptoms

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The aim of this study was to analyse occupational class differences in the effect of work stress on depression in a sample taken from the Hungarian Epidemiological Panel. Binary logistic regression was used to determine the effect of work stress. The results showed higher effort-reward imbalance and overcommitment significantly predicted higher depressive symptoms in both genders. A significant interaction between overcommitment and occupational classes was found among men. Men who were manual workers with high overcommitment had the highest risks of depressive symptoms ($OR=3.4$ $p<0.001$). Higher occupational class may buffer against the health damaging effects of overcommitment among men.

The 'non-self' belief across the life span

Sano, Ayako Waseda University, Tokyo, Japan **Ishii, Yasutomo** Letters, Arts and Sciences, Waseda University, Tokyo, Japan **Takaki, Hiroko** Letters, Arts and Sciences, Waseda University, Tokyo, Japan Today a fifth of Japanese people is over 65 year old. This study examined a cross-sectional age-difference of the 'non-self' belief which was 'the state of seeing things just they are and having respect for not only oneself but also others as well'. This belief is assumed to be helpful for successful aging. Japanese people (18-82 year olds; $N=455$) answered questionnaires about the 'non-self' and other psychological states. ANOVAs revealed that older people have stronger belief of 'non-self' than younger one. And the 'non-self' belief had correlations with subjective happiness ($r=.47$, $p<.01$) and depressive state ($r=-.41$, $p<.01$).

Perceived organizational support and well-being at work

Santos, Joana Dept. of Psychology, University of Algarve, Faro, Portugal **Gonçalves, Gabriela** Department of Psychology, University of Algarve, Faro, Portugal **Gomes, Alexandra** Department of Psychology, University of Algarve, Faro, Portugal The main goal of the present research is to study the influence of perceived organizational support on well-being at work; those are fundamentals issues when we are interested in organizational performance. 150 questionnaires were applied to Portu-

guese teachers. The regression analysis showed a systematic and positive association between organizational support and well-being at work. The organizational support explains significantly more the well-being than the contributions brought by demographic variables. These results showed the importance of organizational support in the study of well-being. However, further research is needed in order to explore this problem more deeply, from theoretical and empirical perspectives.

Drug addiction: Salomé case study

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The aim of this study was to know a woman history, once there is a lack of knowledge about drug addicts women. In this case study, it had been concluded, there are therapeutic outcomes in the treatment process which is still happen and her recuperation is really being made, also result of her personal contribution. This is the reason our choice of a clinical case to support one monography: description of a successful case, despite the whole negative life events and interferences in this life course. Key words: drug addiction; drug addicts women; qualitative research; female drug addict case study; treatment; therapeutic community; therapeutic outcomes.

Recovery strategies: Mitigating the negative effects of work-family conflict on employee's well-being

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The present study links the work-family interface (i.e. work-family conflict (WFC) and family-work conflict (FWC) with the concept of recovery. The authors hypothesized that two recovery strategies - psychological detachment from work and verbal expression of emotions- moderated the relationship of the two types of conflict with well-being. The sample was composed of 128 emergency professionals from Spain. Results of regression analyses revealed that psychological detachment from work moderated the relationship between WFC and psychological strain and between FWC and life satisfaction. Verbal expression of emotions moderated the relationship between both types of conflict and psychological strain. Findings are discussed in terms of their theoretical and practical implications.

History of social psychology in Japan

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Both McDougall (a psychologist) and Ross (a sociologist) coincidentally wrote the first textbook(s) on social psychology in 1908. But in Japan, the first book on "social psychology (SHAKAI SHINRIGAKU)" appeared in 1906 by the sociologist Tokuya. And in 1908, Higuchi published the "Study on social psychology". These authors might have been influenced by psychological sociology. After the Taisho Political Crisis (TAISHO SEIHEN), Higuchi (1913) defined the social situation of Japan as the "era of the crowded" after Gustav Le Bon. The implication of psychological sociology to the history of Japanese social psychology is discussed.

The evaluation of a multimodal intervention program to prevent prejudice and promote intergroup relations in elementary school children

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The present study evaluates the PARTS-program, a multimodal prevention program that combines intercultural learning methods, extended contact stories, and social-cognitive skills exercises to prevent prejudice and promote intergroup relations among elementary school children. Effectiveness was studied within a treatment-control-group design with a total of $n = 500$ third-graders. Assessments on prejudice, discrimination and interpersonal tolerance were made prior, immediately after and three-month after the termination of the program. The results showed positive outcomes for the program group compared to the control group on proximal measures (e.g., prejudice), while effects on distal outcomes (e.g., interpersonal tolerance) were only weak.

The influence of perceptual grouping on visual contextual modulation

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Embedding a target within contextual elements can influence performance on this target. For example, when a vernier is flanked by two lines, discrimination deteriorates strongly compared to an unflanked presentation. This contextual modulation is usually explained by local spatial interactions. Here we show that this explanation is inadequate. Instead, we propose that flanks interfere most strongly with the vernier when they are grouped with the vernier. We show that "ungrouping" the flanks from the vernier by embedding them in figurative configurations improves performance. Our results show that global figural aspects are crucial in visual contextual modulation.

Addiction and co-morbidity

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At in-patient treatment facilities psychopathologic disturbances are more noticeable in female alcohol-addicts than in male alcohol-addicts. The following studies try to identify the relationships between co-morbidity and the potential course of dependencies and to derive gender and disorder-specific treatment approaches. 170 female and male in-patients at the Anton Proksch Institute participated in the study. Standardized questionnaires, short diagnostic interviews and rating scales were used. First results show a mental co-morbidity in 75% of the women and in 53% of the men ($t=2.255$; $df=97$). Women suffer significantly more frequently from depressive episodes and agoraphobia and social phobia. Resulting therapeutic consequences are shown and discussed.

Does prior strategy use affect on subsequent strategy choice?: Insights from a numerosity judgement task

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Three experiments tested the hypothesis that repeated prior strategy use affects subsequent



strategy choice. Adults were presented sequences of items that either strongly elicited an addition-based or a subtraction-based strategy for judging numerosities in a rectangular grid. Each sequence was followed by a "neutral" item that equally elicited both strategies. Experiment 1 and 2 revealed that strategy choices on a neutral item were affected by the repeated use of the strategy on the previous items, but only for a small range of neutral items. Experiment 3 showed that this effect was – unexpectedly – not strengthened by the length of the sequence.

Are infant regulatory disorders predictive of intelligence in preschool children: Results of a prospective longitudinal study

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Objective: To evaluate whether infant regulatory problems are predictive of cognitive development in children. **Method:** The sample consisted of $n=4427$ infants. Regulatory problems, i.e. excessive crying and feeding problems were assessed at 5 months of age, and IQ (CMM), language and vocabulary (AWST) at 56 months. **Results:** 19.7% of infants suffered from regulatory problems. Feeding and number of regulatory problems were predictive of lower vocabulary, whereas socioeconomic status, breastfeeding, neurological problems, and family adversity were predictive of all three IQ scales. **Conclusion:** Infant feeding problems and number of regulatory problems are predictive of lower verbal IQ when controlled for other social factors.

Capitalize the potential of interdisciplinary teams: Evaluation of the knowledge integration training for teams

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Today's growing business complexity frequently asks for work in interdisciplinary teams. However, these teams are challenged by problems that emerge from different functional backgrounds of team members. The Knowledge Integration Training for Teams was developed to improve efficiency of interdisciplinary teams. Based on a sample of 36 students, the present study evaluated six training-modules. The evaluation followed the five-data-box conception (Wittmann, 1985; 1990) and the four-level model proposed by Kirkpatrick (1975). All six modules seem to promote the work in interdisciplinary teams; furthermore three of them promote the ability of knowledge integration. These results encourage further use of this training.

Representation of the elderly in textbooks: Diagnosis and recommendation

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Negative stereotypes about the elderly are present in children before they start school, especially because of television and the limited number of good relationships between generations. Textbooks are common tools for children and they must not contain stereotypes about the elderly. Our study is based on a quantitative analysis of textbooks, a survey among teachers and book publishers, and interviews of an association for the elderly. The

elderly are hardly ever presented in textbooks and they are usually in retirement situations. They are absent from work situations. We will give recommendations to improve the representation of the elderly in textbooks.

Are ERN/Ne and CRN amplitudes affected by people's uncertainty?

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This study aims to investigate whether age effects on ERN/Ne and CRN are related to uncertainty. We expect a replication of the smaller ERN/Ne in elderly compared to young adults and the ERN/Ne and CRN to vary with task difficulty. 20 younger/older participants performed a perceptual decision task with four difficulty levels. The EEG and EOG were recorded from 65 channels. Elderly had smaller ERN/Ne and CRN amplitudes compared to younger adults. Both groups showed attenuated ERN/Ne and enhanced CRN amplitudes with higher difficulty. Task difficulty and thereby uncertainty does not differentially affect performance monitoring in younger and older adults.

Mistaking the instance for the rule: A critical analysis of the truth-table paradigm and implications for theories of conditional reasoning.

Schroyens, Walter Psychology, University of Gent, Gent, Belgium

Many studies investigate $\langle \text{if } A \text{ then } C \rangle$'s interpretation by having people evaluate truth-table cases as making the rule true or false, or being irrelevant. We argue that a single case can never prove a general rule to be true. The impossible 'true' option would therefore bias results. Experiment 1 accordingly showed an increase in not-false vs. true evaluations. Experiment 2's experimental group ($N=67$) could also indicate cases make the rule more plausible, but neither true nor false. This significantly reduced irrelevant evaluation-rates as compared to the standard true/false/irrelevant task ($N=61$). Results challenge 30 years of research with tasks using the impossible "true" option.

A critical review of thinking about what is true, possible and irrelevant in reasoning from or reasoning about conditional propositions: Corrective meta-analyses and reconsiderations of theoretical argumentation based on the truth-table task literature

Schroyens, Walter Psychology, University of Gent, Gent, Belgium

Truth-table tasks investigate $\langle \text{if } A \text{ then } C \rangle$'s interpretation by having people evaluate truth-table cases (e.g., $\langle A, C \rangle$, $\langle A, \text{not-}C \rangle$, $\langle \text{not-}A, C \rangle$, $\langle \text{not-}A, \text{not-}C \rangle$) as making a rule true or false, or being irrelevant. Recent studies looking at truth-table task performance have used their conclusions about the 'facts' presented in the literature to evaluate the explanatory adequacy of theories of human reasoning. Mental-models theory has recently been the focus of many critiques. Focusing on those critiques based on truth-table task results, our meta-analyses suggest they are in need of a critical analysis: critics have presented mistaken generalizations as fact, thus constructing arguments that are at best unsound.

A crucial test for the suppositional-conditional theory of conditional reasoning

Schroyens, Walter Psychology, University of Gent, Gent, Belgium

Suppositional-conditional theory explains the relevance of false-antecedent cases – as evidenced by truth-table studies, in which $\langle \text{not-}A, \text{not-}C \rangle$ is

often judged consistent with $\langle \text{if } A \text{ then } C \rangle$ rules – by means of pragmatic implicatures: $\langle \text{if } A \text{ then } C \rangle$ invites its converse $\langle \text{if } C \text{ then } A \rangle$ and/or its inverse $\langle \text{if not-}A \text{ then not-}C \rangle$. Neither the converse, nor inverse implicature yields a pattern of truth-table task evaluations that is consistent with the material-implication interpretation, in which only $\langle A, \text{not-}C \rangle$ makes the rule false, while other cases are neither irrelevant nor false. Evidence shows that a significant minority of people do exhibit material-implication patterns/interpretations; thus showing suppositional-conditional theory is false/incomplete.

