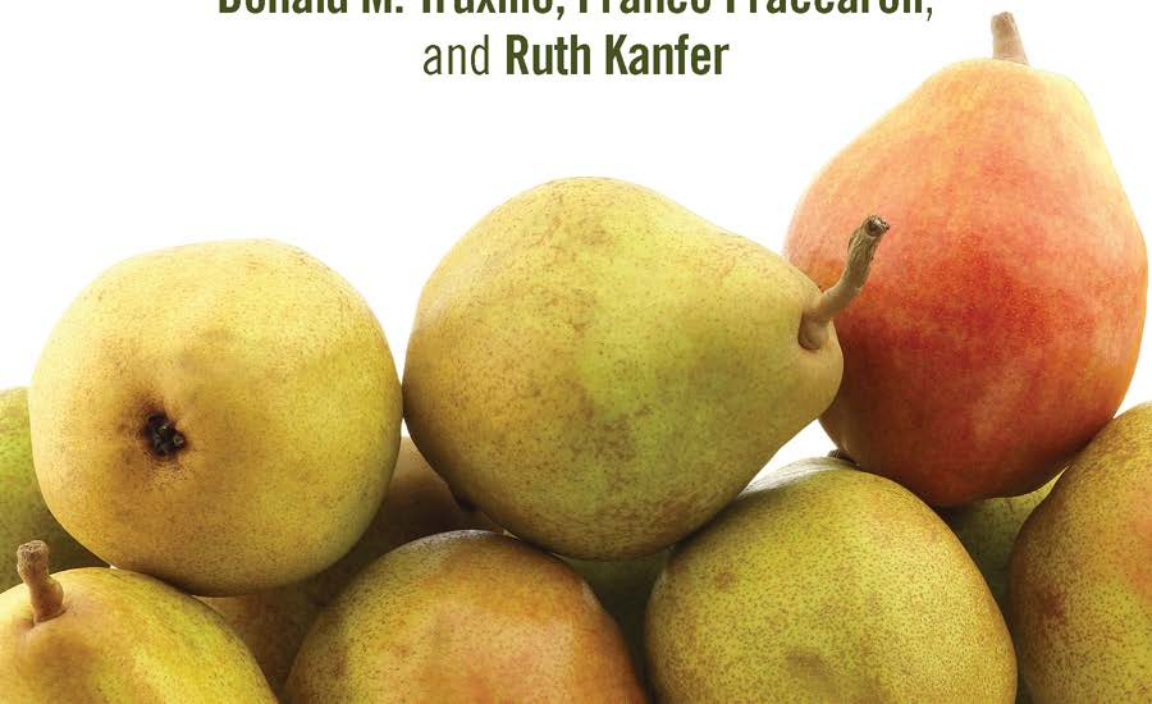


Facing the Challenges of a Multi-Age Workforce

A Use-Inspired Approach

Edited by **Lisa M. Finkelstein,**
Donald M. Truxillo, Franco Fraccaroli,
and **Ruth Kanfer**



Facing the Challenges of a Multi-Age Workforce

Facing the Challenges of a Multi-Age Workforce examines the shifting economic, cultural, and technological trends in the modern workplace that are taking place as a result of the aging global workforce. Taking an international perspective, contributors address workforce aging issues around the world, allowing for productive cross-cultural comparisons. Chapters adopt a use-inspired approach, with contributors proposing solutions to real problems faced by organizations, including global teamwork, unemployed youth, job obsolescence and overqualification, heavy emotional labor and physically demanding jobs, and cross-age perceptions and communication. Additional commentaries from sociologists, gerontologists, economists, and scholars of labor and government round out the volume and demonstrate the interdisciplinary nature of this important topic.

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For Rhoda and Kurt, my favorite people.

-LF

For Chip.

-DT

For Pietro, Cecilia, Nicolò, and Alba.

-FF

*For Phil and Sarah, whose support inspires my work
and outlook on aging.*

-RK

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Series Foreword

This volume focuses on a topic of growing importance in the new age of work. As the 21st century unfolds, it is clear that the nature of work is much different now than the one experienced by our parents. Technical advances and globalization have created the need for a shift in job characteristics to focus more on problem solving, cultural awareness, and interpersonal skills and away from physical demands. These trends have also begun to fundamentally change the work environments, work roles, and tasks that individuals perform.

At the same time, there has been a sea change in the nature of the available workforce. Demographic trends point to continuing age diversity at work, as individuals live longer, healthier lives and seek jobs that provide for satisfaction of basic human motives related to psychological and economic well-being. The focus of this volume—worker age as it affects the individual's experience of work, the workplace, and the organization—addresses the interface between changes in work and changes in the workforce, and some of the most important challenges to face scholars and practitioners concerned with work in the new millennium.

This volume, edited by Lisa Finkelstein, Donald Truxillo, Franco Fraccaroli, and Ruth Kanfer, identifies the key research needs in this area and ways to address them. First, and perhaps most importantly, the volume underscores the many scholarly and practical consequences of growing age diversity in the workplace that is occurring around the world. Research, issues, and controversies related to workforce aging and age-diversity management have appeared with increasing frequency in our field over the past few decades. All too often, however, such work has been scattered across our field, precluding effective information and idea sharing between researchers working in different areas and human resource managers dealing with specific age-related concerns. The editors of this volume have effectively organized these diverse and often disparate lines of research and practice around a “use-inspired” perspective that highlights the synergies that can occur when thinking about employee age and age-diverse workplaces from multiple basic and applied perspectives.

Specifically, this book adopts a framework that organizes scholarly viewpoints and practical problems around four global challenges: (1) changes

in the organization and management of work in the 21st century; (2) age-related differences in the meaning and impact of work on workers; (3) specific worker issues; and (4) practical challenges. The inclusion of a final multidisciplinary section that examines the meaning of a multi-age workforce from economic and developmental viewpoints further highlights the value of understanding age diversity from a person-centric perspective that incorporates the role of non-work forces on workplace behavior and attitudes.

The editors have assembled an impressive array of authors to contribute to our understanding of the challenges, solutions, and research needs of the future when it comes to dealing with workers of different ages and a multi-age workforce. In each chapter, authors provide new insights on promising research directions and evidence to support the use of practices that foster employee inclusion and performance in age-diverse workplaces. The emphasis placed on how research findings may be translated into effective organizational and human resource management practices throughout this volume responds to the growing call for an integrative science, and represents a major benefit of this volume for both researchers and practitioners.

On behalf of the SIOP membership and SIOP's Organizational Frontier Series Editorial Board, we thank the editors and contributors for this timely and integrative volume. The framework and aggregation of empirical evidence on this topic make an important contribution to the development of organizational science and practice in this emerging area, and serves as an inspiration to those concerned with the twin goals of promoting employee effectiveness and organizational performance in a world of work increasingly characterized by high levels of age diversity.

Eduardo Salas
Organizational Frontier Series, Past Editor
University of Central Florida

Preface

Although we do not recall actually discussing it with each other directly at the time, looking back it seems this book was “in the air” back in November of 2011 at the University of Trento in Rovereto, Italy. Two of us (Truxillo and Fraccaroli) were organizers of and presenters at the European Association for Work and Organizational Psychology’s Small Group Meeting on Aging at Work, and the other two of us (Finkelstein and Kanfer) were keynote speakers at that meeting. This meeting brought together an intimate group of researchers from several countries dedicated to the issues facing the aging workforce. The blend of scholars with different cultural and disciplinary backgrounds, but a shared sense of excitement and passion for this topic, led to an intellectual and collegial experience that exceeded all of our expectations. (The delicious food, wine, and coffee that kept us going did not hurt either.)

All of us left that meeting with a re-energized sense of purpose and a widened perspective for the topic of aging and work. Shortly thereafter, at the SIOP meeting in San Diego in 2012, the seed of a Frontiers Series Book was born, with the goal of capturing the exciting new ideas of I-O psychologists from around the world.

Our vision for this book had five dimensions. We strove for a book that was multicultural, interdisciplinary, use-inspired, person-centric, and future-oriented.

First, there was a palpable sense of urgency regarding this issue from scholars around the globe, even if different countries may have some different societal perspectives and economic priorities around these issues. This emphasized to us the central importance of having a perspective that goes beyond the United States.

Second, we are constantly reminded that the aging workforce is a concern in disciplines beyond I-O psychology. Although this volume contains chapters that build primarily on perspectives dominant in I-O psychology and management, we also invited commentaries from scholars representing other disciplines to weigh in on the issues through their own disciplinary lenses.

Third, we asked that authors take a “use-inspired” approach to their chapters. Though we elaborate more on this in Chapter 1, for those less

familiar with this concept, it means that we asked authors to focus on research that is needed to answer pressing societal issues. This is not to say that research for its own sake is not important, but we wanted to emphasize that the aging workforce is a looming crisis that I-O psychology must be prepared to address as it unfolds in the coming decades.

Fourth, we felt strongly about carrying a person-centric focus or theme throughout the chapters in the book. We, as I-O psychologists, have tended to conceptualize people in terms of the variables we are studying at the moment rather than in terms of the whole, complex person. In the case of the aging workforce and work, it means that we need to acknowledge that the person functions not only as an employee within the organization, but within a family, society, culture, and economic system as well; they make decisions within their own, individual framework. For example, retirement decisions are based on a complex set of factors, including the individual's family, economic, and health situation, all operating within larger societal, cultural, and national contexts.

Finally, we took the notion of *Frontiers* very literally in our vision for this book, and requested that the authors not write a conventional "review and integrate past literature, then make a few suggestions for future needs" type of chapter. Rather, we turned this approach on its head: we wanted the authors just to describe the current state of affairs quite quickly in their chapters, and to spend the majority of their pages on a vision for future research, guided by the changing landscape of our global workforce now and in the coming decades.

Obviously, we see this book as a useful text for graduate seminars in this area. But more importantly, we hope this volume will serve as an inspiration and a roadmap for work and organizational researchers devoting their efforts to both theoretical advancement and practical problem solving in the critical area of aging and work.

Through the completion of this volume, we have all become increasingly aware of the crucial role that work plays in the outcomes of individuals, organizations, and societies. Although this volume focuses largely on the panoply of changes, both internal and exogenous, that occur during later adulthood and their effects on individual well-being, our journey in completing this volume has convinced us that strategies aimed at improving the employability and well-being of older workers has potential benefits that extend to organizations and societies as well. By focusing on the individual, we hope this volume helps to stimulate new research directions for how organizational practices may better promote and make use of the many assets that these mature individuals bring to the workplace.

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About the Editors

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Lisa M. Finkelstein received her Ph.D. in Industrial-Organizational Psychology from Tulane University in 1996, and has spent her career thus far on the faculty in the Psychology Department at Northern Illinois University. Dr. Finkelstein's main research area is in aging and work, with specific focal areas in age bias, stereotypes, meta-stereotypes, aging and mentoring relationships, and the conceptualization and measurement of age. Her work on aging appears in such journals as the *Journal of Applied Psychology*, the *Journal of Organizational Behavior*, the *European Journal of Work and Organizational Psychology*, *Group and Organizational Management*, and *Experimental Aging Research*. In 2011, she co-edited a special issue on aging and work for the *Journal of Organizational Behavior*, and in that same year delivered a keynote address on age stereotypes at the European Association of Work and Organizational Psychology's Small Group Meeting on Age Cohorts in the Workplace. She serves as an Associate Editor for *Group and Organization Management* and on the editorial boards of the *Journal of Management*, the *Journal of Business and Psychology*, and *Work, Age, and Retirement*. She is a Fellow of SIOP and in the past decade she has served as program chair, conference chair, and secretary of SIOP. She has supervised more than 25 master's theses and 17 dissertations, has served as program director of the Social-I/O Area at NIU, and has won a university-level award for her undergraduate teaching. Her other research interests include mentoring, stigmas at work, and humor in the workplace.

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Franco Fraccaroli is a Professor in the Department of Psychology and Cognitive Science, University of Trento, Rovereto, Italy, where he has been Director of the Department and Dean of the Faculty. He has served as President of the European Association of Work and Organizational Psychology and he has been the Co-President of the XIII Congress of EAWOP in Santiago de Compostela (Spain, 2009). He is President of the board of delegates of the Alliance for Organizational Psychology. His main areas of research are transitions to work, experience of joblessness,

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The diversity of perspectives represented at these meetings encouraged us to think about the issues associated with an aging workforce from multiple lenses and reinforced our motivation for producing a volume that brings to bear scientific progress on the important practical issues that currently face policymakers, research scholars, and older workers across the developed world. We also each wish to thank our families and colleagues at our home institutions for their daily support and steadfast encourage-

ment over the past two years. Their support was crucial in creating the space and time for us to produce the integrative volume we sought.

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Lisa M. Finkelstein
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Franco Fraccaroli
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Part I

Overview

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1

An Introduction to Facing the Challenges of a Multi-Age Workforce: A Use-Inspired Approach

*Lisa M. Finkelstein, Donald M. Truxillo,
Franco Fraccaroli, and Ruth Kanfer*

This volume addresses what is arguably one of the industrialized world's most pressing challenges at the start of the 21st century; namely, how best to promote employability and well-being in an increasingly older workforce and age-diverse workplace. In North America, Asia, and Europe, aging populations, reductions in birth rates, and new patterns of late life workforce participation have already begun to influence societal norms, public policy, and organizational practices. Organizational and work scholars have also begun to devote systematic attention to the issues associated with these population trends, as evidenced by the growing number of special journal issues and books devoted to effectively managing an aging workforce. In this edited volume, we seek to provide readers with an overview of the substantial progress on this topic and the insights of researchers pursuing these issues pertaining to what needs to be done in the future.

The issues associated with workforce aging demand an interdisciplinary understanding of the psychological, economic, and sociocultural forces that dynamically shape worker behavior and organizational practices. In psychology, accumulating research in developmental lifespan psychology documents the different trajectories of growth, stability, and decline in human cognition, skills, preferences, and competencies over the lifespan. Taken together, these findings portray a complex picture of the individual as a “work in progress,” whose contributions to the workplace develop and change over the lifespan as a function of biology and work and non-work conditions.

Research in industrial-organizational (I-O) psychology paints a similarly intricate picture of the role that age diversity may play in managerial practices, in key organizational practices, such as personnel selection and job training, and the impact that organizations have on major life decisions that workers make in later adulthood, such as when and how to retire. Findings in labor economics further show the role that societal laws, social norms, family demands, education, and gender may have on patterns of work participation in midlife and late life, particularly following periods of unemployment. As the contributors to this volume repeatedly suggest, a modern account of work life aging requires the contribution of findings from multiple disciplinary perspectives.

In addition to the aging trend in many national workforces, there have also been dramatic changes in the nature of work. As discussed in several chapters in this volume, jobs that demand heavy physical labor are on the decline and are being rapidly replaced by jobs that demand high levels of problem-solving and interpersonal skill. The near ubiquitous use of teams in organizations, for example, has created strong interest in understanding the role of age in how people get along with others in teams. In the organizationally flatter world of knowledge work, performance is often defined in terms of innovation, spurring new interest in understanding the role of age in divergent thinking.

Accordingly, we argue that it is not possible to study workforce aging without taking into account the changing nature of job demands; that is, that these forces operate in unison to create unique situations in which older workers may experience difficulty maintaining or finding suitable work.

The simultaneous aging of the workforce and changes in the nature of work create a host of new challenges for I-O psychology. Although there is a long history of research from the socio-technical perspective for understanding the impact of new technologies on worker performance, there is far less work directed toward understanding how these changes operate in an age-diverse workforce. Similarly, I-O psychologists have made substantial progress investigating the impact of inter-individual differences in knowledge, skills, and abilities on job performance. What is far less well understood, however, is the impact of intra-individual differences on the antecedents and processes that influence job performance. Understanding how and where these simultaneous trends operate in the vast and volatile modern employment landscape represents a critical first step in developing organizational practices that both promote older worker employability and organizational performance. Thus, a second major

objective of this volume is to identify the specific research questions that *need to be asked* and studies that *should be undertaken* in order to practically address the challenges associated with an aging workforce in a changing workplace.

This volume seeks to step into this breach, with the goal of setting an agenda for I-O research to address the coming age-related changes to the workforce. Specifically, our primary goal is not to review past research on age at work, but rather to identify what research we should be doing to address age in the workplace. In this chapter, we set the stage for this book, describing the demographic, economic, societal, and technological changes most relevant to the aging workforce; age-related changes that can affect the workplace; and how a use-inspired approach to I-O research can address these issues.

DEMOGRAPHIC PERSPECTIVES

It is widely recognized that economically developed societies are characterized by an overall process of aging. This process is a combined effect of two demographic trends: a general decline in fertility and an increase in life expectancy. Due to these dynamics, the composition of labor forces in these developed societies is changing, and additional change is expected in the coming 30–50 years. The aging phenomenon is exacerbated by the “baby boomer” generation (persons born between 1946 and 1964) that is now entering into the late career and retirement phases, without a new generation of the same size that is entering the labor market.

To provide some figures, the future scenario of the aging process can be summarized through an index, the *projected old-age dependency ratio* (POADR), widely used in demographic studies that seek to monitor changes in population structure. The POADR is the ratio between the projected total number of people aged 65 and over (usually retired people) and the projected number of people of working age (15–64 years old). The projection makes some assumptions about fertility rate, mortality (or life expectancy), and immigration in different countries. For this reason, the index is a good indicator for comparability across countries, although the overall accuracy is limited because of the high level of uncertainty of the assumptions (Eurostat, 2011; Kinsella & Phillips, 2005; United Nations, 2012).

Eurostat (2012a) produced a scenario based on 2008 data, using changes in the POADR from 1960 to 2060 in 27 European countries. This analysis provides critical insights into the adequacy of pension systems and sustainability of public finances. At the same time, it allows for some forecasts related to the age structure of the working population in the future (Giannakouris, 2008).

These documents can be summarized as follows. First, the portion of people aged 65 years or over is projected to become 30% of the entire population in 2060 from 17.1% in 2008. Second, the POADR is expected to increase to 53% in 2060 from 25.9% in 2010. That means that while today in the EU there are four working people for every retired person, in 50 years this ratio will be two working persons for each retired person. Third, among the EU countries there is strong variability in the aging process. For instance, the POADR will be particularly burdensome (over 60%) for Eastern European countries while it is expected to be lower than 45% for some Nordic countries.

Similar estimates for the USA (Eurostat, 2011) show that the POADR's growth will be from about 19.5 "older dependents" over 100 "workers" in 2010, to 36.8% in 2060; that is, an aging process similar to the European one, but less pronounced. A complete international comparison (Eurostat, 2011) shows that the level of old age dependency is variable between geographical areas, with a more critical situation in Japan and Europe. At the same time, the projections indicate that some developing countries, such as Brazil and China, which now have relatively low old age dependency ratios, will be not immune to the aging phenomenon in the future.

The trends analyzed with POADR assume certain structural processes (fertility, migration, life expectancy) that could potentially be influenced by national governments and international institutions only through long-term policies. But there are some other processes that could exacerbate the age dependency ratio and the sustainability of pension systems. The most crucial one of these is the employment rate for people aged between 55 and 64 years—a rate that, of course, is strongly related to the average age of retirement. In 2000, this rate was around 60% in the USA and Japan, 50% in all the members of the OECD (Organization for Economic Cooperation and Development), which includes more than 30 economically developed countries, and only 37% in the EU (27 countries). The European Commission established a target of 50% for 2010, in an attempt to encourage national governments to adopt policies for postponing retirement. In fact, this objective has not been achieved, considering that in 2011 the employment rate for people aged from 55 to 64 in the EU

(27 countries) was still 47.4%. Only 12 countries (of 27) in 2011 achieved 50%. In the same period, the USA (60%) and Japan (65%) maintain a quite stable rate, whereas the rate for the OECD countries reached 54% in 2011 (OECD, 2012).

Taken together, these data show, first, that there is a general historical trend toward postponing retirement and toward increasing the length of working life. This happened after a long period (during the first three-quarters of the past century) in which the working life has been progressively reduced. This general trend is consistent with improvements in life expectancy (today in Europe and USA the life expectancy at age 65 is 20 and 17 years, respectively, for females and males). This trend is also dictated by public finance constraints. Second, these data show that the pension systems seem still far from financial sustainability in some countries, mostly in Europe. Consider that in 2009 the average age of retirement in the EU was 61.4 years. In the future, the number of people still working at the age of 55–65 will increase in many geographical areas. This trend needs to be accompanied by social policies to improve the quality of working life for elderly people and organizational strategies to manage late careers. Third, there are some substantial differences in the rate of employment between countries and between geographical areas. These differences could have some direct effects on the economic systems of each country in terms of public debt (direct costs to pay pensions) and in terms of general competitiveness. These dynamics could produce intergenerational conflicts and the necessity to improve flexibility in the labor market and employment contracts for older workers.

ECONOMIC ISSUES

Related to these demographic shifts—longer lifespans, a general aging of the population, and, in some countries, a decline in birth rates—there are economic challenges on the horizon for both older and younger workers. These include the need for people to continue to work longer to maintain retirement systems that can no longer be supported by dwindling numbers of younger workers; an increased need for certain job types, such as medical jobs and those requiring post-secondary education; and employment challenges for persons at either end of the age spectrum.

First, longer lifespans, compounded by decreased birth rates in some countries, have the potential to place significant pressures on retirement

systems (European Commission and Economic Policy Committee, 2012). These issues have caused many countries to raise the statutory retirement age, although this has also been met with fierce resistance from some workers (e.g., Donadio & Alderman, 2012). Taken together, these events suggest that industrialized societies will need for people to work longer to be able to support their retirement systems; and that employers and societies will need to find ways to keep workers engaged, motivated, and productive, all with sufficient work-life balance and the best health possible. It also suggests that not only will the workforce age, with the workforce participation of those over 55 continuing to increase in both the US and Europe (Eurostat, 2012b; Toossi, 2012), but that people of very different ages will need to work side by side, at a rate previously unseen in industrialized workplaces. At the same time, working longer may be difficult for some older workers: although the number of the most physically demanding jobs may be decreasing—a good sign for older workers—significant numbers of people still work in physically demanding jobs (Johnson, Mermin, & Ressenger, 2011).

At the same time, economic projections indicate changes in certain sectors of the workforce, many of them due to the fact that the general population is living longer. For instance, due to the aging of the population, the number of medical jobs, such as nurses and home healthcare aides, is expected to grow significantly (Lockard & Woolf, 2012). However, many of these jobs require specialized training and have their own sets of physical demands (e.g., nursing and home healthcare aides) (Trinkoff, Lipscomb, Geiger-Brown, Storr, & Brady, 2003), which could pose challenges for older workers. At the same time, the numbers of jobs requiring post-secondary education are expected to continue to grow in the industrialized economies (Lockard & Woolf, 2012), a challenge for many workers both young and old.

In addition, the youngest and the oldest workers may be particularly vulnerable to economic downturns. For instance, the current high unemployment rates in the US and in Europe are producing pressures on workers at both ends of the age spectrum. In the US, older workers who lose their jobs are finding significant challenges with re-employment (U.S. Government Accountability Office, 2012). At the same time, in some European countries, the overall unemployment rates mask substantial differences between the fortunes of older workers versus younger workers (those under 25), whose unemployment rates had exceeded 50% in Greece and Spain as of summer 2012 (Froymovich, 2012; Thompson, 2012). These employment issues are putting pressure on the social safety net, such as

many younger people having to live at home. It is also leading to people needing to work in jobs for which they are overqualified (Erdogan, Bauer, Peiró, & Truxillo, 2011) and to older workers needing to continue to work longer or take on bridge employment to have sufficient retirement income. These unemployment issues may also lead to some generational conflict: paradoxically, although older people need to continue to work to support overburdened retirement systems, younger people may perceive that older workers are preventing them from entering the workforce. However, this perception does not seem to fit the economic reality, in that older worker retirements do not necessarily mean more jobs for younger people (Munnell & Wu, 2012).

TECHNOLOGY

When thinking of recent and future changes to the world of work, technology is likely one of the first factors to come to mind, but the impact of changing technologies may affect our work lives in even more ways than we may first realize. For example, rapid technological advances have created entirely new fields of work with increased employment opportunities and required skill sets while also making some long-standing fields obsolete. Even in more traditional jobs, there are continual changes in tools and equipment and increased reliance on the Internet to conduct business. Those increasingly rapid developments require a new mindset geared toward constant training and lifelong learning (Charness, Czaja, & Sharitt, 2007; Czaja & Sharrit, 2009). Moreover, much of the training itself will be delivered via new technologies (Charness et al., 2007; Wolfson, Cavanagh, & Kraiger, 2014). These advances also allow mobility in where people do their work, but at the same time may erase the boundaries of when people are “at” work (Burke & Cooper, 2008). Finally, this same technology provides access to a global workplace with multicultural teams (Olson & Olson, 2000). Each of these issues is given further attention below.

Types of Jobs

Constant and rapid technological developments change the nature of work by creating entirely new fields of work, as well as new jobs within existing fields, while at the same time eliminating others. O*Net continually updates its database service with jobs in “New and Emerging Occupations.” Some

examples of recent additions include several jobs in tech-heavy occupations such as Geospatial Technology and Bioinformatics (O*Net, 2006). Reports also abound regarding serious decline in growth in more traditional occupations, such as watch/clock repair, camera repair, and postal service work (e.g., AOL, 2011). Interestingly, it is not necessarily technological changes for doing that sort of work that have endangered these occupations, but rather other technological changes in our daily lives that are leading to their demise (e.g., fewer people wear watches because they carry mobile phones with the time; film cameras have largely been replaced by digital cameras or smartphones; and email has severely cut back postal needs). Other occupations have experienced decline because of more direct technological advancements for completing job tasks (such as various machine operators).

Changing Job Processes

Even if certain jobs are not becoming extinct, there are some fundamental changes to the nature of how business is conducted across a wide number of fields, even those not known to be technology-oriented. For example, stock clerks track inventory with more sophisticated scanners, train conductors use scanners to track frequent riders, and warehouse forklift operators use increasingly sophisticated machinery. Small businesses can no longer survive without an active presence on the Internet and on social media (Facebook, Twitter, etc.). There are likely few remaining jobs where technology is not present and evolving.

Lifelong Learning Needs

With these changes comes a constant demand for learning new skills (Czaja & Sharit, 2009). Several challenges are inherent here. First, organizations should be investing in training for all employees regardless of age and tenure if they are likely to come in contact with changing technology. This may be cost-prohibitive, and some leaders may especially doubt the cost-effectiveness of training older employees, who are sometimes believed to have less capacity for development (Finkelstein, Burke, & Raju, 1995). The responsibility for continual learning may fall at least in part on the individual employees, requiring them to be proactive in seeking out developmental opportunities to stay on top of change. Though many employees continue to embrace learning across the lifespan, on average older employees as compared with younger employees may resist learning

opportunities out of resentment, fear, or lack of belief that they are truly needed for success, as past experience has not demanded them (Wolfson et al., 2014).

Technology-Based Training

Technology not only creates a need for continual training and learning, but it actually is increasingly likely to also be the medium by which that training is delivered, magnifying challenges. Technology-based instruction (TBI) (Kraiger & Ford, 2006) is a general concept engulfing all training that uses some kind of technological medium (video, computer, etc.) in its delivery. Although there are some aspects to TBI that could potentially level the playing field across age in terms of ease of use (e.g., self-pacing, privacy, and clear and immediate feedback), the features of many TBI programs involve some familiarity with the medium (less likely for older individuals) and cognitive processing capabilities that may on average diminish with age (Czaja, Sharit, Charness, Fisk, & Rogers, 2001; Wolfson et al., 2014).

Expanded Locations of Work

Technological advancement in computers, tablets, smartphones, and their associated software applications have given employees in a variety of fields the “freedom” to work remotely, be it from home, a more conveniently located satellite office, or the local coffee shop (Olson & Olson, 2000). In some ways, this can be advantageous to employees across the lifespan as it may allow for employees to more easily meet childcare or eldercare needs (Czaja & Sharit, 2009). Employees requiring special accommodations—sometimes due to afflictions accompanying aging—could perhaps utilize their current home-based accommodations, requiring less adjustment by employers. However, this “freedom” often comes hand-in-hand with a 24/7 connection culture that dissolves the lines between work and non-work that may be a crucial part of the well-being of employees’ health and family lives (Burke & Cooper, 2008). It is interesting to speculate whether older employees who did not go through important life events during this connectivity culture (e.g., forging a new marriage or having children) may have had quite different relationships to those events than currently younger employees who are now embarking on those personal journeys while tethered electronically to work. Aside from the location and times where we do our work, the potential for whom we do it for and with has also expanded tremendously due to technology.

Virtual Teams

The composition of work teams is no longer restricted to those geographically collocated as technology has continually improved our ability to communicate in real time efficiently and inexpensively. Interest in the processes of virtual work has been on the rise, as the advantages to unlimited combinations of talent in a virtual team may be tempered by process loss due to different levels of trust and communication misunderstandings (Olson & Olson, 2000). Leadership of virtually located teams can also create challenges and require new skills among managers (Cascio, 2000; Zaccaro & Bader, 2002). Finally, virtual teams also increase the likelihood of employees from different organizational and national cultures working together on projects. More attention is given to the cultural issue in the following section, but this is truly a place of intersection among workforce trends.

