Table of Contents

Contents

1 An Introduction from the Dean

Western industrialized nations have been undergoing fundamental changes in economic, cultural and social life. These changes are precipitated by more and more people reaching old and very old age, by markedly reduced birth rates, by living in an era of rapid knowledge turnover and by ever increasing globalization. Consequently, patterns of working, learning, and living need to change apace. This implies challenges for social institutions, including institutions of higher education, for corporations as well as for the individual. It is the goal of the Jacobs Center of Lifelong Learning and Institutional Development (JCLL) to do research that contributes to the knowledge necessary to optimize the current transformations, and to provide education and consulting that support these transformations. Against the background of this historic constellation, the JCLL pursues the general aim to better understand individual and institutional conditions of productive adult development and it does so from a systemic perspective (see below). Productive is defined in a broad sense that goes beyond the narrow economic understanding of productivity as exclusively linked to the contribution to the gross national product (cf. Staudinger, 1996).

The developing individual is embedded in different important systems of influence that need to be kept in mind if the process of development is supposed to be productive. These systems are "Bildungs" experiences, social networks, the respective corporation with its approach to human resource development and finally the societal framework conditions such as the legal framework of work and education but also the images of aging and "Bildung" available in the public. In all these systems, changes have become necessary to accommodate the current transformative processes and enable successful lifelong learning and lifespan development.

This systemic framework asks for multiple disciplines to be represented at the JCLL, such as Neuroscience and Human Performance, Lifespan Psychology, Health and Personality Psychology, Organizational Behavior (with a focus on learning in the work setting), Media and Communication Sciences (with a focus on images of aging, age-graded medial preferences and media competence), Business Administration, and Lifecourse Sociology and Economics.

The mutual dependencies of individual and social change are the focus of JCLL's joint research endeavors. For instance, the contribution of the Jacobs Center to the proposal of a Graduate School of the Social Sciences (BIGSSS) in the context of the Initiative for Excellence of the German Government (DFG / Wissenschaftsrat) lies exactly at the investigation of life-course and lifespan dynamics and their effect on individual and institutional or societal outcomes. Similarly, the interaction between the individual and the organization plays a central role in the first JCLL joint research proposal successful with the BMBF (Federal Ministry for Bildung and Research). In this project - that brings together all JCLL faculty under one common theme - we are interested in the matches and mismatches among employees' attitudes and competencies, the management strategies and work organization of the company as well the organizational climate with regard to the following domains: health promotion, training, images of aging, experience transfer, and adaptive competence. The central assumption

is that individual as well as organizational outcomes (e.g., health, productivity) are best understood when taking into consideration the matches and mismatches between all possible combinations (Strategy - Climate, Climate - Employee, Employee - Strategy). Both a linear as well as a typological approach are considered as useful analytical tools. Five companies have agreed to participate. We will pursue a two-step sampling procedure: first we sample work units per company and second we sample individuals within each work unit. In order to keep the assessment protocol to a realistic length not all research domains will be assessed at each company. Rather, always two companies will have one domain in common. Thus, replication of findings across companies becomes possible. The research project, which will start in April 2007, is part of a program initiative by the BMBF revolving around innovative approaches to work security and health protection in the workplace. One of the results of this project will be a diagnostic toolbox for the identification of matches or mismatches in the domains of aging, learning, health, communication and adaptive capacity as well as application rules to be given to companies that want to work with the tool.