Adolescents' knowledge, attitude and performance regarding Ecstasy

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Introduction: Illicit drug use appears to be increasing among youth. Ecstasy is a psychoactive illegal drug which has numerous side effects. **Methods:** This cross-sectional study was carried out to determine adolescents' knowledge, attitude and performance regarding Ecstasy. Eight hundred adolescents resided in west of Tehran participated in this study. **Results:** Adolescent's Knowledge about Ecstasy in 53.8% was moderate, 78.9 % had a negative attitude toward using Ecstasy and 7.6% of them used Ecstasy once at least. **Conclusion:** Based on the study findings, Prevention programs which address the drug abuse side effects and reinforce adolescents' life skills is recommended.

Assessment of the effects of the first phase of the cardiac rehabilitation program on the level of anxiety in patients hospitalized for coronary arteries bypass surgery

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Surgical operations are among the most stressful events which might take place in everyone's life. This is a quasi-experimental research of the type clinical trial in which 60 patients who were hospitalized for coronary arteries bypass heart surgery. Findings of the research indicated that on the average, the level of anxiety and vital sign were no significant difference in both experience and control groups. The first phase of the cardiac rehabilitation program including physical exercises and conversation with the patient. During this process, patients are encouraged to do their ordinary daily activities in order to reduce their anxiety.

The difference of paternity of adolescences: Discussion from the Jung's perspective

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Maternal affection is necessary for children. People have masculinity and femininity from Jungian theory. Young adolescence is cooperative for child rearing. However, how do men enthrusing business manage both maternal affection and business? We executed survey for Japanese and Finnish university students using questionnaire. We found not only for women but for men have maternal affection, from the standpoint of intention of future lifestyle. However, Finnish adolescences do not want to be both motherly men and also paternity men. Finding is that the cross-point of identities and social

expectation is important. We discuss how to unite maternal affection and masculinity.

Psychological change in children who attended Japanese traditional pilgrimage Ohenro

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It was investigated that the effect of Japanese traditional pilgrimage "Ohenro" on children (8-14 y.o.). They walked for a part of Ohenro, that is, approx. 40 km and visited 4 Buddhist temples in 3 days. Questionnaires were administered to the children (pre- and post-test, $n = 20$) and their parents (post-test). The results showed (1) the children had reduced feeling of sadness ($p < .01$, by paired t-test), (2) they had reduced the use of resignation coping for stressor ($p < .05$, by paired t-test), and (3) they had increased confidence and feeling of growth (by post-test).

Work engagement and communication processes at work place in Japan

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The present study examines how work engaged employees recognize and form their relationships at their work place. 11 Japanese employees who were high on work engagement (Schaufeli et al., 2002) were given individual semi-structured interviews. Based on the 45 concepts, 14 categories and 6 category groups created by analyzing the data using M-GTA (Modified Grounded Theory Approach; Kinoshita, 2006), a model describing communication processes, more particularly, mentally and objectively focused ones, was developed. The findings indicate that work engaged employees are characterized by curiousness, persistence, flexibility and positiveness concerning relationships. They purposely join colleagues and try to develop interactions.

Maternal behavior toward directing an infant's attention to foods during mealtime

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We examined the manner in which mothers direct their infants' attention to foods during mealtime. The directing behaviors of mothers toward infants were divided into "following" and "redirecting." Fourteen pairs of mothers and infants aged from nine to fourteen months were observed. The results showed that mothers, under monitored infants' behaviors, used "following" or "redirecting" for directing infants' attention to foods. While previous studies suggested that "redirecting" is less effective than "following" in play situation, our results indicate that "redirecting" is effective in some situations.

Employment dispute resolutions in New Zealand: What affect employers' satisfaction?

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This study attempts to identify the reasons for employers' dissatisfaction with the employment relationship problems resolution (ERPR) provisions in New Zealand. Data was received from a national survey asking employers about their ERPR experiences. Results showed that the total cost of employment relationship problems was about 0.4-0.6% of private sector annual wages and

salaries. Regression models suggest that the level of satisfaction was negatively associated with the change in productivity, recruitment costs and the length of the resolution process. It was concluded that employers' concerns about the high cost of ERPR were likely to be based on perception rather than on concrete evidence.

The relationship between social support and emotional well-being in daily life

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We examined the impact of discrepancies in desired and received social support on emotional well-being in daily life. A total of 30 undergraduates took part in a hand-held computer based experiences sampling study. In a series of multilevel analyses, we found that, in comparison to an optimal matching, insufficient received support in terms of desired support was significantly negatively associated with well-being. In contrast a surplus of received compared to the desired support was only for emotional support significantly positively associated with well-being. The results highlight the importance of optimal matching between desired and received support for emotional well-being.

Controlling the impact of mood in persuasion:

Contrasting correction and suppression

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The control of undesired influences in our judgments, by thought suppression, has been associated with ironic effects given the paradoxical hyperaccessibility of those thoughts. In this study, we contrast suppression and correction strategies, presenting a direct comparison of their processes and consequences. We first manipulated participants' mood (positive vs. negative) and subsequently gave them suppression or correction instructions, in order to control its influence on the evaluation of a following persuasive message. Results reveal a differential impact of these strategies in the persuasive message processing, as well as in a subsequent mood measure, associating rebound effects only with suppression.

Sex differences in basic and social emotion recognition

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Gender has been suggested as an important factor in emotion processing. The main objective of this study was to understand the sex differences in emotion recognition. We applied a cognitive test battery to characterize sixty participants (30 males and 30 females), and a visual emotion paradigm. The visual paradigm was composed by 54 stimulus of six basic emotions (happiness, sadness, anger, fear, disgust and surprise) and 27 stimulus of three social emotions (arrogance, guilt and jealousy). The results suggest that males recognize anger with inferior reactions times and display that females had a superior accuracy for social emotions in study.

Kohlberg and a "fair community": Promoting the citizenship in school

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This work had as main objective to describe a technique for moral education entitled "Fair Com-

munity" as proposed by Kohlberg and his collaborators at the University of Harvard and which has its fundamentals in the theory of moral judgement by the same author. Starting from the discussion technique of hypothetical dilemmas in group, it is resumed in a program in the type of "fair community" implemented in the city of Niterói, Rio de Janeiro, Brazil and presents a statistical analysis by which it was verified an increase of scores in the moral maturity of students within the program. It was also discussed the broad implementation of such program in a Brazilian context.

Explanatory style and coping

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An exploratory study was carried out to understand the possibility of any relationship between explanatory style and coping on 30 women (age range 35-55). Data was elicited through in-depth interview. The interview focused on questions relating to background information, explanatory style and ways of coping. Thematic analysis showed that women who were optimists relied on planning, self control, positive reframing as a way of coping. Women, who were pessimists preferred denial, behavioural disengagement, distancing as a way of coping. This study has implication for designing interventions to promote positive approach towards life and to counsel individuals to be more optimists.

Social-pedagogical reflective self-images of students of psychological and pedagogical specialities

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Social - pedagogical reflective self-images of students of psychological and pedagogical specialities. The present study explores the possible link between self- and reflective images of students. The purpose of the study was to analyze the content and the structure of actual and reflective images (Myself in the opinion of my favorite and unfavorite teachers). To develop this we used a method of free characteristics (Sitnikov, 2001). Data analysis indicated a significant positive correlation between reflective self-images and images of favorite and unfavorite teachers. Findings showed little correlation between actual and reflective self-images of students. The results underline the importance of self-perception in the opinion of emotional-significant teachers on formation of self-image.

Stereotype threat impacts in uniformly minority contexts may require both majority presence and majority-involved evaluation.

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Does Stereotype Threat require outgroup evaluative presence and stereotype related testing of minorities? 307 African American students at a historically Black College completed SAT verbal tests under conditions represented as diagnostic or as nondiagnostic of their personal ability. White experimenter's or White co-actor/test-taker's presence produced stereotype threat performance decrements. Black experimenters didn't produce performance decrements even when a White re-



searcher appeared briefly before testing, or when a merely present, White male sat uninvolved near the front of the test room. These findings suggest that continuous outgroup presence and potential outgroup comparison-evaluation may be required to produce substantial Stereotype Threat impacts.

The effects of message framing on minority influence impact

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Opinion minorities can increase their impact by linking arguments to a common normative principle shared by both the majority and the minority. Message framing as an influence strategy has been demonstrated in a variety of contexts and the present study expands and contextualizes this effect. Participants observed a videotape of five individuals discussing the legal marriage between homosexuals. We manipulated whether or not the minority framed its arguments and assessed its perceived impact upon the group, attitude change, and information processing of the message via thought-listing. Results support the notion that framing is a powerful influence strategy for minority sources.

Unemployment and psychosocial impact of the outplacement

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This study evolves around the employee separation process, the unemployment phenomenon and its psychosocial impact. The aim is to analyse whether there are differences in terms of self-esteem and the discouragement learned between two groups, one consisting of individuals with access to the Outplacement program and another without Outplacement or any other kind of employee separation program. This is a prospective study in which it's predicted that the self-esteem of the subject with access to Outplacement programs is higher compared with the subjects not included in that kind of employee separation programs; the disappointment learned, in contrary, is expected higher in the group without Outplacement. Keywords: Unemployment, Untying labour, Employee Separation, Outplacement.

Weight bias in early childhood

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The general purpose of this study was to examine weight bias in young children. A great number of empirical studies show weight-based stigmatization toward overweight children in boys and girls as young as age three. Participants of this study were 280 pre-school and Primary School children (3 to 8 years of age). They were individually assessed following a semi-structured interview. Participants had to successively select among 4 drawings depicting children differing in body shape (from "very slim" to "very fat") one of the figures for several tasks (preferences and rejections task, identification tasks, playmate preferences and adjective attribution task). Overall, most children

showed positive bias toward thinner figures and negative bias toward fatter ones.

But next time, I will win: On the relation between irrationality and probability estimates in a game of chance

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Based on Rational Emotive Behavior Therapy (REBT) we tested the hitherto unexplored assumption that irrationality as conceptualized by REBT (demandingness, self evaluation, low frustration tolerance), is associated with erroneous statistical reasoning. We assessed trait irrationality of 216 respondents and individual estimates of future winning probabilities in the context of the Wortman (1975) perceived control design. Results indicate that an increased (i.e. unrealistically optimistic) as well as a decreased (i.e. unrealistically pessimistic) estimation of future winnings is associated with irrationality. Findings substantiate an association between erroneous probability estimates and therapeutically relevant cognitions which do not imply any mathematical or statistical contents.

Toys and children's games in a gender's study

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To investigate cultural stereotypes signaled by children of 8 and 9 years old, boys and girls pupils of elementary school in Rio de Janeiro, they having as base the symbolic dimension of the toys and tricks. Methodology - Quali/ Quantitative study. The Subjects were 300 children. Hypothesis: the children choose toys and tricks that had adequate culturally to its sex. Result - 33 % of the girls breach with stereotypes of previous generations. They point to culture change in the woman image. 78% of boys reproduce stereotypes of the Brazilian culture where the exchange of social papers still resists the rupture.

Possibilities for and effects of health-promoting work organization in nursing

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The characteristics of work organization have an essential impact on the quality of working life. Unfortunately there are only a few studies in the impact of hospital and ward organization on strain and well-being of nurses. Therefore the main question is, whether there are different kinds of work organization in hospital nursing? The main sample consists of 44 wards and 220 graduated nurses. The results show that it is possible to develop kinds of work organization on the ward level and the individual level of the nurses. Emotional exhaustion and perceived task-specific strain differ in favour of the most favourably organized wards and individual strategies. The organizational characteristics are discussed mainly with respect to primary prevention.