CULTURAL ISSUES

In the previous section, we discussed how technological advancements have begun to break down previous limitations to distributed work teams—and one implication is that we now work with people across vast cultural boundaries. It is no longer just expatriates who must become accustomed to new cultural norms. Some of these norms may be particularly pertinent to our age-diverse workforce. For example, various countries and cultures may have differing age-related expectations regarding things such as how one communicates to elders, as well as differing beliefs and stereotypes about what behavior is appropriate at different ages (Perry & Parlamis, 2006).

Age norms for where one is “supposed” to be on the career ladder have become less stringent over time, but expectations about career timetables still linger (Lawrence, 1996; Pitt-Catsoupes, Matz-Costa, and Brown, 2010). These beliefs also extend into appropriate ages for retirement. Many of these expectations are likely to be at least in part culture-bound. Countries vary in the legal age for retirement, but norms and values—not just laws—likely influence beliefs. Multinational organizations must deal with not only the laws for retirement in their various locales, but also with the beliefs of local employees.

The increased preponderance of global corporations and outsourcing of work has also increased competition among organizations and also

among workers vying to promote themselves as adding value, particularly when quality labor may be available less expensively in another part of the world (Frese, 2008). There has been recognition in the careers literature for the past couple of decades that the milieu of a one-organization career is disappearing and being replaced by the expectation of a workforce that is more protean (Briscoe, Hall, & DeMuth, 2006). Those who have a more protean, proactive approach to career management are self-directed and tend to use their internal values, rather than external influences, as a compass to guide their career choices. Interestingly, though, they are not necessarily less committed to the organizations in which they work (Briscoe & Finkelstein, 2009). But there appears to be a growing understanding that the psychological contract between employee and employer is not necessarily as stable as it once was.

Though the career path of the white-collar sector appears more dynamic in today's environment, those in blue-collar jobs may find their career path more fragmented. In order to survive in the current economy, many workers worldwide must work multiple jobs and/or temporary jobs. Though that situation is challenging to juggle anywhere, in some countries, such as some EU countries, this may mean working with temporary and often undesirable or unfair contracts to make ends meet (DeCuyper, Notelaers, & DeWitte, 2009).

Finally, in addition to the ethnic cultural diversity brought about by global corporations, in any one particular country workforce diversity is on the rise. People across ages are working with and for others who are more likely to differ in gender, race, disability status, and sexual orientation than ever before. These issues may relate to age in a multitude of ways. For instance, older workers used to homogenous workforces are now facing a major change. Additionally, what aging means *to* and how it is perceived *by* workers from diverse backgrounds is likely to make the understanding of age effects at work much more complex. For example, within a given culture, the impact of aging in the workforce may differ for minorities and women compared with the majority and men (Goldberg, 2007).

THE WORKER: AGE-RELATED CHANGES

In this section, we briefly summarize basic findings with respect to age-related changes over mid- and late-adulthood that have relevance for the workplace and an individual's employability. Interest in age-related changes

that occur during adulthood has burgeoned over the past 30 years. Most studies to date have been cross-sectional, although the number of longitudinal studies that document patterns of intra-individual change over the adult lifespan has been steadily increasing over the past 15 years (e.g., Lucas & Donellan, 2011; van der Velde, Feij, & van Emmerik, 1998). There has also been greater research interest in generational or cohort differences in person attributes (e.g., Hansen & Leuty, 2012; Smits, Dolan, Vorst, Wicherts, & Timmerman, 2011). Studies of cohort differences are particularly germane for understanding the impact of multigenerational workforce on worker relations and teamwork processes. In contrast to research on intra-individual differences in person attributes over the adult lifespan, generational studies focus on contextual factors, such as culture and the common experiences of persons born during a particular period, as they contribute to between-cohort differences on attributes such as work values and attitudes.

Numerous reviews exist on the relationship between chronological age and specific person attributes, including cognitive abilities, knowledge, physical abilities, personality traits, and emotion regulation (e.g., Salthouse, 2012). Comprehensive reviews are also available on the relationship between chronological age and work-related variables, such as work motivation (e.g., Kanfer & Ackerman, 2004), work motives and values (e.g., Kooij, de Lange, Jansen, Kanfer, & Dikkers, 2011), work attitudes (e.g., Ng & Feldman, 2010), and job performance (e.g., Ng & Feldman, 2008). Although these reviews provide comprehensive information on the relationships between chronological age and specific person characteristics, they are difficult to cumulate with respect to how age-related changes operate in unison with work and non-work influences to affect the individual's work experiences and mid- and late-adulthood decisions related to job transitions, including retirement, career transitions, and post-retirement work.

The complexity of findings with respect to age-related changes in person characteristics is illustrated in Figure 1.1. As shown, chronological aging is associated with decline in some characteristics and improvement in other characteristics. Findings in the cognitive aging literature, for example, provide evidence for age-related decline in selective cognitive abilities and processes, though the rate of decline varies considerably from person to person. Although declines in cognitive abilities appear most pronounced with respect to fluid intellectual abilities and memory-related cognitive processes, recent findings also suggest that such declines are not uniform and may importantly depend on the individual's health. Recent findings

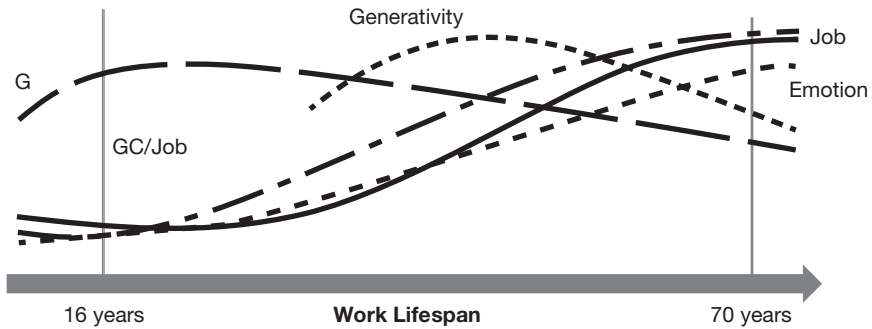


FIGURE 1.1
Trajectories of change across the work lifespan

Source: Kanfer, Beier, and Ackerman (2013)

also suggest that individuals may successfully compensate for gradual age-related declines in cognitive abilities by optimizing abilities such as declarative and job knowledge that tend to increase across the lifespan and to be preserved into late adulthood, and by creating work roles that make lower demands on cognitive abilities that are age-sensitive.

Age-related declines in cognitive abilities have often been interpreted as meaning that older workers are less able learners than younger workers, thus accounting for why older learners often perform more poorly than younger workers in standard job training programs. Recent investigations indicate, however, that older workers continue to learn, albeit sometimes more slowly than younger learners, particularly in training formats that make heavy demands on fluid intellectual abilities (Beier & Ackerman, 2005).

Findings in the social and personality domain also suggest selectivity in the role that chronological age per se plays in social skills and personality. Evidence from cross-sectional and longitudinal studies of personality change over adulthood indicate that although mean trait levels may increase or decrease over the lifespan, the individual's ranking on the trait tends to remain relatively stable across the life course. In the social skills domain, research on age-related changes in emotion regulation shows a gradual age-related increase in these skills.

Historically, person attributes such as physical abilities, cognitive abilities, and personality have been long held to co-vary in part as a consequence of the common role that genetic and psychobiological factors play in their development over the life course. At the same time, however,

these person attributes represent only one influence on older adult experience and adjustment. Over the life course, inter- and intra-individual differences in psychological variables interact with family and environmental affordances and constraints. These interactions in turn influence the individual's work history and experiences. In the US, for example, job tenure is typically positively associated with chronological age, higher pay, and increased job responsibility. Although these relations suggest that older workers fare better than younger workers, economic conditions that prompt widespread layoffs may be harder for older workers than younger workers. In contrast to younger workers, older workers who have not engaged in job search or job change for a decade or longer may lack effective job search skills in an increasingly technology-driven marketplace.

Taken together, the reviews on intra-individual change across the lifespan describe a complicated picture of how aging affects an individual's work attitudes, job competencies, and employability in late adulthood. On the one hand, age-related declines in select physical abilities and cognitive processes may encourage early retirement and/or midlife career transition among workers in jobs that place heavy demands on age-sensitive abilities. On the other hand, age-related increases in declarative knowledge, job knowledge, and interpersonal skills may strengthen work attitudes and facilitate performance in jobs that emphasize teamwork and innovation, particularly when working with persons they know well. For other older workers with long job tenures, the same changes in the nature of work and economic conditions may reduce motivation for maintaining employability or making a job transition in late adulthood.

CHANGING PERSON IN A DYNAMIC CONTEXT

As described in the previous sections, people of working age continue to change throughout the work-life span; at the same time, these changes are taking place within a dynamic demographic, economic, and cultural context. In short, psychological structures and processes within the worker are evolving over the life course, and the context within which this is evolving as well. Each of these issues has been discussed independently in this chapter, but the savvy reader can spot the connections among them, and these connections have significant implications for researchers in I-O psychology. For example, how do shifting age demographics impact the treatment of workers of different ages? Does the interplay of changing

age demographics and technological demands affect workplace training? Do technological advances, cross-cultural teamwork, and cultural norms differentially affect workers across the life course? These are only a few questions; the permutations of reciprocal influence are abundant.

A USE-INSPIRED, PERSON-CENTRIC APPROACH

Use-Inspired

In 1997, Donald Stokes wrote an influential book in which he argued for “use-inspired” research; namely, research that both informs basic understanding and responds to important practical problems. We believe that the confluence of advances in our understanding of the aging process, improved population health, and the increasing participation of older individuals in the workforce create ideal conditions for conducting research that can inform science, public policy, and human resource practice. Indeed, such work is already underway and beginning to have an impact on public policy, organizational practices, and worker routines. Studies that show age-related improvement in affect regulation, for example, provide evidence for the potential benefit of hiring older workers into customer service positions. Similarly, research on the determinants of retirement has recently broadened beyond the retirement event per se to examine the impact of pre-retirement work and the retirement process on workability and worker well-being after retirement. In countries characterized by a graying workforce, these findings have important implications for public policies that shape social norms for work and retirement, as well as for organizations seeking to develop and maximize workforce investments.

Person-Centric

For much of the 20th century, organizational scholars focused on worker behavior and performance using an organizational lens that emphasized the impact of person characteristics, work design, and managerial practices in terms of maximizing job performance. In the context of industrial economies, in which work products were typically performed on site and during scheduled hours, performance-centric perspectives seemed reasonable. In this perspective, theories of personnel selection, work motivation, and job design were frequently developed and tested using “technical”

performance criteria, such as number of units produced. The performance emphasis in organizational science was further supported by workforce demographic trends of the times. As a consequence of the post-WWII baby boom, organizations in the latter part of the 20th century were able to select workers from a large, educated group of younger workers. The ready supply of young talent in many countries along with mandatory retirement legislation during this period encouraged organizations to emphasize selection rather than training, and to develop talent early in the career path rather than during mid or later adulthood.

During the late 20th century, technological advances, globalization, and new demographic trends spurred increased interest in a person-centric perspective on work (e.g., Weiss & Rupp, 2011). In this perspective, work and its outcomes are understood from the worker's viewpoint, and emphasis is placed on sustaining high levels of typical job performance. The person-centric perspective focuses on how workers perceive their tasks and work relations, and perform their job in the broader context of non-work demands. Changes in the nature of work have led to increased use of teams and organizational structures that place a premium on interpersonal relations and "contextual" dimensions of job performance that require further understanding of the events and psychological processes involved in effective worker relations. At the same time, increasing age diversity in the workforce as a consequence of increased longevity, repeal of mandatory retirement legislation, and shifting norms on retirement age have created new organizational challenges with respect to leadership, training and talent development, and the process of work withdrawal in late adulthood. For example, research from the person-centric perspective indicates the key role that organizations play in effective worker transition to retirement and post-retirement adjustment. Conversely, in an increasingly networked economy in which employees are often customers and recruiters, organizations have focused greater attention on identifying human resource practices that sustain employee loyalty to the organization after separation.

In contrast to a performance-centric perspective that clearly demarcates task and non-task behaviors, the person-centric perspective focuses on the interface between work and non-work demands in their effects on worker stress and well-being, that in turn are posited to influence job performance. As applied to older workers, the person-centric perspective allows for greater understanding of the mechanisms through which age-related changes in later adulthood may influence worker motivation, job behaviors, and performance.

The Focal Approach

The adoption of a “use-inspired, person-centric” perspective distinguishes this volume from past work in several ways. First, chapters are organized around issues that have and are expected to emerge as a consequence of changing workforce demographics (e.g., retirement transitions), rather than by substantive topic (e.g., cognitive aging). We have asked the chapter authors to address the implications of findings for enhancing worker well-being in the context of policymaking and organizational practices that sustain competitive excellence.

Second, this volume will adopt a mixed model with respect to the relevance of issues for workers and organizations. Many of the challenges associated with the changing workforce pertain to the factors that contribute to successful aging and adaptation to a changing workplace (e.g., post-retirement job search). To address these issues requires a *person-centric approach* that emphasizes the worker’s context and history. Other issues, such as managing an age-diverse workforce, are most relevant for organizational and human resource personnel, and reflect a more traditional *performance-centric perspective*. The proposed volume seeks to address both the person in the organization and the cultural context.

How Can I-O Researchers Address These Issues?

Our approach in this book is to ask: what research should be done in I-O psychology to address these complex patterns of change happening now and in the coming decades? Our distinguished chapter authors were faced with this question, and they accepted the challenge. Again, our approach in this book is not to have authors exhaustively review and catalogue existing research. Rather, in keeping with the spirit of a book chosen to be part of the “Frontiers” series, we use these looming issues as a guide to suggest what our research agenda should be in I-O moving forward in the area of age research. In other words, what research should we be doing to address these demographic, economic, technological, and cultural shifts?

REFERENCES

- AOL (2011). *9 Dying Occupations—Thanks to Technology*. Available at: <http://jobs.aol.com/articles/2011/10/07> (accessed January 12, 2015)
- Beier, M. E., & Ackerman, P. L. (2005). Age, ability, and the role of prior knowledge on the acquisition of new domain knowledge: Promising results in a real-world learning environment. *Psychology and Aging*, 20, 341–355.

- Briscoe, J. P., & Finkelstein, L. M. (2009). The “new career” and organizational commitment: Do boundaryless and protean attitudes make a difference? *Career Development International*, 14, 242–260.
- Briscoe, J. P., Hall, D. T., & DeMuth, R. L. F. (2006). Protean and boundaryless careers: An empirical exploration. *Journal of Vocational Behavior*, 69, 30–47.
- Burke, R. J., & Cooper, C. L. (2008). *The Long Work Hours Culture: Causes, Consequences, and Choices*. Bingley: Emerald Group Publishing.
- Cascio, W. F. (2000). Managing a virtual workplace. *Academy of Management Executive*, 14, 81–90.
- Charness, N., Czaja, S., & Sharit, J. (2007). Age and technology for work. In K. Shultz & G. Adams (Eds.), *Aging and Work in the 21st Century* (pp. 225–250). Mahwah, NJ: Lawrence Erlbaum Associates.
- Czaja, S. J., & Sharit, J. (2009). Emerging challenges for organizations and older workers in the twenty-first century. In S. J. Czaja & J. Sharit (Eds.), *Aging and Work: Issues and Implications in a Changing Landscape* (pp. 1–8). Baltimore, MD: Johns Hopkins University Press.
- Czaja, S. J., Sharit, J., Charness, N., Fisk, A. D., & Rogers, W. (2011). The center for research and education on aging and technology for enhancement (CREATE): A program to enhance technology for older adults. *Gerontechnology*, 1, 50–59.
- Donadio, R., & Alderman, L. (2012, November). Fragile coalition in Greece narrowly backs austerity. *New York Times*. Available at: www.nytimes.com/2012/11/08/world/europe/greece-austerity-vote.html (accessed November 30, 2012).
- DeCuyper, N., Notelaers, G., & DeWitte, H. (2009). Job insecurity and employability in fixed-term contractors, agency workers, and permanent workers: Associations with job satisfaction and affective organizational commitment. *Journal of Occupational Health Psychology*, 14, 193–205.
- Erdogan, B., Bauer, T. N., Peiró, J. M., & Truxillo, D. M. (2011). Overqualified employees: Making the best of a potentially bad situation for individuals and organizations. *Industrial and Organizational Psychology: Perspectives on Science and Practice*, 4, 215–232.
- European Commission and Economic Policy Committee (2012). *The 2012 Ageing Report: Economic and Budgetary Projections for the EU27 Member States (2010–2060)*. Joint report prepared by the European Commission (DG ECFIN) and the Economic Policy Committee (AWG).
- Eurostat (2011). European population compared with world population. *European Commission*. Available at: http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/European_population_compared_with_world_population (accessed December 29, 2012).
- Eurostat (2012a). Old-age dependency ratio, 1960–2060. *European Commission*. Available at: [http://epp.eurostat.ec.europa.eu/statistics_explained/index.php?title=File:Old-age_dependency_ratio_1960-2060_\(1\)_population_aged_65_years_and_over_as_%25_of_population_aged_15-64.png&filetimestamp=20120321111604](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php?title=File:Old-age_dependency_ratio_1960-2060_(1)_population_aged_65_years_and_over_as_%25_of_population_aged_15-64.png&filetimestamp=20120321111604) (accessed December 29, 2012).
- Eurostat (2012b). Employment statistics. *European Commission*. Available at: http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Employment_statistics (accessed December 1, 2012).
- Finkelstein, L. M., Burke, M. J., & Raju, N. S. (1995). Age discrimination in simulated employment contexts: An integrative analysis. *Journal of Applied Psychology*, 80, 652–663.

- Frese, M. (2008). The changing nature of work. In N. Chmiel (Ed.). *An Introduction to Work and Organizational Psychology: A European Perspective* (pp. 397–413). Malden, MA: Blackwell.
- Froyovich, R. (2012, September). In Europe, signs of a jobless generation. *The Wall Street Journal*. Available at: <http://online.wsj.com/article/SB10000872396390444301704577631391024255180.html> (accessed December 1, 2012).
- Giannakouris, K. (2008). Ageing characterises the demographic perspectives of the European societies. *Eurostat Statistic in Focus*, 72. Available at: http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-SF-08-072/EN/KS-SF-08-072-EN.PDF (accessed December 29, 2012).
- Goldberg, C. (2007). Diversity issues for an aging workforce. In K. Shultz & G. Adams (Eds.), *Aging and Work in the 21st Century* (pp. 51–72). Mahwah, NJ: Lawrence Erlbaum Associates.
- Hansen, J. C., & Leuty, M. E. (2012). Work values across generations. *Journal of Career Assessment*, 20, 34–52.
- Johnson, R. W., Mermin, G. B. T., & Resseger, M. (2011). Job demands and work ability at older ages. *Journal of Aging and Social Policy*, 23, 101–118.
- Kanfer, R., & Ackerman, P. L. (2004). Aging, adult development and work motivation. *Academy of Management Review*, 29, 1–19.
- Kanfer, R., Beier, M. E., & Ackerman, P. L. (2013). Goals and motivation related to work in later adulthood: An organizing framework. *European Journal of Work and Organizational Psychology* 22, 253–264.
- Kinsella, K., & Phillips, D. R. (2005). Global aging: The challenge of success. *Population Bulletin*, 60, 5–42.
- Kooij, D. T. A. M., de Lange, A. H., Jansen, P. G. W., Kanfer, R., & Dikkers, J. S. E. (2011). Age and work-related motives: Results of a meta-analysis. *Journal of Organizational Behavior*, 32, 197–225.
- Kraiger, K., & Ford, J. K. (2006). The expanding role of workplace training: Themes and trends influencing training research and practice. In L. Koppes (Ed.), *Historical Perspectives in Industrial and Organizational Psychology* (pp. 281–309). Mahwah, NJ: Lawrence Erlbaum Associates.
- Lawrence, B. S. (1996). Organizational age norms: Why is it so hard to know one when you see one? *The Gerontologist*, 36, 209–220.
- Lockard, C. B., & Woolf, M. (2012). Employment outlook: 2010–2012: Occupational employment projections to 2020. *Monthly Labor Review*, 135, 84–108.
- Lucas, R. E., & Donnellan, M. B. (2011). Personality development across the life span: Longitudinal analyses with a national sample from Germany. *Journal of Personality and Social Psychology*, 101, 847–861.
- Munnell, A. H., & Wu, A. Y. (2012). Are aging baby boomers squeezing younger workers out of jobs? *Issue in Brief* (pp. 12–18). Chestnut Hill, MA: Center for Retirement Research at Boston College.
- Ng, T. W. H., & Feldman, D. C. (2008). The relationship of age to ten dimensions of job performance. *Journal of Applied Psychology*, 93, 392–423.
- Ng, T. W. H., & Feldman, D. C. (2010). The relationships of age with job attitudes: A meta-analysis. *Personnel Psychology*, 63, 677–718.
- O*Net (2006). New and emerging (N&E) occupations: Methodology development report. National Center for O*Net Development.
- OECD (2012). Employment rate of older workers % of population aged 55–64. *OECD ILibrary*. Available at: www.oecd-ilibrary.org/employment/employment-rate-of-older-workers-2012_emp-ol-table-2012-1-en (accessed December 30, 2012).

- Olson, G. M., & Olson, J. S. (2000). Distance matters. *Human-Computer Interaction*, 15, 139–178.
- Perry, E. L., & Parlamis, J. D. (2006). Age and ageism in organizations: A review and consideration of national culture. In A. Konrad, P. Prasad, & J. Pringle (Eds.). *Handbook of Workplace Diversity* (pp. 345–370). London: Sage.
- Pitt-Catsoupes, M., Matz-Costa, C., & Brown, M. (2010). The prism of age: Managing age diversity in the twenty-first century workplace. In E. Parry and S. Tyson (Eds.), *Managing an Age Diverse Workforce* (pp. 80–94). London: Palgrave Macmillan.
- Salthouse, T. A. (2012). Consequences of age-related cognitive declines. *Annual Review of Psychology*, 63, 201–226.
- Smits, I. A. M., Dolan, C. V., Vorst, H. C. M., Wicherts, J. M., & Timmerman, M. E. (2011). Cohort differences in Big Five personality factors over a period of 25 years. *Journal of Personality and Social Psychology*, 100, 1124–1138.
- Stokes, D. E. (1997). *Pasteur's Quadrant: Basic Science and Technological Innovation*. Washington, DC: Brookings Institution Press.
- Toossi, M. (2012). Labor force projections to 2020: A more slowly growing workforce. *Monthly Labor Review*, 135, 43–64.
- Thompson, D. (2012, October). Europe's most tragic graph: Greek youth unemployment hits 55%. *The Atlantic Monthly Online*. Available at: <http://online.wsj.com/article/SB10000872396390444301704577631391024255180.html> (accessed December 1, 2012).
- Trinkoff, A. M., Lipscomb, J. A., Geiger-Brown, J., Storr, C. L., & Brady, B. A. (2003). Perceived physical demands and reported musculoskeletal problems in registered nurses. *American Journal of Preventive Medicine*, 24, 270–275.
- United Nations (2012). Probabilistic Population Projections: Old-age Dependency Ratio. *Department of Economic and Social Affairs*. Available at: http://esa.un.org/unpd/ppp/Figures-Output/Population/PPP_Old-age-Dependency-Ratio.htm (accessed December 28, 2012).
- U.S. Government Accountability Office (2012). Unemployed older workers: Many experience challenges regaining employment and face reduced retirement security. *GAO-12-445*, April 25, 2012.
- van der Velde, M. E. G., Feij, J. A., & van Emmerik, H. (1998). Change in work values and norms among Dutch young adults: Ageing or societal trends? *International Journal of Behavioral Development*, 22, 55–76.
- Weiss, H. M., & Rupp, D. E. (2011). Experiencing work: An essay on a person-centric work psychology. *Industrial and Organizational Psychology*, 4, 83–97.
- Wolfson, N., Cavanagh, T., & Kraiger, K. (2014). Older adults and technology-based instruction: Optimizing learning outcomes and transfer. *Academy of Management Learning and Education*, 13, 26–44.
- Zaccaro, S. J., & Bader, P. (2002). E-Leadership and the challenges of leading e-teams: Minimizing the bad and maximizing the good. *Organizational Dynamics*, 31, 377–387.

An Introduction to Facing the Challenges of a Multi-Age Workforce: A Use-Inspired Approach

AOL (2011). 9 Dying Occupations—Thanks to Technology. Available at: <http://jobs.aol.com/articles/2011/10/07> (accessed January 12, 2015)

Beier, M. E., & Ackerman, P. L. (2005). Age, ability, and the role of prior knowledge on the acquisition of new domain knowledge: Promising results in a real-world learning environment. *Psychology and Aging*, 20, 341–355.

Briscoe, J. P., & Finkelstein, L. M. (2009). The “new career” and organizational commitment: Do boundaryless and protean attitudes make a difference? *Career Development International*, 14, 242–260.

Briscoe, J. P., Hall, D. T., & DeMuth, R. L. F. (2006). Protean and boundaryless careers: An empirical exploration. *Journal of Vocational Behavior*, 69, 30–47.

Burke, R. J., & Cooper, C. L. (2008). *The Long Work Hours Culture: Causes, Consequences, and Choices*. Bingley: Emerald Group Publishing.

Cascio, W. F. (2000). Managing a virtual workplace. *Academy of Management Executive*, 14, 81–90.

Charness, N., Czaja, S., & Sharit, J. (2007). Age and technology for work. In K.Shultz & G.Adams (Eds.), *Aging and Work in the 21st Century* (pp. 225–250). Mahwah, NJ: Lawrence Erlbaum Associates.

Czaja, S. J., & Sharit, J. (2009). Emerging challenges for organizations and older workers in the twenty-first century. In S. J.Czaja & J.Sharit (Eds.), *Aging and Work: Issues and Implications in a Changing Landscape* (pp. 1–8). Baltimore, MD: Johns Hopkins University Press.

Czaja, S. J., Sharit, J., Charness, N., Fisk, A. D., & Rogers, W. (2011). The center for research and education on aging and technology for enhancement (CREATE): A program to enhance technology for older adults. *Gerotechnology*, 1, 50–59.

Donadio, R., & Alderman, L. (2012, November). Fragile coalition in Greece narrowly backs austerity. *New York Times*. Available at: www.nytimes.com/2012/11/08/world/europe/greece-austerity-vote.html (accessed November 30, 2012).

DeCuyper, N., Notelaers, G., & DeWitte, H. (2009). Job insecurity and employability in fixed-term contractors, agency workers, and permanent workers: Associations with job satisfaction and affective organizational commitment. *Journal of Occupational Health Psychology*, 14, 193–205.

Erdogan, B., Bauer, T. N., Peiró, J. M., & Truxillo, D. M. (2011). Overqualified employees: Making the best of a potentially bad situation for individuals and organizations. *Industrial and Organizational Psychology: Perspectives on Science and Practice*, 4, 215–232.

European Commission and Economic Policy Committee (2012). *The 2012 Ageing Report: Economic and Budgetary Projections for the EU27 Member States (2010–2060)*. Joint report prepared by the European Commission (DG ECFIN) and the Economic Policy Committee (AWG).

Eurostat (2011). European population compared with world population. European Commission. Available at:

http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/European_population_compared_with_world_population (accessed December 29, 2012).

Eurostat (2012a). Old-age dependency ratio, 1960–2060. European Commission. Available at: [http://epp.eurostat.ec.europa.eu/statistics_explained/index.php?title=File:Old-age_dependency_ratio_1960-2060_1_\(population_aged_65_years_and_over_as_%25_of_population_aged_15-64\).png&filetimestamp=20120321111604](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php?title=File:Old-age_dependency_ratio_1960-2060_1_(population_aged_65_years_and_over_as_%25_of_population_aged_15-64).png&filetimestamp=20120321111604) (accessed December 29, 2012).

Eurostat (2012b). Employment statistics. European Commission. Available at: http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Employment_statistics (accessed December 1, 2012).

Finkelstein, L. M., Burke, M. J., & Raju, N. S. (1995). Age discrimination in simulated employment contexts: An integrative analysis. *Journal of Applied Psychology*, 80, 652–663.

Frese, M. (2008). The changing nature of work. In N.Chmiel (Ed.). *An Introduction to Work and Organizational Psychology: A European Perspective* (pp. 397–413). Malden, MA:

Blackwell.

Froymovich, R. (2012, September). In Europe, signs of a jobless generation. *The Wall Street Journal*. Available at:

<http://online.wsj.com/article/SB10000872396390444301704577631391024255180.html> (accessed December 1, 2012).

Giannakouris, K. (2008). Ageing characterises the demographic perspectives of the European societies. *Eurostat Statistic in Focus*, 72. Available at:

http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-SF-08-072/EN/KS-SF-08-072-EN.PDF (accessed December 29, 2012).

Goldberg, C. (2007). Diversity issues for an aging workforce. In K.Shultz & G.Adams (Eds.), *Aging and Work in the 21st Century* (pp. 51–72). Mahwah, NJ: Lawrence Erlbaum Associates.