Ursula M. Staudinger Bremen, December 2006

2 Interdisciplinary Projects at the Jacobs Center

2.1 Demopass: Effects of Matches/ Mismatches between Aspects of Human and Social Capital, Corporate Strategy and Work Organization on the Physical and Mental Well-Being of Employees

Research Team Ursula M. Staudinger (Professor of Psychology), Ben Godde (Professor of Neuroscience), Heike Heidemeier (Postdoctoral fellow, Psychology), Brigitte Kudielka-Wüst (Professor of Health Psychology), Christian Rossnagel (Professor of Organizational Behavior), Klaus Schömann (Professor of Sociology),

Mireille Trautmann (Postdoctoral Fellow, Neuroscience), Claudia Voelcker-Rehage (Lecturer, Human Performance), Sven Völpel (Professor of Business Administration), Stefan Baron (Doctoral Fellow, Sociology), Catherine Bowen (Doctoral Fellow, Psychology), Nicolas Feuerhahn (Doctoral Fellow, Health Psychology), Daniela Noethen (Doctoral Fellow, Business Administration).

Description of the project

Demographic change challenges management and corporate strategies as well as aging individuals. Companies face the challenge of staying innovative and productive with fewer young talents on the labor market, while individuals need to frequently update their skills and knowledge to maintain high levels of employability into (statutory) retirement age. Above all, employees' physical and psychological health is an invaluable resource and a precondition for the ability to maintain high levels of productivity throughout a career. Since the impact of demographic change on organizations is multifaceted, and demands action in several fields, an interdisciplinary perspective on productive aging is fitting. All JCLL professors have worked together to contribute diverse perspectives within a joint research project. Project "Demopass" (from the German words "Demografie" and "Passung": demography and match/mismatch) examines matches and mismatches between several organizational levels (employees, management, and organizational strategies) that are crucial for understanding organizational outcomes, such as employee health and productivity. Moreover, the project emphasizes the important role that organizational climate (an aspect of an organization's social capital) plays in understanding organizational outcomes. Organizational climate communicates (implicit) expectations, values and incentives that may have a marked influence on actual behavior and the success of organizational strategies. The concept of matches and mismatches between three perspectives defines a reference framework that guides the work of five subprojects.



Figure 1: Project Demopass

Research objectives Project "Demopass" identifies five fields of action that are specifically relevant to tackling the challenges posed by demographic change in organizations: intergenerational knowledge transfer, training and on-thejob learning, images of aging in organizations, adaptive competences, and physical as well as psychological health. Exemplary research questions include the following: In order to establish successful knowledge management, employees' abilities to communicate and seek knowledge must match the expectations, resources and support provided by supervisors, as well as the forces implied in organizational climate. Specific consideration is given to intergenerational ("young to old" and "old to young") knowledge transfer. Similarly, images of aging and age-related organizational policies must be communicated in ways so that they match the beliefs of both employees and their supervisors. A company's "age climate" determines how others perceive older workers, and conveys whether they are esteemed members of the organization. Negative stereotyping may impair the motivation and productivity of older workers. This applies to self-views as well as the (assumed) views of others. Indeed, personal views and the views of others (supervisor beliefs or shared beliefs; i.e. "age climate") may positively or negatively complement or compensate for one other. A positive "age climate" may par-

ticularly help employees who tend to think negatively about their own aging to maintain effective self-regulation and higher levels of productivity. As a final example, the subproject on adaptive competencies examines meta-competencies that are highly relevant (in addition to specific skill or expertise) to meeting work demands. Again, an important assumption is that a match between perceived work demands, actual demands, and also employees' adaptive competencies contributes to an understanding of physical health and psychofogical well-being at work. Having to meet excessive demands may be as detrimental as insufficient challenge of skill and adaptive competencies. For the remaining two fields, training and health psychology, the same framework is applied to study matches and mismatches among the employees' competencies or attitudes, management support and strategies, and work climate.

By studying a number of "paralleling" research questions, the project seeks to contribute to current understanding, while implementing an interdisciplinary approach. But the project also aims to communicate results so they are able to inform management practice. For that purpose, participating companies will receive feedback about their results. In addition, the project will assemble a toolbox for diagnosing matches and mismatches in organizations; this will be made available to companies which then can independently employ it.