Theoretical grounds of educational psychology

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Educational psychology is actively developing in Russia but many practical problems of education remain unsolved. One of the reasons is diversity of approaches to the goals of psychological service in education.. We consider educational psychology not as independent brunch of educational process but as an aspect equal with medical, social and methodical ones. It's goals are derived from the general goals of education. The goal of modern education is not the translation of ready-made

knowledge but the training of pupils in dealing with different tasks in changing environment. So the task of school psychological service is the formation of wide social outlook in accordance with P.J.Galperin's concept of psyche as orienting process.

Studying explicit and implicit ethnic attitudes and ethnic categorization effects in the Russian Federation

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We studied ethnic attitudes and ethnic categorization judgments in Russia. Participants judged 100 faces varying on facial physiognomy (Eurocentric to Afrocentric) and skin color (light to dark) and completed implicit and explicit ethnic attitude measures. Explicit and implicit attitudes were pro-Russian; negative explicit attitudes were expressed towards some ethnic groups. Implicit and explicit attitudes towards non-Russian groups were independent. Participants used skin color when categorizing faces as "Russian" or "non-Russian," and relied on facial physiognomy to make finer distinctions among lighter faces. Participants high on implicit ethnic prejudice judged racial typicality more variably than individuals low on implicit ethnic prejudice.

Fostering language development of migrant children: Results of an evaluation study

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Fostering migrant children to learn the national language before visiting school is a crucial topic of early education in child care institutions. A program was evaluated in a 1-year controlled pre-post-design and followed up 2 years after start with 100 children, initially 2, 3 and 4 years old. Language status was measured by a standardized observation scale run in the institutions. Context data from families and institutions were collected by questionnaires. Young children with early entrance into the program caught up or even outdid elder children. The program showed: compensatory effects reducing differences between children from lower and higher education families.

How do teachers react to stress? Work related coping styles and psychophysiological correlates

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The aim of this study is the investigation of differences in galvanic skin response regarding behavioural coping styles, measured with the Workrelated Risk Factors Questionnaire (WRFQ). The sample consists of 20 female teachers. In a 24-hour-monitoring a skin response diagnostic was performed. According to the under-arousal-theory, risktype A (high work involvement and low dissociation from work) and risktype B (high resignation and low life-satisfaction) showed lower physiological arousal and at the same time more changes between arousal and relaxation. The latter can be interpreted as a decreased ability to relax. Thus, in person-oriented interventions activating techniques should be used.

Behavioral change of drug users visiting rehabilitation centers in Jakarta

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Objectives: find a new knowledge of relapse and drop outs among those who visited rehabilitation centers in Jakarta Methods: longitudinal qualitative study in Jakarta greater area. Participants were drug users who have been in rehabilitation centers and selected by backgrounds (i.e., sex, age, educational level, social economic status, and type of drugs). After baseline interview, participants were followed up every four months for two years. Results: 12 participants have been in rehabilitation centers at least once. During the study they were not in rehabilitation centers but stayed using drugs. Conclusion: rehabilitation program for drug users needs to be evaluated

The influence of occupation-related gender stereotypes on self-reported service satisfaction

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Stereotype Threat Theory indicates that individuals' performance can be influenced and conform to their stereotypes (Steele & Aronson, 1995). Our aim is to tests whether the activation of occupation-related gender stereotypes (doctor is suitable for males & nurse is for females) causes participants' inappropriate evaluation of service satisfaction about particular targets (male nurses or female doctors). Participants were asked to read a manipulation article, look at target photographic, and then rate their satisfaction if they are serviced by this target. Our results reveal participants in experiment condition rate lower satisfaction than in control condition. More details and findings are discussed.

Attention enhances the perception of backscroll illusion

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When a movie presents a walker against an ambiguously moving background of vertical counterphase grating, the background appears to move in the opposite direction of her/his locomotion. We examined an effect of spatial cueing on this backscroll illusion. When a dot stimulus preceded the movie clip at the same location, participants perceived the backscroll illusion at higher probabilities than under no-cueing conditions. In addition, this effect occurred in peripheral vision but not in central vision. These results suggest that the spatial attention enhances the motion perception which relies on high-level object-centered signals.

Improvement of university students' communication skills through sports education classes

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The purpose of this study was to investigate the change of communication skills through sports education classes in a university. One hundred and eighty-seven students participated in two badminton or three table tennis classes. The participants were twice administered communication skills questionnaires including the Encoding-Decoding Skills Test Ver.2 (Horiike, 1994) and the Affective Communication Test (Friedman et al., 1980). The

results indicated that the communication skills of the participants improved significantly through the sports education classes with more improvement in the badminton classes than the table tennis classes.

Perceptual bias and attentional bias on chimeric faces processing

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An experiment was conducted using the chimeric face paradigm to investigate the perceptual bias and attentional bias on chimeric face processing. The results indicated that: (1) the left perceptual bias was significant when faces were upside, significant perceptual bias was not found when faces were upside down; (2) participants produced more first saccades on the right and longer fixation time on the right side of faces significantly. These results suggested that perceptual bias and attentional bias on chimeric faces were separated, eye movements were not required in perceptual bias producing on chimeric face judgements.

Students' judgments and teachers' self-judgments of empathy: The empathy judgment consistency based on the Interpersonal Reactivity Index (IRI)

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To examine the consistence between students' and their teachers' judgments of empathy, a sample of 525 adolescents and their teachers completed the Interpersonal Reactivity Index (IRI) with four subscales: empathy concern (EC), perspective taking (PT), fantasy (FS), and personal distress (PD). The average-achieving students (AAS) scored significantly lower than others on all subscales; The inferior students (IS) scored lower on EC but higher on PD than excellent students (ES); The teachers scored significantly higher than others on PD and FS. The hypothesis of close effect was supported, the ES gained more caring while the IS gained more sympathy. PD and FS might be implicit elements of empathy.

Effects of received training quantity in the elaboration of derived research inquiries

Suro, Ana CEIC, University of Guadalajara, Guadalajara, Mexico **Padilla, Antonia** CEIC, University of Guadalajara, Guadalajara, Mexico **Tamayo, Jairo** CEIC, University of Guadalajara, Guadalajara, Mexico An essential activity in the scientific work is making research inquiries derived from a certain knowledge area. An experimental task was designed to study the relation of different mastery in a theory and the capability to formulate inquiries derived from that theory. Twenty-five participants were evaluated in the formulation of research inquiries, being exposed to different training quantities: Definitions, examples and experiments; Definitions and experiments; Definitions; and Experiments. Data shows that complexity and pertinence in the questions elaborated by the participants, increases with an increased quantity of received training. The implications that these results have for teaching sciences are discussed.

Gender stereotypes on the rebound in Japan

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This study investigated the rebound effect in the context of stereotypes of traditional women in Japan. First, participants were told to write a description of a traditional woman on a holiday. Half of them were instructed to avoid using

stereotypes in their description, others were not. After a filler task, they rated another woman on twenty items which were consisted of four kinds of trait; gender type (masculine vs. feminine) x valence (positive vs. negative). Results indicated that the rebound effect occurred only in female participants on the negative-feminine traits. We discuss gender differences in this stereotype rebound effect.

Assessment parents' idea with epileptic children about stressor and their coping.

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Objective: determination of parents' idea with epileptic children about stressor and their coping. Methods: The sample was 400 parents with children 5 to 14 years old. The instrument was questionnaire with 3 parts about demography informations, stressor and coping. The t-test and analyze variance were applied. Results: there was significant difference between mothers' and fathers' stress ($p=0.001$) and there wasn't significant coping ($p=0.866$). There was significant and converse relationship between stress and coping in parents. Conclusion: There was significant and converse relationship with stress and coping in parents with epileptic children and increasing stress lead to decrease coping.

General health in runaway and non-runaway girls

Tahbaz, Sahar Dept. of Psychology, University of Tehran, Tehran, Islamic Republic of Iran This study examined differences between runaway and non-runaway girls' general health through a case-control design. The sample group of runaway girls involved 25, 17-25 years of age runaway girls being kept at the shelters in Tehran. Non-runaway girls were 25 college students matched with runaway girls in all demographic features. General Health Questionnaire (GHQ) was administered on subjects for measurement of general health. The results showed a significant difference between two groups in all subscales of somatization, anxiety and insomnia, social dysfunction, depression and total score of GHQ. Running away from home, needs more consideration and the author suggests strengthening social preventive and protective systems to deal with this pathology.

Japanese students' images of the elderly: An analysis by the Semantic Differential (SD) method

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Our purpose is to compare the Japanese students' images of the general elderly with those of their own old age. The Semantic Differential (SD) test with 23 items was used. The subjects were 362 Social Science (SS) major students and 279 Social Welfare (SW) majors. Japanese students' images of the general elderly were not coincident with their own elderly images. Their images of the general elderly were similar in all students. However, SS students evaluated their own elderliness more positively than SW students. The factor analysis showed 5 factors in the general elderly and 4 in their own elderliness.

Figure - ground organization on Watercolor effect and Sumi painting effect

Takashima, Midori Dept. of Psychology, Nihon University, Tokyo, Japan **Fujii, Teruo** Economics, Keiai University, Inage-ku, Chiba-city, Japan Watercolor effect is new color spreading effect. On the other hand, when background color was middle gray and the border colors were lighter gray and darker gray, we observe a spreading effect into both sides. This phenomenon is Sumi painting effect.



This study examined figure - ground organization on Watercolor effect and Sumi painting effect. This result indicated that Sumi painting effect dose not influence the organization of both depth and form. However, Watercolor effect strongly affected organizations of depth, and the organizations of form were more affected by a factor of equal width than Watercolor effect.

A school-based long-term intervention for reduction of students' trauma-related distress in a Japanese school

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A school-based long-term intervention for reducing students' post-traumatic stress-related symptoms, somatic complaints, functional impairment, and anxiety due to exposed to a school crisis is reported and examined. The tragic incident occurred on June 8, 2001. Eight students were killed and thirteen students and two teachers were seriously injured by a intruder with a knife. Many students witnessed and suffered from psychological trauma. After early intervention, authors have kept on supporting to the students, parents and teachers on psycho education, counseling, consultation on class contents and school events and so on. This intervention results in students adjustment at school. The implementation and effectiveness of the school-based long-term intervention in a Japanese school is discussed.

Teacher's classroom management and children's behavior at the beginning of the semester

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This study investigated the relations between teacher's classroom management and children's behavior at the beginning of the semester. Teacher's discourse and behaviors and children's behavior were observed in one of the six grade classroom in Japan (20 boys and 19 girls) from April to July. Also, interviews about classroom management were administered to the teacher. The main results were as follows: First, teacher's instructional belief was reflected on teacher's behavior to children. Second, the teacher coped with problem children considering overall classroom management. And the teacher's behavior to children changed as to the forming grade of his class.

Can the type of goal and critical thinking ability affect the evaluation of enthymeme?

Tanaka, Yuuko Graduate School of Education, Kyoto University, Kyoto, Japan **Kusumi, Takashi** Graduate School of Education, Kyoto University, Kyoto, Japan This study examined the effect of two types of goal ("to make correct judgments" and "to enjoy things") and critical thinking ability, assessed using part of the Watson-Glaser Critical Thinking Appraisal, on the evaluation of enthymemes. An enthymeme is defined as a syllogism without a major premise that is logically invalid. Thirty-five Japanese nursing students were asked to evaluate the acceptability of 30 enthymemes. The results showed that the enthymemes tended to be more accepted when the students were "enjoying things" and students who had lower critical thinking ability scores tended to more accept the enthymemes.