Hansen, J. C., & Leuty, M. E. (2012). Work values across generations. *Journal of Career Assessment*, 20, 34–52.

Johnson, R. W., Mermin, G. B. T., & Resseger, M. (2011). Job demands and work ability at older ages. *Journal of Aging and Social Policy*, 23, 101–118.

Kanfer, R., & Ackerman, P. L. (2004). Aging, adult development and work motivation. *Academy of Management Review*, 29, 1–19.

Kanfer, R., Beier, M. E., & Ackerman, P. L. (2013). Goals and motivation related to work in later adulthood: An organizing framework. *European Journal of Work and Organizational Psychology* 22, 253–264.

Kinsella, K., & Phillips, D. R. (2005). Global aging: The challenge of success. *Population Bulletin*, 60, 5–42.

Kooij, D. T. A. M., de Lange, A. H., Jansen, P. G. W., Kanfer, R., & Dijkers, J. S. E. (2011). Age and work-related motives: Results of a meta-analysis. *Journal of Organizational Behavior*, 32, 197–225.

Kraiger, K., & Ford, J. K. (2006). The expanding role of workplace training: Themes and trends influencing training research and practice. In L.Koppes (Ed.), *Historical Perspectives in Industrial and Organizational Psychology* (pp. 281–309). Mahwah, NJ: Lawrence Erlbaum Associates.

Lawrence, B. S. (1996). Organizational age norms: Why is it so hard to know one when you see one? *The Gerontologist*, 36, 209–220.

Lockard, C. B., & Woolf, M. (2012). Employment outlook: 2010–2012: Occupational employment projections to 2020. *Monthly Labor Review*, 135, 84–108.

Lucas, R. E., & Donnellan, M. B. (2011). Personality development across the life span: Longitudinal analyses with a national sample from Germany. *Journal of Personality and Social Psychology*, 101, 847–861.

Munnell, A. H., & Wu, A. Y. (2012). Are aging baby boomers squeezing younger workers out of jobs? Issue in Brief (pp. 12–18). Chestnut Hill, MA: Center for Retirement Research at Boston College.

Ng, T. W. H., & Feldman, D. C. (2008). The relationship of age to ten dimensions of job performance. *Journal of Applied Psychology*, 93, 392–423.

Ng, T. W. H., & Feldman, D. C. (2010). The relationships of age with job attitudes: A meta-analysis. *Personnel Psychology*, 63, 677–718.

O*Net (2006). New and emerging (N&E) occupations: Methodology development report. National Center for O*Net Development.

OECD (2012). Employment rate of older workers % of population aged 55–64. OECD iLibrary. Available at: www.oecd-ilibrary.org/employment/employment-rate-of-older-workers-2012_emp-ol-table-2012-1-en (accessed December 30, 2012).

Olson, G. M., & Olson, J. S. (2000). Distance matters. *Human-Computer Interaction*, 15, 139–178.

Perry, E. L., & Parlamis, J. D. (2006). Age and ageism in organizations: A review and consideration of national culture. In A.Konrad , P.Prasad , & J.Pringle (Eds). *Handbook of Workplace Diversity* (pp. 345–370). London: Sage.

Pitt-Catsoupes, M., Matz-Costa, C., & Brown, M. (2010). The prism of age: Managing age diversity in the twenty-first century workplace. In E.Parry and S.Tyson (Eds.), *Managing an Age Diverse Workforce* (pp. 80–94). London: Palgrave Macmillan.

- Salthouse, T. A. (2012). Consequences of age-related cognitive declines. *Annual Review of Psychology*, 63, 201–226.
- Smits, I. A. M., Dolan, C. V., Vorst, H. C. M., Wicherts, J. M., & Timmerman, M. E. (2011). Cohort differences in Big Five personality factors over a period of 25 years. *Journal of Personality and Social Psychology*, 100, 1124–1138.
- Stokes, D. E. (1997). *Pasteur's Quadrant: Basic Science and Technological Innovation*. Washington, DC: Brookings Institution Press.
- Toossi, M. (2012). Labor force projections to 2020: A more slowly growing workforce. *Monthly Labor Review*, 135, 43–64.
- Thompson, D. (2012, October). Europe's most tragic graph: Greek youth unemployment hits 55%. *The Atlantic Monthly Online*. Available at: <http://online.wsj.com/article/SB10000872396390444301704577631391024255180.html> (accessed December 1, 2012).
- Trinkoff, A. M., Lipscomb, J. A., Geiger-Brown, J., Storr, C. L., & Brady, B. A. (2003). Perceived physical demands and reported musculoskeletal problems in registered nurses. *American Journal of Preventive Medicine*, 24, 270–275.
- United Nations (2012). Probabilistic Population Projections: Old-age Dependency Ratio. Department of Economic and Social Affairs. Available at: http://esa.un.org/unpd/ppp/Figures-Output/Population/PPP_Old-age-Dependency-Ratio.htm (accessed December 28, 2012).
- U.S. Government Accountability Office (2012). Unemployed older workers: Many experience challenges regaining employment and face reduced retirement security. GAO-12-445, April 25, 2012.
- van der Velde, M. E. G., Feij, J. A., & van Emmerik, H. (1998). Change in work values and norms among Dutch young adults: Ageing or societal trends? *International Journal of Behavioral Development*, 22, 55–76.
- Weiss, H. M., & Rupp, D. E. (2011). Experiencing work: An essay on a person-centric work psychology. *Industrial and Organizational Psychology*, 4, 83–97.
- Wolfson, N., Cavanagh, T., & Kraiger, K. (2014). Older adults and technology-based instruction: Optimizing learning outcomes and transfer. *Academy of Management Learning and Education*, 13, 26–44.
- Zaccaro, S. J., & Bader, P. (2002). E-Leadership and the challenges of leading e-teams: Minimizing the bad and maximizing the good. *Organizational Dynamics*, 31, 377–387.

Age Diversity and Global Teamwork: A Future Agenda for Researchers and Practitioners

- Armstrong-Stassen, M., & Templer, A. (2005). Adapting training for older employees. *Journal of Management Development*, 24(1), 57–67.
- Baltes, P. B., & Baltes, M. M. (1990). Psychological perspectives on successful aging: The model of selective optimization with compensation. In P. B. Baltes & M. M. Baltes (Eds.), *Successful Aging: Perspectives from the Behavioral Sciences* (pp. 1–34). Cambridge: Cambridge University Press.
- Barak, B. (2009). Age identity: A cross-cultural global approach. *International Journal of Behavioral Development*, 33(1), 2–11.
- Bezrukova, K., Jehn, K. A., Zanutto, E. L., & Thatcher, S. M. (2009). Do workgroup faultlines help or hurt? A moderated model of faultlines, team identification, and group performance. *Organization Science*, 20, 35–50.
- Biemann, T., & Andresen, M. (2010). Self-initiated foreign expatriates versus assigned expatriates: Two distinct types of international careers? *Journal of Managerial Psychology*, 25(4), 430–448.
- Boehm, S., Kunze, F., & Bruch, H. (2014). Spotlight on age-diversity climate: The impact of age-inclusive HR practices on firm-level outcomes. *Personnel Psychology*, 67, 667–704.
- Bond, M. H., & Wang, K. H. (1986). The social psychology of the Chinese people. In M. H. Bond (Ed.), *The Psychology of the Chinese People* (pp. 213–266). Hong Kong: Oxford

University Press.

Byrne, D. (1971). *The Attraction Paradigm*. New York: Academic Press.

Catterall, M., & Maclaran, P. (2001). Body talk: Questioning the assumptions in cognitive age. *Psychology & Marketing*, 18(10): 1117–1133.

Cennamo, L., & Gardner, D. (2008). Generational differences in work values, outcomes and person-organisation values fit. *Journal of Managerial Psychology*, 23(8), 891–906.

Chiu, C. K., Chan, A. W., Snape, E., & Redman, T. (2001). Age stereotypes and discriminatory attitudes towards older workers: An East-West comparison. *Human Relations*, 54(5): 629–661.

Choi, S., & Rainey, H. G. (2010). Managing diversity in US federal agencies: Effects of diversity and diversity management on employee perceptions of organizational performance. *Public Administration Review*, 70(1), 109–121.

Erickson, R., & Grove, W. (2007). Why emotions matter: Age, agitation, and burnout among registered nurses. *Online Journal of Issues in Nursing*, 13(1). Available at: <http://gm6.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/TableOfContents/vol132008/No1Jan08/ArticlePreviousTopic/WhyEmotionsMatterAgeAgitationandBurnoutAmongRegisteredNurses.html> (accessed January 12, 2015).

Eurostat (2013). Old-Age Dependency Ratio, 1960–2060. European Commission. Available at: [http://epp.eurostat.ec.europa.eu/statistics_explained/index.php=File:Oldage_dependency_ratio_19602060_\(1\)_population_aged_65_years_and_over_as_%25_of_population_aged_15-64.png&filetimestamp=20120321111604](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php=File:Oldage_dependency_ratio_19602060_(1)_population_aged_65_years_and_over_as_%25_of_population_aged_15-64.png&filetimestamp=20120321111604) (accessed July 13, 2013).

Garloff, A., Pohl, C., & Schanne, N. (2012). Demografischer Wandel der letzten 20 Jahre. *IAB Kurzbericht*, 10(2012), 1–7.

Hofstede, G. (2001). *Cultures Consequences. Comparing Values, Behaviors, Institutions, and Organizations Across Nations*. Thousand Oaks, CA: Sage.

Horwitz, S. K., & Horwitz, I. B. (2007). The effects of team diversity on team outcomes: A meta-analytic review of team demography. *Journal of Management*, 33(6), 987–1015.

House, R. J., Hanges, P. J., Javidan, M., Dorfman, P. W., & Gupta, V. (2004). *Leadership, Culture, and Organizations: The GLOBE Study of 62 Societies*. Beverly Hills, CA: Sage.

Ilmarinen, J. E. (2001). Aging workers. *Occupational and Environmental Medicine*, 58(8), 546–552.

Jehn, K. A., & Bezrukova, K. (2004). A field study of group diversity, workgroup context, and performance. *Journal of Organizational Behavior*, 25(6), 703–729.

Joshi, A., & Roh, H. (2009). The role of context in work team diversity research: A meta-analytic review. *Academy of Management Journal*, 52(3), 599–627.

Kanfer, R., & Ackerman, P. L. (2004). Aging, adult development, and work motivation. *Academy of Management Review*, 29(3), 440–458.

Kanter, R. M. (1977). Some effects of proportions on group life: Skewed sex ratios and responses to token women. *American Journal of Sociology*, 82(5), 965–990.

Kearney, E., & Gebert, D. (2009). Managing diversity and enhancing team outcomes: The promise of transformational leadership. *Journal of Applied Psychology*, 94(1), 77–98.

Kilduff, M., Angelmar, R., & Mehra, A. (2000). Top management-team diversity and firm performance: Examining the role of cognitions. *Organization Science*, 11(1), 21–34.

Kooij, D. T., de Lange, A. H., Jansen, P. G., & Dijkers, J. S. (2013). Beyond chronological age. Examining perceived future time and subjective health as age-related mediators in relation to work-related motivations and well-being. *Work & Stress*, 27(1), 88–105.

Kunze, F., & Boehm, S. (2013). Research on age diversity in the workforce: Current trends and future research directions. In C.Cooper , R.Burke , & J.Field (Eds.), *Sage Handbook on Work, Aging, and Society* (pp. 41–60). Thousand Oaks, CA: Sage.

Kunze, F., & Bruch, H. (2010). Age-based faultlines and perceived productive energy: The moderation of transformational leadership. *Small Group Research*, 41(5), 593–620.

Kunze, F., Boehm, S., & Bruch, H. (2011). Age diversity, age discrimination, and performance consequences: A cross organizational study. *Journal of Organizational Behavior*, 32(2), 264–290.

Kunze, F., Boehm, S., & Bruch, H. (2013a). Organizational performance consequences of age diversity: Inspecting the role of diversity-friendly HR policies and top managers' negative

age stereotypes. *Journal of Management Studies*, 50(3), 413–442.

Kunze, F., de Jong, S. B., & Bruch, H. (2013b). Consequences of collective-focused and differentiated individual-focused leadership: Development and testing of an organizational-level model. *Journal of Management*. DOI: 10.1177/0149206313498903.

Kunze, F., Leicht-Deobald, U., Bruch, H. (2013c). Age/gender faultlines and team innovation behavior: Exploring the role of differentiated leadership behavior. Paper presented at the Congress of the European Association for Work and Organizational Psychology (EAWOP) in Münster, Germany.

Lau, D. C., & Murnighan, J. K. (1998). Demographic diversity and faultlines: The compositional dynamics of organizational groups. *The Academy of Management Review*, 23(2), 325–340.

Lawrence, B. S. (1988). New wrinkles in the theory of age: Demography, norms, and performance ratings. *Academy of Management Journal*, 31, 309–337.

Lawrence, B. S. (1997). The black box of organizational demography. *Organization Science*, 8(1), 1–22.

Li, J., Chu, C. W. L., Lam, K. C., & Liao, S. (2011). Age diversity and firm performance in an emerging economy: Implications for cross-cultural human resource management. *Human Resource Management*, 50(2), 247–270.

Martens, A., Goldenberg, J. L., & Greenberg, J. (2005). A terror management perspective on ageism. *Journal of Social Issues*, 61, 223–239.

McClurg, L. N. (2001). Team rewards: How far have we come? *Human Resource Management*, 40(1), 73–86.

Meyer, B., & Glenz, A. (2013). Team faultline measures: A computational comparison and a new approach to multiple subgroups. *Organizational Research Methods*, 16(3), 393–424.

Montepare, J. M. (2009). Subjective age: Toward a guiding lifespan framework. *International Journal of Behavioral Development*, 33(1), 42–46.

Morrison, E. W. (2002). Newcomers' relationships: The role of social network ties during socialization. *Academy of Management Journal*, 45(6), 1149–1160.

Naveh-Benjamin, M. (2000). Adult age differences in memory performance: Tests of an associative deficit hypothesis. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 26(5), 1170–1187.

Peeters, M., & Groot, L. (2012). Demographic change across the globe-maintaining social security in ageing economies. *World Economics*, 13(2), 75–97.

Pelled, L. H., Xin, K. R., & Weiss, A. M. (2001). No es como mi: Relational demography and conflict in a Mexican production facility. *Journal of Occupational and Organizational Psychology*, 74(1), 63–84.

Reisenwitz, T. H., & Iyer, R. (2009). Differences in Generation X and Generation Y: Implications for organization and marketers. *Marketing Management Journal*, 19(2), 91–103.

Samson, M. M., Meeuwssen, I. B., Crowe, A., Dessens, J. A., Duursma, S. A., & Verhaar, H. J. (2000). Relationships between physical performance measures, age, height and body weight in healthy adults. *Age and Ageing*, 29(3), 235–242.

Schwall, A. R. (2012). Defining age and using age-relevant constructs. In J. W. Hedge & W. C. Borman (Eds.), *The Oxford Handbook of Work and Aging* (pp. 169–186). Oxford: Oxford University Press.

Schwartz, S. H. (1994). *Beyond Individualism/Collectivism: New Cultural Dimensions of Values*. Thousand Oaks, CA: Sage.

Shore, L. M., Randel, A. E., Chung, B. G., Michelle, A. D., Holcombe Erhart, K., & Singh, G. (2011). Inclusion and diversity in work groups: A review and model for future research. *Journal of Management*, 37(4), 1262–1289.

Tajfel, H., & Turner, J. C. (1986). The social identity theory of intergroup behaviour. In S. Worchel & W. G. Austin (Eds.), *Psychology of Intergroup Relation* (pp. 7–24). Chicago, IL: Nelson-Hall.

Thatcher, S., & Patel, P. C. (2011). Demographic faultlines: A meta-analysis of the literature. *Journal of Applied Psychology*, 96(6), 1119–1193.

Trezzini, B. (2008). Probing the group faultline concept: An evaluation of measures of patterned multi-dimensional group diversity. *Quality and Quantity*, 42(3), 339–368.

- UNRIC (2013). Mass Immigration to Norway. Available at: www.unric.org/en/youth-unemployment/27413-mass-immigration-to-norway (accessed July 10, 2013).
- van Dijk, H., van Engen, M. L., & van Knippenberg, D. (2012). Defying conventional wisdom: A meta-analytical examination of the differences between demographic and job-related diversity relationships with performance. *Organizational Behavior and Human Decision Processes*, 119(1), 38–53.
- van Knippenberg, D., & Schippers, M. C. (2007). Work group diversity. *Annual Review of Psychology*, 58, 515–541.
- van Knippenberg, D., & Sitkin, S. B. (2013). A critical assessment of charismatic-transformational leadership research: Back to the drawing board? *The Academy of Management Annals*, 7(1), 1–60.
- van Knippenberg, D., de Dreu, C. K. W., & Homan, A. C. (2004). Work group diversity and group performance: An integrative model and research agenda. *Journal of Applied Psychology*, 89(6), 1008–1022.
- van Knippenberg, D., Dawson, J. F., West, M. A., & Homan, A. C. (2011). Diversity faultlines, shared objectives, and top management team performance. *Human Relations*, 64(3), 307–336.
- Wegge, J., Roth, C., Neubach, B., Schmidt, K. H., & Kanfer, R. (2008). Age and gender diversity as determinants of performance and health in a public organization: The role of task complexity and group size. *Journal of Applied Psychology*, 93(6), 1301–1313.
- Wu, J. B., Tsui, A. S., & Kinicki, A. J. (2010). Consequences of differentiated leadership in groups. *Academy of Management Journal*, 53(1), 90–106.
- Zenger, T. R., & Lawrence, B. S. (1989). Organizational demography: The differential effects of age and tenure distributions on technical communication. *Academy of Management Journal*, 32(2), 353–376.

Human Resource Management and Sustainability at Work Across the Lifespan: An Integrative Perspective

- Alavinia, S. M., de Boer, G. E., van Duivenbooden, J. C., Frings-Dresen, M. H. W., & Burdorf, A. (2009). Determinants of work ability and its predictive value for disability. *Occupational Medicine*, 59, 32–37.
- Armstrong-Stassen, M. (2008). Organisational practices and the post-retirement employment experience of older workers. *Human Resource Management Journal*, 18, 36–53.
- Armstrong-Stassen, M., & Ursel, N. D. (2009). Perceived organizational support, career satisfaction, and the retention of older workers. *Journal of Occupational and Organizational Psychology*, 82, 201–220.
- Baltes, P. B., & Baltes, M. M. (1990). Psychological perspectives on successful aging: The model of selective optimization with compensation. In P. B. Baltes & M. M. Baltes (Eds.), *Successful Aging: Perspectives from the Behavioral Sciences* (pp. 1–34). New York: Cambridge University Press.
- Barling, J., & Griffiths, A. (2011). A history of occupational health psychology. In K. C. Quick & L. E. Tetrick (Eds.), *Handbook of Occupational Health Psychology* (pp. 21–35). Washington, DC: American Psychological Association.
- Bass, B. M., Avolio, B. J., Jung, D. I., & Bernson, Y. (2003). Predicting unit performance by assessing transformational and transactional leadership. *Journal of Applied Psychology*, 88, 207–218.
- Berg, J. M., Wrzesniewski, A., & Dutton, J. E. (2010). Perceiving and responding to challenges in job crafting at different ranks: When proactivity requires adaptivity. *Journal of Organizational Behavior*, 31, 158–186.
- Blau, P. M. (1964). *Exchange and Power in Social Life*. New York: Wiley.
- Boxall, P., & Purcell, J. (2011). *Strategy and Human Resource Management*. 3rd ed. New York: Palgrave Macmillan.

- Caldwell, C., Truong, D., Linh, P., & Tuan, A. (2010). Strategic human resource management as ethical stewardship. *Journal of Business Ethics*, 98(1), 171–182.
- Conway, E. (2004). Relating career stage to attitudes towards HR practices and commitment: Evidence of interaction effects? *European Journal of Work and Organizational Psychology*, 13, 417–446.
- Costanza, R., & Patten, B. C. (1995). Defining and predicting sustainability. *Ecological Economics*, 15(3), 193–196.
- de Lange, A. H., & van der Heijden, B. I. J. M. (Eds.) (2013). *Handboek: Een leven lang inzetbaar? Duurzame inzetbaarheid op het werk: interventies, best practices en integrale benaderingen*. [Handbook: A Life Long Employability? Sustainable Work Participation: Interventions, Best Practices and Integrative Approaches]. Alphen aan de Rijn: Vakmedianet.
- de Lange, A. H., Taris, T. W., Jansen, P. G. W., Smulders, P., Houtman, I. L. D., & Kompier, M. A. J. (2006). Age as a factor in the relation between work and mental health: Results from the longitudinal TAS survey. In J. Houdmont & S. McIntyre (Eds.), *Occupational Health Psychology: European Perspectives on Research, Education and Practice* (Vol. 1) (pp. 21–45). Maia, Portugal: ISMAI Publications.
- Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227–268.
- Deci, E. L., Ryan, R. M., & Guay, F. (2013). Self-determination theory and actualization of human potential. In D. McInerney, H. Marsh, R. Craven, & F. Guay (Eds.), *Theory Driving Research: New Wave Perspectives on Self Processes and Human Development* (pp. 109–133). Charlotte, NC: Information Age Press.
- Dellve, L., Eriksson, J., & Vilhelmsson, R. (2007). Assessment of long-term work attendance within human service organisations. *Work*, 29(2), 71–80.
- Dellve, L., Skagert, K., & Eklöf, M. (2008). The impact of systematic occupational health and safety management for occupational disorders and long-term work attendance. *Social Science Medicine*, 67, 965–970.
- Docherty, P., Kira, M., & Shani, A. B. (2009). What the world needs now is sustainable work systems. In P. Docherty, M. Kira, & A. B. Shani (Eds.), *Creating Sustainable Work Systems* (pp. 1–23). London: Routledge.
- Dvir, T., Eden, D., Avolio, B. J., & Shamir, B. (2002). Impact of transformational leadership on follower development and performance: A field experiment. *Academy of Management Journal*, 45, 735–744.
- Edwards, A. (2005). Let's get beyond community and practice: The many meanings of learning by participating. *The Curriculum Journal*, 16(1), 53–69.
- Edwards, J. R., Cable, D. M., Williamson, I. O., Lambert, L. S., & Shipp, A. J. (2006). The phenomenology of fit: Linking the person and environment to the subjective experience of person-environment fit. *Journal of Applied Psychology*, 91, 802–827.
- Ehnert, I., & Harry, W. (2012). Recent developments and future prospects on sustainable human resource management: Introduction to the special issue. *Management Revue*, 23(3), 221–238.
- Finegold, D., Mohrman, S., & Spreitzer, G. M. (2002). Age effects on the predictors of technical workers' commitment and willingness to turnover. *Journal of Organizational Behavior*, 23, 655–674.
- Garavan, T. N., & McGuire, D. (2010). Human resource development and society: Human resource development's role in embedding corporate social responsibility, sustainability, and ethics in organizations. *Advances in Developing Human Resources*, 12(5), 487–507.
- Gratton, L. (2011). Workplace 2025: What will it look like? *Organizational Dynamics*, 40, 246–254.
- Guest, D., & Bos-Nehles, A. (2013). HRM and performance: The role of effective implementation. In J. Paauwe, D. Guest, & P. Wright (Eds.), *HRM and Performance: Achievements and Challenges*. Chichester: Wiley.
- Hackman, J. R., & Oldham, G. R. (1975). Development of the job diagnostic survey. *Journal of Applied Psychology*, 60(2), 159–170.
- Hannah, D., & Iverson, R. (2004). Employment relationships in context: Implications for policy and practice. In J. Coyle-Shapiro, L. Shore, S. Taylor, & L. Tetrick (Eds.), *The Employment Relationship: Examining Psychological and Contextual Perspectives* (pp. 332–350). Oxford:

Oxford University Press.

Heckhausen, J., Wrosch, C., & Schulz, R. (2010). A motivational theory of life-span development. *Psychological Review*, 117(1), 32–60.

Hertel, G., van der Heijden, B., de Lange, A., & Deller, J. (2013). Facilitating age diversity in organizations—part I: Challenging popular misbeliefs. Special issue of the *Journal of Managerial Psychology*, 28, 729–856.

Hobfoll, S. E. (2001). The influence of culture, community, and the nested-self in the stress process: Advancing conservation of resources theory. *Applied Psychology: An International Review*, 50(3), 337–421.

Hobfoll, S. E. (2011). Conservation of resource caravans and engaged settings. *Journal of Occupational and Organizational Psychology*, 84(1), 116–122.

Hock, D. W. (1999). *Birth of the Chaordic Age*. San Francisco, CA: Berrett-Koehler.

Holling, C. S. (2001). Understanding the complexity of economic, ecological, and social systems. *Ecosystems*, 4, 390–405.

Huczynski, A., & Buchanan, D. (2007). *Organisational Behaviour: An Introductory Text*. 6th ed. Harlow: FT/Prentice Hall.

Ilmarinen, J. (2006). The ageing workforce—challenges for occupational health. *Occupational Medicine*, 56(6), 361–364.

Ilmarinen, J. (2009). Aging and work: An international perspective. In J. Sharit (Ed.), *Aging and Work: Issues and Implications in a Changing Landscape* (pp. 51–73). Baltimore, MD: Johns Hopkins University Press.

Ilmarinen, J., & Tuomi, K. (1992). Work ability of aging workers. *Scandinavian Journal of Work, Environment & Health*, 18(2), 8–10.

Ilmarinen, J. E. (2001). Aging workers. *Occupational and Environmental Medicine*, 58(8), 546.

International Labour Organization (2013). The ILO at a Glance. Available at: www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/@webdev/documents/publication/wcms_082367.pdf (accessed January 10, 2013).

Jabbour, C. J. C., & Santos, F. C. A. (2008). The central role of human resource management in the search for sustainable organizations. *The International Journal of Human Resource Management*, 19, 2133–2154.

Jackson, S. E., & Seo, J. (2010). The greening of strategic HRM scholarship. *Organization Management Journal*, 7, 278–290.

Jackson, S. E., Renwick, D. W. S., Jabbour, C. J. C., & Muller-Camen, M. (2011). State-of-the-art and future directions for green human resource management: Introduction the special issue. *Zeitschrift für Personalforschung*, 25(2), 99–116.

Kanfer, R., & Ackerman, P. L. (2004). Aging, adult development and work motivation. *Academy of Management Review*, 29, 440–458.

Karasek, R., & Theorell, T. (1990). *Healthy Work: Stress, Productivity, and the Reconstruction of Working Life*. New York: Basic Books.

Khilji, S. E., & Wang, X. (2006). “Intended” and “implemented” HRM: The missing linchpin in strategic human resource management research. *International Journal of Human Resource Management*, 17, 1171–1189.

Kira, M., van Eijnatten, F. M., & Balkin, D. B. (2010). Crafting sustainable work: Development of personal resources. *Journal of Organizational Change Management*, 23(5), 616–632.

Kooij, D. T. A. M. (2010). *Motivating older workers: A lifespan perspective on the role of perceived HR practices*. Ridderkerk: Ridderprint (Ph.D. thesis).

Kooij, D. T. A. M., de Lange, A. H., Jansen, P. G. W., & Dijkers, J. (2008). Older workers' motivation to continue work: Five meanings of age. A conceptual review. *Journal of Managerial Psychology*, 23, 364–394.

Kooij, D. T. A. M., Jansen, P. G. W., Dijkers, J. S. E., & de Lange, A. H. (2010). The influence of age on the associations between HR practices and both affective commitment and job satisfaction: A meta-analysis. *Journal of Organizational Behavior*, 31, 1111–1136.

Kooij, D. T. A. M., de Lange, A. H., Jansen, P. G. W., Kanfer, R., & Dijkers, J. S. E. (2011). Age and work-related motives: Results of a meta-analysis. *Journal of Organizational Behavior*, 32, 197–225.

Kooij, D. T. A. M., Guest, D., Clinton, M., Knight, T., Jansen, P. G. W., & Dikkers, J. S. E. (2013). How the impact of HR practices on employee well-being and performance changes with age. *Human Resource Management Journal*, 23, 18–35.

Kooij, D. T. A. M., Jansen, P. G. W., Dikkers, J. S. E., & de Lange, A. H. (2014). Managing aging workers: A mixed methods study on bundles of HR practices for aging workers. *The International Journal of Human Resource Management*, 25(15), 2192–2212.

Kooij, D. T. A. M., Tims, M., & Kanfer, R. (2015). Successful aging at work: The role of job crafting. In P. M. Bal, D. T. A. M. Kooij, & D. M. Rousseau (Eds.), *Aging Workers and the Employee-Employer Relationship* (pp. 145–161). Cham, Switzerland: Springer.

Küpers, W., & Weibler, J. (2006). How emotional is transformational leadership really? Some suggestions for a necessary extension. *Leadership & Organization Development Journal*, 27(5), 368–383.

Levi, L. (2011). Foreword: Narrowing the science-policy gap. In K. C. Quick & L. E. Tetrick (Eds.), *Handbook of Occupational Health Psychology* (pp. x–xvii). Washington, DC: American Psychological Association.

Messersmith, J. G., Patel, P. C., & Lepak, D. P. (2011). Unlocking the black box: Exploring the link between high-performance work systems and performance. *Journal of Applied Psychology*, 96, 1105–1118.