Outlook By the end of 2008, the project "Demopass" will have finished with data collection in five partnering companies. The project will then have collected questionnaire data and indicators of objective health from roughly 1500 employees and their supervisors. In addition, interviews with management representatives provide information about corporate and work strategies. The research questions will be addressed empirically using a multi-level design, with individuals sampled from their work teams in order to ensure that they share the same social and physical work environment and climate.

Research results will begin to come to fruition in

2009. The project team also plans to carry out another round of data collection in order to validate the previously mentioned toolbox. This will be structured as a shortened version of the original questionnaire that will be tailored to address essential aspects of match/mismatch in the five action fields, and that will be designed to be applied by practitioners. In 2010 the project will attempt to scale up outreach both within the scientific community and with other relevant actors in private and public organizations.

Grant Grant sponsorship was provided by the BMBF and the European Social Fund, "Effects of Matches/Mismatches between Aspects of Human and Social Capital, Corporate Strategy and Work Organization on the Physical and Mental Well-Being of Employees" (April, 2007).

Competency models are widely used by Human Resource (HR) practitioners in the selection, placement and development of employees. However, only little competency modeling research has been conducted, and the issue of age-related competency changes has hardly ever been addressed. In collaboration with Bosch Rexroth AG, we are developing a competency model that incorporates employees' age-related changes in ability and motivation factors. The model is intended to help identify HR development requirements in the mid-term (5 years).

2.2 Mobility and Developmental Success

Research Team Ben Godde (Professor of Neuroscience), Klaus Schömann (Professor of Sociology), Ursula M. Staudinger (Professor of Psychology), Claudia Voelcker-Rehage (Lecturer, Human Performance), Heike Heidemeier (Postdoctoral fellow, Psychology)

Description of the project The aging and shrinking of the labor force in modern industrialized nations requires that companies and employees optimize their productivity across their life spans in order to both avoid jeopardizing economic success, and to enable individuals to successfully navigate through their extended life

span. With increasing age there are certain gains and a greater number of losses that may interfere with the maintenance of individuals' productivity. Job mobility has become an increasingly important feature of the modern labor market. In addition, it may be that job mobility helps to compensate for some salient age-related declines, and thus can be considered a natural intervention to strengthening productivity across life spans.

Research objectives Our main aim is to investigate the cumulative effects of voluntary job mobility on (productivity) and its interaction with individual developmental trajectories of adaptive competencies. We will focus on the large cohort of the so-called "baby boomers", who are currently entering into midlife and will constitute the future cohort of older workers.

Job mobility is defined as encompassing voluntary changes of the employer or company, as well job changes within a company. Extending traditional job mobility research, which has concentrated on single spells of mobility, we investigate (using sequence-analytical methods) the cumulative effects of job mobility. Adaptive competence comprises a cognitive as well as a personality component. In the first domain, our study deals with the capacity to adapt perceptual and motor functioning, as well as higher cognitive functions, to new or changing tasks or challenges. This takes into account the neurobiological mechanisms underlying such learning or adaptation processes. The important dimension of adaptive competence in the domain of personality characteristics, on which we will focus, is the openness for new experiences, the readiness to take risks, and rigidity. As mediating and moderating variables we are interested in self-esteem, internal control beliefs. and accommodative as well as assimilative skills. Further, job-specific aspects like job commitment and job satisfaction play an important role. We assume a strong relationship between both aspects of adaptive competencies on the one hand and job mobility on the other hand. We have two main hypotheses that may both be true. First, adaptive competences might strengthen job mobility,

as adaptive workers are more able and ready to learn new tasks or to adapt to new working environments, and thus to take over new positions within their firm or in other firms. An adaptive personality, characterized by openness, may have a stronger motivation for changes and mobility. Second, it may also be expected that voluntary job mobility, in turn, is able to increase adaptive competencies. Changing working tasks and experiences of job mobility "train" cognitive adaptivity, as well as adaptivity in the domain of personality, and thus avoid the usual age-related decline or even stimulate increases. On the other hand, routinized work and a lack of new challenges for several years might have negative impacts on adaptive competences; even they must be trained continuously. Interested in cognitive as well as personality developmental processes, our multidisciplinary approach combining both is well suited not only to provide new evidence within the different domains of adaptivity, but also to investigate interactions between personality characteristics and underlying cognitive processes at the neural level. Moreover, we expect that findings in either domain allow predictions for the other.