Relationship between humor and friendships

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This study was investigated how assistive sense of humor affected the satisfaction and influence derived from their friends. A questionnaire was

administered to 357 Japanese undergraduates. Results indicated that participants with high in assistive sense of humor rated higher scores on the satisfaction and influence derived from their friends with sense of humor, while they rated lower satisfaction and influence to their friends without having the sense. Furthermore, the higher the score on the sense people had, the more notably the discrepancy of those two rates expanded.

Mental grouping in multiple-object tracking

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We report that during multiple-object tracking (MOT, Pylyshyn & Storm 1988) a strategy of grouping several targets into "mental objects" and overtly following their centers is more consistent with eye movement data than a theory of moving multiple foci of attention (FINST). 18 subjects showed significantly ($p < 0.01$) higher performance when they had to track objects by freely moving their eyes than by fixating in the screen center. The eye movements are well predicted by a model following centers of groups of 3-4 targets and occasionally inspecting collisions of targets.

Main types of high school students' career orientations and effects of gender on their development

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Objectives. To find out main types of high school students' career orientations and effects of gender on their development. Methods. The investigation was done on 120 high school students (33.3% boys and 66.7% girls) from Kiev in 2007 using E.Schein Career anchors and SPSS. Results. 1. Three types of the students' career orientations were found: autonomous-professional, managerial-entrepreneurship, and traditional. 2. The most developed was the managerial-entrepreneurship type (37.0% of the respondents). 3. The managerial-entrepreneurship type was mainly oriented toward by men ($r < 0.01$) while the traditional type by women ($r < 0.01$). Conclusion. The research findings can be helpful in professional counseling of high school students.

The value system of students of Iran

Tarkhorani, Hamid Tehran, Islamic Republic of Iran

Introduction: The value types proposed by Schwartz were: power, achievement, hedonism, stimulation, self-direction, universalism, benevolence, conformity, tradition and security. This study designed to determine values preferences in students of Tehran city. Methods: The sample size consists of 1000 students that educating in Tehran high schools. We used clustering method for sampling. Each student was given Schwartz value survey Results: the value ranking in sample was Conformity, security, Self-direction, universalism, benevolence, achievement, hedonism, power, stimulation, tradition. Discussion: The Conformity, the first value in the ranking introduces the life-adjustment as the most important challenge among adolescent population.

Explaining the role of coping styles in mental health and marital satisfaction

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An extensive analysis was performed to assess the kind of association among coping styles (problem-focused, positive emotional-focused, negative emotional-focused), marital satisfaction and mental health. 276 students were included in this study. The result revealed that positive emotional-focused strategies were positively associated with marital satisfaction and psychology well-being, and negatively associated with psychology distress. It was found that negative emotional-focused coping style

as an ineffective strategy was negatively associated with marital satisfaction and psychological well-being, and positively associated with psychological distress. The results suggested that couples marital satisfaction and mental health could be explained by different coping styles

The relationship between goal orientation and feedback seeking motives

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This study examined the relationship between goal-orientation and feedback seeking motives. Two-hundred-two people working in transportation, banking, and pharmaceutical sectors in Turkey filled out a questionnaire package including goal-orientation and feedback seeking motives scales. Regression analyses showed that learning-goal orientation predicted desire-for-useful information motive (DUM) positively and defensive motive (DM) negatively. While performance-prove orientation (PPO) predicted both DUM and DM positively, performance-avoid orientation (PAO) predicted DM only. It seems that for learning-oriented employees the primary motive for seeking feedback is to obtain diagnostic information about their performance whereas for PAO employees the primary motive is to protect their ego and self-image.

Professionals' work locus of control and quality of life

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The present study examined the relationship between work locus of control and quality of life among three occupations (N=654), namely managers, engineers, and bookkeepers in Estonia. Research has held by Work Locus of Control Scale (WLCS) and WHO Quality of Life Instrument (WHOQOL-100). Results showed that professionals' internal work locus of control associated with their higher quality of life ($r = .43$). Moreover, all six domains of quality of life, e.g. physical health, psychological well-being, level of independence, social relationships, environment, spirituality/religion/personal beliefs were significantly ($p \leq .001$), related to internal work locus of control, correlations ranged from .39 to .24.

Bookstart: Evaluation of a head start program that supports early language development of children in Hamburg

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This research project evaluates the Hamburg bookstart program. Core of bookstart is the distribution of free book packages at the U6 preventive medical checkup to all parents residing in Hamburg. Additionally, special playgroups are offered to support the families. The evaluation combines specific designs, subjects, methods of data collection and statistical analyses in a multimethod approach to answer diverse research questions. First results indicate a high acceptance of the program among parents and a positive rating by pediatricians. Besides structure and process quality, the effectiveness of bookstart concerning parental skills of language teaching and infantile language development will be observed.



The effects of stress and failure on mood and performance of functional, dysfunctional and non-perfectionists

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Longitudinal studies have shown that perfectionism acts as a vulnerability factor for distress in response to failure and stressful life events. It is hypothesized that this holds especially for achievement related stress. Usually the amount of experienced stress is measured by self-assessment, and consequences of failure and other forms of stress are not differentiated. In the presented study ($N=70$), achievement related stress and failure were manipulated experimentally by using two forms of a concentration test and positive versus negative feedback. Effects on mood and performance varied across different types of perfectionists. Implications for perfectionism theory and measurement will be discussed.

Adaptive disengagement from unattainable demands in adulthood: The concept of developmental barriers

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When individuals are confronted with serious barriers for development, then opportunities for primary control are limited. We hypothesized that the most adaptive way of coping with developmental barriers rather is to employ secondary control strategies. This hypothesis was tested and confirmed utilizing a sample of $N = 806$ adults who lived in different contexts and who reported many challenging demands in their work and family life. Results showed positive associations between secondary control and subjective well-being if developmental barriers were high. This implies that under certain circumstances giving up may be more adaptive than persistence.

Intolerance of ambiguity, interpersonal life events, and mental health

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This study examined whether the interactions between intolerance of ambiguity and interpersonal-related life events have effects on mental health. Two hundred thirty six Japanese university students participated in the study. They were asked to complete 4 scales including Intolerance of Ambiguity Scale, Stress Response Scale, Happiness Scale, and Interpersonal Life Event Scale. Hierarchical regression analysis showed that in males, the interaction among intolerance of ambiguity, negative life events and positive life events predicted the increase of stress response significantly. However among females, no significant interaction effects were obtained.

Prospective memory failure and the metacognitive experience of "blank in the mind"

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This study tested the hypothesis that prospective memory (PM) failure is related to the metacognitive experience of "blank in the mind" (BIM). A computerized, event-based PM task was administered to 68 university students of both genders. After the completion of the PM task participants responded to a series of questions tapping meta-

cognitive awareness of PM failures and BIM experience. Results showed that participants were aware of PM failures and of BIM experience. The frequency of self-reported BIM was a function of task demands on working memory and correlated with the accuracy of response and response time on the PM task.

The role of direct experiences in evaluation shifts

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The present study aimed to clarify the role of direct experiences in evaluating attitude objects. Although past researches showed evaluation shifts in some context (e.g., attitudes) after having direct experiences, it is still not clear how people give meanings to the events according to the way they experience. The authors manipulated the manner of experience (direct/indirect) in an experiment setting. A total of 52 participants were asked to solve the five sets of puzzles under different conditions. Findings of the present study provided evidences supporting the importance of direct experiences in decision making.

Positive affect and cortisol awakening response on work day and weekend in women

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Positive affective states such as psychological well-being are associated with reduced cortisol awakening response (CAR) which is the change in cortisol levels that occurs during the first hour after waking from sleep, i.e., allostatic response. Here we show that higher positive affect level in Japanese women, 20-50 years old ($N=58$), is associated with reduced CAR on work day when compared to the subjects with lower positive affect level. However, there were no significant differences in CAR on weekend between subjects with higher positive affect level and with lower one. These findings suggest that positive affective states directly buffer the impact of working day.

The study of peer-assisted learning strategy system for elementary students

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The aim of this study was to develop the peer-assisted learning strategy system (PALSS) for elementary students. A hierarchical cluster analysis was carried out based on students' online involvement profiles. The results indicated that the patterns of online peer interaction varied as a function of types of language arts activities. The findings suggested a critical connection among learners' achievement level, self-concept, and online interaction. There was a positive correlation between students' self-concept and their online tutor's/tutee's behaviors. The results indicated that PALSS was an effective tool for enhancing students' Chinese reading ability as well as self-concept of those passive participants.

Relationships between elementary children's reading, writing, and mathematical abilities: Does working memory play a role?

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One potential source of individual and age-related differences in elementary school children's ability to perform on reading, writing, and mathematical tasks and the focus of the current study is working memory (WM). In this study, we test two competing models of WM. The first model posits that individual and age related differences in reading, writing, and mathematical ability are related to a processing efficiency model of WM where the fluency of lower order component processes mediates these relations. In contrast, the second model assumes that storage capacity within a WM executive system allocates resources to lower order operations.

Promotion of the self-efficacy of junior high school students by contrived success using a presentation trick

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The purpose of the study was to promote the self-efficacy of junior high school students and to examine whether academic achievement can be positively affected by artificially promoted self-efficacy. Twenty-four junior high school students with academic achievement in the 26-50 percentile solved easier anagram tasks surreptitiously presented using the fMORI technique (Mori, 2007), while other 183 students solved more difficult tasks, without being aware of the duality. The target students preformed the anagram task significantly better than their class mates. Success on the tasks significantly promoted students' self-efficacy and showed a sign of subsequent academic achievement. (97 words)

"(Don't) worry, live?!" – An empirical review of the theory of learned carefreeness

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The Theory of learned carefreeness deals with the question of why people often repeatedly violate precautions and ignore warning-signals in combination with a comfortable state of well-being (positive illusions, hedonism). The Validation study presents a confirmatory factor analysis and behavioural measures of a new scale to detect carefreeness ($= .88$, $N=581$) as well as correlations with related concepts. As a reliable instrument the carefreeness-scale provides numerous starting points for prevention strategies in all areas where human behaviour can be seen as a risk factor for sanitary, social or material damages (environmental pollution, health care, traffic- or financial behaviour, etc.).

Neural correlates of action and size information during working memory retention and retrieval from long-term memory

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We hypothesized that working and long-term memory are represented by the same content-specific neural structures (e.g. visual sensory, auditory sensory, motor). In an fMRI study with sixteen healthy participants, working memory retention and long-term memory retrieval of size and action information were investigated. Whole



brain analyses revealed a jointly activated posterior region (BA 17) for size information whereas action tasks yielded a common frontal region (BA 47) considered representing semantic information. Motor structures for action information were confined to Regions of Interest (ROI) analyses. It can be concluded that information-specific configurations exist pertaining to both working and long-term memory.

Individual differences in the attentional blink: The important role of irrelevant information

Valchev, Nikola Groningen, Netherlands

A well-established phenomenon in the study of attention is the attentional blink (AB): A deficit in reporting the second of two targets when it occurs 200-500 ms after the first. We present evidence for large individual differences in the level of distractor processing and subsequent interference with target identification processes. In two experiments we present streams with or without additional distracters besides the target's masks. The results thus seem to support the hypothesis that non-blinkers (participants who systematically show no blink) are more efficient in ignoring irrelevant information than blinkers are.