Müller, A., Weigl, M., Heiden, B., Glaser, J., & Angerer, P. (2012). Promoting work ability and well-being in hospital nursing: The interplay of age, job control, and successful ageing strategies. *Work*, 41, 5137–5144.

Nishii, L. H. (2013). The benefits of climate for inclusion for gender-diverse groups. *Academy of Management Journal*, 56, 1754–1774.

Oldham, G. R., & Hackman, J. R. (2010). Not what it was and not what it will be: The future of job design research. *Journal of Organizational Behavior*, 31, 463–479.

Ostroff, C., & Bowen, D. E. (2000). Moving HR to a higher level: HR practices and organizational effectiveness. In K. J. Klein & S. W. J. Kozlowski (Eds.), *Multilevel Theory, Research, and Methods in Organizations: Foundations, Extensions, and New Directions* (pp. 211–266). San Francisco, CA: Jossey-Bass.

Ouweneel, E., Schaufeli, W., & Le Blanc, P. (2009). Van preventie naar amplitie: interventies voor optimaal functioneren [From prevention to amplification: Interventions for optimal functioning]. *Gedrag & Organisatie*, 22, 118–135.

Paul, R. J., & Townsend, J. B. (1993). Managing the older worker—don't just rinse away the gray. *The Academy of Management Executive*, 7, 67–74.

Pfeffer, J. (2010). Building sustainable organisations: The human factor. *Academy of Management Perspectives*, 24(1), 34–45.

Radkiewicz, P., & Widerszal-Bazyl, M. (2005). Psychometric properties of work ability index in the light of comparative survey study. *International Congress Series*, 1280, 304–309.

Rau, B. L., & Adams, G. A. (2005). Attracting retirees to apply: Desired organizational characteristics of bridge employment. *Journal of Organizational Behavior*, 26, 649–660.

Remery, C., Henkens, K., Schippers, J., & Ekamper, P. (2003). Managing an aging workforce and a tight labor market: Views held by Dutch employers. *Population Research and Policy Review*, 22, 21–40.

Rudolph, C., de Lange, A. H., & van der Heijden, B. I. J. M. (2014). Adjustment processes in bridge employment: Where we are and need to go. In P. M. Bal, T. A. M. Kooij, & D. Rousseau (Eds.), *Aging Workers and the Employee-Employer Relationship* (pp. 221–242). New York: Springer.

Saba, T., & Guerin, G. (2005). Extending employment beyond retirement age: The case of health care managers in Quebec. *Public Personnel Management*, 34, 195–214.

Sachs, J. (2012). *The Price of Civilization: Reawakening American Virtue and Prosperity*. New York: Random House.

Shore, L. M., & Shore, T. H. (1995). Perceived organizational support and organizational justice. In R. Cropanzano & K. M. Kacmar (Eds.), *Organizational Politics, Justice, and Support: Managing Social Climate at Work* (pp. 149–164). Westport, CT: Quorum Press.

Shultz, K. S., & Wang, M. (2011). Psychological perspectives on the changing nature of retirement. *American Psychologist*, 66(3), 170–179.

- Spreitzer, G., Sutcliffe, K., Dutton, J., Sonenshein, S., & Grant, A. M. (2005). A socially embedded model of thriving at work. *Special Issue: Frontiers of Organization Science*, 2(16), 537–549.
- Taylor, S., Osland, J., & Egri, C. P. (2012). Guest editors' introduction: Introduction to HRM's role in sustainability: Systems, strategies, and practices. *Human Resource Management*, 51, 789–798.
- Tims, M., Bakker, A. B., & Derks, D. (2012). Development and validation of the job crafting scale. *Journal of Vocational Behavior*, 80, 173–186.
- Toh, S. M., Morgeson, F. P., & Campion, M. A. (2008). Human resource configurations: Investigating fit with the organizational context. *Journal of Applied Psychology*, 93, 864–882.
- Truxillo, D. M., & Fraccaroli, F. (2013). Research themes on age and work: Introduction to the special issue. *European Journal of Work and Organizational Psychology*, 22, 249–252.
- Truxillo, D. M., Cadiz, D. A., Rinner, J. R., Zaniboni, S., & Fraccaroli, F. (2012). A lifespan perspective on job design: Fitting the job and the worker to promote job satisfaction, engagement, and performance. *Organizational Psychology Review*, 2, 340–360.
- Tuomi, K., Ilmarinen, J., Jahkola, A., Katajarinne, L., & Tulkki, A. (1998). *Work Ability Index* (2nd ed.). Occupational Health Care 19. Helsinki: Finnish Institute of Occupational Health.
- United Nations Conference on the Human Environment (1972). Report of the United Nations Publication, Stockholm, June 5–16 1972 (Sales No.E.73.II.A.14 and corrigendum), chap. I. Available at: www.un.org/documents/ga/conf151/aconf15126-1annex1.htm (accessed January 1, 2014).
- van Dalen, H., Henkens, K., & Schippers, J. (2007). *Oudere werknemers door de lens van de werkgever*. Nederlands Interdisciplinair Demografische Instituut, Rapport no. 74.
- van der Heijden, B. I. J. M. (2005). "No one has ever promised you a rose garden." On shared responsibility and employability enhancing strategies throughout careers. Inaugural address, Open Universiteit in the Netherlands. Heerlen: Open Universiteit in the Netherlands. Assen: van Gorcum.
- Van der Heijde, C.M., & Van der Heijden, B.I.J.M. (2006). A competence-based and multidimensional operationalization and measurement of employability. *Human Resource Management*, 45(3), 449–476.
- van Eijnatten, F. M. (2004). Chaotic systems thinking: Some suggestions for a complexity framework to inform a learning organization. *The Learning Organization*, 11, 430–449.
- van Solinge, H., & Henkens, K. (2008). Adjustment to and satisfaction with retirement: Two of a kind? *Psychology and Aging*, 23(2), 422–434.
- Veth, K., Emans, B., van der Heijden, B. I. J. M., Korzilius, H., & de Lange, A. H. (2011). Taking care of older workers: A multi-perspective case study on HRM practices in healthcare organizations for older workers. Paper presented at Dutch HRM network conference 2011, Groningen, Netherlands.
- Weigl, M., Müller, A., Hornung, S., Zacher, H., & Angerer, P. (2013). The moderating effects of job control and selection, optimization, and compensation strategies on the age-work ability relationship. *Journal of Organizational Behavior*, 34, 607–628.
- Wilkinson, A., Hill, M., & Gollan, P. (2001). The sustainability debate. *International Journal of Operations and Production Management*, 21, 1492–1502.
- World Commission on Environment and Development (1987). *Our Common Future*. General Assembly Resolution 42/187. New York: United Nations.
- Wright, P. M., & Nishii, L. H. (2013). Strategic HRM and organizational behaviour: Integrating multiple levels of analysis. In J.Paauwe , D. E.Guest , & P.Wright (Eds.), *HRM and Performance Achievements and Challenges* (pp. 97–110). Chichester: Wiley.
- Wrzesniewski, A., & Dutton, J. E. (2001). Crafting a job: Revisioning employees as active crafters of their work. *Academy of Management Review*, 26, 179–201.

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1

- Agut, S., Peiró, J. M., & Grau, R. (2009). The effect of overeducation on job content innovation and career-enhancing strategies among young Spanish employees. *Journal of Career Development*, 36, 159–182.
- Anderson, S., & Winefield, A. H. (2011). The impact of underemployment on psychological health, physical health, and work attitudes. In D. C. Maynard & D. C. Feldman (Eds.), *Underemployment: Psychological, Economic, and Social Challenges* (pp. 165–185). New York: Springer.
- Archer, J., & Rhodes, V. (1993). The grief process and job loss: A cross-sectional study. *British Journal of Psychology*, 84, 395–410.
- Bashshur, M. R., Hernández, A., & Peiró, J. M. (2011). The impact of underemployment on individual and team performance. In D. C. Maynard & D. C. Feldman (Eds.), *Underemployment: Psychological, Economic, and Social Challenges* (pp. 187–214). New York: Springer.
- Blanch, J. M. (1990). *Del viejo al nuevo paro. Un análisis psicológico y social*. Barcelona: PPU.
- Büchel, F., & Mertens, A. (2004). Overeducation, undereducation, and the theory of career mobility. *Applied Economics*, 36, 803–816.
- Carpintero, H. (2006). Towards a history of applied psychology in the 20th century. In Q. Jing, M. R. Rosenzweig, G. d'Ydewalle, H. Zhang, H. C. Chen, & K. Zhang (Eds.), *Progress in Psychological Science Around the World, Vol. II* (pp. 433–442). New York: Psychology Press.
- Cassidy, T., & Wright, L. (2008). Graduate employment status and health: A longitudinal analysis of the transition from student. *Social Psychology and Education*, 11, 181–191.
- Curie, J., Hajjar, V., Marquie, H., & Roques, M. (1990). Proposition méthodologique pour la description du système des activités. *Le travail humain*, 53, 103–118.
- de Witte, H. (2012). On the experience of unemployment: Overview of the international literature and some results from a South African project. Workshop "Experience of Unemployment in Europe and South-Africa," March 30.
- Edwards, J. R. (1991). Person-job fit: A conceptual integration, literature review, and methodological critique. In C. L. Cooper (Ed.), *International Review of Industrial and Organizational Psychology*, Vol. 6 (pp. 283–357). Chichester: Wiley.
- Erdogan, B., & Bauer, T. N. (2011). The impact of underemployment on turnover and career trajectories. In D. C. Maynard & D. C. Feldman (Eds.), *Underemployment: Psychological, Economic, and Social Challenges* (pp. 215–232). New York: Springer.
- Erdogan, B., Bauer, T. N., Peiró, J. M., & Truxillo, D. M. (2011). Overqualified employees: Making the best of a potentially bad situation for individuals and organizations. *Industrial and Organizational Psychology*, 4, 215–232.
- Feij, J. A., Whitely, W. T., Peiró, J. M., & Taris, T. (1995). The development of career-enhancing strategies and content innovation: A longitudinal study of new workers. *Journal of Vocational Behavior*, 46, 231–256.
- Feldman, D. C. (1996). The nature, antecedents and consequences of underemployment. *Journal of Management*, 22, 385–407.
- Feldman, D. C., & Turnley, W. H. (2004). Contingent employment in academic careers: Relative deprivation among adjunct faculty. *Journal of Vocational Behavior*, 64, 284–307.
- Feldman, D. C., Leana, C. R., & Bolino, M. C. (2002). Underemployment and relative deprivation among reemployed executives. *Journal of Occupational and Organizational Psychology*, 75, 453–471.
- Fryer, D. (1992). Psychological or material deprivation: Why does unemployment have mental health consequences? In E. McLaughlin (Ed.), *Understanding Unemployment: New Perspectives on Active Labour Market Policies* (pp. 103–125). London: Routledge.
- Fugate, M., Kinicki, A. J., & Ashforth, B. E. (2004). Employability: A psycho-social construct, its dimensions, and applications. *Journal of Vocational Behavior*, 65, 14–38.
- García-Montalvo, J., & Peiró, J. M. (2008). *Análisis de la sobrecualificación y la flexibilidad laboral*. Observatorio de Inserción Laboral de los Jóvenes 2008. Valencia: Fundación

Bancaja, IVIE.

- Greenberg, D. H., Michalopoulos, C., & Robins, P. K. (2003). A meta-analysis of government-sponsored training programs. *Industrial and Labor Relations Review*, 57, 31–53.
- Halbesleben, J. R. B., Wheeler, A. R., & Paustian-Underdahl, S. C. (2013). The impact of furloughs on emotional exhaustion, self-rated performance, and recovery experiences. *Journal of Applied Psychology*, 98, 492–503.
- Hernández, A., Bashshur, M. R., & Peiró, J. M. (2011). Overeducation: Permanent or Transitory? The Role of Time and Voluntary Turnover. Paper presented at 26th annual conference of Society of Industrial-Organizational Psychology. Chicago, IL.
- ILO (2013). *Global Employment Trends 2013*. Geneva: International Labour Office.
- Jacob, M. (2008). Unemployment benefits and parental resources: What helps the young unemployed with labour market integration? *Journal of Youth Studies*, 11, 147–163.
- Jahoda, M. (1982). *Employment and Unemployment: A Social-Psychological Analysis*. Cambridge: Cambridge University Press.
- Kinicki, A. J., Prussia, G. E., & McKee-Ryan, F. (2000). A panel study of coping with involuntary job loss. *Academy of Management Journal*, 43, 90–100.
- Kluge, J. (2010). The effectiveness of European active labor market programs. *Labour Economics*, 17, 904–918.
- Latack, J. C., Kinicki, A. J., & Prussia, G. E. (1995). An integrative process model of coping with job loss. *Academy of Management Review*, 20, 311–342.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, Appraisal, and Coping*. New York: Springer.
- Leccardi, C. (2006). Redefining the future: Youthful biographical constructions in the 21st century. *New Directions for Child and Adolescent Development*, 113, 37–48.
- Luksyte, A., & Spitzmueller, C. (2011). Behavioral science approaches to studying underemployment. In D. C. Maynard & D. C. Feldman (Eds.), *Underemployment: Psychological, Economic, and Social Challenges* (pp. 35–56). New York: Springer.
- Mares, I. (2007). The economic consequences of the welfare state. *International Social Security Review*, 60, 65–81.
- Marías, J. (1955). *Reason and Life*. London: Hollis & Carter.
- Marías, J. (1987). *The Structure of Society*. Tuscaloosa, AL: University of Alabama Press.
- McArdle, S., Water, L., Briscoe, J. P., & Hall, D. T. (2007). Employability during unemployment: Adaptability, career identity and human and social capital. *Journal of Vocational Behavior*, 71, 247–264.
- McKee-Ryan, F. M., & Harvey, J. (2011). "I have a job, but ...": A review of underemployment. *Journal of Management*, 37, 962–996.
- McKee-Ryan, F. M., & Maitoza, R. (in press). Job loss, unemployment, and families. In U. C. Klehe & E. A. J. van Hooft (Eds.), *The Oxford Handbook of Job Search and Job Loss*. New York: Oxford University Press.
- McKee-Ryan, F. M., Song, Z., Wanberg, C. R., & Kinicki, A. J. (2005). Psychological and physical well-being during unemployment: A meta-analytic study. *Journal of Applied Psychology*, 90, 53–76.
- McKee-Ryan, F., Virick, M., Prussia, G. E., Harvey, J., & Lilly, J. D. (2009). Life after the layoff: Getting a job worth keeping. *Journal of Organizational Behavior*, 30, 561–580.
- MOW International Research Team (1987). *The Meaning of Working*. London: Academic Press.
- Nabi, G. R. (2003). Graduate employment and underemployment: Opportunity for skill use and career experiences amongst recent business graduates. *Education and Training*, 45, 371–382.
- OECD (2013). *OECD Employment Outlook 2013*. Paris: Organization for Economic Cooperation and Development.
- Ortega y Gasset, J. (2004). *Obras completas, Vol. I*. Madrid: Taurus/Fundación José Ortega y Gasset.
- Paul, K. I., & Moser, K. (2009). Unemployment impairs mental health: Meta-analyses. *Journal of Vocational Behavior*, 74, 264–282.
- Peiró, J. M. (1990). Expected developments in work and organizational psychology in Europe in the nineties. In P. D. J. Drenth, J. A. Sergeant, & R. J. Takens (Eds.), *European*

- Perspective in Psychology, Vol. 3 (pp. 21–35). Chichester: Wiley.
- Prause, J., & Dooley, D. (2011). Youth underemployment. In D. C. Maynard & D. C. Feldman (Eds.), *Underemployment: Psychological, Economic, and Social Challenges* (pp. 59–80). New York: Springer.
- Ramos, J., & Peiró, J. M. (2013). Unemployment and well-being in youth transition to the labour market: The role of proactive career approach, work centrality and employability. Paper presented at the Annual Meeting of Belgian Association of Psychological Sciences, Louvain-la Neuve (Belgium), May 28.
- Rueda, D. (2007). *Social Democracy Inside Out: Government Partisanship, Insiders, and Outsiders in Industrialized Democracies*. New York: Oxford University Press.
- Shipp, A. J., & Jansen, K. J. (2005). The Temporality of Person-Environment Fit Perceptions: The Role of Retrospection and Anticipation. Paper presented at the 21st annual meeting of the Society for Industrial Organizational Psychology, Los Angeles, CA.
- Stern, W. (1903). *Angewandte psychologie [Applied psychology]*. *Beiträge zur Psychologie der Aussage*, 1, 4–45.
- Stern, W. (1957). *Psicología General desde el punto de vista personalista [General Psychology from a Personalist Point of View]*. Buenos Aires: Paidós (original published in 1938).
- Virick, M. (2011). Underemployment and older workers. In D. C. Maynard & D. C. Feldman (Eds.), *Underemployment: Psychological, Economic, and Social Challenges* (pp. 81–104). New York: Springer.
- Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes* (M. Cole, V. John-Steiner, S. Scribner, & E. Souberman, Eds.). Cambridge, MA: Harvard University Press.
- Wanberg, C. R. (2012). The individual experience of unemployment. *Annual Review of Psychology*, 63, 369–396.
- Wanberg, C. R., Zhu, J., Kanfer, R., & Zhang, Z. (2012). After the pink slip: Applying dynamic motivation frameworks to the job search experience. *Academy of Management Journal*, 55, 261–284.
- Waters, L. (2005). The role of protean career attitude during unemployment and re-employment: A literature review and conceptual model. In K. Näswall, J. Hellgren, & M. Sverke (Eds.), *The Individual in the Changing Working Life* (pp. 328–350). Cambridge: Cambridge University Press.
- Waters, L. (2007). Experiential differences between voluntary and involuntary job redundancy on depression, job-search activity, affective employee outcomes and re-employment quality. *Journal of Occupational and Organizational Psychology*, 80, 279–299.
- Weiss, H., & Rupp, D. E. (2011). Experiencing work: An essay on a person-centric work psychology. *Industrial and Organizational Psychology*, 4, 83–97.
- Whitely, W., Peiró, J. M., & Sarchielli, G. (1992). WOSY theoretical framework, research methodology and potential implications. *International Review of Social Psychology*, 5, 9–35.
- Wilkins, R., & Wooden, M. (2011). Economic approaches to studying underemployment. In D. C. Maynard & D. C. Feldman (Eds.), *Underemployment: Psychological, Economic, and Social Challenges* (pp. 13–34). New York: Springer.
- Zikic, J., & Klehe, U. C. (2006). Job loss as a blessing in disguise: The role of career exploration and career planning in predicting reemployment quality. *Journal of Vocational Behavior*, 69, 391–409.

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- Ackerman, P. L. (2000). Domain-specific knowledge as the “dark matter” of adult intelligence: *gf/gc*, personality and interest correlates. *Journal of Gerontology: Psychological Sciences*, 55B, 69–84.
- Ackerman, P. L., & Kanfer, R. (1993). Integrating laboratory and field study for improving selection: Development of a battery for predicting air traffic controller success. *Journal of*

Applied Psychology, 78, 413–432.

Bal, P. M., & Smit, P. (2011). The older the better! Age related differences in emotion regulation after psychological contract breach. *Career Development International*, 27, 6–24.

Baltes, P. B., & Baltes, M. M. (1990). Psychological perspectives on successful aging: The model of selective optimization with compensation. In P. B. Baltes & M. M. Baltes (Eds.). *Successful Aging: Perspectives from the Behavioral Sciences* (pp. 1–34). New York: Cambridge University Press.

Barnes-Farrell, J. L., Rumery, S. M., & Swody, C. A. (2002). How do concepts of age relate to work and off-the-job stresses and strains? A field study of health care workers in five nations. *Experimental Aging Research*, 28, 87–98.

Beier, M. E., & Ackerman, P. L. (2001). Current events knowledge in adults: An investigation of age, intelligence and non-ability determinants. *Psychology and Aging*, 16, 615–628.

Beier, M. E., & Ackerman, P. L. (2003). Determinants of health knowledge in adults: An investigation of age, gender, abilities, personality, and interests. *Journal of Personality and Social Psychology*, 84, 439–448.

Beier, M. E., & Ackerman, P. L. (2005). Age, ability, and the role of prior knowledge on the acquisition of new domain knowledge: Promising results in a real-world learning environment. *Psychology & Aging*, 20, 341–355.

Beier, M. E., & Kanfer, R. (2010). Motivation in training and development: A phase perspective. In S. W. J. Kozlowski & E. Salas (Eds.). *Learning, Training, and Development in Organizations: SIOP Frontiers Book Series* (pp. 65–97). Mahwah, NJ: Erlbaum.

Beier, M. E., Teachout, M. S., & Cox, C. B. (2012). The training and development of an aging workforce. In J. W. Hedge & W. C. Borman (Eds.). *The Oxford Handbook of Work and Aging* (pp. 436–453). New York: Oxford University Press.

Bureau of Labor Statistics, U.S. Department of Labor (2008). The Editor's Desk. More Seniors Working Full Time. Available at: www.bls.gov/opub/ted/2008/aug/wk1/art03.htm (accessed January 7, 2014).

Callahan, J. S., Kiker, D. S., & Cross, T. (2003). Does method matter? A meta-analysis of the effects of training method on older learner training performance. *Journal of Management*, 29, 663–680.

Carstensen, L. L. (1998). A life-span approach to social motivation. In J. Heckhausen & C. S. Dweck (Eds.). *Motivation and Self-Regulation Across the Life Span* (pp. 341–364). New York: Cambridge University Press.

Carstensen, L. L., & Mikels, J. A. (2005). At the intersection of emotion and cognition: Aging and the positivity effect. *Current Directions in Psychological Science*, 14, 117–121.

Cattell, R. B. (1987). *Intelligence: Its Structure, Growth, and Action*. Amsterdam: North Holland.

Cleveland, J. N., & Lim, A. S. (2008). Employee age and performance in organizations. In K. S. Shultz & G. A. Adams (Eds.). *Aging and Work in the 21st Century* (pp. 109–137). Mahwah, NJ: Erlbaum.

Cleveland, J. N., & Shore, L. M. (1992). Self and supervisory perspectives on age and work attitudes on performance. *Journal of Applied Psychology*, 77, 469–484.

Cordery, J., & Parker, S. K. (2012). Work design: Creating jobs and roles that promote individual effectiveness. In S. W. J. Kozlowski (Ed.). *The Oxford Handbook of Organizational Psychology*, Vol. 1 (pp. 247–284). New York: Oxford University Press.

Cox, C. B., & Beier, M. E. (2009). The moderating effect of individual differences on the relationship between the framing of training and interest in training. *International Journal of Training and Development*, 13, 247–261.

Cox, C. B., & Beier, M. E. (2014). Too old to train or reprimand: The role of intergroup attribution bias in evaluating older workers. *Journal of Business and Psychology*, 29, 61–70.

Eyster, L., Johnson, R. W., & Toder, E. (2008, January). Current strategies to employ and retain older workers. Washington, DC: The Urban Institute. Available at: www.doleta.gov/reports/Employ_Retain_Older_Workers_FINAL.pdf (accessed February 18, 2014).

Grant, A. M., Fried, Y., & Juillerat, T. (2011). Work matters: Job design in classic and contemporary perspectives. In S. Zedeck (Ed.). *APA Handbook of Industrial and Organizational Psychology*, Vol. 1: Building and Developing the Organization (pp. 417–453).

Washington, DC: American Psychological Association.

Greller, M. M., & Stroh, L. K. (1995). Careers in midlife and beyond: A fallow field in need of sustenance. *Journal of Vocational Behavior*, 47, 232–247.

Hackman, J. R., & Oldham, G. R. (1975). Development of the job diagnostic survey. *Journal of Applied Psychology*, 60, 159–170.

Hebl, M. R., Foster, J. B., Mannix, L. M., & Dovidio, J. F. (2002). Formal and interpersonal discrimination: A field study of bias toward homosexual applicants. *Personality and Social Psychology Bulletin*, 28, 815–825.

Hedge, J. W., Borman, W. C., & Lammlein, S. E. (2006). *The Aging Workforce: Realities, Myths, and Implications for Organizations*. Washington, DC: American Psychological Association.

Hertzog, C., Kramer, A. F., Wilson, R. S., & Lindenberger, U. (2008). Enrichment effects on adult cognitive development: Can the functional capacity of older adults be preserved and enhanced? *Psychological Science in the Public Interest*, 9, 1–65.

Johnson, R. W. (2004). Trends in job demands among older workers, 1992–2002. *Monthly Labor Review*, 127, 48–56.

Johnson, R. W., & Butrica, B. A. (2012, May). Age disparities in unemployment and reemployment during the great recession and recovery. Washington, DC: The Urban Institute. Available at: www.urban.org/publications/412574.html (accessed March 4, 2014).

Johnson, R. W., Mermin, G. B. T., & Ressenger, M. (2007). Employment at older ages and the changing nature of work (Research Report No. 2007-20). Available at: www.urban.org/UploadedPDF/1001154_older_ages.pdf (accessed March 4, 2014).

Kanfer, R., & Ackerman, P. L. (2004). Aging, adult development, and work motivation. *Academy of Management Review*, 29, 440–458.

Karasek, R., Brisson, C., Kawakami, N., Houtman, I., Bongers, P., & Amick, B. (1998). The job content questionnaire (JCQ): An instrument for internationally comparative assessments of psychosocial job characteristics. *Journal of Occupational Health Psychology*, 3, 322–355.

Kite, M. E., Stockdale, G. D., Whitley, B. E., Jr., & Johnson, B. T. (2005). Attitudes toward younger and older adults: An updated meta-analytic review. *Journal of Social Issues*, 61, 241–266.

Kristof, A. L. (1996). Person-organization fit: An integrative review of its conceptualizations, measurement, and implications. *Personnel Psychology*, 49, 1–49.

Kooij, D. T. A., de Lange, A. H., Jansen, P. G. W., Kanfer, R., & Dijkers, J. S. E. (2011). Age and work-related motives: Results of a meta-analysis. *Journal of Organizational Behavior*, 32, 197–225.

Kubeck, J. E., Delp, N. D., Haslett, T. K., & McDaniel, M. A. (1996). Does job-related training performance decline with age? *Journal of Applied Psychology*, 90, 677–691.

Mather, M., & Carstensen, L. L. (2005). Aging and motivated cognition: The positivity effect in attention and memory. *Trends in Cognitive Sciences*, 9, 496–502.

Matthews, R. A., Bulger, C. A., & Barnes-Farrell, J. L. (2010). Work social supports, role stressors, and work-family conflict: The moderating effect of age. *Journal of Vocational Behavior*, 76, 78–90.

Maurer, T. J., Weiss, E. M., & Barbeite, F. G. (2003). A model of involvement in work-related learning and development activity: The effects of individual, situational, motivational, and age variables. *Journal of Applied Psychology*, 88, 707–724.

McEvoy, G. M., & Cascio, W. F. (1989). Cumulative evidence of the relationship between employee age and job performance. *Journal of Applied Psychology*, 74, 11–17.

Morgeson, F. P., & Humphrey, S. E. (2006). The work design questionnaire (WDQ): Developing and validating a comprehensive measure for assessing job design and the nature of work. *Journal of Applied Psychology*, 91, 1321–1339.

Murphy, K. R. (1989). Is the relationship between cognitive ability and job performance stable over time? *Human Performance*, 2, 183–200.

Ng, T. W. H., & Feldman, D. C. (2008). The relation of age to ten dimensions of job performance. *Journal of Applied Psychology*, 93, 392–423.

Ng, T. W. H., & Feldman, D. C. (2012). Evaluating six common stereotypes about older workers with meta-analytical data. *Personnel Psychology*, 65, 821–858.