Outlook In an important first empirical step, using secondary-analytical methods, we will recruit matching samples from the data of the German Socioeconomic Panel (SOEP). These samples will differ with respect to their job mobility (high or low mobility) and - accounting for gender-specific careers - in terms of gender, resulting in a design with four different groups of participants. Groups have to be matched for confounding variables like job profile, social participation, health, qualification, life satisfaction, etc. Propensity Score Matching allows filtering persons with nearly identical characteristics differing only in respect to the specific factors of interest (job mobility and gender). As the second empirical step, we will use these samples to investigate the two facets of adaptive competence development as antecedence and/or consequence of job mobility. In the domain of cognitive functions we will use neurophysiological and neuropsychological methods (functional MRI, behavioral tests) to examine adaptivity and learning abilities. Test parameters are, for example, the ability to adapt perception under fast switching conditions, the capacity to transfer learned skills to new situations, and the extent of cognitive flexibility and shortterm cortical plasticity. In the domain of personality, questionnaires will be used to assess openness to new experience and rigidity, as well as internal control beliefs and accommodative/assimilative coping styles. Further, job-specific aspects like job commitment and job satisfaction are also investigated. Sample size is restricted by the SOEP data set itself but also by the applied methods. For the neurophysiological and -psychological tests a sample size of n=20 per group is intended. The total sample size to correlate personality characteristics with job mobility will be extended to all persons available in the dataset and willing to participate. First calculations suggest that we need to cumulate 4-5 birth cohorts (born between 1962 and 1966) in order to arrive at a final sample of 200 participants (50 in each group) that has complete information for 20 years; this is taking into account a 25The current study suggests that it is useful to pool expertise from sociology, psychology and neuroscience in order to test whether voluntary job mobility may be considered a highly successful "natural" intervention when it comes to optimizing productivity across the life course. For this purpose, the study combines the unique longitudinal SOEP data set with behavioral and neuroscience methods, and utilizes the unique potential of secondary data analysis. The practical implications of the proposed study are obvious: given we find the alleged compensatory and facilitative effects of voluntary job mobility, this will send a strong signal to companies and employees alike to pursue the route of transforming traditionally stable work careers in Germany.

Grant This project is funded by Volkswagen Foundation.

3 Discipline - specific Research Projects at the Jacobs Center

- 3.1 Neuroscience and Human Performance
- 3.2 Stress and Health at Work
- 3.3 The Plasticity of Adult Development: Lifespan Perspectives
- 3.3.1 Contexts Facilitating Adult Development and Aging
- 3.3.2 Physical and Motor Fitness as Facilitators of Cognitive and Emotional Plasticity
- 3.3.3 Developmental Regulation and Self-Regulation as Facilitators of Adult Development and Aging
- 3.3.4 Two Types of Positive Personality Development: Adjustment and Growth

Research Program

Does personality stay stable after young adulthood or is there continued change throughout middle and later adulthood? For decades, this question has caused heated debate. In recent years, a consensus has emerged based on contemporary cross-cultural as well as longitudinal evidence. This consensus confirms that indeed there is personality change in middle and later adulthood. Many authors have labeled this change, personality maturation or growth. In somewhat simplified terms the observed pattern is as follows: Neuroticism declines, conscientiousness and agreeableness increase. At the same time it has been argued that this pattern of personality change is the result of coping with the developmental tasks of adulthood and thus increased adjustment. In this research area, we are interested in exploring the different ways of operationalizing adjustment and growth, and also finding out about their developmental dynamics.