Identification of work styles in children between 4 and 5 years old

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The main aim of our research is to determine whether children between 4 and 5 years old work at school with different working styles in the different areas of the curriculum. 104 children have participated. The observation has been carried out by six teachers using the assessment protocol of Gardner, Feldman and Krechevsky (1998). The results suggest that children use different work styles depending on the knowledge area. The most significant conclusion is that teachers can identify the predominant style with which children take part in each of the curriculum subjects.

Styles of work in children on first stage of primary education (6 and 7 years old)

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The investigation's aim is to verify the existence of different work styles in children between 6 and 7 years old. They have 93 children participated and evaluation has been carried out by six teachers who have used the observation protocol adapted by Ballester (2004). The results show that children at this age have various work styles. The findings indicate that children use in each activity a different work style depending on the area they are studying.

To be a volunteer: Motivational and ideological underpinnings

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Volunteering is an important social phenomenon nowadays. Many volunteers are young people, most of them are university students. Then, it seems relevant to study the reasons that lead university students to enrol in volunteer activities. The current research tried to explore whether motivational factors, ideological variables and previous experiences can influence the willing to do volunteer work. In order to investigate these factors, two different studies were conducted. A sample of volunteers participated in both studies. Results show that altruistic motivation and legitimizing ideologies play important roles in volunteers' enrolment and commitment. Discussion will be focus on the importance of these results for promoting volunteers active participation and long term commitment.

Does sense of coherence mediate the relationship of hardships and psychological distress during unemployment?

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Individuals exposed to hardships during unemployment experience greater distress than their non-exposed counterparts. We investigated whether the reactions to hardships could be explained through greater vulnerability caused by weakened resistant resources, i.e. sense of coherence (SOC). Our method was a longitudinal study with unemployed respondents participating in an intervention program. Results: Individuals subjected to impaired work ability, problem drinking and financial strain have weaker SOC than other individuals. Moreover, we found that SOC acts as a mediator of relationships between experienced hardships and psychological distress. Conclusion: Low SOC can be an important psychological background factor underlying the negative effects of hardships during unemployment on mental health.

The Estonian students' and teachers' coping patterns in the academic domain

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In this empirical research the method of gathering data about students' and teachers coping strategies was based on the system of coping categories created by Skinner and Wellborn (1997). Main hypothesis was that a school can potentially either support or inhibit students' capacity to overcome problems with academic coping. We distributed questionnaires to the 7th, 9th and 12th grade students (N = 3838) with 2 years interval and their teachers (N = 620). Results: teachers' and students' coping patterns, sex, national differences will be analysed.

Couple's attachment and adjustment to the transition to parenthood

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As shown by wide research, childbirth determines remarkable changes in couple's relationship; it is a period in which attachment is extremely important for the successful transition. The aim of this study is to investigate the role of adult/couple's attachment on marital adjustment in this period. 104 subjects were recruited; Adult Attachment Interview, Current Relationship Interview, and Dyadic Adjustment Scale were administered. Repeated measures General Linear Models were applied for the analyses. Results showed the role of couple's attachment on adjustment after childbirth ($p = .033$), underlining the importance to analyze the

recent conceptualizations of adult attachment states of mind.

Physiotherapist work in the habilitation team in elementary school

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The possibilities in the work of a physiotherapist dealing with the habilitation of the grade 1-4 schoolchildren in the Center of Children Development and Education are investigated in the research. The theoretical conclusions about the junior grade schoolchildren physical and mental development and studies are drawn. The ideas about the peculiarities of the children musculo-skeletal system are presented. Especially poor posture in childhood and the possibility to correct it are discussed. Particular attention is paid to the therapeutic exercises and swimming. The survey of different professional work experience has been carried out in Secondary School in the Center of Children Development and Education.

Gender perception and stereotypical beliefs: Application for diversity management

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Given the growing presence minorities in organizations, diversity researchers have focused on the process underlying the diversity perception, and they mostly studied the effects of social category differences in race, ethnic background and gender. Focusing on induction-deduction paradigm, on a sample of (N= 249) students the stereotyping processes underlying relations were assessed. Relying on gender as a salience social category, 2(Gender)x2(Target)x2(Individual)x2(Traits stereotypical-non stereotypical) ANOVA analysis was conducted and it revealed a main effect of stereotype relevance ($M=.31$), $F(1,232)=14.95$ $p<.001$. Taking into account these processes, suggestions may arise for further research in the field of diversity management.

Interpretation patterns of counterfactuals, absurd conditionals, prospective and retrospective conditionals

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In three experiments we investigated the preferred interpretation of counterfactuals, absurd, prospective and retrospective conditionals. Subjects could pick out of a list of four paraphrases, matching the inference types of propositional logic. For prospective conditionals, participants primarily chose Modus Ponens (p, therefore q); for retrospective conditionals Modus Ponens and Affirmation of the Consequent (q, therefore p); for counterfactuals Denial of the Antecedent (not p, therefore not q); for absurd conditionals Modus Tollens (not q, therefore not p). Contrary to the regular inference task, this new method displays a very clear distribution among the inference types.

Extraversion and agreeableness as personality characteristics associated with sense of community

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The objective of this investigation was to study the influence of the personality factors, specifically the quality and intensity of interpersonal relationships



in the sense of community. The sample was composed by 400 adults from Argentina. The Revised Inventory of Personality NEO (NEO PI-R) by Costa and McCrae (1992) and the Sense of Community Scale (Vignale, in press) were administered. Regression analyses were done between Extraversion and Agreeableness factors and the sense of community. According to the studied sample, we can conclude that the personality factors contributed significantly to the prediction of the sense of community.

The relationship between working expectancies and burnout syndrome among Mexican health professionals

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Objective: Analyze the relationship between working expectancies (Professional development, Users relationship, Compensation, Work characteristics) and the burnout syndrome components (emotional exhaustion, depersonalisation, and personal accomplishment) Method: Participants were 236 Mexican health professionals. The working expectancies were evaluated through the "Working Expectancies Questionnaire" (CEL), and Burnout through the "Short Burnout Questionnaire" (CBB) Results: The results of the multivariate analysis of variance showed a positive relation between whole working expectancies index and whole burnout index. The relations between the different types of expectations and the components of Burnout Syndrome are discussed. Conclusions: The analysis of the job expectations contributes to the development of a burnout cognitive model.

Prediction of moral decisions and actions

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Three studies were designed to test a model for the prediction of moral decisions and actions. The model comprises moral development and expectancies x values of costs, benefits and feelings. The studies tested the model in hypothetical moral decisions and in game situations: in the prisoners dilemma (PD) the first two studies and in the dictator game (DG) the third study. Participants were university students and employees. Regressions showed a high percentage of variance predicted by the model in the hypothetical decisions, and a lower but significant variance of the behavior predicted in the games.

Better late than never: How onsets and offsets influence prior entry and exit

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Three experiments examine visual prior entry (determining which of two stimuli appeared first) and prior exit (determining which of two stimuli disappeared first) effects with a temporal order judgment (TOJ) task. In addition to using onset and offset targets, the preceding cues were either onset or offset stimuli. Typical, and equivalent, prior entry effects were found when either onset or offset cues preceded the onset targets. Unexpectedly large prior exit effects were found with the offset targets, with offset cues producing greater capture effects than onset cues. These findings suggest that more attention is allocated to searching the visual field when targets are difficult to find.

Role of virtual reality helmets in the development of human image thinking

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According to the phased and cultural-historical (Vigotsky) theories of mental development exteriorization results in interiorization. On a certain stage of filogenesis human thinking by images was supplemented with thinking words. It makes thinking more effective, thanks to virtual reality helmets and gloves people get a possibility to think in computer images, virtually forming skills and habits, experiencing emotions. Results of our experiment shows: Children's early assimilation of methods allowing interacting with virtual reality suppresses the defense and the newness reflexes. Verbal thinking and verbal communication play a less significant part. Nevertheless orientation, cognitive reflexes develops at earlier periods.

Interests and competence beliefs of elementary school students: Effects on secondary school track choice

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In a sample of about 900 elementary school students we analyze relations between motivational variables and the choice of secondary school track. Data are taken from BiKS-8-12, a longitudinal study on competence development and educational decisions in 8 to 12 year olds. Substantial differences in interests and especially competence beliefs between academic and non-academic track can already be shown in primary school age. Interests and competence beliefs are based on school subjects as well as broader domains of activity. The sample will be traced until grade 7, allowing further analyses of mutual influences between individual differences and school contexts.

Beyond logics and deontic logics: The rational role of action options and goals in the Wason selection task

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Normatively, testing a conditional ($p \rightarrow q$) traditionally involves logics and checking p and non- q cases. We tested our hypothesis that participants, checking conditional obligations or prohibitions, deviate from logic not in an irrational, but systematic way, using deontic logic, different social goals (cheater and cooperator detection, cf. v. Sydow & Hagmayer, 2006), and action options. In the first experiment we varied rules and goals, in the second goals and action options. Both studies confirmed our prediction of rational knowledge-based answers that systematically transcend the norms of standard logics.

Perception of affordances for standing on an inclined surface depends on center of mass and experience

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Objectives. We investigated whether changes in the height of center of mass influence perceptual

boundaries for standing on inclined surface. Methods. Participants adjusted a surface until it was the steepest angle that would support standing on that surface. Participants wore a weighted backpack that raised their center of mass. Results. Perceptual boundaries occurred at smaller slopes while wearing the weighted backpack but decreased over the course of six trial blocks regardless of whether the backpack was worn. Conclusions. Perceptual boundaries for standing on an inclined surface depend on both the height of the center of mass and experience.

La place des stéréotypes et discriminations dans les manuels scolaires

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Textbooks must remain neutral and must not convey stereotypes which participate in the advent of discrimination. However, in reality, stereotypes can remain. We analyse, with a quantitative methodology, different textbooks of civic-education, history, geography, French literature, English, mathematics and biology in order to identify potential discrimination. Some textbooks present different situations between men and women. Foreigners and seniors are rarely present. Finally, disabled people and homosexuals are absent in textbooks. The results enable us to suggest some recommendations to book publishers so that they can reduce the amount of stereotypes present in textbooks.

Recognition memory impairment after intentional suppression as an all-or-none phenomenon: Electrophysiological evidence

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This study employed event-related potentials (ERPs) to investigate the effects of intentional suppression on recognition memory in a think/no-think experiment. Participants were cued to either suppress or think of previously learned words, 18 or 0 times. Subsequent old/new discrimination was attenuated for repeatedly suppressed in contrast with zero-repetition items. Early frontal and late parietal ERP old/new effects, reflecting familiarity and recollection, were present for all correctly recognized items and did not differ between conditions. These results indicate that intentional suppression diminishes item recognition, but that it does not alter the relative contributions of familiarity and recollection to correct recognition memory.

A comparative study on validities of two indicators for dependent variable in the running memory paradigm

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To explore validities of dependent variables in the running memory paradigm, two indicators of two Jonides and Smith's running memory experiments ($n=78$; 1.75s task, 1.25s task) were employed. Indicator 1 is that a number string symbols one score; indicator 2 is that different lengths of number strings represent different scores, which depend on lengths and capacities of active memory for number strings. As results, factor loadings of indicator 1 in



two tasks are 0.21 and 0.26 respectively; those of indicator 2 are 0.80 and 0.97 respectively. In conclusion, indicator 2 is more valid than indicator 1 for running memory paradigm.