- Palacios, C. S., Torres, M. V. T., & Mena, M. J. B. (2009). Negative aging stereotypes and their relation with psychosocial variables in the elderly population. *Archives of Gerontology and Geriatrics*, 48, 385–390.
- Parker, S. K., Wall, T. D., & Cordery, J. L. (2001). Future work design research and practice: Towards an elaborated model of work design. *Journal of Occupational and Organizational Psychology*, 74, 413–440.
- Perry, E. L., Dokko, G., & Golom, F. (2012). The aging worker and person-environment fit. In J. W. Hedge & W. C. Borman (Eds.). *The Oxford Handbook of Work and Aging* (pp. 187–212). New York: Oxford University Press.
- Posthuma, R. A., & Campion, M. A. (2009). Age stereotypes in the workplace: Common stereotypes, moderators, and future research directions. *Journal of Management*, 35, 158–188.
- Roberts, B. W., Walton, K. E., & Viechtbauer, W. (2006). Patterns of mean-level change in personality traits across the life course: A meta-analysis of longitudinal studies. *Psychological Bulletin*, 132, 1–25.
- Robson, S. M., & Hansson, R. O. (2007). Strategic self-development for successful aging at work. *International Journal of Aging and Human Development*, 64, 331–359.
- Salthouse, T. A. (1984). Effects of age and skill in typing. *Journal of Experimental Psychology: General*, 113, 345–371.
- Salthouse, T. A. (1996). The processing-speed theory of adult age differences in cognition. *Psychological Review*, 103, 403–428.
- Sanders, M. J., & McCreedy, J. (2009). A qualitative study of two older workers' adaptation to physically demanding work. *Work*, 32, 111–122.
- Scheibe, S., & Blanchard-Fields, F. (2009). Effects of regulating emotions on cognitive performance: What is costly for young adults is not so costly for older adults. *Psychology and Aging*, 24, 217–223.
- Sharit, J., & Czaja, S. J. (2012). Job design and redesign for older workers. In J. W. Hedge & W. C. Borman (Eds.). *The Oxford Handbook of Work and Aging* (pp. 454–482). New York: Oxford University Press.
- Sloan Center on Aging and Work (2012, December). Aging today: Encore careers and bridge jobs. Available at: www.bc.edu/content/dam/files/research_sites/agingandwork/pdf/publications/FS32_EncoreCareers&BridgeJobs.pdf (accessed March 4, 2014).
- Sturman, M. C. (2003). Searching for the inverted u-shaped relationship between time and performance: Meta-analyses of the experience/performance, tenure/performance, and age/performance relationships. *Journal of Management*, 29, 609–640.
- The Economist (2011, March). A silver opportunity: Rising longevity and its implications for business. London: The Economist Intelligence Unity. Available at: www.managementthinking.eiu.com/sites/default/files/downloads/EIU-Axa_Longevity_Web.pdf (accessed January 7, 2014).
- Tishman, F. M., van Looy, S., & Bruyère, S. M. (2012, March). Employer strategies for responding to an aging workforce. Report by the National Technical Assistance and Research Center to Promote Leadership for Increasing the Employment and Economic Independence of Adults with Disabilities. Available at: www.dol.gov/odep/pdf/NTAR_Employer_Strategies_Report.pdf (accessed January 7, 2014).
- Truxillo, D. M., Cadiz, D. M., Rineer, J. R., Zaniboni, S., & Fraccaroli, F. (2012). A lifespan perspective on job design: Fitting the job and the worker to promote job satisfaction, engagement, and performance. *Organizational Psychology Review*, 2, 340–360.
- Vroom, V. H. (1964). *Work and Motivation*. New York: John Wiley.
- Waldman, D. A., & Avolio, B. J. (1986). A meta-analysis of age differences in job performance. *Journal of Applied Psychology*, 71, 33–38.
- Wolfson, N., Cavanagh, T., & Kraiger, K. (2013). Older adults and technology-based instruction: Optimizing learning outcomes and transfer. *Academy of Management Learning and Education*. Advance online publication. DOI: 10.5465/ame.2012.0056.
- Yeatts, D. E., Folts, W. E., & Knapp, J. (2000). Older workers' adaptation to a changing workplace: Employment issues for the 21st century. *Educational Gerontology*, 26, 565–582.

- Zacher, H., & Frese, M. (2009). Remaining time and opportunities at work: Relationships between age, work characteristics, and occupational future time perspective. *Psychology and Aging*, 24, 487–493.
- Zacher, H., & Frese, M. (2011). Maintaining a focus on opportunities at work: The interplay between age, job complexity, and the use of selection, optimization, and compensation strategies. *Journal of Organizational Behavior*, 32, 291–318.
- Zaniboni, S., Truxillo, D. M., & Fraccaroli, F. (2013). Differential effects of task variety and skill variety on burnout and turnover intentions for older and younger workers. *European Journal of Work and Organizational Psychology*, 22, 306–317.
- Zaniboni, S., Truxillo, D. M., Fraccaroli, F., McCune, E. A., & Bertolino, M. (2014). Who benefits from more tasks? Older versus younger workers. *Journal of Managerial Psychology*, 29, 508–523.

Work Ability and Aging

- Allen, J., & de Grip, A. (2012). Does skill obsolescence increase the risk of employment loss? *Applied Economics*, 44 (25), 3237–3245.
- Brynin, M. (2002). Overqualification in employment. *Work, Employment and Society*, 16 (4), 637–654.
- Frey, C. B., & Osborne, M. A. (2013). The future employment: How susceptible are jobs to computerisation? Available at: www.oxfordmartin.ox.ac.uk/downloads/academic/The_Future_of_Employment.pdf (accessed September 15, 2013).
- Gould, R., Ilmarinen, J., Järvisalo, J., & Koskinen, S. (2008). Dimensions of Work Ability: Results of the Health 2000 Survey. Helsinki: Finnish Centre for Pensions, the Social Insurance Institution, National Public Health Institute, Finnish Institute of Occupational Health.
- Ilmarinen, J. (2006). Towards a Longer Worklife: Ageing and the Quality of Worklife in the European Union. Helsinki: Finnish Institute of Occupational Health, Ministry of Social Affairs and Health.
- Ilmarinen, J. (2009). Aging and work: An international perspective. In S. J. Czaja & J. Sharit (Eds.), *Aging and Work: Issues and Implications in a Changing Landscape* (pp. 51–73). Baltimore, MD: Johns Hopkins University Press.
- Ilmarinen, J. (2013). Redesign of workplaces for an ageing society. In P. Taylor (Ed.), *Older Workers in an Ageing Society: Critical Topics in Research and Policy* (pp. 133–146). Cheltenham: Edward Elgar Publishing.
- Ilmarinen, J., Tuomi, L., & Klockars, M. (1997). Changes in the work ability of active employees over an 11-year period. *Scandinavian Journal of Work, Environment and Health*, 23(1), 49–57.
- Ilmarinen, J., Ilmarinen, V., Huuhtanen, P., Louhevaara, V., & Näsman, O. (2013). Good work—longer career: Work well-being in the Finnish technology industry. Conference abstract presented at work, well-being and wealth. Active ageing at work. *Scandinavian Journal of Work, Environment and Health*. August 2013. Available at: www.sjweh.fi/www2013.php (Abstract) (accessed November 20, 2013).
- Kinnunen, U., Feldt, T., Geurts, S., & Pulkkinen, L. (2006). Types of work-family interface: Well-being correlates of negative and positive spillover between work and family. *Scandinavian Journal of Psychology*, 47(2), 149–162.
- Kivimäki, M., Leino-Arjas, P., Luukkonen, R., Riihimäki, H., Vahtera, J., & Kirjonen, J. (2002). Work stress and risk of cardiovascular mortality: Prospective cohort study of industrial employees. *British Medical Journal*, 325(7369), 857–860.
- Kumashiro, M. (2008). Promotion of work ability towards productive aging—selected papers of the 3rd international symposium on work ability. Paper presented at the Promotion of Work Ability Towards Productive Aging—Selected Papers of the 3rd International Symposium on Work Ability, Hanoi, Vietnam.
- Lundell, S., Tuominen, E., Hussi, T., Klemola, S., Lehto, E., Mäkinen, E., Oldenbourg, R., Saarelmä-Thiel, T., & Ilmarinen, J. (2011). *Ikävoimaa työhön [Age Power]*. Helsinki: Finnish

Institute of Occupational Health.

McKee-Ryan, F. M., & Harvey, J. (2011). "I have a job, but ...": A review of underemployment. *Journal of Management*, 37(4), 962–996.

Morris, M., & Western, B. (1999). Inequality in earnings at the close of the twentieth century. *Annual Review of Sociology*, 25, 623–657.

Näsman, O., & Ahonen, G. (1999). The DalBo-project: The economics of maintenance of work ability. In W. J. A. Goedhard (Ed.), *Aging and Work 4. Healthy and Productive Aging of Older Employees* (pp. 171–175). The Hague: Pasmans Offsetdrukkerij.

Näsman, O., & Ilmarinen, J. (1999). Metal-age: A process for improving well-being and total productivity. *Experimental Aging Research*, 25 (4), 379–384.

Nygård, C., Savinainen, M., Kirsi, T., & Lumme-Sandt, K. (2011). Age management during the life course. Paper presented at the 4th Symposium on Work Ability, Tampere, 6 to 9 June 2010, Tampere, Finland.

Rautio, M., & Michelsen, T. (2013). WAI: How to Use the Work Ability Index(tm) Questionnaire. Helsinki: Finnish Institution of Occupational Health.

Ruoppila, I., Huuhtanen, P., Seitsamo, J., & Ilmarinen, J. (2008). Age-Related Changes of the Work Ability Construct and its Relations to Cognitive Functioning in the Older Worker: A 16-Year Follow-Up Study. Jyväskylä: University of Jyväskylä.

Tempel, J., & Ilmarinen, J. (2013). *Arbeitsleben 2025. Das Haus der Arbeitsfähigkeit im Unternehmen bauen*. Herausgegeben Marianne Giesert. Hamburg: VSA Verlag.

Tuomi, K. (Ed.) (1997). Eleven-year follow-up of ageing workers. *Scandinavian Journal of Work, Environment & Health*, 23 (1), 1–71.

Tuomi, K., Ilmarinen, J., Jahkola, A., Katajarinne, K., & Tulkki, A. (1998). *Work Ability Index*. 2nd rev. ed. Helsinki: Finnish Institute of Occupational Health.

Twenge, J. M., Campbell, S. M., Hoffman, B. J., Lance, C. E. (2010). Generational differences in work values: Leisure and extrinsic values increasing, social and intrinsic values decreasing. *Journal of Management*, 36(5), 1117–1142.

Wahrendorf, M., Dragano, N., & Siegrist, J. (2013). Social position, work stress, and retirement intentions: A study with older employees from 11 European countries. *European Sociological Review*, 29(4), 792–802.

Vahtera, J., Kivimäki, M., Pentti, J., Linna, A., Virtanen, M., Virtanen, P., & Ferrie, J. E. (2004). Organisational downsizing, sickness absence, and mortality: 10-town prospective cohort study. *British Medical Journal*, 328(7439), 555–558.

Von Bonsdorff, M. B., Seitsamo, J., Ilmarinen, J., Nygård, C.-H., Von Bonsdorff, M. E., & Rantanen, T. (2011). Work ability in midlife as a predictor of mortality and disability in later life: A 28-year prospective follow-up study. *Cmaj*, 183(4), 235–242.

The Implications of Changes in Job Demands for the Continued and Future Employment of Older Workers

Bal, A. C., Reiss, A. E., Rudolph, C. W., & Baltes, B. B. (2011). Examining positive and negative perceptions of older workers: A meta-analysis. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 66(6), 687–698.

Bosman, E. A., & Charness, N. (1996). Age differences in skilled performance and skill acquisition. In T. Hess & F. Blanchard-Fields (Eds.), *Perspectives on Cognitive Change in Adulthood and Aging* (pp. 428–453). New York: McGraw-Hill.

Bureau of Labor Statistics (2011). Current population survey. Available at: www.bls.gov/cps (accessed December 29, 2013).

Bureau of Labor Statistics (2013). Table 1. Civilian Labor Force by Age, Sex, Race, and Ethnicity, 1992, 2002, 2012, and Projected 2022. Bureau of Labor Statistic News Release, November 1, 2013. Available at: www.bls.gov/news.release/pdf/wkyeng.pdf (accessed November 18, 2013).

Charness, N. (2008). Technology as multiplier effect for an aging work force. In K. W. Schaie & R. Abeles (Eds.), *Social Structures and Aging Individuals: Continuing Challenges* (pp.

167–192). New York: Springer.

Charness, N. (2009). Skill acquisition in older adults: Psychological mechanisms. In S. J. Czaja & J. Sharit (Eds.), *Aging and Work: Issues and Implications in a Changing Landscape* (pp. 232–258). Baltimore, MD: Johns Hopkins University Press.

Charness, N., & Czaja, S. J. (2005). Adaptation to new technologies (7.13). In M. L. Johnson (Gen. Ed.), *Cambridge Handbook on Age and Ageing* (pp. 662–669). Cambridge: Cambridge University Press.

Charness, N., & Fox, M. C. (2010). Formal training, older workers, and the IT industry. In J. McMullin & V. W. Marshall (Eds.), *Aging and Working in the New Economy: Changing Career Structures in Small IT Firms* (pp. 143–162). Williston, VT: Edward Elgar.

Charness, N., Kelley, C. L., Bosman, E. A., & Mottram, M. (2001). Word processing training and retraining: Effects of adult age, experience, and interface. *Psychology and Aging*, 16, 110–127.

Czaja, S. J., & Sharit, J. (1998). The effect of age and experience on the performance of a data entry task. *Journal of Experimental Psychology: Applied*, 4, 332–351.

Czaja, S. J., & Sharit, J. (Eds.) (2009). *Aging and Work: Issues and Implications in a Changing Landscape*. Baltimore, MD: Johns Hopkins University Press.

Czaja, S. J., & Sharit, J. (2012). *Designing Training and Instructional Programs for Older Adults*. Boca Raton, FL: CRC Press.

Czaja, S. J., Sharit, J., Ownby, R., Roth, D., & Nair, S. (2001). Examining age differences in performance of a complex information search and retrieval task. *Psychology and Aging*, 16, 564–579.

Dobbs, J., Healey, P., Kane, K., Mak, D., & McNamara, T. (2007). *Age Bias and Employment Discrimination* (Fact Sheet, 2007). Chestnut Hill, MA: Boston College Center on Aging and Work/Workplace Flexibility.

Dychtwald, K. E., Erickson, T. J., & Morrison, R. (2006). *Workforce Crisis. How to Beat the Booming Shortage of Skills and Talent*. Boston, MA: Harvard Business School Press.

Feinsod, R., Davenport, T., & Arthurs, R. (2005). *The business case for workers 50+: Planning for tomorrow's talent needs in today's competitive environment*. Washington, DC: AARP Public Policy Institute. Available at:

http://assets.aarp.org/rgcenter/econ/workers_fifty_plus_1.pdf (accessed December 28, 2013).

Fisk, A. D., Rogers, W. A., Charness, N., Czaja, S. J., & Sharit, J. (2009). *Designing for Older Adults: Principles and Creative Human Factors Approaches* (2nd ed.). Boca Raton, FL: CRC Press.

Grosch, J. W., & Pransky, G. S. (2009). Safety and health issues for an aging workforce. In S. J. Czaja & J. Sharit (Eds.), *Aging and Work: Issues and Implications in a Changing Landscape* (pp. 334–358). Baltimore, MD: Johns Hopkins University Press.

Heidkamp, M. (2012). *Older workers, rising skill requirements, and the need for a re-envisioning of the Public Workforce System*. New Brunswick, NJ: John J. Heldrich Center for Workforce Development, Rutgers University. Available at:

www.cael.org/pdfs/TMT_Reenvision_Public_Workforce_System (accessed December 3, 2013).

Johnson, R. E. (2003). Aging and the remembering of text. *Developmental Review*, 23, 261–346.

Kausler, D. H. (1994). *Learning and Memory in Normal Aging*. San Diego, CA: Academic Press.

Kroemer, K. H. E. (2009). Ergonomic design of workplaces for the aging population. In S. J. Czaja & J. Sharit (Eds.), *Aging and Work: Issues and Implications in a Changing Landscape*. Baltimore, MD: Johns Hopkins University Press.

Kubeck, J. E., Delp, N. D., Haslett, T. K., & McDaniel, M. A. (1996). Does job-related training performance decline with age? *Psychology and Aging*, 11, 92–107.

Lesser, E., & Rivera, R. (2006). *Closing the Generational Divide: Shifting Workforce Demographics and the Learning Function*. Accessed December 3, 2013 from: www.935.ibm.com/services/us/gbs/bus/pdf/g510-6323-00_generational_divide.pdf.

Loch, C. H., Fabian, J. S., Bauer, N., & Mauerman, H. (2010). The globe: How BMW is defusing the demographic time bomb. *Harvard Business Review*, March, 99–102.

Newell, A. (1990). *Unified Theories of Cognition*. Cambridge, MA: Harvard University Press.

Pew Charitable Trusts (2012). Five long-term employment questions. Available at: www.pewtrusts.org/uploadedFiles/wwwpewtrustsorg/Reports/Fiscal_Analysis/Pew_PFAI_Unemployment_Chartbook_print.pdf (accessed December 27, 2013).

Posthuma, R. A., & Campion, M. A. (2009). Age stereotypes in the workplace: Common stereotypes, moderators, and future research directions. *Journal of Management*, 35, 158–188.

Rampell, C. (2013). In a hard economy, older isn't better ... it's brutal. *New York Times*, February 3, 2013.

Rix, S. (2012). The employment situation, December 2011: Year ends on encouraging note. Washington, DC: AARP Foundation. Available at: www.aarp.org/content/dam/aarp/research/public_policy_institute/econ_sec/2011/fs246.pdf (accessed December 20, 2013).

Rizzuto, T. (2011). Age and technology innovation in the workplace: Does work context matter? *Computers and Human Behavior*, 27, 1612–1620.

Searcy, T. (2013). Help Older Workers Adapt to Changes. Available at: www.inc.com/tom-searcy/boomer-workers-help-them-adapt.html (accessed December 3, 2013).

Sharit, J., & Czaja, S. J. (2012). Job design and re-design for older workers. In J. W. Hedge & W. C. Borman (Eds.), *Oxford Handbook of Work and Aging* (pp. 454–482). New York: Oxford University Press.

Sharit, J., Czaja, S. J., Hernandez, M., Yang, Y., Perdomo, D., Lewis, J., Lee, C. C., & Nair, S. (2004). An evaluation of performance by older persons on a simulated telecommuting task. *The Journals of Gerontology: Psychological Sciences*, 59B(6), 305–316.

Sharit, J., Czaja, S. J., Hernandez, M. A., & Nair, S. N. (2009). The employability of older workers as teleworkers: An appraisal of issues and an empirical study. *Human Factors and Ergonomics in Manufacturing*, 19, 457–477.

Simon, H. A. (1956). Rational choice and the structure of the environment. *Psychological Review*, 63 (2), 129–138.

Sinclair, D., Watson, J., & Beach, B. (2013). *Working Longer: An EU Perspective*. London: ILC-UK.

Smith, A. (2013). Smartphone ownership—2013 update. Available at: http://pewinternet.org/~media/Files/Reports/2013/PIP_Smartphone_adoption_2013_PDF.pdf (accessed November 18, 2013).

Smyer, M. A., & Pitt-Catsoupes, M. (2009). Collaborative work: What's age got to do with it? In S. J. Czaja & J. Sharit (Eds.), *Aging and Work: Issues and Implications in a Changing Landscape* (pp. 144–164). Baltimore, MD: Johns Hopkins University Press.

Toossi, M. (2012). Labor force projections to 2020: A more slowly growing workforce. *Monthly Lab. Rev.*, 135, 43–64.

Torres-Gil, F. (2009). The politics of work and aging: Public policy for the new elders. In S. J. Czaja & J. Sharit (Eds.), *Aging and Work: Issues and Implications in a Changing Landscape* (pp. 77–89). Baltimore, MD: Johns Hopkins University Press.

U.S. Department of Labor (2008). Report of the taskforce on the aging of the American workforce. Available at: www.doleta.gov/reports/final_taskforce_report_2_27_08.pdf (accessed December 4, 2013).

U.S. Government Accountability Office (2011). Multiple employment and training programs: Providing information on collocating services and consolidating administrative structures could provide efficiencies (GAO 11–92). Available at: www.gao.gov/new.items/d1192.pdf (accessed December 28, 2013).

Verhaeghen, P., Marcoen, A., & Goossens, L. (1993). Facts and fiction about memory aging: A quantitative integration of research findings. *Journal of Gerontology*, 48, 157–171.

Zhang, T. (2011). Workforce Investment Act training for older workers: Toward a better understanding of older worker needs during the economic recovery. Washington, DC: U.S. Department of Labor, Employment Training Administration. Available at: http://wdr.doleta.gov/research/FullText_Documents/ETAOP_2011-10.pdf (accessed December 28, 2013).

Zickuhr, K. (2013). Tablet ownership 2013. Available at: http://pewinternet.org/~media/Files/Reports/2013/PIP_Tablet%20ownership%202013.pdf

(accessed November 18, 2013).

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- Allen, J. A., Pugh, S. D., Grandey, A. A., & Groth, M. (2010). Following display rules in good or bad faith? Customer orientation as a moderator of the display rule-emotional labor relationship. *Human Performance*, 23, 101–115.
- Andersson, L. M., & Pearson, C. M. (1999). Tit for tat? The spiraling effect of incivility in the workplace. *Academy of Management Review*, 24, 452–471.
- Ashforth, B. E., & Humphrey, R. H. (1993). Emotional labor in service roles: The influence of identity. *The Academy of Management Review*, 18, 88–115.
- Baltes, P. B., & Smith, J. (2003). New frontiers in the future of aging: From successful aging of the young old to the dilemmas of the fourth age. *Gerontology*, 49, 123–135.
- Barger, P. B., & Grandey, A. A. (2006). Service with a smile and encounter satisfaction: Emotional contagion and appraisal mechanisms. *Academy of Management Journal*, 49, 1229–1238.
- Barrett, L. F., & Kensinger, E. A. (2010). Context is routinely encoded during emotion perception. *Psychological Science*, 21, 595–599.
- Barrett, L. F., Mesquita, B., & Gendron, M. (2011). Context in emotion perception. *Current Directions in Psychological Science*, 20, 286–290.
- Beal, D., & Trougakos, J. (2013). Episodic interpersonal emotion regulation: Or, dealing with life as it happens. In A. A. Grandey, J. M. Diefendorff, & D. Rupp (Eds.), *Emotional Labor in the 21st Century: Diverse Perspectives on Emotion Regulation at Work*. New York: Psychology Press/Routledge.
- Birditt, K. S., Fingerman, K. L., & Almeida, D. M. (2005). Age differences in exposure and reactions to interpersonal tensions: A daily diary study. *Psychology and Aging*, 20, 330–340.
- Boerlijst, J. G., Munnichs, J. M. A., & van der Heijden, B. I. J. M. (1998). The “older worker” in the organization. In P. J. D. Drenth, H. Thierry, & C. J. de Wolff (Eds.), *Handbook of Work and Organizational*, Vol. 2: *Work Psychology* (2nd ed.) (pp. 183–213). Hove: Psychology Press/Erlbaum.
- Bölte, S., Hubl, D., Feineis-Matthews, S., Prvulovic, D., Dierks, T., & Poustka, F. (2006). Facial affect recognition training in autism: Can we animate fusiform gyrus? *Behavioral Neuroscience*, 120, 211–216.
- Brotheridge, C. M., & Grandey, A. A. (2002). Emotional labor and burnout: Comparing two perspectives of “people work.” *Journal of Vocational Behavior*, 60, 17–39.
- Butler, E. A., Egloff, B., Wilhelm, F. H., Smith, N. C., Erickson, E. A., & Gross, J. J. (2003). The social consequences of expressive suppression. *Emotion*, 3, 48–67.
- Carstensen, L. L. (2006). The influence of a sense of time on human development. *Science*, 312, 1913–1915.
- Carstensen, L. L., & Turk-Charles, S. (1994). The salience of emotion across the adult life span. *Psychology and Aging*, 9, 259–264.
- Carstensen, L. L., Turan, B., Scheibe, S., Ram, N., Ersner-Hershfield, H., Samanez-Larkin, G. R., Brooks, K. P., & Nesselroade, J. R. (2011). Emotional experience improves with age: Evidence based on over 10 years of experience sampling. *Psychology and Aging*, 26, 21–33.
- Cate, R. A., & John, O. P. (2007). Testing models of the structure and development of future time perspective: Maintaining a focus on opportunities in middle age. *Psychology and Aging*, 22, 186–201.
- Charles, S. T. (2010). Strength and vulnerability integration: A model of emotional well-being across adulthood. *Psychological Bulletin*, 136, 1068–1091.
- Charles, S. T., & Carstensen, L. L. (2008). Unpleasant situations elicit different emotional responses in younger and older adults. *Psychology and Aging*, 23, 495–504.
- Charness, N., Kelley, C. L., Bosman, E. A., & Mottram, M. (2001). Word-processing training and retraining: Effects of adult age, experience, and interface. *Psychology and Aging*, 16, 110–127.

- Cheung, F. Y.-I., & Tang, C. S.-k. (2010). Effects of age, gender, and emotional labor strategies on job outcomes: Moderated mediation analyses. *Applied Psychology: Health and Well-Being*, 2, 323–339.
- Colonia-Willner, R. (1998). Practical intelligence at work: Relationship between aging and cognitive efficiency among managers in a bank environment. *Psychology and Aging*, 13, 45–57.
- Côté, S. (2005). A social interaction model of the effects of emotion regulation on work strain. *Academy of Management Review*, 30, 509–530.
- Dahling, J. J., & Perez, L. A. (2010). Older worker, different actor? Linking age and emotional labor strategies. *Personality and Individual Differences*, 48, 574–578.
- Dallimore, K. S., Sparks, B. A., & Butcher, K. (2007). The influence of angry customer outbursts on service providers' facial displays and affective states. *Journal of Service Research*, 10, 78–92.
- Diefendorff, J. M., & Gosserand, R. H. (2003). Understanding the emotional labor process: A control theory perspective. *Journal of Organizational Behavior*, 24, 945–959.
- Diefendorff, J. M., & Richard, E. M. (2003). Antecedents and consequences of emotional display rule perceptions. *Journal of Applied Psychology*, 88, 284–294.
- Diefendorff, J. M., Croyle, M. H., & Gosserand, R. H. (2005). The dimensionality and antecedents of emotional labor strategies. *Journal of Vocational Behavior*, 66, 339–357.
- Diefendorff, J. M., Richard, E. M., & Croyle, M. H. (2006). Are emotional display rules formal job requirements? Examination of employee and supervisor perceptions. *Journal of Occupational and Organizational Psychology*, 79, 273–298.
- Diefendorff, J. M., Richard, E. M., & Yang, J. (2008). Linking emotion regulation strategies to affective events and negative emotions at work. *Journal of Vocational Behavior*, 73, 498–508.
- Diefendorff, J. M., Erickson, R. J., Grandey, A. A., & Dahling, J. J. (2011). Emotional display rules as work unit norms: A multilevel analysis of emotional labor among nurses. *Journal of Occupational Health Psychology*, 16, 170–186.
- Dwyer, S., Richard, O., & Shepherd, C. D. (1998). An exploratory study of gender and age matching in the salesperson-prospective customer dyad: Testing similarity-performance predictions. *Journal of Personal Selling & Sales Management*, 18, 55–69.
- Ebner, N. C., & Johnson, M. K. (2009). Young and older emotional faces: Are there age group differences in expression identification and memory? *Emotion*, 9, 329–339.
- Ekman, P. (1973). *Darwin and Facial Expression: A Century of Research in Review*. Oxford: Academic Press.
- Ekman, P. (2002). *Microexpression Training Tool, Subtle Expression Training Tool*. Salt Lake City, UT: A Human Face.
- Elfenbein, H. A., & Ambady, N. (2002). Predicting workplace outcomes from the ability to eavesdrop on feelings. *Journal of Applied Psychology*, 87, 963–971.
- Ennett, J. (2013). A cop's nonverbal journey: From gut to mind. In D. Matsumoto, M. G. Frank, & H. S. Hwang (Eds.), *Nonverbal Communication: Science and Applications* (pp. 155–162). Thousand Oaks, CA: Sage.
- Evans, F. B. (1963). Selling as a dyadic relationship: A new approach. *American Behavioral Scientist*, 6, 76–79.
- Fife, E., & Pereira, F. (2001). Small- and medium-size enterprises and the e-economy: Challenges and prospects. *Journal of the Institution of British Telecommunications Engineers*, 2, 173–179.
- Gabriel, A. S., Acosta, J. D., & Grandey, A. A. (in press). The value of a smile: Does emotional performance matter more in familiar or unfamiliar exchanges? *Journal of Business and Psychology*.
- Gibson, J. L., & Klein, S. M. (1970). Employee attitudes as a function of age and length of service: A reconceptualization. *The Academy of Management Journal*, 13, 411–425.
- Goldberg, L. S., & Grandey, A. A. (2007). Display rules versus display autonomy: Emotion regulation, emotional exhaustion, and task performance in a call center simulation. *Journal of Occupational Health Psychology*, 12, 301–318.
- Gosserand, R. H., & Diefendorff, J. M. (2005). Emotional display rules and emotional labor. *Journal of Applied Psychology*, 90, 1256–1264.