Research Highlihts 2007/2008

Our two goals were to develop and validate a performance measure of personal wisdom (PW), and to examine age differences. Based on the Berlin wisdom paradigm and growth theories of personality, five criteria of PW were developed. A sample of 83 younger (20-40) and 78 older adults (60-80) thought aloud about a PW task. Transcribed answers were rated. Validity was established with regard to indicators of personality growth, subjective well-being, intelligence, critical life events, as well as general wisdom (GW; see Fig. 14). As expected, no age differences were obtained on the basic criteria and negative age differences were found on the meta-criteria indexing PW. Fluid intelligence and openness to new experience partially mediated these differences. It is argued that on average and for current cohorts, age-related changes in psychological functioning may act as hindrances to PW.

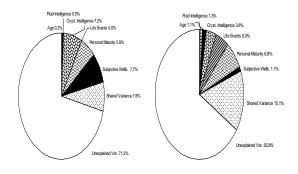


Figure 2: Predictive validity of two wisdom measures (results of commonality analysis; Mickler & Staudinger, 2008)

3.3.5 Collaborations

- Brandeis University; Prof. Margie Lachman, PhD
- Humboldt University, Berlin; Dr. Charlotte Mickler
- Jacobs University, JCLL; Prof. Dr. Ben Godde

- Jacobs University, JCLL; Prof. Dr. Klaus Schömann
- Jacobs University, JCLL; Dr. Claudia Voelcker-Rehage
- Max Planck Institute for Human Development, Berlin; Prof. Dr. Ulman Lindenberger
- Stanford University; Prof. Laura Carstensen, PhD
- University of Florida, Gainsville, FLA; Prof. Manfred Diehl, PhD
- University of Frankfurt; Prof. Dr. Tilmann Habermas
- University of Klagenfurt;Prof. Dr. Judith Glück
- University of Heidelberg; Prof. Dr. Hans-Werner Wahl
- University of Hildesheim; Prof. Dr. Werner Greve
- University of Michigan; Prof. Patricia Reuter-Lorenz, PhD

3.3.6 Other Professional Activities

- Alexander von Humboldt Stiftung, Member of Selection Committee
- Berlin-Institut für Bevölkerung und Entwicklung, Member of the Advisory Board
- German Center for Gerontology, DZA, Member of the Scientific Board
- German Psychological Society, President
- Joint Academy Network "Aging in Germany" (Leopoldina, acatech), Co-Speaker
- Leopoldina National Academy of Sciences, Vice President
- Margret M. and Paul B. Baltes Foundation, Chair
- Max Planck International Research Network on Aging (MAXNET Aging), Senior Fellow

3.4 A Lifespan Perspective on Organizational Behavior

Research Team

Christian Stamov Roßnagel (Professor of Organizational Behavior), Melanie Schulz (Doctoral

Fellow; since 02/2007), Jennifer Bittner (Post-doctoral Fellow; since 12/2008).

Workers bring to their workplace a set of personal resources, often referred to as KSAOs (i.e. knowledge, skills, abilities and other characteristics); examples include motives, personality and values. Jobs offer a variety of job resources; examples include task complexity, leader-member exchange, and organizational climate. Both types of resources interact in shaping organizational behavior. Two workers equipped with the same personal resources will show quite different work behaviors depending on the availability of job resources. Similarly, even under maximally supportive job conditions, two workers will fair quite differently to the extent that they are endowed with different personal resources.

Human development across the lifespan is a major determinant of this interaction, impinging differentially on different kinds of personal and job resources. While availability is likely to decrease for some resources (e.g., certain cognitive abilities) and to increase for other resources (e.g., expertise), utility is likely to change for still other resources (e.g., task variety). In sum, losses in some resources coupled with stability or growth in other resources lead to systematic patterns of qualitative changes in work behaviors, and it is these patterns that we are interested in.