A multilevel analysis on high school teachers' job burnout

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Objectives This paper explored the indicating effect on teachers' job burnout, which was caused by individual and collective variables. **Method** HLM was used to analyze how the collective variable (teacher collective efficacy) influenced the individual variables (teacher efficacy, coping self-efficacy, teacher work stress, and teacher job burnout) within 763 teachers. **Results** TCE could predict positively the relation between WS and depersonalization, and CSE and personal accomplishment. TCE could explain higher percent on variance of CSE, compared to TE. **Conclusions** People ought to pay more attention to school culture, such as TCE, and reduce the sense of TJB effectively.

Academic self-presentation of primary school student: Styles and mechanics

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The present research aimed to explore the academic self-presentation styles in pupils and the reciprocity of self-presentation and self-evaluation. Assertive, ambivalent and protective styles were identified by projection test. Different relationships between self evaluation and conceived other's evaluation were also found. 3 experiments were conducted to explore the interaction of self evaluation and other's evaluation. It was found that a passive feedback within a limit and an positive feedback would invoke self-promotion. Pupils with passive self-evaluation would like to present themselves better than before, and try to change themselves in the new environment.

Working memory span, central executive functions and reasoning ability: A relationship study on uncultured mountainous youth in China

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Objectives: To explore the relationships among working memory capacity(WMC), reasoning ability and the central executive functions(CEF) including three subcomponents. **Method:** The WMC, reasoning achievements and CEF of 84 volunteers were assessed using cognitive measures, which based on DMDX software package and Raven's Standard Progressive Matrices in Qinba areas in China. **Results:** The correlations were significantly among reasoning ability, WMC and some of CEF sub-components excluding the shifting function. However no significant correlation was found between WMC, reasoning ability vs. the shifting function. **Conclusion:** The results suggested significant correlation between WMC, CEF vs. reasoning ability.

E-Leadership and personality of team leaders: Are personality factors relevant in virtual teams?

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The aim of the study was to investigate the influence of personality factors on emergent leadership in virtual teams. Sixty-six ad-hoc three member

groups of unacquainted students of technical colleges had to nominate a leader after accomplishing a disjunctive group task via chat in a session of 25 minutes. Results obtained by discriminant analysis revealed that emergent leadership was associated most strongly with extraversion followed by openness to experience (big five) respectively extraversion followed by acting (self monitoring scale). Further analyses showed that the influence of these personality traits is of relevance if the group is heterogenic in their composition regarding personality.

Developmental study of relations among shame, orientation toward others and self-esteem

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The purpose of the study was to clarify the developmental changes in the relations between five types of shame—that is inferiority, social nonconformity, being gazed at, self-criticism, and reflected—and orientation toward others and self-esteem. A questionnaire was administered to junior high school, high school, and university students. Results showed that higher orientation toward others was associated with higher degrees of shames were, especially self-critical shame, in early adolescence. Also, self-esteem was negatively related to various types of shame, in particular, in late adolescence. Findings were discussed in terms of the individualism-collectivism dichotomy applied on a personal level.

Relationship between four requirements of assertiveness and internal adjustment

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This study examined relationship between assertiveness and internal adjustment. Assertiveness was dealt with in terms of four requirements in this study. Theoretical concept of assertiveness included "open expression", "control of emotion", "consideration for others" and "self-direction". 359 students completed a questionnaire which contained UCLA isolation scale, general health questionnaire(GHQ) and original items to measure four requirements assertiveness. Correlation analysis revealed that "control of emotion" and "self-direction" had positive correlation with internal adjustment. However, "consideration for others" had negative correlation with internal adjustment. The results suggested consideration for others had appropriate level to keep internal adjustment.

Remembering and knowing personality traits: Figure/ground asymmetries in person-related retrieval experience

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The retrieval experience in social information processing was investigated. Subjects rated typicality or concreteness of personality traits that differed in stereotype reference. Remember/know responses indicated an impact of category salience. Only after typicality ratings (high salience), stereotype-consistent traits were more often "remembered" than inconsistent traits. After a change of the attention focus (i.e., after untotypicality ratings), the remember/know rate was reversed. The results suggest that metacognitive trait representations depend on principles of figure/ground asymmetries rather than on functional principles of social information processing. This conclusion was confirmed by a perceptual identification task (i.e., traits were hidden within a word puzzle).

Teachers burnout : Strategies to cope with it

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Nowadays the educational system in Argentina is going through a profound crisis. Rapid changes and

permanent pressures to which teachers are exposed, impose them continuous adaptations that turn them more and more prone to distress. When stressors are intense or extended in time, exceeding personal abilities to cope with them, the individual gets exhausted and collapses. This may lead to burnout syndrome, affecting teachers health as well as the educational structure as a whole. We will describe a Prevention and Management Program for Teachers Stress which aim is to prevent and/or to reduce its effects, by offering physiological, cognitive and behavioural techniques as well as group dynamics strategies to cope with stress situations at work.

Nonlinear and interactive effects of stressors and resources in occupational stress: A structural equation modeling approach using multimethod data

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A previously collected sample of 404 steel workers provided multimethod data of job analysis measurements (self and observer ratings, coworker data from the same workplace). Hypothesized interactive effects of work stressors and resources on health outcomes were re-analyzed using the data from multiple methods simultaneously by nonlinear structural equation modeling. Nonlinear and interactive effects of stressors (problems of work organization) and resources (task control, communication possibilities) were found. However, adequately taking the multimethod structure and nonlinear effects into account at the same time proved to be challenging. Limitations of different methods of analysis and potential remedies will be discussed.

Relationships among the Big Five, emotional intelligence and coping in a naturally occurring stressful encounter

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Emotional management is a part of emotional intelligence (ability EI) and its relation to stress and coping is not fully clarified. This study amongst 141 civil service trainees investigated the links between emotional intelligence, coping, and personality traits in a potentially highly stressful examination that contributes to a grade which is important for further employment. Results suggest a mediational model in which neuroticism leads to worse coping strategies which in turn leads to higher states of anxiety. Notably, emotional intelligence does not contribute to this relationship.

Parents' satisfaction from inclusive education of their children

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The purpose of the study was to describe satisfaction of parents from inclusive educational settings of their children, and it's basic differentiation and correlations. The study was conducted in 13 inclusive classrooms (primary schools, 1-3 grade); 277 parents participated (ca. 135 couples). Self-constructed method was used to measure parents' satisfaction; several other variables were measured and used in analysis. Parents' satisfaction correlates with their attitudes towards people with disability, and differs regarding parents' gender and school grade. Both correlation and differences interact with the presence of child's disability. The received outcomes are important for future organisation of inclusive classrooms.

Reward processing and decision-making in cannabis-addiction and schizophrenia

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As recent studies showed cannabis addiction not only increases the risk for psychosis but also changes functions on the neuronal and neuropsychological levels, what can be used to improve the differential diagnosis of schizophrenia. Models of decision-making and reward-processing emphasize the role of the fronto-striatal loops, especially dopaminergic projections to the ventral striatum and PFC implicated in both diseases. We tested groups of 20 Patients suffering from cannabis-addiction and/or schizophrenia and matched controls with a comprehensive neuropsychological test-battery. Primarily the Iowa-Gambling-Task and a probabilistic-selection task revealed specific profiles of deficits and strengths in the domains of decision-making and reward-processing respectively.

Work-life-conflict as a mediator between job stressors and strain: The moderating role of family status

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This study examined whether the mediative effect of work-life-conflict (WLC) between job stressors and strain depends on family status. Data were obtained from German employees (N=149). Time pressure as job stressor, irritation and somatic complaints as strain parameters and WLC were measured by questionnaire. As expected, total mediations were found in the group of employees living together with a partner (sobel-test, $p < .05$) but not in the group of employees living alone. The results show that living conditions should be recognized in researching WLC. Regarding the data, companies should use differentiated strategies to reduce their employees' strain.

Emotional influences upon perceptions of group deviants (or how I learned to stop worrying and love deviance)

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The present study assessed the role of emotions in the process of creating a normative framework the make deviance more acceptable. Perceived legitimacy was found to have a significant effect upon the acceptability of group deviance, and illegitimate conditions were accompanied by significantly more negative emotional states that legitimate conditions. These findings lend support to the argument that emotional states interact with social perceptions to affect group norms and influence group behaviour.

Irrationality as a determinant of gender stereotyping towards women

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Irrational thinking can be considered to be the key concept of Rational Emotive Behavior Therapy (REBT) and has been conceptualized as rigid and inflexible adherence to absolutistic thinking and person evaluations. Based on this definition we

predicted a positive relation between irrationality and gender stereotyping towards women. Established reliable scales were used to assess the constructs in a non-student sample (N = 240). In line with assumptions we were able to detect a significant positive relation between irrationality and gender stereotyping while controlling for the Big Five, life satisfaction, sex and age. Implications for interventions concerning stereotypes are outlined.

Creative behavior predicted by stages of the creative process

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When predicting creative behavior, in addition to divergent thinking, further abilities considered in creativity process models should be analysed regarding their importance for creative performance. Based on a process-oriented creativity test, we examined the predictive power of eight process stages for different criteria of creative performance in a sample of 742 employees and students. Regression analyses indicated significant ($p < .05$) beta weights for several stages depending on the criterion taken into account. To gain incremental validity, a self-description inventory was included, which lead to an increase in R^2 . Thus, considering multiple criteria in process-oriented assessment helps explaining creative performance.

Does synaesthesia enhances memory: Short review

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In psychological literature concerning memory one can find suggestions that synaesthesia enhances memory. Is it really a fact? Does current psychological knowledge entitles us to such claims? The main purpose of the presentation is to review scientific research conducted in this field, with special consideration of methods of gathering data used in those experiments. Author's own research (case study) concerning memory of two synaesthetes will also be shown. A short theoretical introduction containing basic information about synaesthesia is included. Data from literature concerning synaesthesia along with data concerning superb memory will be presented and analyzed.

Researching on the relationship among social categorization, depersonalization, and group behavior

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Based on Tajfel's SIT, especially Turner's SCT, we argue that social categorization influences social processes and structures within groups through self-categorization and prototype-based depersonalization. Because social categorization place people in categories. Meanwhile, depersonalization can make people in groups appear attitudinally, affectively, and behaviorally, furthermore relatively homogeneous. Social categorization links to the ingroups behaviors through prototype-based depersonalization. The bound that social categorization and depersonalization effects on processes within groups is wide, it covers conformity, normative behavior, crowd behavior, group polarization, the behavioral expressions of attitudes cohesion, deviance, leadership and power, roles, status, diversity, subgroups, and organizational mergers.

The mixed effect of psychological empowerment towards emotional exhaustion

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Emotional labor workers experience high level of emotional exhaustion. Most previous research demonstrated that psychological empowerment reduced emotional exhaustion. The purpose of this study was to explore whether all psychological empowerment dimensions would definitely lower emotional exhaustion. Hypotheses were tested by doing a field investigation of 369 employees in a customer service center in a big telecom company. Hierarchical regression analysis revealed that meaning was negatively related to emotional exhaustion, whereas impact was positively related to it. Female workers perceived more emotional exhaustion. The result indicates it is important to consider the mixed effect of psychological empowerment towards emotional exhaustion.

Probe the relationship between collective identity and personal identity

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Based on the three level of self representation, namely collective, relational, and personal, and the two distinct component, namely collective versus private self, from the Tajfel's SIT and Turner's SCT, we have probed the relationship between collective identity and personal identity. Three factors play very important role in turning personal identity into collective identity: a. Depersonalization and social categorization; b. Mutable self-category. Individual develop a taxonomy of situations to reflect the different concerns and motives that play as a result of threats to personal and group identity and degree of commitment to the group. c. self-esteem and uncertainty reduction.