- Gottman, J. M., & Levenson, R. W. (1992). Marital processes predictive of later dissolution: Behavior, physiology, and health. *Journal of Personality and Social Psychology*, 63, 221–233.
- Grandey, A. (2003). When "the show must go on": Surface and deep acting as determinants of emotional exhaustion and peer-rated service delivery. *Academy of Management Journal*, 46, 86–96.
- Grandey, A. A., Fisk, G. M., Mattila, A. S., Jansen, K. J., & Sideman, L. A. (2005). Is "service with a smile" enough? Authenticity of positive displays during service encounters. *Organizational Behavior and Human Decision Processes*, 96, 38–55.
- Grandey, A. A., Diefendorff, J. M., & Rupp, D. E. (2013). *Emotional Labor in the 21st Century: Diverse Perspectives on Emotion Regulation at Work*. New York: Psychology Press/Routledge.
- Gross, J. J. (1998). The emerging field of emotion regulation: An integrative review. *Review of General Psychology*, 2, 271–299.
- Gross, J. J. (2001). Emotion regulation in adulthood: Timing is everything. *Current Directions in Psychological Science*, 10, 214–219.
- Gross, J. J., & John, O. P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. *Journal of Personality and Social Psychology*, 85, 348–362.
- Gross, J. J., Carstensen, L. L., Pasupathi, M., Tsai, J., Götestam Skorpen, C., & Hsu, A. Y. C. (1997). Emotion and aging: Experience, expression, and control. *Psychology and Aging*, 12, 590–599.
- Groth, M., & Grandey, A. A. (2012). From bad to worse: Negative exchange spirals in employee-customer service interactions. *Organizational Psychology Review*, 2, 208–233.
- Gyurak, A., Gross, J. J., & Etkin, A. (2011). Explicit and implicit emotion regulation: A dual-process framework. *Cognition & Emotion*, 25, 400–412.
- Hatfield, E., Cacioppo, J. T., & Rapson, R. L. (1993). Emotional contagion. *Current Directions in Psychological Science*, 2, 96–99.
- Hertzog, C., & Dixon, R. A. (1996). Methodological issues in research on cognition and aging. In F. Blanchard-Fields & T. M. Hess (Eds.), *Perspectives on Cognitive Change in Adulthood and Aging* (pp. 66–121). New York: McGraw-Hill.
- Hess, U., Adams, R. B., Jr., Simard, A., Stevenson, M. T., & Kleck, R. E. (2012). Smiling and sad wrinkles: Age-related changes in the face and the perception of emotions and intentions. *Journal of Experimental Social Psychology*, 48, 1377–1380.
- Hochschild, A. (1983). *The Managed Heart: Commercialization of Human Feeling*. Berkeley, CA: University of California Press.
- Hooyman, N., & Kiyak, H. A. (1996). *Social Gerontology: A Multidisciplinary Perspective* (4th ed.). Boston, MA: Allyn & Bacon.
- Hülshager, U. R., & Schewe, A. F. (2011). On the costs and benefits of emotional labor. *Journal of Occupational Health Psychology*, 16, 361–389.
- Isaacowitz, D. M., & Stanley, J. T. (2011). Bringing an ecological perspective to the study of aging and emotion recognition: Past, current, and future methods. *Journal of Nonverbal Behavior*, 35, 261–278.
- Isaacowitz, D. M., Loeckenhoff, C., Lane, R., Wright, R., Sechrest, L., Riedel, R., & Costa, P. T. (2007). Age differences in recognition of emotion in lexical stimuli and facial expressions. *Psychology and Aging*, 22, 147–159.
- John, O. P., & Gross, J. J. (2004). Healthy and unhealthy emotion regulation: Personality processes, individual differences, and life span development. *Journal of Personality*, 72, 1301–1334.
- Johnson, S. L., Holdsworth, L., Hoel, H., & Zapf, D. (2013). Customer stressors in service organizations: The impact of age on stress management and burnout. *European Journal of Work and Organizational Psychology*, 22, 318–330.
- Judge, T. A., Wolf, E. R., & Hurst, C. (2009). Is emotional labor more difficult for some than others? A multilevel, experience-sampling study. *Personnel Psychology*, 62, 57–68.
- Kammeyer-Mueller, J. D., Rubenstein, A. L., Long, D. M., Odio, M. A., Buckman, B. R., Zhang, Y., & Halvorsen-Ganepola, M. D. K. (2013). A meta-analytic structural model of dispositional affectivity and emotional labor. *Personnel Psychology*, 66, 47–90.

- Keightley, M. L., Winocur, G., Burianova, H., Hongwanishkul, D., & Grady, C. L. (2006). Age effects on social cognition: Faces tell a different story. *Psychology and Aging*, 21, 558–572.
- Keil, A., & Freund, A. M. (2009). Changes in the sensitivity to appetitive and aversive arousal across adulthood. *Psychology and Aging*, 24, 668–680.
- Kessler, E.-M., & Staudinger, U. M. (2009). Affective experience in adulthood and old age: The role of affective arousal and perceived affect regulation. *Psychology and Aging*, 24, 349–362.
- Kim, E., & Yoon, D. J. (2012). Why does service with a smile make employees happy? A social interaction model. *Journal of Applied Psychology*, 97, 1059–1067.
- Kunzmann, U., Richter, D., & Schmukle, S. C. (2013). Stability and change in affective experience across the adult life span: Analyses with a national sample from Germany. *Emotion*, advance online publication. DOI: 10.1037/a0033572.
- Levenson, R. W. (2000). Expressive, physiological, and subjective changes in emotion across adulthood. In S. H. Qualls & N. Abeles (Eds.), *Psychology and the Aging Revolution: How We Adapt to Longer Life*, Vol. 9 (pp. 123–140). Washington, DC: American Psychological Association.
- Levenson, R. W., Carstensen, L. L., Friesen, W. V., & Ekman, P. (1991). Emotion, physiology, and expression in old age. *Psychology and Aging*, 6, 28–35.
- Malatesta, C. Z., Izard, C. E., Culver, C., & Nicolich, M. (1987). Emotion communication skills in young, middle-aged, and older women. *Psychology and Aging*, 2, 193–203.
- McNair, S., & Flynn, M. (2006). Managing an ageing workforce in the retail sector: A report for employers. Department for Work and Pensions. Available at: <http://statistics.dwp.gov.uk/asd/asd5/rports2005-2006/agepos8.pdf> (accessed January 9, 2015).
- Michaels, C. E., & Spector, P. E. (1982). Causes of employee turnover: A test of the Mobley, Griffeth, Hand, and Meglino model. *Journal of Applied Psychology*, 67, 53–59.
- Morrison, R. L., & Bellack, A. S. (1981). The role of social perception in social skill. *Behavior Therapy*, 12, 69–79.
- Murphy, N. A., & Isaacowitz, D. M. (2010). Age effects and gaze patterns in recognising emotional expressions: An in-depth look at gaze measures and covariates. *Cognition & Emotion*, 24, 436–452.
- Ng, T. W. H., & Feldman, D. C. (2010). The relationships of age with job attitudes: A meta-analysis. *Personnel Psychology*, 63, 677–718.
- O'Brien, G. E., & Dowling, P. (1981). Age and job satisfaction. *Australian Psychologist*, 16, 49–61.
- Panek, P. E., Staats, S., & Hiles, A. (2006). College students' perceptions of job demands, recommended retirement ages, and age of optimal performance in selected occupations. *The International Journal of Aging & Human Development*, 62, 87–115.
- Park, D. C. (2000). The basic mechanisms accounting for age-related decline in cognitive function. In D. C. Park & N. Schwarz (Eds.), *Cognitive Aging: A Primer* (pp. 3–21). New York: Psychology Press.
- Paulmann, S., Pell, M. D., & Kotz, S. A. (2008). How aging effects the recognition of emotional speech. *Brain and Language*, 104, 262–269.
- Pugh, S. D. (2001). Service with a smile: Emotional contagion in the service encounter. *The Academy of Management Journal*, 44, 1018–1027.
- Pugh, S. D., Diefendorff, J. M., & Moran, C. S. (2013). Emotional labor: Organization level influences, strategies, and outcomes. In A. A. Grandey, J. M. Diefendorff, & D. E. Rupp (Eds.), *Emotional Labor in the 21st Century: Diverse Perspectives on Emotion Regulation at Work* (pp. 199–221). New York, New York: Psychology Press/Routledge.
- Rafaeli, A., & Sutton, R. I. (1987). Expression of emotion as part of the work role. *The Academy of Management Review*, 12, 23–37.
- Ready, R. E., & Robinson, M. D. (2008). Do older individuals adapt to their traits? Personality-emotion relations among younger and older adults. *Journal of Research in Personality*, 42, 1020–1030.
- Riediger, M., Voelkle, M. C., Ebner, N. C., & Lindenberger, U. (2011). Beyond "happy, angry, or sad?" Age-of-poser and age-of-rater effects on multi-dimensional emotion perception. *Cognition & Emotion*, 25, special section, 968–982.

Rogers, W. A., Stronge, A. J., & Fisk, A. D. (2005). Technology and aging. *Reviews of Human Factors and Ergonomics*, 1, 130–171.

Roring, R. W., Hines, F. G., & Charness, N. (2006). Age-related identification of emotions at different image sizes. *Human Factors*, 48, 675–681.

Ruffman, T., Henry, J. D., Livingstone, V., & Phillips, L. H. (2008). A meta-analytic review of emotion recognition and aging: Implications for neuropsychological models of aging. *Neuroscience & Biobehavioral Reviews*, 32, 863–881.

Rupp, D. E., & Spencer, S. (2006). When customers lash out: The effects of customer interactional injustice on emotional labor and the mediating role of discrete emotions. *Journal of Applied Psychology*, 91, 971–978.

Russell, T. A., Chu, E., & Phillips, M. L. (2006). A pilot study to investigate the effectiveness of emotion recognition remediation in schizophrenia using the micro-expression training tool. *British Journal of Clinical Psychology*, 45, 579–583.

Saal, F. E. (1978). Job involvement: A multivariate approach. *Journal of Applied Psychology*, 63, 53–61.

Salthouse, T. A. (2009). When does age-related cognitive decline begin? *Neurobiology of Aging*, 30, 507–514.

Salthouse, T. A., Atkinson, T. M., & Berish, D. E. (2003). Executive functioning as a potential mediator of age-related cognitive decline in normal adults. *Journal of Experimental Psychology: General*, 132, 566–594.

Schaie, K. W. (1996). Intellectual development in adulthood. In J. E. Birren & K. W. Schaie (Eds.), *Handbook of the Psychology of Aging* (4th ed.) (pp. 266–286). San Diego, CA: Academic Press.

Scheibe, S., & Blanchard-Fields, F. (2009). Effects of regulating emotions on cognitive performance: What is costly for young adults is not so costly for older adults. *Psychology and Aging*, 24, 217–223.

Scheibe, S., & Carstensen, L. L. (2010). Emotional aging: Recent findings and future trends. *Journal of Gerontology: Psychological Sciences*, 65B, 135–144.

Scheibe, S., & Zacher, H. (2013). A lifespan perspective on emotion regulation, stress, and well-being in the workplace. In P. L. Perrewé, J. Halbesleben, & C. C. Rosen (Eds.), *Research in Occupational Stress and Well-Being: The Role of Emotion and Emotion Regulation* (Vol. 11) (pp. 163–193). Bingley: Emerald.

Scott, B. A., & Barnes, C. M. (2011). A multilevel field investigation of emotional labor, affect, work withdrawal, and gender. *Academy of Management Journal*, 54, 116–136.

Sheppes, G., & Meiran, N. (2008). Divergent cognitive costs for online forms of reappraisal and distraction. *Emotion*, 8, 870–874.

Shiota, M. N., & Levenson, R. W. (2009). Effects of aging on experimentally instructed detached reappraisal, positive reappraisal, and emotional behavior suppression. *Psychology and Aging*, 24, 890–900.

Silver, H., Goodman, C., Knoll, G., & Isakov, V. (2004). Brief emotion training improves recognition of facial emotions in chronic schizophrenia. A pilot study. *Psychiatry Research*, 128, 147–154.

Sliter, M., Sliter, K., & Jex, S. (2012). The employee as a punching bag: The effect of multiple sources of incivility on employee withdrawal behavior and sales performance. *Journal of Organizational Behavior*, 33, 121–139.

Sliter, M., Chen, Y., Withrow, S., & Sliter, K. (2013). Older and (emotionally) smarter? Emotional intelligence as a mediator in the relationship between age and emotional labor strategies in service employees. *Experimental Aging Research*, 39, 466–479.

Stanley, J. T., & Isaacowitz, D. M. (2012). Socioemotional perspectives on adult development. In S. K. Whitbourne & M. J. Sliwinski (Eds.), *The Wiley-Blackwell Handbook of Adulthood and Aging* (pp. 236–253). New York: Blackwell.

Sterns, H. L., & Miklos, S. M. (1995). The aging worker in a changing environment: Organizational and individual issues. *Journal of Vocational Behavior*, 47, 248–268.

Sullivan, S., Ruffman, T., & Hutton, S. B. (2007). Age differences in emotion recognition skills and the visual scanning of emotion faces. *Journal of Gerontology: Psychological Sciences*, 62B, 53–60.

- Toossi, M. (2012). Labor force projections to 2020: A more slowly growing workforce. *Monthly Labor Review*, 135, 43–64.
- Tsai, J. L., Levenson, R. W., & Carstensen, L. L. (2000). Autonomic, subjective, and expressive responses to emotional films in older and younger Chinese Americans and European Americans. *Psychology and Aging*, 15, 684–693.
- Turel, O., Connelly, C. E., & Fisk, G. M. (2011). Service with an e-smile: Employee authenticity and customer usage of web-based services. *Proceedings of the 44th Hawaii International Conference on Systems Sciences*, 1–10.
- U.S. Bureau of Labor (2010). Bureau of Labor Statistics Report. Washington, DC.
- van Dierendonck, D., & Mevissen, N. (2002). Aggressive behavior of passengers, conflict management behavior, and burnout among trolley car drivers. *International Journal of Stress Management*, 9, 345–355.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54, 1063–1070.
- Wegge, J., Vogt, J., & Wecking, C. (2007). Customer-induced stress in call centre work: A comparison of audio- and videoconference. *Journal of Occupational and Organizational Psychology*, 80, 693–712.
- Weiss, H. M., & Cropanzano, R. (1996). Affective events theory: A theoretical discussion of the structure, causes and consequences of affective experiences at work. In B. M. S. L. Cummings (Ed.), *Research in Organizational Behavior: An Annual Series of Analytical Essays and Critical Reviews*, Vol. 18 (pp. 1–74). Greenwich, CT: Elsevier Science/JAI Press.
- Williams, L. M., Brown, K. J., Palmer, D., Liddell, B. J., Kemp, A. H., Olivieri, G., Peduto, A., & Gordon, E. (2006). The mellow years? Neural basis of improving emotional stability over age. *Journal of Neuroscience*, 26, 6422–6430.
- Wood, P. M., & Kroese, B. S. (2007). Enhancing the emotion recognition skills of individuals with learning disabilities: A review of the literature. *Journal of Applied Research in Intellectual Disabilities*, 20, 576–579.
- Yang, J., & Diefendorff, J. M. (2009). The relations of daily counterproductive workplace behavior with emotions, situational antecedents, and personality moderators: A diary study in Hong Kong. *Personnel Psychology*, 62, 259–295.
- Zapf, D. (2002). Emotion work and psychological well-being: A review of the literature and some conceptual considerations. *Human Resource Management Review*, 12, 237–268.

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- Bajor, J. K., & Baltes, B. B. (2003). The relationship between selection, optimization with compensation, conscientiousness, motivation, and performance. *Journal of Vocational Behavior*, 63, 347–367.
- Baltes, B. B., Briggs, T. E., Huff, J. W., Wright, J. A., & Neuman, G. A. (1999). Flexible and compressed workweek schedules: A meta-analysis of their effects on work-related criteria. *Journal of Applied Psychology*, 84, 496–513.
- Baltes, P. B., & Baltes, M. M. (1990). Psychological perspectives on successful aging: The model of selective optimization with compensation. In P. B. Baltes & M. M. Baltes (Eds.), *Successful Aging: Perspectives from the Behavioral Sciences* (pp. 1–34). New York: Cambridge University Press.
- Barney, C. E., & Elias, S. M. (2010). Flex-time as a moderator of the job stress-work motivation relationship: A three nation investigation. *Personnel Review*, 39, 487–502.
- Birnholtz, J. P., Gutwin, C., & Hawkey, K. (2007). Privacy in the open: How attention mediates awareness and privacy in open-plan offices. *Proceedings of the 2007 International ACM Conference on Supporting Group Work*.
- Brennan, A., Chugh, J. S., & Kline, T. (2002). Traditional versus open office design: A longitudinal field study. *Environment and Behavior*, 34, 279–299.

- Byrne, D. (1971). *The Attraction Paradigm*. Orlando, FL: Academic Press.
- Carstensen, L. L. (1992). Social and emotional patterns in adulthood: Support for socioemotional selectivity theory. *Psychology & Aging*, 7, 331–338.
- Carstensen, L. L. (1995). Evidence for a life-span theory of socioemotional selectivity. *Current Directions in Psychological Science*, 4, 151–156.
- Center on an Aging Society (2005). *A Decade of Informal Caregiving: Are Today's Informal Caregivers Different than Informal Caregivers a Decade Ago?* (Data Profile No. 1). Washington, DC: Center on an Aging Society. Available at: <http://hpi.georgetown.edu/agingociety/pubhtml/caregiver1/caregiver1.html> (accessed February 12, 2014).
- Chung, K. H., & Ross, M. F. (1977). Differences in motivational properties between job enlargement and job enrichment. *Academy of Management Review*, 2, 113–122.
- Cuddy, A. J. C., Norton, M. I., & Fiske, S. T. (2005). This old stereotype: The pervasiveness and persistence of the elderly stereotype. *Journal of Social Issues*, 61, 267–285.
- de Dreu, C. K. W. (2006). When too little or too much hurts: Evidence for a curvilinear relationship between task conflict and innovation in teams. *Journal of Management*, 32, 83–107.
- de Dreu, C. K. W., & West, M. A. (2001). Minority dissent and team innovation: The importance of participation in decision making. *Journal of Applied Psychology*, 86, 1191–1201.
- de Girolamo, G., Dagani, J., Purcell, R., Cocchi, A., & McGorry, P. D. (2012). Age of onset of mental disorders and use of mental health services: Needs, opportunities, and obstacles. *Epidemiology and Psychiatric Sciences*, 21, 47–57.
- Dewa, C. S., & Lin, E. (2000). Chronic physical illness, psychiatric disorder and disability in the workplace. *Social Science & Medicine*, 51, 41–50.
- Firestone, W. A. (1991). Merit pay and job enlargement as reforms: Incentives, implementation, and teacher response. *Educational Evaluation and Policy Analysis*, 13, 269–288.
- Goldberg, C. B., Perry, E. L., Finkelstein, L. M., & Shull, A. (2013). Antecedents and outcomes of targeting older applicants in recruitment. *European Journal of Work and Organizational Psychology*, 22, 265–278.
- Guzzo, R. A., Jette, R. D., & Katzell, R. A. (1985). The effects of psychologically based intervention programs on work productivity: A meta-analysis. *Personnel Psychology*, 38, 275–291.
- Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. *Organization Behavior and Human Performance*, 16, 250–279.
- Hill, E. J., Yang, C., Hawkins, A. J., & Ferris, M. (2004). A cross-cultural test of the work-family interface in 48 countries. *Journal of Marriage and Family*, 66, 1300–1316.
- Huang, W. W., Wei, K., Watson, R. T., & Tan, B. C. Y. (2002). Supporting virtual teambuilding with a GSS: An empirical investigation. *Decision Support Systems*, 34, 359–367.
- Inceoglu, I., Segers, J., & Bartram, D. (2012). Age-related differences in work motivation. *Journal of Occupational and Organizational Psychology*, 85, 300–329.
- Kanfer, R., & Ackerman, P. L. (2004). Aging, adult development and work motivation. *Academy of Management Review*, 29, 440–458.
- Khanna, T., & Palepu, K. (2000). Is group affiliation profitable in emerging markets? An analysis of diversified Indian business groups. *Journal of Finance*, 55, 867–891.
- Klein, C., Diazgranados, D., Salas, E., Le, H., Burke, C. S., Lyons, R., & Goodwin, G. F. (2009). Does team building work? *Small Group Research*, 40, 181–222.
- Kooij, D., de Lange, A., Jansen, P., & Dijkers, J. (2008). Older workers' motivation to continue to work: Five meanings of age: A conceptual review. *Journal of Managerial Psychology*, 23, 364–394.
- Kooij, D. T. A. M., de Lange, A. H., Jansen, P. G. W., Kanfer, R., & Dijkers, J. S. E. (2011). Age and work-related motives: Results of a meta-analysis. *Journal of Organizational Behavior*, 32, 197–225.
- Liebermann, S. C., Wegge, J., Jungmann, F., & Schmidt, K. H. (2013). Age diversity and individual team member health: The moderating role of age and age stereotypes. *Journal of Occupational and Organizational Psychology*, 86, 184–202.

- McElroy, J. C., & Morrow, P. C. (2010). Employee reactions to office redesign: A naturally occurring quasi-field experiment in a multi-generational setting. *Human Relations*, 63, 609–636.
- Neuman, G. A., Edwards, J. E., & Raju, N. S. (1989). Organizational development interventions: A meta-analysis of their effects on satisfaction and other attitudes. *Personnel Psychology*, 42, 461–489.
- Parker, S. K. (1998). Enhancing role breadth self-efficacy: The roles of job enrichment and other organizational interventions. *Journal of Applied Psychology*, 83, 835–852.
- Parry, E., & Urwin, P. (2011). Generational differences in work values: A review of theory and evidence. *International Journal of Management Reviews*, 13, 79–96.
- Pitt-Catsoupes, M., Smyer, M. A., Matz-Costa, C., & Kane, K. (2007). The national study report: Phase II of the national study of business strategy and workforce development. Research Highlight No. 04. Chestnut Hill, MA: The Center on Aging & Work/Workplace Flexibility. Available at: http://agingandwork.bc.edu/documents/RH04_NationalStudy_03-07_004.pdf (accessed December 20, 2013).
- Raza, M. A., & Nawaz, M. M. (2011). Impact of job enlargement on employees' job satisfaction, motivation, and organizational commitment: Evidence from public sector of Pakistan. *International Journal of Business and Social Science*, 2, 268–273.
- Robertson, P. J., Roberts, D. R., & Porras, J. I. (1993). Dynamics of planned organizational change: Assessing empirical support for a theoretical model. *Academy of Management Journal*, 36, 619–634.
- Rudolph, C. W., Baltes, B. B., & Zabel, K. L. (2013). Age and work motives. In J. Field, R. J. Burke, & C. L. Cooper (Eds.), *The Sage Handbook of Aging, Work, and Society*. London: Sage.
- Salas, E., Rozell, D., Mullen, B., & Driskell, J. E. (1999). The effect of team building on performance: An integration. *Small Group Research*, 30, 309–329.
- Schneider, B. (1987). The people make the place. *Personnel Psychology*, 40, 437–453.
- Sharpe, D. L., Hermsen, J. M., & Billings, J. (2002). Factors associated with having flextime: A focus on married workers. *Journal of Family and Economic Issues*, 23, 51–72.
- Sloan Center on Aging & Work (2010). Executive case summary series: Talent management and the prism of age. Chestnut Hill, MA. Available at: www.bc.edu/content/dam/files/research_sites/agingandwork/pdf/publications/case_TM.pdf (accessed December 20, 2013).
- Sloan Center on Aging & Work (2012). CVS Caremark Snowbird Program. Chestnut Hill, MA. Available at: http://capricorn.bc.edu/agingandwork/database/browse/case_study/24047 (accessed December 20, 2013).
- Spreckelmeyer, K. F., (1993). Office relocation and environmental change: A case study. *Environment and Behavior*, 25, 181–204.
- Sundstrom, E., Burt, R. E., & Kamp, D. (1980). Privacy at work: Architectural correlates of job satisfaction and job performance. *Academy of Management Journal*, 23, 1101–1117.
- Sundstrom, E., Town, J. P., Rice, R. W., Osborn, D. P., & Brill, M. (1994). Office noise, satisfaction, and performance. *Environment and Behavior*, 26, 195–222.
- Tajfel, H. (1978). Social categorization, social identity, and social comparison. In H. Tajfel (Ed.), *Differentiation Between Social Groups* (pp. 61–76). New York: Academic Press.
- Timmerman, T. A. (2000). Racial diversity, age diversity, interdependence, and team performance. *Small Group Research*, 31, 592–606.
- Truxillo, D. M., Cadiz, D. M., Rineer, J. R., Zaniboni, S., & Fraccaroli, F. (2012). A lifespan perspective on job design: Fitting the job and the worker to promote job satisfaction, engagement, and performance. *Organizational Psychology Review*, 2, 340–360.
- van Dalen, H. P., Henkens, K., & Schippers, J. (2010). Productivity of older workers: Perceptions of employers and employees. *Population and Development Review*, 36, 309–330.
- Wegge, J., & Schmidt, K. (2009). The impact of age diversity in teams on group performance, innovation, and health. In A. S. Antoniou, C. L. Cooper, G. P. Chrousos, C. D. Spielberger, & M. W. Eysenck (Eds.), *Handbook of Managerial Behavior and Occupational Health* (pp. 79–94). Northampton: Elgar.

- Wiese, B. S., Freund, A. M., & Baltes, P. B. (2000). Selection, optimization, and compensation. An action-related approach to work and partnership. *Journal of Vocational Behavior*, 57, 273–300.
- Zaniboni, S., Truxillo, D. M., & Fraccaroli, F. (2013). Differential effects of task variety and skill variety on burnout and turnover intentions for older and younger workers. *European Journal of Work and Organizational Psychology*, 22, 306–317.
- Zaniboni, S., Truxillo, D. M., Fraccaroli, F., McCune, E. A., & Bertolino, M. (2014). Who benefits from more tasks? Older versus younger workers. *Journal of Managerial Psychology*, 29, 508–523.

Retirement and Bridge Employment: People, Context, and Time

- Adams, G. A., & Rau, B. L. (2011). Putting off tomorrow to do what you want today: Planning for retirement. *American Psychologist*, 66, 180–192.
- Adams, G. A., Prescher, J., Beehr, T. A., & Lepisto, L. (2002). Applying work-role attachment theory to retirement decision-making. *International Journal of Aging & Human Development*, 54, 125–137.
- Ashforth, B. (2001). *Role Transitions in Organizational Life: An Identity-Based Perspective*. Mahwah, NJ: Erlbaum.
- Atchley, R. C. (1989). A continuity theory of normal aging. *Gerontologist*, 29, 183–190.
- Avery, D. R., McKay, P. F., & Wilson, D. C. (2007). Engaging the aging workforce: The relationship between perceived age similarity, satisfaction with coworkers, and employee engagement. *Journal of Applied Psychology*, 92, 1542–1556.
- Bal, P. M., Jansen, P. G. W., van der Velde, M. E. G., de Lange, A. H., & Rousseau, D. M. (2010). The role of future time perspective in psychological contracts: A study among older workers. *Journal of Vocational Behavior*, 76, 474–486.
- Baltes, P. B., Staudinger, U. M., & Lindenberger, U. (1999). Life span psychology: theory and application to intellectual functioning. *Annual Review of Psychology*, 50, 471–507.
- Beehr, T. A. (1986). The process of retirement: A review and recommendations for future investigation. *Personnel Psychology*, 39, 31–55.
- Boehm, S. A., Kunze, F., & Bruch, H. (2013). Spotlight on age-diversity climate: The impact of age-inclusive HR practices on firm-level outcomes. *Personnel Psychology*, 67, 667–704.
- Carstensen, L. L. (1995). Evidence for a life span theory of socioemotional selectivity. *Current Directions in Psychological Science*, 4, 151–156.
- Chan, D. (1998). Functional relations among constructs in the same content domain at different levels of analysis: A typology of composition models. *Journal of Applied Psychology*, 83, 234–246.
- de Lange, A. H., van Yperen, N. W., van der Heijden, B. I. J. M., & Bal, P. M., (2010). Dominant achievement goals of older workers and their relationship with motivation-related outcomes. *Journal of Vocational Behavior*, 77, 118–125.
- Dendinger, V. M., Adams, G. A., & Jacobson, J. D. (2005). Reasons for working and their relationship to retirement attitudes, job satisfaction and occupational self-efficacy of bridge employees. *International Journal of Aging & Human Development*, 61, 21–35.
- Ekerdt, D. J., Kosloski, K., & DeViney, S. (2000). The normative anticipation of retirement by older workers. *Research on Aging*, 22, 3–22.
- Elder, G. H. (1995). The life course paradigm: Social change and individual development. In P. Moen, G. H. Elder, & K. Luscher (Eds.), *Examining Lives in Contexts: Perspectives on the Ecology of Human Development* (pp. 101–139). Washington, DC: American Psychological Association.
- Feldman, D. C. (1994). The decision to retire early: A review and conceptualization. *Academy of Management Review*, 19, 285–311.
- Felps, W., Mitchell, T. R., Hekman, D. R., Lee, T. W., Holtom, B. C., & Harman, W. S. (2009). Turnover contagion: How coworkers' job embeddedness and job search behaviors influence quitting. *Academy of Management Journal*, 52, 545–561.