We conduct much of our research in collaboration with personnel decision-makers from major companies such as Deutsche Bank, EnBW, and OTTO Group. From the perspective of Dynamic Human Resource Management (D-HRM, see Staudinger, Roßnagel & Voelpel, 2008) we emphasize the need for integrated action on five action fields. The central assumption of D-HRM is that workers and jobs alike significantly and systematically change across work life. This alters the fit between workers and their jobs, which has been shown to be an important determinant of job satisfaction and commitment. One of the objectives of Dynamic HRM is to provide

tools for proactive fit management in order to enable sustainable work conditions across work life. Developing research designs in close exchange with practitioners has helped raise both academically and practically interesting research questions. Given the rigor we bring into our research, such exchange increases the validity and generalizability of our findings.

Much of the research on older workers' training and development participation has focused on the role of KSAO and training characteristics as determinants of training participation and outcomes; much less evidence is available on the influence of organizational determinants (e.g., training climate). We have therefore taken the demopass project (see 2.1) as an opportunity to extend the well-established person-environment fit perspective to T&D issues. Building on preliminary findings that individual "fit style" (e.g., emphasizing person-organization vs. person-job fit) may change with age, we have set up the T&D part of the demopass survey so that the relative roles of supervisor and team support, and a company's training climate for predicting training participation can be investigated.

3.4.1 Age Differences in Workplace Learning

Research Program

Informal learning is said to be developing into an increasingly important part of companies' training and development (T&D) activities. Such learning takes places outside traditional courses and may occur as participation in quality circles, mentoring programs, self-organized study, or simply as "learning by doing". Informal learning shares many features of self-regulated learning; thus we explore informal learning in terms of a learning competency arising from the interplay of cognitive (learning strategies), meta-cognitive (monitoring), and motivational (e.g., epistemic belief) dimensions. Our research is aimed at identifying the competency dimensions most relevant for predicting learning success.

Research Highlights 2007/2008



Figure 3: Levels and central constructs of learning competency.

We began with employee surveys assessing the interplay of meta-cognitive and motivational variables, and the influence of organizational variables (e.g., T&D climate, learning opportunities at work) on learning competency. Results indicated that older workers showed learning competency decreases from declines in memory selfefficacy (MSE) rather than as a function of biological age. As such declines are particularly likely in organizations that offer few learning opportunities, and that fail to encourage continuous T&D participation, older workers are more likely than their younger colleagues to experience MSE decline; it may thus be seen as a secondary age effect. We follow up on these findings in laboratory research investigating the interplay of age, MSE, and task difficulty in cognitive resource allocation to self-regulated learning tasks in an elearning environment. Intervention studies follow naturally from this approach, and thus they form a third focus of our research. We have started designing "learning competency workshops" that seek to enhance learning performance by training goal-setting and monitoring skills.

3.4.2 Age-Related Changes in Work Motivation

Research Program

Given decreasing numbers of young workforce entrants, the successful retention of older workers is of high importance for many organizations; this requires a profound understanding of older workers' motivation. While aging, more often than not, is perceived to involve inevitable decline in motivation, we posit that age-related changes in work motivation might be conceptualized as outcomes of active regulation. Rather than passively responding to personal (e.g., capability declines) and environmental (e.g., altered work demands) changes, older workers actively adapt to these changes. As a result, work motivation becomes more task-specific; the influence of work context on motivation changes both quantitatively and qualitatively and leads to developing an individual motivational profile (Stamov Roßnagel, in press).

In co-operation with various companies, we develop within this framework tools for motivation diagnostics and interventions. We seek to identify specific areas of age-related increases and decreases. Beyond academic interest, conceptualizing age-related changes in motivation as an outcome of active regulation might provide human resource professionals with more opportunities for motivation interventions. For instance, giving older workers higher degrees of job control might help fulfill their needs for job customization, and may enable them to allocate effort in line with their motivational profile. In a similar vein, discussing and "teaching" motivational regulation strategies might help equip older workers with skills to successfully cope with age-related capability changes and changing job demands. Finally, research into motivation profiles might increase the effectiveness and efficiency of motivational interventions, and might be fruitful for building (age-diverse) teams.