An exploratory study on job seeking self-efficacy of university students in China

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This study explored the dimensionality, antecedents and consequences of job seeking self-efficacy (JSSE) of Chinese university students. Survey data were collected from 220 university student job seekers and newly employed graduates. Factor analysis revealed two dimensions of JSSE, information and decision efficacy (IDE), and personnel selection efficacy (PSE). Results indicated that vicarious experience and emotional arousal were positively related to IDE, and vicarious experience was positively related to PSE. Positive effects of JSSE on job seeking consequences were found. The study has significance for university students counseling and training during the expansion of enrollment in higher education in China.

Top-down processes based on color cues in preview search

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Two experiments were conducted to determine the role of color cues in preview search. In experiment one, the color of probe dot was either that of the preview items or an irrelevant color. The results showed that subjects detected the irrelevant-color probe dot faster than the preview-item-color probe dot. In experiment two, the color of search items



and the irrelevant color were alternatives. It was found that the reaction time to the search-item-color probe dot was shorter than the one to the irrelevant-color probe-dot. The authors reduce that there might be two types of top-down processes based on color cues: inhibition set and anticipatory set.

The role of emotion in the individual investor's decision making behavior

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Under the background of financial behavior, this study is to explore the role of emotion in the individual investor's Decision Making behavior. Through systematic manipulation of a stock price in a simulated situation, experimenter record (a) subjects' reaction time of every price; (b) subjects' behavior of buying, selling and maintaining; (c) subjects' heart rate during the experiment; (d) the anticipatory emotion elicited by the price and (e) the final score the subjects get by buying, selling or maintaining the price-manipulated stock as subjects' response. The findings show that different anticipatory emotion will produce different influence on participants' Decision Making behavior. Keywords: Emotion; Decision Making behavior; Heart rate

The color-based anticipatory set in preview search: Evidence from a colored dot probing task

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A colored dot probing task was created to certify the role of color-based anticipatory set in preview search. In experiment one, preview items were initially displayed, followed by a colored dot or search items. The color of probe dot was either as same as the search items or irrelevant to both of search and preview items. The results showed that subjects responded faster to the search-item-color probe dot than the irrelevant-color one. In experiment two, an attentional blink paradigm was combined with the task of experiment one. The results showed that the effect once observed in the first experiment became weaker, supporting the hypothesis that attentional resources are required for anticipatory set.

Nicotine use, problem solving styles and depression levels of university students

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Background: The aim of the study is to determine the relationship between perceived problem solving styles, depression levels and nicotine/alcohol use among university students. Method: University students in Ankara [n:110] had completed Problem Solving Inventory and Beck Depression Inventory. The sociodemographic data as well as addictive behaviours were recorded. Results: The results of the current study showed that the prevalence of nicotine/alcohol use is highly correlated with the depression level and problem solving styles of the students. Conclusion: Preventative efforts such as education about problem solving and coping styles could be beneficial on increasing the nicotine/alcohol use and depression levels.

Relationship between the PNEI response and the subjective well-being

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This study investigated relationship between the PNEI response (saliva free-MHPG, s-IgA, and cortisol) and the subjective well-being was evaluated using WHO-SUBI. We carried out the WHO-SUBI to 100 volunteers and extracted the healthy group and the poor group. Subjects were exposed to the speech task after a rest for 10 minutes. The speech task increased the saliva level of free-MHPG, s-IgA, and cortisol. The level of s-IgA in the healthy group was higher than the poor group during the session. These results show that the acute stress coping skill in the healthy group was better than in the poor group.

Combining representations of visible and invisible motion in estimating time-to contact

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This study investigated the effect of speed change of task-irrelevant moving objects (distractors), which accompanied a moving target, on time-to-contact estimation. In a prediction motion task, the target passed behind a rectangle and observers estimated the exit timing of the target. The variation of speed, spatial offset, luminance, occlusion, and motion direction of the distractors were controlled as experimental factors. As a result, the speed change altered the estimation only if the distractor motion paralleled the estimated target motion. The results imply that reliable visible motion information affected invisible motion in estimating time-to contact.

The effects of olfactory stimulus on cognitive function of stroop task measured by near infrared spectroscopy

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Oxyhemoglobin (oxy-Hb) was measured by near infrared spectroscopy (NIRS) at eight positions of head while performing Stroop task to test the effects of olfactory stimulus on the cognitive function. NIRS and blood pressure were monitored and saliva was collected for six male students performing Stroop task for 10 min. Within the task, one of the lavender, lemon or odorless air was presented. Blood pressure and cortisol level were not affected by odor presentation. NIRS revealed that, in odorless air condition, oxy-Hb was increased at forehead and near Broca's area while performing task, and lavender odor suppressed its increase on forehead.

Measurement of the Ponzo illusion in the picture drawings

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The Ponzo illusion in the picture drawing of room-walls (Rock, I., 1984, Perception) and its variants were measured to test the validity of the perspective theory. Eight variant figures were made by gradual degradation of the original figure. The results of 13 human observers in the experiment on the PC display by the method of adjustment of vertical lines showed a rapid change of the illusion magnitude between geometrical perspective line drawings (about 20%) and more picture-like drawings of the room-walls (about 40%). A new explanation of the illusion was proposed based upon these results.

Effects of training on visual attentional function in elders

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In this study, we investigated the effects of training on the visual attentional function of the olds. Two kind of the visual-search tasks were used. One was the feature search (FS), and the other was the conjunction search (CS). In each task, the targets were divided by the level of familiarity. The results showed that the reaction time in the olds faster than in the younger, especially in the FS when the targets were more familiar. The similar results were found also when the targets were presented in the center region. These results suggest that the simple and familiar stimuli were more efficient as the training tool for the olds.

An inquiry into depression consultancy system

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An increasing number of Chinese undergraduates are committing suicide because of depression. This article describes the establishment of a computer program for depression consultancy. The consultancy system can help undergraduates to measure themselves whether or not they are suffering from depression, to adjust their behavior and to decide whether or not it is necessary to seek therapy. The author has 18 years of working experience as a psychological counselor in universities. She has collected large numbers of first-hand data, and used systems analysis method to construct a reasonable database. Based on this, she established the depression consultancy system.

The effect of verbal self-guidance training for overcoming employment barriers: A study of Islamic women

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Women, over the age of 40, in an Islamic society were trained in verbal self guidance. Subsequently, they (n=27) had significantly higher self-efficacy with regard to re-employment than their counterparts who had been randomly assigned to a control group (n=28). In addition, they persisted in job search behaviors significantly more so than those in the control group. Job search self-efficacy completely mediated the effect of the training program on job search behaviors. Consequently, they were more likely to find a job in their area of interest within six months and one year of training than were women in the control group.

The microgenetic study of visual self-recognition in infancy

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The microgenetic approach was adopted to assess 15 toddlers weekly from 15 to 23 months by video. It was designed to evaluate the occurring time and the individual differences of visual self-recognition, and its sequence of the indices as well. The results showed: (1) visual self-recognition occurred at the 2nd week of the 17th month and it developed gradually rather than abruptly while this process had individual differences; (2) the indices of visual self-recognition occurred in order: the mirror self-recognition came the first, then was followed by object-locating from its mirror image, and the photo identification emerged at last.



The brain mechanism of implicit self-esteem and N400

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Event-related brain potentials (ERPs) were measured when the participants finished the implicit association test (IAT) for implicit self-esteem. Behavioral data indicated that the participants responded relatively rapidly in the congruent condition when associating self with positive items. Scalp event-related brain potentials analysis revealed that self items in the incongruent condition elicited a more negative ERP deflection than those in the congruent condition between 350 and 450 ms after the onset of the self items. N400 has been shown to be sensitive to semantic processing, which is consistent with the nerve net model of the IAT.

The neural basis of risky decision making in a blackjack task

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Event-related potentials were recorded when participants engaged in a modified blackjack game. We focused on the high-conflict condition (probability of losing ~50%) and low-conflict condition (probability of losing ~20%). We were also interested in the difference between risky and conservative responses in high-conflict conditions. In the 220–320 ms and 500–600 ms time windows, high-conflict conditions elicited more negative event-related potential deflections than low-conflict conditions. In the latter time window, risky conditions elicited more negative event-related potential deflections than conservative conditions. The N2 and N500 provide evidence for the dissociation of neural circuits between perceptual conflicts and response conflicts.

Understanding of the scientific texts by the freshmen

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Our research deals with the problem of understanding of the scientific texts. The purpose of the research is to distill the main properties and typical errors in understanding of the complex scientific texts by the freshmen. The main method of the research is the interview which is conducted after reading of the experimental text. The preliminary results of the research allow to formulate several common characteristics of the text understanding. The results of the research show the actuality of the topic and necessity of the further research.

The effect of career information exploratory behavior on the outcomes of job hunting in Japan.

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The purpose of this study was to examine the effect of career information exploratory behavior on the outcomes of job hunting. 200 fourth-year Japanese undergraduates (72 males, 128 females) reported a Big Five, career information exploratory behavior and one's own outcomes of job hunting. Path analysis showed the following results; 1) Conscientiousness was significantly related with the first-hand information, and neuroticism or extroversion were also significantly related with the company characteristics. 2) Exploring the first-hand information

from alumni and the company characteristics predicts the outcomes of job hunting such as satisfaction for one's own job hunting or career decision.

Hypothyroidism affects behavioral inhibition in rats

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We investigated the relationships between impulsiveness and thyroid hormone inhibition in rats. Pregnant rats were treated with Methimazole by adding it to the drinking water at the dose of 0, 0.002 or 0.02% from the gestational day 15 to the postnatal day 21. Their offspring performed the DRL 20s schedule. In the schedule, the animals were required to press a lever greater than or equal to 20 s after the previous response to get a food reward. The hypothyroid rats tended to induce greater burst responses than the control rats. The results indicate the possibility that hypothyroidism causes impulsiveness.

Affective effects generated by motions: Different impression made by the direction of movement

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In this study, effects of direction on impressions for a moving dot were investigated by two experiments using the SD method. Stimuli are made by controlling some variables (direction, motion pattern, changes of acceleration, and color). In experiment 1, factor analysis indicated three factors: Activity, Evaluation, and Smoothness. In experiment 2, factor analysis indicated five factors: Activity, Potency, Evaluation, Lightness, and Smoothness. In both experiments, observers felt that movement from right to left was more active than the opposite direction, even if these movements had the same motion pattern. The results confirmed the descriptions of creators based on subjective experiences.

The bullying in junior high schools in Japan (1): Factors of restraining bullying in the view point of group dynamics

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This study investigated the bullying in the view point of group dynamics which consisted of bully (minority), targets and observers (majority). Subjects?120 University students. Methods? retrospect about bullying in their junior high school days: questionnaire. The results are 1) higher friendship in classes, 2) closer relationship with teachers and 3) higher degree of enjoyment in school, these three influenced high normative consciousness of observers significantly. Those with high normative consciousness tended to react against bully. But because of 'observers' no reactions bully often regarded themselves as being attached in class. Reasons of no reactions were discussed.

Factors which impact the vocational choice of Chinese college students

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With the development of economy and innovation in policy of China, college students' behavior and conception of employment have changed. According the investigation in Chinese college students studying at different university, we found that it is a common conception that after graduation one should find a job to make a living independently. The vocational choice of them is not only affected by their demography, such as grade, gender, major, but by family economic situation, parents' education and location where the university is. Further

more these factors impact their wills to obtain a job. The result is consistent with social cognitive theory.