- Gobeski, K. T., & Beehr, T. A. (2009). How retirees work: Predictors of different types of bridge employment. *Journal of Organizational Behavior*, 30, 401–425.
- Goldberg, C. B., Perry, E. L., Finkelstein, L. M., & Shull, A. (2013). Antecedents and outcomes of targeting older applicants in recruitment. *European Journal of Work and Organizational Psychology*, 22, 265–278.
- Hansson, R. O., DeKoekkoek, P. D., Need, W. M., & Patterson, D. W. (1997). Successful aging at work: Annual review, 1992–1996: The older worker and transitions to retirement. *Journal of Vocational Behavior*, 51, 202–233.
- Henkens, K., & van Solinge, H. (2002). Spousal influences on the decision to retire. *International Journal of Sociology*, 32, 55–74.
- Hershey, D. A., Henkens, K., & van Dalen, H. P. (2007). Mapping the minds of retirement planners. *Journal of Cross-Cultural Psychology*, 38, 361–382.
- Johns, G. (2006). The essential impact of context on organizational behavior. *Academy of Management Review*, 31, 386–408.
- Kanfer, R., & Ackerman, P. L. (2004). Aging, adult development, and work motivation. *Academy of Management Review*, 29, 440–458.
- Kim, N., & Hall, D. T. (2013). Protean career model and retirement. In M. Wang (Ed.), *The Oxford Handbook of Retirement* (pp. 102–116). New York: Oxford University Press.
- Kubicek, B., Korunka, C., Raymo, J. M., & Hoonakker, P. (2011). Psychological well-being in retirement: The effects of personal and gendered contextual resources. *Journal of Occupational Health Psychology*, 16, 230–246.
- Kunze, F., Boehm, S. A., & Bruch, H. (2011). Age diversity, age discrimination climate and performance consequences: A cross organizational study. *Journal of Organizational Behavior*, 32, 264–290.
- Lee, T. W., Sablinski, C. J., Burton, J. P., & Holtom, B. C. (2004). The effects of job embeddedness on organizational citizenship, job performance, volitional absences, and voluntary turnover. *Academy of Management Journal*, 47, 711–722.
- Leung, C. S. Y., & Earl, J. K. (2012). Retirement resources inventory: Construction, factor structure and psychometric properties. *Journal of Vocational Behavior*, 81, 171–182.
- Liu, S., Zhan, Y., & Wang, M. (2011). Person-centric work psychology: Additional insights on its tradition, nature, and research methods. *Industrial and Organizational Psychology: Perspectives on Science and Practice*, 4, 105–108.
- Mathieu, J. E., & Zajac, D. M. (1990). A review and meta-analysis of the antecedents, correlates, and consequences of organizational commitment. *Psychological Bulletin*, 108, 171–194.
- Meyer, J. P., & Allen, N. J. (1997). *Commitment in the Workplace: Theory, Research, and Application*. Thousand Oaks, CA: Sage.
- Mischel, W. (1968). *Personality and Assessment*. New York: Wiley.
- Mor-Barak, M. E. (1995). The meaning of work for older adults seeking employment: The generativity factor. *International Journal of Aging and Human Development*, 41, 325–344.
- Muchinsky, P. M., & Monahan, C. J. (1987). What is person-environment congruence? Supplementary versus complementary models of fit. *Journal of Vocational Behavior*, 31, 268–277.
- Ng, T. W. H., & Feldman, D. C. (2008). The relationship of age to ten dimensions of job performance. *Journal of Applied Psychology*, 93, 392–423.
- Ng, T. W. H., & Feldman, D. C. (2013). How do within-person changes due to aging affect job performance? *Journal of Vocational Behavior*, 83, 500–513.
- Pinquart, M., & Schindler, I. (2007). Changes of life satisfaction in the transition to retirement: A latent-class approach. *Psychology and Aging*, 22, 442–455.
- Quick, H. E., & Moen, P. (1998). Gender, employment, and retirement quality: A life course approach to the differential experiences of men and women. *Journal of Occupational Health Psychology*, 3, 44–64.
- Rau, B. L., & Adams, G. A. (2005). Attracting retirees to apply: Desired organizational characteristics of bridge employment. *Journal of Organizational Behavior*, 26, 649–660.
- Reitzes, D. C., & Mutran, E. J. (2004). The transition into retirement: Stages and factors that influence retirement adjustment. *International Journal of Aging and Human Development*, 59, 63–84.

- Shultz, K. S. (2003). Bridge employment: Work after retirement. In G. A. Adams & T. A. Beehr (Eds.), *Retirement: Reasons, Processes, and Results* (pp. 215–241). New York: Springer.
- Shultz, K. S., & Wang, M. (2011). Psychological perspectives on the changing nature of retirement. *American Psychologist*, 66, 170–179.
- Shultz, K. S., Morton, K. R., & Weckerle, J. R. (1998). The influence of push and pull factors on voluntary and involuntary early retirees' retirement decision and adjustment. *Journal of Vocational Behavior*, 53, 145–157.
- Sinclair, R. R., Tucker, J. S., Cullen, J. C., & Wright, C. (2005). Performance differences among four organizational commitment profiles. *Journal of Applied Psychology*, 90, 1280–1287.
- Smith, D. B., & Moen, P. (1998). Spousal influence on retirement: His, her, and their perceptions. *Journal of Marriage and the Family*, 60, 734–744.
- Szinovacz, M. E., & Davey, A. (2004). Honeymoons and joint lunches: Effects of retirement and spouse's employment on depressive symptoms. *Journal of Gerontology: Psychological Sciences*, 59B, 233–245.
- Szinovacz, M. E., & Davey, A. (2005). Predictors of perceptions of involuntary retirement. *The Gerontologist*, 45, 36–47.
- Szinovacz, M. E., DeViney, S., & Davey, A. (2001). Influences of family obligations and relationships on retirement: Variations by gender, race, and marital status. *Journals of Gerontology: Social Sciences*, 56B, 20–27.
- Topa, G., Moriano, J. A., Depolo, M., Alcover, C., & Morales, J. F. (2009). Antecedents and consequences of retirement planning and decision-making: A meta-analysis and model. *Journal of Vocational Behavior*, 75, 38–55.
- van Solinge, H., & Henkens, K. (2005). Couples' adjustment to retirement: A multi-actor panel study. *Journals of Gerontology: Social Sciences*, 60B, 11–20.
- Wang, M. (2007). Profiling retirees in the retirement transition and adjustment process: Examining the longitudinal change patterns of retirees' psychological well-being. *Journal of Applied Psychology*, 92, 455–474.
- Wang, M., & Hanges, P. (2011). Latent class procedures: Applications to organizational research. *Organizational Research Methods*, 14, 24–31.
- Wang, M., & Shi, J. (2014). Psychological research on retirement. *Annual Review of Psychology*, 65, 209–233.
- Wang, M., & Shultz, K. S. (2010). Employee retirement: A review and recommendations for future investigation. *Journal of Management*, 36, 172–206.
- Wang, M., & Zhan, Y. (2012). Employee-organization relationship in older workers. In L. M. Shore, J. A. M. Coyle-Shapiro, & Tetrick, L. (Eds.), *The Employee-Organization Relationship: Applications for the 21st Century* (pp. 427–454). New York: Psychology Press.
- Wang, M., Zhan, Y., Liu, S., & Shultz, K. S. (2008). Antecedents of bridge employment: A longitudinal investigation. *Journal of Applied Psychology*, 93, 818–830.
- Wang, M., Henkens, K., & van Solinge, H. (2011). Retirement adjustment: A review of theoretical and empirical advancements. *American Psychologist*, 66, 204–213.
- Westman, M., & Etzion, D. (1995). Crossover of stress, strain and resources from one spouse to the another. *Journal of Organizational Behavior*, 16, 169–181.
- Weiss, H. W., & Rupp, D. E. (2011). Experiencing work: An essay on a person-centric work psychology. *Industrial and Organizational Psychology: Perspectives on Science and Practice*, 4, 83–97.
- Wöhrmann, A. M., Deller, J., & Wang, M. (2013). Outcome expectations and work design characteristics in post-retirement work planning. *Journal of Vocational Behavior*, 83, 219–228.
- Zhan, Y., Wang, M., Liu, S., & Shultz, K. (2009). Bridge employment and retirees' health: A longitudinal investigation. *Journal of Occupational Health Psychology*, 14, 374–389.
- Zhan, Y., Wang, M., & Yao, X. (2013). Domain specific effects of commitment on bridge employment decisions: The moderating role of economic stress. *European Journal of Work and Organizational Psychology*, 22, 362–375.
- Zyphur, M. J. (2009). When mindsets collide: Switching analytical mindsets to advance organization science. *Academy of Management Review*, 34, 677–688.

Intergenerational Perceptions and Conflicts in Multi-Age and Multigenerational Work Environments

- Abrams, D., Eller, A., & Bryant, J. (2006). An age apart: The effects of intergenerational contact and stereotype threat on performance and intergroup bias. *Psychology and Aging*, 21 (4), 691–702.
- Adams, G., & Rau, B. (2004). Job seeking among retirees seeking bridge employment. *Personnel Psychology*, 57(3), 719–744.
- Adams, J. S. (1965). Inequity in social exchange. *Advances in Experimental Social Psychology*, 2, 267–299.
- Allport, G. W. (1954). *The Nature of Prejudice*. Cambridge, MA: Perseus Books.
- Armstrong-Stassen, M. (2008). Organisational practices and the post-retirement employment experience of older workers. *Human Resource Management Journal*, 18 (1), 36–53.
- Ashforth, B. E., & Mael, F. (1989). Social identity theory and the organization. *Academy of Management Review*, 14 (1), 20–39.
- Bal, A. C., Reiss, A. E., Rudolph, C. W., & Baltes, B. B. (2011). Examining positive and negative perceptions of older workers: A meta-analysis. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 66 (6), 687–698.
- Baltes, B. B., & Rudolph, C. W. (2012). The theory of selection, optimization and compensation. In M. Wang (Ed.), *The Oxford Handbook of Retirement* (pp. 88–101). New York: Oxford University Press.
- Baltes, B. B., Zhdanova, L. S., & Parker, C. P. (2009). Psychological climate: A comparison of organizational and individual level referents. *Human Relations*, 62(5), 669–700.
- Baltes, P. B. (1968). Longitudinal and cross-sectional sequences in the study of age and generation effects. *Human Development*, 11(3), 145–171.
- Bertolino, M., Truxillo, D. M., & Fraccaroli, F. (2013). Age effects on perceived personality and job performance. *Journal of Managerial Psychology*, 28(7/8), 867–885.
- Blythe, J., Baumann, A., Zeytinoglu, I. U., Denton, M., Akhtar-Danesh, N., Davies, S., & Kolotylo, C. (2008). Nursing generations in the contemporary workplace. *Public Personnel Management*, 37 (2), 137–159.
- Bodner, E. (2009). On the origins of ageism among older and younger adults. *International Psychogeriatrics*, 21(6), 1003–1014.
- Burtless, G. (2012). Who is delaying retirement? Analyzing the increase in employment at older ages (white paper). Available at: https://appam.confex.com/.../Burtless_APPAM_Complete_Nov-2012.pdf (accessed February 1, 2014).
- Butler, R. N. (1969). Age-ism: Another form of bigotry. *The Gerontologist*, 9(4), 243–246.
- Byrne, D. (1961). Interpersonal attraction and attitude similarity. *The Journal of Abnormal and Social Psychology*, 62 (3), 713–715.
- Carmody, S. (2013). ngramr: Retrieve and plot Google n-gram data. R package version 1.4.2. Software. Available at: <http://CRAN.R-project.org/package=ngramr> (accessed February 1, 2014).
- Cennamo, L., & Gardner, D. (2008). Generational differences in work values, outcomes, and person-organisation values fit. *Journal of Managerial Psychology*, 23(8), 891–906.
- Clemens, A. (2012). Position-specific promotion rates and the “fast track” effect. *Research in Labor Economics*, 36, 77–107.
- Collins, M. H., Hair, J. F., & Rocco, T. S. (2009). The older-worker-younger-supervisor dyad: A test of the Reverse Pygmalion effect. *Human Resource Development Quarterly*, 20 (1), 21–41.
- Costanza, D. P., Badger, J. M., Fraser, R. L., Severt, J. B., & Gade, P. A. (2012). Generational differences in work-related attitudes: A meta-analysis. *Journal of Business and Psychology*, 27 (4), 375–394.
- Dansereau, F., Cashman, J., & Graen, G. (1973). Instrumentality theory and equity theory as complementary approaches in predicting the relationship of leadership and turnover among managers. *Organizational Behavior and Human Performance*, 10(2), 184–200.
- de Dreu, C. K. W. (2006). When too little or too much hurts: Evidence for a curvilinear relationship between task conflict and innovation in teams. *Journal of Management*, 32,

- Dols, J., Landrum, P., & Wieck, K. L. (2010). Leading and managing an intergenerational workforce. *Creative Nursing*, 16(2), 68–74.
- Edwards, J. R., & Shipp, A. J. (2007). The relationship between person-environment fit and outcomes: An integrative theoretical framework. In C. Ostroff & T. A. Judge (Eds.), *Perspectives on Organizational Fit* (pp. 209–258). San Francisco, CA: Jossey-Bass.
- Eyerman, R., & Turner, B. S. (1998). Outline of a theory of generations. *European Journal of Social Theory*, 1 (1), 91–106.
- Finkelstein, L. M., Ryan, K. M., & King, E. B. (2013). What do the young (old) people think of me? Content and accuracy of age-based metastereotypes. *European Journal of Work and Organizational Psychology*, 22 (6), 633–657.
- Fiske, S. T. (1998). Stereotyping, prejudice, and discrimination. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *The Handbook of Social Psychology*, Vol. 2 (4th ed.) (pp. 357–393). Boston, MA: McGraw-Hill.
- Flynn, M. (2010). Who would delay retirement? Typologies of older workers. *Personnel Review*, 39 (3), 308–324.
- Fox, S., & Giles, H. (1993). Accommodating intergenerational contact: A critique and theoretical model. *Research on Aging*, 7 (4), 423–451.
- Gentry, J. (2013). twitterR: R based Twitter client. R package version 1.1.7. Software. Available at: <http://CRAN.R-project.org/package=twitterR>.
- Gilbert, J. (2011). The millennials: A new generation of employees, a new set of engagement policies. Available at: <http://fiveybusinessjournal.com/topics/the-workplace/the-millennials-a-new-generation-of-employees-a-new-set-of-engagement-policies#UtsUxayPcM> (accessed January 14, 2014).
- Graen, G. B. (1976). Role making processes within complex organizations. In M. D. Dunnette (Ed.), *Handbook of Industrial and Organizational Psychology* (pp. 1201–1245). Chicago, IL: Rand-McNally.
- Graen, G. B., Novak, M. A., & Sommerkamp, P. (1982). The effects of leader-member exchange and job design on productivity and satisfaction: Testing a dual attachment model. *Organizational Behavior and Human Performance*, 30 (1), 109–131.
- Graves, J. A. (2012). Millennial workers: Entitled, needy, self-centered? Available at: <http://money.usnews.com/money/careers/articles/2012/06/27/millennial-workers-entitled-needy-self-centered> (accessed January 14, 2014).
- Hanks, R. S., & Icenogle, M. (2001). Preparing for an age-diverse workforce: Intergenerational service-learning in social gerontology and business curricula. *Educational Gerontology*, 27(1), 49–70.
- Harwood, J., Giles, H., & Ryan, E. B. (1995). Aging, communication, and intergroup theory: Social identity and intergenerational communication. In J. F. Nussbaum (Ed.), *Handbook of Communication and Aging Research* (pp. 133–159). Hillsdale, NJ: Lawrence Erlbaum & Associates.
- Haslam, C., Morton, T. A., Haslam, S. A., Varnes, L., Graham, R., & Gamaz, L. (2012). "When the age is in, the wit is out": Age-related self-categorization and deficit expectations reduce performance on clinical tests used in dementia assessment. *Psychology and Aging*, 27(3), 778–784.
- Hassell, B. L., & Perrewe, P. L. (1995). An examination of beliefs about older workers: Do stereotypes still exist? *Journal of Organizational Behavior*, 16, 457–468.
- Hogg, M. A., & Terry, D. J. (2000). Social identity and self-categorization processes in organizational contexts. *Academy of Management Review*, 25, 121–140.
- Hu, M., & Liu, B. (2004). Mining and summarizing customer reviews. *Proceedings of the ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD-2004)*, Seattle, Washington, USA.
- Hummert, M. L. (1990). Multiple stereotypes of elderly and young adults: A comparison of structure and evaluations. *Psychology and Aging*, 5(2), 182–193.
- Hussar, W. J., & Bailey, T. M. (2013). Projections of education statistics to 2021. National Center for Education Statistics: U.S. Department of Education. Available at: <http://nces.ed.gov/pubs2013/2013008.pdf> (accessed February 1, 2014).

Iweins, C., Desmette, D., Yzerbyt, V., & Stinglhamber, F. (2013). Ageism at work: The impact of intergenerational contact and organizational multi-age perspective. *European Journal of Work and Organizational Psychology*, 22, 331–346.

Joshi, A., Dencker, J. C., Franz, G., & Martocchio, J. J. (2010). Unpacking generational identities in organizations. *Academy of Management Review*, 35 (3), 392–414.

Joshi, A., Dencker, J. C., & Franz, G. (2011). Generations in organizations. *Research in Organizational Behavior*, 31, 177–205.

Kalokerinos, E. K., von Hippel, C., & Zacher, H. (2014). Is stereotype threat a useful construct for organizational psychology research and practice? *Industrial and Organizational Psychology: Perspectives on Science and Practice*, 7 (3), 381–402.

Kearney, E. (2008). Age differences between leader and followers as a moderator of the relationship between transformational leadership and team performance. *Journal of Occupational and Organizational Psychology*, 81, 803–811.

Kearney, E., & Gebert, D. (2009). Managing diversity and enhancing team outcomes: The promise of transformational leadership. *Journal of Applied Psychology*, 94(1), 77–89.

Kearney, E., Gebert, D., & Voelpel, S. C. (2009). When and how diversity benefits teams: The importance of team members' need for cognition. *Academy of Management Journal*, 52 (3), 581–598.

Kerschreiter, R., Mojzisch, A., Schulz-Hardt, S., Brodbeck, F. C., & Frey, D. (2003). Informationsaustausch bei Entscheidungsprozessen in Gruppen: Theorie, Empirie und Implikationen für die Praxis [Information exchange in decision processes of groups: Theory, data and practical implications]. In S. Stumpf & A. Thomas (Eds.), *Teamarbeit und Teamentwicklung [Team Work and Team Development]* (pp. 85–118). Göttingen: Hogrefe.

Kessler, E. M., & Staudinger, U. M. (2007). Intergenerational potential: Effects of social interaction between older people and adolescents. *Psychology and Aging*, 22, 690–704.

Kim, S., & Feldman, D. C. (2000). Working in retirement: The antecedents of bridge employment and its consequences for quality of life in retirement. *Academy of Management Journal*, 43 (6), 1195–1210.

Kite, M. E., Stockdale, G. D., Whitley, B. E., & Johnson, B. T. (2005). Attitudes toward younger and older adults: An updated meta-analytic review. *Journal of Social Issues*, 61 (2), 241–266.

Kooij, D. T. A. M., de Lange, A. H., Jansen, P. G. W., & Dijkers, J. S. E. (2008). Older workers' motivation to continue to work: Five meanings of age. *Journal of Managerial Psychology*, 23(4), 364–394.

Kowske, B. J., Rasch, R., & Wiley, J. (2010). Millennials' (lack of) attitude problem: An empirical examination of generational effects on work attitudes. *Journal of Business and Psychology*, 25, 265–279.

Krueger, J., Heckhausen, J., & Hundertmark, J. (1995). Perceiving middle-aged adults: Effects of stereotype-congruent and incongruent information. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 50 (2), 82–93.

Kunze, F., Böhm, S. A., & Bruch, H. (2011). Age diversity, age discrimination climate and performance consequences: A cross organizational study. *Journal of Organizational Behavior*, 32 (2), 264–290.

Kunze, F., Böhm, S., & Bruch, H. (2013). Organizational performance consequences of age diversity: Inspecting the role of diversity-friendly HR policies and top managers' negative age stereotypes. *Journal of Management Studies*, 50(3), 413–442.

Lawrence, B. S. (1984). Age grading: The implicit organizational timetable. *Journal of Organizational Behavior*, 5 (1), 23–35.

Lawrence, B. S. (1988). New wrinkles in the theory of age: Demography, norms, and performance ratings. *Academy of Management Journal*, 31 (2), 309–337.

Lawrence, B. S. (1997). Perspective: The black box of organizational demography. *Organization Science*, 8 (1), 1–22.

Lawrence, B., & Zyphur, M. (2011). Identifying organizational faultlines with latent class cluster analysis. *Organizational Research Methods*, 14, 32–57.

Levy, B. R., Slade, M. D., Kunkel, S. R., & Kasl, S. V. (2002). Longevity increased by positive self-perceptions of aging. *Journal of Personality and Social Psychology*, 83, 261–270.

- Liden, R. C., Stilwell, D., & Ferris, G. R. (1996). The effects of supervisor and subordinate age on objective performance and subjective performance ratings. *Human Relations*, 49 (3), 327–347.
- Lyons, S., & Kuron, L. (2014). Generational differences in the workplace: A review of the evidence and directions for future research. *Journal of Organizational Behavior*, 35, 139–157.
- MacCallum, R. C., Zhang, S., Preacher, K. J., & Rucker, D. D. (2002). On the practice of dichotomization of quantitative variables. *Psychological Methods*, 7, 19–40.
- Mannheim, K. (1970). The problem of generations. *Psychoanalytic Review*, 57(3), 378–404.
- McAdams, D. P., & de St. Aubin, E. (1992). A theory of generativity and its assessment through self-report, behavioral acts, and narrative themes in autobiography. *Journal of Personality and Social Psychology*, 62 (6), 1003–1015.
- McCann, R. M., Dailey, R. M., Giles, H., & Ota, H. (2005). Beliefs about intergenerational communication across the lifespan: Middle age and the roles of age stereotyping and respect norms. *Communication Studies*, 56 (4), 293–311.
- Michel, J. B., Shen, Y. K., Aiden, A. P., Veres, A., Gray, M. K., The Google Books Team, Pickett, J. P., Hoiberg, D., Clancy, D., Norvig, P., Orwant, J., Pinker, S., Nowak, M. A., & Aiden, E. L. (2011). Quantitative analysis of culture using millions of digitized books. *Science*, 331(6014), 176–182.
- Myers, K. K., & Sadaghiani, K. (2010). Millennials in the workplace: A communication perspective on millennials' organizational relationships and performance. *Journal of Business and Psychology*, 25(2), 225–238.
- Newton, B. (2006). Training an age-diverse workforce. *Industrial and Commercial Training*, 38 (2), 93–97.
- Ng, S. H. (1998). Social psychology in an ageing world: Ageism and intergenerational relations. *Asian Journal of Social Psychology*, 1 (1), 99–116.
- Ng, T. W., & Feldman, D. C. (2012). Evaluating six common stereotypes about older workers with meta-analytical data. *Personnel Psychology*, 65(4), 821–858.
- Noack, C. M. G., & Staudinger, U. M. (2009). Psychological age climate: Associations with work-related outcomes. Poster presented at the Annual Meeting of the Society for Industrial and Organizational Psychology, New Orleans, LA.
- North, M. S., & Fiske, S. T. (2012). An inconvenienced youth? Ageism and its potential intergenerational roots. *Psychological Bulletin*, 138 (5), 982–997.
- North, M. S., & Fiske, S. T. (2013). A prescriptive intergenerational-tension ageism scale: Succession, identity, and consumption (SIC). *Psychological Assessment*, 25 (3), 706–713.
- Pang, B., & Lee, L. (2008). Opinion mining and sentiment analysis. *Foundations and Trends in Information Retrieval*, 2 (1–2), 1–135.
- Parry, E., & Urwin, P. (2011). Generational differences in work values: A review of theory and evidence. *International Journal of Management Reviews*, 13 (1), 79–96.
- Peacock, E. W., & Talley, W. M. (1984). Intergenerational contact: A way to counteract ageism. *Educational Gerontology*, 10(1), 13–24.
- Perry, E. L., Dokko, G., & Golom, F. D. (2012). The aging worker and person-environment fit. In J. W. Hedge & W. C. Borman (Eds.), *The Oxford Handbook of Work and Aging* (pp. 187–212). New York: Oxford University Press.
- Pettigrew, T. F. (1998). Intergroup contact theory. *Annual Review of Psychology*, 49, 65–85.
- Pitt-Catsoupes, M., Matz-Costa, C., & James, J. (2012). Through a Different Looking Glass: The Prism of Age. Chestnut Hill, MA: Sloan Center on Aging & Work, Boston College.
- Posthuma, R. A., & Campion, M. A. (2009). Age stereotypes in the workplace: Common stereotypes, moderators, and future research directions. *Journal of Management*, 35 (1), 158–188.
- Randel, A. E. (2002). Identity salience: A moderator of the relationship between group gender composition and work group conflict. *Journal of Organizational Behavior*, 23, 749–766.
- Real, K., Mitnick, A. D., & Maloney, W. F. (2010). More similar than different: Millennials in the US building trades. *Journal of Business and Psychology*, 25 (2), 303–313.
- Rosenbaum, J. E. (1979). Organizational career mobility: Promotion chances in a corporation during periods of growth and contraction. *American Journal of Sociology*, 85, 21–48.

- Rosow, I. (1978). What is a cohort and why? *Human Development*, 21(2), 65–75.
- Roth, C., Wegge, J., & Schmidt, K.-H. (2007). Konsequenzen des Demographischen Wandels für das Management von Humanressourcen [Consequences of demographic changes for the management of human resources]. *Zeitschrift für Personalpsychologie*, 6, 99–116.
- Rudolph, C. W. (2011). A meta-analytic framework for understanding how leader-subordinate age differences impact leadership effectiveness ratings: A novel approach to relational demography. ETD Collection for Wayne State University. Paper AAI3466678. Available at: <http://digitalcommons.wayne.edu/dissertations/AAI3466678> (accessed February 1, 2014).
- Rudolph, C. W., Baltes, B. B., & Zabel, K. L. (2013). Age and work motives. In J. Field, R. J. Burke, & C. L. Cooper (Eds.), *The Sage Handbook of Aging, Work, and Society*. Thousand Oaks, CA: Sage.
- Ryan, C. L., & Siebens, J. (2012). Educational attainment in the United States: 2009. Current Population Reports. Available at: www.census.gov/prod/2012pubs/p20-566.pdf (accessed February 1, 2014).
- Schwall, A. R. (2012). Defining age and using age-relevant constructs. In J. W. Hedge & W. C. Borman (Eds.), *The Oxford Handbook of Work and Aging* (pp. 169–186). New York: Oxford University Press.
- Shapiro, D. L. (2010). Relational identity theory: A systematic approach for transforming the emotional dimension of conflict. *American Psychologist*, 65 (7), 634–645.
- Sluss, D. M., & Ashforth, B. E. (2007). Relational identity and identification: Defining ourselves through work relationships. *Academy of Management Review*, 32(1), 9–32.
- Smith, K. (2013). Disadvantages of hiring younger employees. Available at: <http://under30ceo.com/disadvantages-of-hiring-younger-employees/> (accessed January 14, 2014).
- Steele, C. M., & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. *Journal of Personality and Social Psychology*, 69(5), 797–811.
- Sterns, H. L., & Doverspike, D. (1989). Aging and the training and learning process in organizations. In I. Goldstein & R. Katze (Eds.), *Training and Development in Work Organizations* (pp. 299–332). San Francisco, CA: Jossey-Bass.
- Stewart, A. J., & Healy, J. M. (1989). Linking individual development and social changes. *American Psychologist*, 44(1), 30–42.
- Stoops, N. (2004). Educational attainment in the United States: 2003. U.S. Census Bureau. Available at: www.census.gov/prod/2004pubs/p20-550.pdf (accessed February 1, 2014).
- Strauss, W., & Howe, N. (2000). *Millennials Rising: The Next Great Generation*. New York: Vintage Books.
- Tajfel, H., & Turner, J. C. (1985) The social identity theory of intergroup behavior. In S. Worchel & W. G. Austin (Eds.), *Psychology of Intergroup Relations* (2nd ed.) (pp. 7–24). Chicago, IL: Nelson-Hall.
- Thompson, V. L. S. (1999). Variables affecting identity salience among African Americans. *Journal of Social Psychology*, 139, 748–761.
- Toossi, M. (2004). Labor force projections in 2012: The graying of the US workforce. *Monthly Labor Review*, 127, 37–57.
- Truxillo, D. M., McCune, E. A., Bertolino, M., & Fraccaroli, F. (2012). Perceptions of older versus younger workers in terms of Big Five facets, proactive personality, cognitive ability, and job performance. *Journal of Applied Social Psychology*, 42(11), 2607–2639.
- Trzesniewski, K. H., Donnellan, M. B., & Robins, R. W. (2008). Do today's young people really think they are so extraordinary? An examination of secular trends in narcissism and self-enhancement. *Psychological Science*, 19(2), 181–188.
- Tsui, A. S., & O'Reilly, C. A. (1989). Beyond simple demographic effects: The importance of relational demography in superior-subordinate dyads. *Academy of Management Journal*, 32 (2), 402–423.
- Tsui, A. S., Egan, T., & O'Reilly, C. (1991). Being different: Relational demography and organizational attachment. *Administrative Science Quarterly*, 37(4), 549–579.
- Turner, J. C., & Oakes, P. J. (1989). Self-categorization theory and social influence. In P. B. Paulus (Ed.), *Psychology of Group Influence* (2nd ed.) (pp. 233–275). Hillsdale, NJ: Lawrence Earlbaum & Associates.