Relations between working memory and reasoning about spatial and nonspatial relations in nonverbal learning disabilities NLD

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This study examined the relations between working memory and 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. Experiment 1 explored four working memory spans: phonological loop, central executive, static and dynamic visual working memory. Experiment 2 tested the secondary task effects on reasoning about spatial and nonspatial relations. Experiment 1 found the NLD group had lower performance than other groups in dynamic visual tasks. Children with VLD experienced deficits in central-executive tasks. Experiment 2 found spatial and nonspatial reasoning loaded different working memory components. The implications of the data for the working memory requirements of reasoning were discussed.

Researching on social identity in CCP of university students

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According to Tajfel's theory of social identity, after measuring 546 CPA and positive member of university students and interviewing with 23 CPA of university students, structural equation modeling and correspondence analysis was used to explore the data, four findings are discovered by us: a. a questionnaire of social identity in CPA of university students; b. setting up a model of influence on behavior that university students participate in CPA. c. status of social identity in CPA of university students; d. the four factors of influencing social identity in CPA of graduate students, namely cognition, motivation, appraisal and relationship among personal, in-group and out-group.

Individual differences between formal and informal leaders within the groups of high school students

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The research aims to investigate the differences of personality between the formal, informal – professional and informal – affective leaders within the groups of high school students. The informal leaders were selected in each class (we worked with 30 classes) as a result of applying a sociogram, whereas the formal leaders were the ones named by the main teacher to be responsible for their classes. After the leaders answered the 16 PF questionnaire, we used inferential statistics to verify the hypothesis. The preliminary results show statistically significant differences between certain personality factors, which have implications for the educational psychology.

The impact of psychiatric comorbidity on brief intervention outcome in dependence on prescription drugs

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Objectives: The impact of psychiatric comorbidity on the efficacy of Motivational Interviewing in persons with a dependence on prescription drugs (DPD) will be examined in a randomised, controlled trial. **Methods:** Of 128 proactive recruited persons with a DPD in a general hospital 60 (49.9%) participants were diagnosed with a current psychiatric diagnosis on Axis I. **Results:** At baseline no significant differences in behavior change constructs assumed by the Transtheoretical Model between groups were found. Currently collected 3-month-follow-up-data will be presented at conference. **Conclusions:** The study results might reveal a basis for implementing interventions for dually diagnosed persons with DPD.

Social representations about the image of politician: Theoretical aspects

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The political perception in the level of mass consciousness, that has its own values, stereotypes and attitudes, structure and functions of political leader, basic indicators of political leader that shows a potential of personality and main factors that influence forming the image of the politician are analyzed in the framework of article. Social representations are value, ideas, and collectively practiced forms of cognitions shared within society, which facilitate the understanding and communication of the knowledge of the world. The paper is aimed reviewing the relevant theoretical knowledge to form a basis for empirical studies of social representations about image of politician.

Does N450 reflect both semantic and response conflict in stroop task?: Evidence from the interaction between inhibition of return and stroop effect

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Objective: The goal of current study is to determine whether the N450 reflect both semantic and response conflict in Stroop task or only reflect response conflict with the combination of a spatial cueing task and Stroop paradigm? **Methods:** Seventy undergraduate students from Northeast Normal University were recruited as participants. **Results and Conclusions:** Although the Stroop effect was eliminated in cued location in behavioral performance, there was no suppression of N450 component at cued location ($F < 1$). These results suggested that the N450 only reflect response conflict rather than both semantic and response conflict in the classical Stroop task.

Stress, coping strategies, and their relationship with adjustment in middle childhood

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91 children were randomly selected in Chinese cities. According to a semi-structured interview and teacher's rating, the data of children's stress, coping strategies and adjustment were collected. The results showed that: (1) the main stressors in children's daily life were peers' collision, tests' losing, parent-child collision, social evaluation stress, and loneliness. Most children's stress of tests' losing were from parents, then peers, and the teachers. (2) active coping, avoidance, seeking help, and distraction were coping strategies children

mainly and consistently used when facing stress. (3) active coping is a mediator of tests' losing and anxiety.

Researches of characteristic of college students' informal reasoning and its measurement criteria

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Everydaylife problems and socialscientific issues tests were administered to debaters and college students with non-debating experience by experiment method and clinical interview method. Results showed that: debaters offered significantly more effective reasons, counterarguments to the arguments and reasons, non-debaters offered significantly more ineffective reasons; Non-debaters made significantly more concept representational mistakes and reasoning discontinuity; Debaters achieved significantly more scores on factors of thinking quality; No significant differences were found in my-side bias index between debaters and non-debaters; The debaters offered significantly more alternative-based objections, argument-based objections and assertion-based objections. Conclusion: based on this research, a systematical measurement criteria were constructed.

The neural basis of insight problem solving: An event-related potential study

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The electrophysiological correlates of successful insight problem solving (Chinese logogriphs) were studied in 18 healthy subjects using high-density Event-Related Potentials (ERPs). Results mainly (see figure 1) showed that Successful logogriphs elicited a more negative ERP deflection than did Unsuccessful logogriphs in the time window within 1500-2000 ms (N1500-2000) and 2000-2500 ms (N2000-2500). Dipole analysis localized the generator of the N1500-2000 in the anterior cingulate cortex (ACC) and of the N2000-2500 in the posterior cingulate cortex (PCC). This result mainly indicates that the ACC might play an important role in the breaking of mental set successfully and the forming of novel associations in insight.

An empirical research of the relationship between entrepreneurial strategies and venture growth in high-tech enterprises

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The research tried to probe into the way of which human resource strategies and technology strategies influenced venture growth performance. It had investigated 65 small and medium Hi-tech enterprises via multilevel behavioral questionnaires. The result of study showed that commitment human resource strategy had a prominent positive effect on potential performance. Control human resource strategy had a prominent positive effect on competitive performance and potential performance, and support human resource strategy had a medium level positive effect on competitive performance and potential performance. Meanwhile, the study revealed that the technology strategies had remarkably positive effect on competitive performance and potential performance.

Concealable stigma in the schools: Cognitive and behavioral control of students with learning disabilities under the condition of learning-related information being concealed

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The present study examined the LD children's cognitive and behavioral control related to concealable stigma under the condition that learning-related information was concealed. A group of middle school students with learning disabilities (LD) and those without learning disabilities (NLD) were assigned separately into the concealed or disclosed conditions. Results showed that the LD group in the concealed condition exhibited more mental and behavioral control with a higher level of suppressing learning-relevant thoughts and higher accessibility of these thoughts than the NLD group. Furthermore, the LD group exhibited a strong tendency than the NLD group in attending to the learning environment and monitoring their own behavior.

Angelica injection reduces cognitive impairment during chronic cerebral hypoperfusion through brain-derived neurotrophic factor and nerve growth factor

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The study investigated whether chronic cerebral hypoperfusion (CCH) produced by 2-vessel occlusion (2-VO) induced cognitive impairment and whether angelica injections alleviated the impairment. Spatial learning in Morris water maze and the expression patterns of brain-derived neurotrophic factor (BDNF) and nerve growth factor (NGF) in the hippocampus of all rats were examined. The results showed that 2-VO significantly impaired spatial learning and memory, and angelica injections significantly reversed the learning and memory impairment. Furthermore, 2-VO resulted in significantly decreased BDNF protein, NGF protein, and NGF mRNA expression in the hippocampus. Thus, angelica injections might alleviate cognitive impairment during CCH through BDNF and NGF.

Understanding flaming through the lens of victimization in the work place.

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Flaming refers to aggressive or hostile communication occurring via computer-mediated channels. This study was to examine how, when and why flaming happens through the lens of victimization. The objective of the study is to increase work productivity by controlling the cost of work conflict generated by flaming actors. A qualitative approach was used. One of critical results was found. With the increase of frequency of flaming, victimization was seen to provoke the episodic flaming shifting to institutional flaming especially when both victim and perpetrator have incompatibility personality. The implications of management for the negative working behavior were recommended.

Procrastination types revisited: Passive non-procrastinator versus active procrastinator

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This article argued against the traditional dichotomy of non-procrastination and procrastination

through the development of a matrix of four procrastination types, namely active/passive non-procrastinator and active/passive procrastinator. Especially, contrary to the prevailing assumption on non-procrastinators, we attempted to identify a passive type of non-procrastinator and compare it with positive procrastinators. An empirical test on 150 Chinese university students indicated that while passive non-procrastinators tend to finish tasks on time, they are more similar to passive procrastinators than to positive procrastinators in terms of Need for Achievement, Perceived Self-Efficacy, Stress Felt and Performance. Theoretical contributions and implications were discussed.

Emotional memory in Iranian older and younger adults

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How many routes to persuasion are there? The research on the dual-process models of persuasion and the unimodel

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Current research on persuasion is dominated by two dual-process theories: the elaboration likelihood model and the heuristic-systematic model. According to them, persuasion can be accomplished via two distinct routes. Lately, there has appeared

an alternative approach - the unimodel, which views persuasion in terms of a single process. The aim of the experiment was an attempt to verify both models. The experimental design included all the variables recognized as important from the perspective of both approaches (involvement, source expertise, source information length, argument quality, argument length, evidence appearance order). The experiment concerned attitudes toward introducing final exams to the universities.

Psychological distress and marijuana use in adolescence: A three year follow-up

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The present study aims at identifying the role of psychological distress in the development of marijuana use in adolescence. A sample of 780 adolescents from Montreal (Canada) was assessed on three occasions 1999 (T1), 2000 (T2), 2001 (T3). Participants completed a self-report questionnaire on marijuana use and symptoms of psychological distress. Logistic regression analysis indicated that the level of psychological distress at T1 was associated with the presence of psychological distress at T3 only for adolescents' girls. Further analysis will include SES, family structure and ethnicity. This study underscores the importance of internalized problems in the prevention of marijuana use.

A model's competence influences the imitative behaviour of 14-month-olds

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Previous studies show that children learn novel words from competent rather than incompetent models. In our study, 14-month-olds were presented with video sequences showing a model acting either competently or incompetently. Then they saw the model 1) choosing one of two novel objects and 2)

operating apparatuses using unusual actions (counterbalanced order) before being given the objects and apparatuses themselves. The model's competence did not influence participants' preference for novel objects. However, infants imitated the unusual actions significantly more often when the model was competent than incompetent ($t(45)=2.24$; $p=.03$) This is the earliest demonstration of 'the competence effect' in infancy.

Concepts and evaluation of psychological models of empathy

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Most psychological researchers agree on the differentiation between two empathic processes (affective and cognitive empathy). Several models of empathy for the use in virtual agents that users can interact with have been created and evaluated. These models have been optimized regarding different criteria like simplicity, psychological plausibility, and computability. The models have been evaluated by psychological experts and users. The former evaluated the theoretical models while the latter evaluated the running models, i.e. after interacting with the virtual agents featured with one of the models in a virtual environment.

Attachment and stress reactivity in adolescents

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The purpose of this study was to examine the stability of attachment quality, stress reactivity (saliva cortisol) and the influence of adverse life events on attachment quality and continuity. Methods: 51 children participated in the 'Ainsworth Strange Situation' at age one year. At age 9 and age 15 subject's attachment was examined again. Life events were assessed with the 'Zürcher Lebensereignisliste' (Steinhausen & Winkler Metzke, 2001) at the age of 15. Results: While there was a significant continuity between the first and the second measurement, attachment was not stable between age 9 and age 15.