Twenge, J. M. (2010). A review of the empirical evidence on generational differences in work attitudes. *Journal of Business and Psychology*, 25 (2), 201–210.

van Knippenberg, D., de Dreu, C. K., & Homan, A. C. (2004). Work group diversity and group performance: An integrative model and research agenda. *Journal of Applied Psychology*, 89 (6), 1008–1022.

von Hippel, C., Kalokerinos, E. K., & Henry, J. D. (2012). Stereotype threat among older employees: Relationships with job attitudes and turnover intentions. *Psychology and Aging*, 28 (1), 17–27.

Vorauer, J. D., Main, K. J., & O'Connell, G. B., (1998). How do individuals expect to be viewed by members of lower status groups? Content and implications of metastereotypes. *Journal of Personality and Social Psychology*, 75 (4), 917–937.

Walster, E., Walster, G., & Berscheid, E. (1978) *Equity: Theory and Research*. Boston, MA: Allyn & Bacon.

Weckerle, J. R., & Shultz, K. S. (1999). Influences on the bridge employment decision among older USA workers. *Journal of Occupational and Organizational Psychology*, 72 (3), 317–329.

Weiss, D., & Freund, A. M. (2012). Still young at heart: Negative age-related information motivates distancing from same-aged people. *Psychology and Aging*, 27, 173–180.

Weiss, D., & Lang, F. R. (2009). Thinking about my generation: Adaptive effects of a dual identity in later adulthood. *Psychology and Aging*, 24(3), 729–734.

Weiss, D., & Lang, F. R. (2012). “They” are old but “I” feel younger: Age-group dissociation as a self-protective strategy in old age. *Psychology and Aging*, 27(1), 153–163.

Weston, M. (2001). Coaching generations in the workplace. *Nursing Administration Quarterly*, 25 (2), 11–21.

Wieck, K. L. (2007). Motivating an intergenerational workforce: Scenarios for success. *Orthopaedic Nursing*, 26 (6), 366–371.

Williams, A., & Nussbaum, J. F. (2001). *Intergenerational Communication Across the Life Span*. London: Routledge.

Wilson, M., & Gerber, L. E. (2008). How generational theory can improve teaching: Strategies for working with the “millennials.” *Currents in Teaching and Learning*, 1 (1), 29–44.

Zacher, H., & Gielnik, M. (2014). Organizational age cultures: The interplay of chief executive officers' age and attitudes toward younger and older employees. *International Small Business Journal*. Published online first. DOI: 10.1177/0266242612463025.

Zacher, H., Rosing, K., Henning, T., & Frese, M. (2011). Establishing the next generation at work: Leader generativity as a moderator of the relationships between leader age, leader-member exchange, and leadership success. *Psychology and Aging*, 26(1), 241–252.

Zenger, T. R., & Lawrence, B. S. (1989). Organizational demography: The differential effects of age and tenure distributions on technical communication. *Academy of Management Journal*, 32 (2), 353–376.

A Comparison of EEO Law on Workforce Aging Across English-Speaking Countries

Cascio, W. F. (1995). Whither industrial and organizational psychology in a changing world of work? *American Psychologist*, 50, 928–939.

Finkelstein, L. M., Burke, M. J., & Raju, N. S. (1995). Age discrimination in simulated employee contexts: An integrative analysis. *Journal of Applied Psychology*, 80, 40–45.

Gutman, A. (2012). Age-based laws and regulations. In J. W. Hedge & W. C. Borman (Eds.), *Work and Aging Handbook* (pp. 606–628). New York: Oxford University Press.

Gutman, A., Koppes, L. L., & Vodanovich, S. (2010). *EEO Law and Personnel Practices* (3rd ed.). New York: Routledge.

Harcourt, M., Wilkinson, A., & Wood, G. (2010). The effects of anti-age discrimination legislation: A comparative analysis. *International Journal of Comparative Labour Law and Industrial Relations*, 26(4), 447–465.

Shore, L. M., & Goldberg, C. B. (2005). Age discrimination in the workplace. In R. L. Dipboye & A. Colella (Eds.), *Discrimination at Work: The Psychological and Organizational Bases* (pp. 203–226). Mahwah, NJ: Erlbaum Associates.

Sterns, H. L., Doverspike, D., & Lax, G. A. (2005). The age discrimination in employment act. In F. S. Landy (Ed.), *Employment Discrimination Litigation: Behavioral, Quantitative and Legal Perspectives* (pp. 256–293). San Francisco, CA: Jossey-Bass.

How Individuals Navigate Social Mobility: Changing Capacities and Opportunities in Careers Across Adulthood

Baltes, P. B., & Kliegl, R. (1992). Negative age differences in cognitive plasticity of a memory skill during adulthood: Further testing of limits. *Developmental Psychology*, 28, 121–125.

Baltes, P. B., Sowarka, D., & Kliegl, R. (1989). Cognitive training research on fluid intelligence in old age: What can older adults achieve by themselves? *Psychology and Aging*, 4, 217–221.

Baltes, P. B., Lindenberger, U., & Staudinger, U. M. (2006). Life span theory in developmental psychology. In W. Damon & R. M. Lerner (Eds.), *Handbook of Child Psychology: Vol. 1. Theoretical Models of Human Development* (6th ed.). New York: Wiley.

Blossfeld, H. P., Buchholz, S., Hofäcker, D., Hofmeister, H., Kurz, K., & Mills, M. (2007). Globalisierung und die Veränderung sozialer Ungleichheiten in modernen Gesellschaften. Eine Zusammenfassung der Ergebnisse des GLOBALIFE-Projekts [Globalization and the change of social inequality in modern societies: A summary of findings from the GLOBALIFE-project]. *Kölner Zeitschrift für Soziologie und Sozialpsychologie*, 59, 667–691.

Brunstein, J. C. (2011). Implicit and explicit motives. In J. Heckhausen & H. Heckhausen (Eds.), *Motivation and Action* (2nd ed.) (pp. 230–249). New York: Cambridge University Press.

Corak, M. (2013). Income inequality, equality of opportunity, and intergenerational mobility. Institute for the Study of Labor, Discussion Paper No. 7540. Forthcoming in the *Journal of Economic Perspectives*.

Durkheim, E. (1977). *De la division du travail social* [Über die Teilung der sozialen Arbeit]. Paris: Übersetzung. Original work published in 1893.

Economic Mobility Project (2007). *Economic Mobility: Is the American Dream Alive and Well?* The PEW Charitable Trusts. Available at: www.pewtrusts.org/~media/legacy/uploadedfiles/pcs_assets/2012/PursuingAmericanDream.pdf (accessed January 9, 2015).

Economic Mobility Project (2012). *Pursuing the American Dream: Economic Mobility Across Generations*. The PEW Charitable Trusts. Available at: www.pewtrusts.org/~media/legacy/uploadedfiles/pcs_assets/2012/PursuingAmericanDream.pdf (accessed January 9, 2015).

Ericsson, K. A. (1990). Peak performance and age: An examination of peak performance in sports. In P. B. Baltes & M. M. Baltes (Eds.), *Successful Aging: Perspectives from the Behavioral Sciences*. New York: Cambridge University Press.

Heckhausen, J. (1999). *Developmental Regulation in Adulthood: Age-Normative and Sociostructural Constraints as Adaptive Challenges*. Cambridge: Cambridge University Press.

Heckhausen, J. (2005). Competence and motivation in adulthood and old age: Making the most of changing capacities and resources. In A. J. Elliot & C. S. Dweck (Eds.), *Handbook of Competence and Motivation* (pp. 240–258). New York: The Guilford Press.

Heckhausen, J. (2014). Motivational affordances in school versus work contexts advantage different individuals: A possible explanation for domain-differential gender gaps. In J. S. Eccles & I. Schoon (Eds.), *Gender Differences in Aspirations and Attainment* (pp. 346–362). London: Cambridge University Press.

Heckhausen, J., & Chang, E. S. (2009). Can ambition help overcome social inequality in the transition to adulthood? Individual agency and societal opportunities in Germany and the United States. *Research in Human Development*, 6(4), 235–251.

- Heckhausen, J., & Heckhausen, H. (2011). Motivation and development. In J. Heckhausen & H. Heckhausen (Eds.), *Motivation and Action* (2nd ed., pp. 384–443). New York: Cambridge University Press.
- Heckhausen, J., & Schulz, R. (1999). Biological and societal canalizations and individuals' developmental goals. In J. Brandstätter & R. Lerner (Eds.), *Action and Self Development: Theory and Research Through the Life-Span* (pp. 67–104). London: Sage.
- Heckhausen, J., & Shane, J. (2015). Social mobility in the transition to adulthood: Educational systems, career entry, and individual agency. In L. A. Jensen (Ed.), *The Oxford Handbook of Human Development and Culture* (pp. 535–553). New York: Oxford University Press.
- Heckhausen, J., & Tomasik, M. J. (2002). Get an apprenticeship before school is out: How German adolescents adjust vocational aspirations when getting close to a developmental deadline. *Journal of Vocational Behavior*, 60, 199–219.
- Heckhausen, J., Wrosch, C., & Fleeson, W. (2001). Developmental regulation before and after a developmental deadline: The sample case of "biological clock" for child-bearing. *Psychology and Aging*, 16, 400–413.
- Heckhausen, J., Wrosch, C., & Schulz, R. (2010). A motivational theory of life-span development. *Psychological Review*, 117, 32–60.
- Klugel, J. R., & Smith, E. R. (1986). *Beliefs About Inequality: Americans' Views of What is and What Ought to Be*. Piscataway, NJ: Aldine Transaction.
- Kray, J., & Lindenberger, U. (2000). Adult age differences in task switching. *Psychology and Aging*, 15, 126–147.
- Li, K. Z. H., Lindenberger, U., Freund, A. M., & Baltes, P. B. (2001). Walking while memorizing: Age-related differences in compensatory behavior. *Psychological Science*, 12, 230–237.
- Lindenberger, U., Marsiske, M., & Baltes, P. B. (2000). Memorizing while walking: Increase in dual-task costs from young adulthood to old age. *Psychology and Aging*, 15, 417–436.
- Mayr, U., & Kliegl, R. (1993). Sequential and coordinative complexity: Age-based processing limitations in figural transformations. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 19, 1297–1320.
- McClelland, D. C., Koestner, R., & Weinberger, J. (1989). How do self-attributed and implicit motives differ? *Psychological Review*, 96, 690–702.
- Schulz, R., & Curnow, C. (1988). Peak performance and age among superathletes: Track and field, swimming, baseball, tennis, and golf. *Journal of Gerontology: Psychological Sciences*, 43, 113–120.
- Sennett, R. (1998). *The Corrosion of Character*. New York: Norton.
- Shane, J., & Heckhausen, J. (2012). Motivational self-regulation in the work domain: Congruence of individuals' control striving and the control potential in their developmental ecologies. *Research in Human Development*, 9(4), 337–357.
- Shane, J., & Heckhausen, J. (2013). University students' causal conceptions about social mobility: Diverging pathways for believers in personal merit and luck. *Journal of Vocational Behavior*, 82, 10–19.
- Shane, J., Heckhausen, J., Lessard, J., Chen, C., & Greenberger, E. (2012). Career-related goal pursuit among post-high school youth: Relations between personal control beliefs and control strivings. *Motivation and Emotion*, 36(2), 159–169.

Labor Force Transitions in Late Life: Between Agency and Structure

- Anderson, K. H., Burkhauser, R. V., & Quinn, J. F. (1986). Do retirement dreams come true? The effect of unanticipated events on retirement plans. *Industrial and Labour Relations Review*, 39(4), 518–526.
- Beck, U., & Beck-Gernsheim, E. (2002). *Individualization: Institutionalized Individualism and its Social and Political Consequences*. Vol. 13. New York: Sage.
- Carr, D. C., & Kail, B. (2013). The influence of unpaid work on the transition out of fulltime paid work. *The Gerontologist*, 53(1), 92–101.

- Conen, W. (2013). *Older Workers: The View of Dutch Employers in a European Perspective*. Amsterdam: Amsterdam University Press.
- Department of Economic and Social Affairs United Nations (2002). *World Population Ageing: 1950–2050*. UN, available at: www.un.org/esa/population/publications/worldageing19502050 (accessed January 11, 2015).
- Dingemans, E., & Henkens, K. (2014). Involuntary retirement, bridge employment, and satisfaction with life: A longitudinal investigation. *Journal of Organizational Behavior*, 35(4), 575–591.
- Ebbinghaus, B. (2006). *Reforming Early Retirement in Europe, Japan and the USA*. Oxford: Oxford University Press.
- Ekerdt, D. J. (2010). Frontiers of research on work and retirement. *Journals of Gerontology Series B-Psychological Sciences and Social Sciences*, 65(1), 69–80.
- Elder, G. H., & Johnson, M. K. (2003). The life course and aging. Challenges, lessons, and new directions. In R. A. Settersten (Ed.), *Invitation to the Life Course. Towards New Understandings of Later Life* (pp. 49–81). New York: Baywood.
- Feldman, D. C., & Beehr, T. A. (2011). A three-phase model of retirement. *American Psychologist*, 66(3), 193–203.
- Giddens, A. (1991). *Modernity and Self-Identity: Self and Society in the Late Modern Age*. Palo Alto, CA: Stanford University Press.
- Goldberg, C. B., Perry, E. L., Finkelstein, L. M., & Shull, A. (2013). Antecedents and outcomes of targeting older applicants in recruitment. *European Journal of Work and Organizational Psychology*, 22(3), 265–278.
- Henkens, K. (1999). Retirement intentions and spousal support: A multi-actor approach. *Journal of Gerontology: Social Sciences*, 54(2), 63–74.
- Henkens, K., & Schippers, J. (2012). Active ageing in Europe: The role of organisations. *International Journal of Manpower*, 33(6), 604–611.
- Henkens, K., & Tazelaar, F. (1997). Explaining retirement decisions of civil servants in the Netherlands. *Research on Aging*, 19(2), 139–173.
- Henkens, K., & van Dalen, H. P. (2012). The employer's perspective on retirement. In M. Wang (Ed.), *The Oxford Handbook of Retirement* (pp. 215–227). Oxford: Oxford University Press.
- Henkens, K., van Solinge, H., & Cozijnsen, R. (2009). Let go or retain? A comparative study of the attitudes of business students and managers about the retirement of older workers. *Journal of Applied Social Psychology*, 39(7), 1562–1588.
- Hershey, D. A., Henkens, K., & van Dalen, H. P. (2010). What drives retirement income worries in Europe? A multilevel analysis. *European Journal of Ageing*, 7(4), 301–311.
- Hitlin, S., & Elder, G. H. (2006). Agency: An empirical model of an abstract concept. *Advances in Life Course Research*, 11, 33–67.
- Hitlin, S., & Elder, G. H. (2007). Time, self, and the curiously abstract concept of agency. *Sociological Theory*, 25(2), 170–191.
- Hochguertel, S. (2010). Self-employment around retirement age (No. 10–067/3). Tinbergen Institute discussion paper.
- Kantarci, T., & van Soest, A. (2008). Gradual retirement: Preferences and limitations. *Economist-Netherlands*, 156(2), 113–144.
- Karpinska, K., Henkens, K., & Schippers, J. (2011). The recruitment of early retirees: A vignette study of the factors that affect managers' decisions. *Ageing & Society*, 31(4), 570–589.
- Kaskie, B., Imhof, S., Cavanaugh, J., & Culp, K. (2008). Civic engagement as a retirement role for aging Americans. *The Gerontologist*, 48(3), 368–377.
- Lee, R., Mason, A., & Cortleat, D. (2010). Some economic consequences of global aging: A discussion note for the World Bank. *Health, Nutrition and Population Discussion Papers*. Washington, DC: World Bank.
- Liefbroer, A. C. (2007). De maakbare levensloop? In T. van der Lippe, P. A. Dykstra, G. Kraaykamp, & J. Schippers (Eds.), *De maakbaarheid van de levensloop* (pp. 9–20). Assen: Koninklijke van Gorcum BV.
- Marshall, V. W. (2005). Agency, events, and structure at the end of the life course. *Advances in Life Course Research*, 10, 57–91.

- Moen, P., & Flood, S. (2013). Limited engagements? Women's and men's work/volunteer time in the encore life course stage. *Social Problems*, 60(2), 206–233.
- Munnell, A. H., & Sass, S. A. (2008). *Working Longer: The Solution to the Retirement Income Challenge*. Washington, DC: Brookings Institution Press.
- Oude Mulders, J. O., Henkens, K., & Schippers, J. (2013). Organizations' ways of employing early retirees: The role of age-based HR policies. *The Gerontologist*, advance access.
- Settersten, R. A., & Gannon, L. (2005). Structure, agency, and the space between: On the challenges and contradictions of a blended view of the life course. *Advances in Life Course Research*, 10, 35–55.
- Shanahan, M. J., & Elder, G. H. (2002). History, agency, and the life course. In R. A. Dienstbier & L. J. Crockett (Eds.), *Agency, Motivation, and the Life Course* (pp. 145–186). Lincoln, NE: University of Nebraska Press.
- Szinovacz, M. E. (2003). Contexts and pathways: Retirement as institution, process, and experience. In G. A. Adams & T. A. Beehr (Eds.), *Retirement. Reasons, Processes and Results* (pp. 6–52). New York: Springer.
- Szinovacz, M. E., & Davey, A. (2005). Predictors of perceptions of involuntary retirement. *The Gerontologist*, 45(1), 36–47.
- Taylor, P. E., Brooke, L., & Di Biase, T. (2010). European employer policies concerning career management and learning from a life-span perspective. In G. Naeyegele (Ed.), *Soziale Lebenslauf Politik* (pp. 474–497). Wiesbaden: VS Verlag.
- van Bavel, J., & de Winter, T. (2013). Becoming a grandparent and early retirement in Europe. *European Sociological Review*, 29(6), 1295–1308. Advance online publication. DOI: 10.1093/esr/jct005.
- van Dalen, H., Henkens, K., & Wang, M. (2014). Recharging or retiring the older worker? Uncovering age-based strategies of European employers. *The Gerontologist*, advance access.
- van den Bogaard, L., Henkens, K., & Kalmijn, M. (2014). So now what? Effects of retirement on civic engagement. *Ageing and Society*, 34(7), 1170–1192.
- van der Heijden, B. I., Schalk, R., & van Veldhoven, M. J. (2008). Ageing and careers: European research on long-term career development and early retirement. *Career Development International*, 13(2), 85–94.
- van Solinge, H. (2013). Who opts for self-employment after retirement? A longitudinal study in the Netherlands. *European Journal of Ageing*, 11(3), 261–272.
- van Solinge, H., & Henkens, K. (2007). Involuntary retirement: The role of restrictive circumstances, timing, and social embeddedness. *Journals of Gerontology Series B- Psychological Sciences and Social Sciences*, 62(5), 295–303.
- Vickerstaff, S. (2006). Entering the retirement zone: How much choice do individuals have? *Social Policy & Society*, 5(4), 507–517.
- Wang, M. (Ed.) (2012). *The Oxford Handbook of Retirement*. Oxford: Oxford University Press.
- Wang, M., Zhan, Y., Liu, S., & Shultz, K. S. (2008). Antecedents of bridge employment: A longitudinal investigation. *Journal of Applied Psychology*, 93(4), 818–830.
- Wang, M., Adams, G. A., Beehr, T. A., & Shultz, K. S. (2009). Career issues at the end of one's career. Bridge employment and retirement. In S. G. Baugh & S. A. Sullivan (Eds.), *Maintaining Focus, Energy, and Options Through the Lifespan* (pp. 135–162). Charlotte, NC: Information Age.
- Wang, M., Henkens, K., & van Solinge, H. (2011). Retirement adjustment. A review of theoretical and empirical advancements. *American Psychologist*, 66(3), 204–213.
- Wise, D. A. (2010). Facilitating longer working lives: International evidence on why and how. *Demography*, 47(1), 131–149.

Optimizing Older Workforces

- Benz, J., Sedensky, M., Tompson, T., & Agiesta, J. (2013). Working longer: Older Americans' attitudes on work and retirement. Research Highlights. NORC Center for Public Affairs Research. Available at: www.apnorc.org/PDFs/Working%20Longer/AP-NORC%20Center_Working%20Longer%20Report-FINAL.pdf (accessed August 15, 2014).
- Bonsang, E., Adam, S., & Perelman, S. (2012). Does retirement affect cognitive functioning? *Journal of Health Economics*, 31, 490–501.
- Börsch-Supan, A. (2013). Myths, scientific evidence and economic policy in an aging world. *Journal of the Economics of Ageing*, 1, 3–15.
- Brown, M., Auman, K., Pitt-Catsoupes, M., Galinsky, E., & Bond, J. T. (2010). Working in retirement: A 21st century phenomenon. The Sloan Center on Aging & Work. Available at: <http://familiesandwork.org/site/research/reports/workinginretirement.pdf> (accessed August 15, 2014).
- Carlson, M. C., Erickson, K. I., Kramer, A. F., Voss, M. W., Bolea, N., Mielke, M., McGill, S., Rebok, G. W., Seeman, T., & Fried, L. P. (2009). Evidence for neurocognitive plasticity in at-risk older adults: The Experience Corps program. *Journal of Gerontology: Medical Sciences*, 64(12), 1275–1281.
- Carstensen, L. L. (2006). The influence of a sense of time on human development. *Science*, 312, 1913–1915.
- Carstensen, L. L. (2014). Our aging population: It may just save us all. In P. Irving & R. Beamish (Eds.), *The Upside of Aging* (pp. 3–18). Hoboken, NJ: Wiley & Sons.
- Carstensen, L. L., Isaacowitz, D., & Charles, S. T. (1999). Taking time seriously: A theory of socioemotional selectivity. *American Psychologist*, 54, 165–181.
- Eugene Steuerle, C., Spiro, C., & Johnson, R. W. (1999). *Can Americans work longer? Straight Talk on Social Security and Retirement Policy No. 5*. Washington, DC: The Urban Institute.
- Fratiglioni, L., Paillard-Borg, S., & Winblad, B. (2004). An active and socially integrated lifestyle in late life might protect against dementia. *Lancet Neurol.*, 3, 343–353.
- Freedman, M. (2008). *Encore: Finding Work that Matters in the Second Half of Life*. New York: Public Affairs.
- Fried, L. P., Carlson, M. C., Freedman, M., Frick, K. D., Glass, T. A., Hill, J., McGill, S., Rebok, W., Seeman, T., Tielsch, J., Wasik, B. A., & Zeger, S. (2004). A social model for health promotion for an aging population: Initial evidence on the Experience Corps model. *Journal of Urban Health: Bulletin of the New York Academy of Medicine*, 81(1), 64–78.
- Helman, R. (2014). The 2014 retirement confidence survey: Confidence rebounds—for those with retirement plans. *EBRI Issue Brief*, 397, 25–27.
- Jenkinson, C. E., Dickens, A. P., Jones, K., Thompson-Coon, J., Taylor, R. S., Rogers, M., Bamba, C. L., Lang, I., & Richards, S. H. (2013). Is volunteering a public health intervention? A systematic review and meta-analysis of the health and survival of volunteers. *BMC Public Health*, 13, 773–783.
- Kanfer, R., & Ackerman, P. L. (2004). Aging, adult development and work motivation. *Academy of Management Review*, 29, 440–458.
- Kanfer, R., Beier, M. E., & Ackerman, P. L. (2012). Goals and motivation related to work in later adulthood: An organizing framework. *European Journal of Work and Organization*, 22(3), 253–264.
- Loch, C. H., Fabien, J. S., Bauer, N., & Mauermann, H. (2010). How BMW is defusing the demographic time bomb. *Harvard Business Review*, March, 99–102.
- MacArthur Foundation Research Network on an Aging Society (2009, Fall). Facts and fictions about an aging America. *Contexts*, 8(4), 16–21.
- Munnell, A. H., & Sass, S. (2008). *Working Longer: The Solution to the Retirement Income Challenge*. Washington, DC: Brookings Institution Press.
- Munnell, A. H., & Wu, Y. (2012). Are aging baby boomers squeezing younger workers out of jobs? Issue in brief (pp. 12–18). October 2012. Available at: http://crr.bc.edu/wp-content/uploads/2012/09/IB_12-18-508.pdf (accessed August 15, 2014).
- Rohwedder, S., & Willis, R. J. (2010). Mental retirement. *Journal of Economic Perspectives*, 24(1), 119–138.

Salthouse, T. (1984). Effects of age and skills in typing. *Journal of Experimental Psychology*, 113, 345–371.

Stroebe, W. (2010). The graying of academia: Will it affect productivity? *American Psychologist*, 65, 660–673.

Toosi, M. (2012). Labor force projections to 2020: A more slowly growing workforce. *Monthly Labor Review*, January 2012. Available at: www.bls.gov/opub/mlr/2012/01/art3full.pdf (accessed January 15, 2013).

An Aging Workforce: The Contribution of Work, Industrial, and Organizational Psychology

Baruch, Y., Sayce, S., & Gregoriou, A. (2014). Retirement in a global labour market: A call for abolishing the fixed retirement age. *Personnel Review*, 43, 464–482.

Cronshaw, S. F. (2012). Aging workforce demographics in Canada. In J. W.Hedge & W. C.Borman (Eds.), *The Oxford Handbook of Work and Aging* (pp. 98–114). Oxford: Oxford University Press.

Kinsella, K., & He, W. (2009). U.S. Census Bureau, International Population Reports, P95/09–1, *An Ageing World: 2008*. Washington, DC: U.S. Government Printing Office.

Phillips, D. R., & Siu, O. I. (2012). Global aging and aging workers. In J. W.Hedge & W. C.Borman (Eds.), *The Oxford Handbook of Work and Aging* (pp. 9–32). Oxford: Oxford University Press.

Sargent, L. D., Lee, M. D., Martin, B., & Zikic, J. (2013). Reiventing retirement: New pathways, new arrangements, new meanings. *Human Relations*, 66, 3–21.

Skirbekk, V., Loichinger, E., & Barakat, B. (2012). The aging of the workforce in European countries. In J. W.Hedge & W. C.Borman (Eds.), *The Oxford Handbook of Work and Aging* (pp. 60–79). Oxford: Oxford University Press.

Truxillo, D. M., & Fraccaroli, F. (2014). The science of a global organizational psychology: Differing approaches and assumptions. In R. L.Griffith , L.Foster Thompson , & B. K.Armon (Eds.), *Internationalizing the Curriculum in Organizational Psychology* (pp. 41–55). New York: Springer.

Wang, M. (Ed.) (2013). *The Oxford Handbook of Retirement*. Oxford: Oxford University Press.

Wang, M., Olson, D. A., & Shultz, K. S. (2013). Mid and Late Career Issue. *An Integrative Perspective*. New York: Routledge.

Yeung, D. Y., & Fung, H. H. (2009). Aging and work: How do SOC strategies contribute to job performance across adulthood? *Psychology and Aging*, 24, 927–940.

Zacher, H., & Frese, M. (2011). Maintaining a focus on opportunities at work: The interplay between age, job complexity, and the use of selection, optimization and compensation strategies. *Journal of Organizational Behavior*, 32, 291–318.

Developing “Best Practices” for Organizations: A Gap in the Current Aging Research

Kossek, E., Hammer, L., Kelly, E., & Moen, P. (2014). Designing work, family & health organizational change initiatives. *Organizational Dynamics*, 43, 53–63.

Roberts, B. W., Walton, K. E., & Viechtbauer, W. (2006). Patterns of mean-level change in personality traits across the life course: A meta-analysis of longitudinal studies. *Psychological Bulletin*, 132, 1–25.

Truxillo, D. M., Cadiz, D. E., & Hammer, L. B. (in press). Promoting the health and well-being of an aging workforce. *Annual Review of Organizational Psychology and Organizational Behavior*.

Now That We Know What...How?

Cohen, D. J. (2007). The very separate worlds of academic and practitioner publications in human resource management: Reasons for the divide and concrete solutions for bridging the gap. *Academy of Management Journal*, 5, 1013–1019.

Daft, R. L. (1983). Antecedents of significant and not-so-significant research. In T. S. Bateman and G. R. Ferris (Eds.), *Method and Analysis in Organizational Research* (pp. 3–14). Reston, VA: Reston Publishing.

Davis, M. (1971). That's interesting: Toward a phenomenology of sociology and a sociology of phenomenology. *Philosophy of Social Science*, 1, 309–344.

Hitt, M. A., Beamish, P. W., Jackson, S. E., & Mathieu, J. E. (2007). Building theoretical and empirical bridges across levels: Multilevel research in management. *Academy of Management Journal*, 50, 1385–1399.

Liu, S., Zhan, Y., & Wang, M. (2011). Person-centric work psychology: Additional insights into its tradition, nature, and research methods. *Industrial and Organizational Psychology*, 4, 105–108.

Ployhart, R. E., & Vandenberg, R. J. (2010). Longitudinal research: The theory, design, and analysis of change. *Journal of Management*, 36, 94–120.

Rynes, S. J. (2012). The research-practice gap in I/O psychology and related fields: Challenges and potential solutions. In S. W. J. Kozlowski (Ed.), *The Oxford Handbook of Organizational Psychology*, Vol. 1 (pp. 409–452). Oxford: Oxford University Press.

Weiss, H. M., & Rupp, D. E. (2011). Experiencing work: An essay on a person-centric work psychology. *Industrial and Organizational Psychology*, 4, 83–97.