In a recently completed survey, we asked 312 workers (ages 18-65) from a company to rate how motivated they were for their work in general and for tasks emphasizing collaboration with colleagues, demonstration of one's knowledge and skills, learning new skills or knowledge, leading others, working autonomously, and passing to colleagues one's knowledge and experience, respectively. Moreover, to assess needs-supplies fit, participants indicated whether they felt they were given sufficient opportunities to work on each of these task types. We found that the motivation patterns as defined by the six aforementioned types of tasks differed as a function of age. Most importantly, older workers showed higher levels of motivation than their younger colleagues on the "people tasks" involving passing on knowledge and experience and leading others. Independent of age, the overall level of motivation was higher for participants who reported good fit, that is, older workers who reported high needs-supplies fit rated their overall motivation on a comparable level than their younger colleagues. Also, high levels of fit were associated with positive affect at work, indicating that task-specific motivation regulation might be a useful strategy of affect regulation.

3.4.3 Older Workers' Cognitive Resources for Innovation Behavior

Most recently, we have embarked on innovation behavior research, which will be funded by a Volkswagen Foundation grant until 2011. Similar to the situation with workplace learning and motivation research, older workers have been somewhat neglected in this field. Although the demand for innovation increases in the wake of technological change and globalization, and although a growing number of older workers will be involved in innovation-related work roles, little research has dealt with the question how age might affect innovation behavior.

Our research focuses on the motivationcognition interface. We assume that while aging might objectively affect older workers' cognitive innovation resources, workers will strive to compensate for declining resources availability if such compensation is supported by the organization. Routinization, a facet of expertise, is a resource of particular interest in this regard. It frees up cognitive capacity that in an innovation-supporting environment might be directed towards recognizing innovation potentials and developing implementation strategies. In a less supportive environment, however, routinization may be married with unproductive routine. Like for our workplace learning and motivation research, we develop a combination of quantitative survey and experimental methods to investigate the role of personal cognitive resources.

3.4.4 Collaborators

- University of Heidelberg; Sonja Bausch.
- University of Dortmund; Michael Falkenstein.
- University of Oldenburg; Prof. Dr. Barbara Moschner.
- University of Passau; Prof. Dr. Franz Lehner.
- Portland State University; Prof. Dr. Pamela Tierney.
- Bremen-Nord Hospital.
- Deutsche Bank.
- EnBW.
- HeidelbergCement.
- OTTO Group.

3.4.5 Other Professional Activities

Ad-hoc reviews: Applied Psychology: An International Review, European Journal of Personality, Journal of Behavioural Sciences, Zeitschrift für Personalpsychologie, Zeitschrift für Sozialpsychologie.

Boards 2007/2008

• EU Commission. Member of the Board of Judges, *European Union eInclusion Awards*.

 Federal Institute of Occupational Health and Safety (BAuA), Advisory Board Member of the PFIFF project.

3.4.6 Publications

- Stamov Roßnagel, C. (in press). Motivationsregulation älterer Beschäftigter. In K. Brauer & G. Korge, editor, Perspektive 50plus? Theoretische und Praktische Ansätze zur regionalen Arbeitsmarktförderung Älterer. Wiesbaden: Verlag für Sozialwissenschaften.
- Stamov Roßnagel, C. (in press). Arbeitsmotivation über die Lebensspanne: Aktive Regulation statt passiven Abbaus. In J. Kocka, M. Kohli, & W. Streeck (Hrsg.), Altern, Familie, Zivilgesellschaft und Politik. Stuttgart: Wissenschaftliche Verlagsgesellschaft.
- Stamov Roßnagel, C. (in press). Was Hänschen nicht lernt...? Folgen der Altersselektion bei Weiterbildungskonzepten. In K. Brauer & W. Clemens (Hrsg.). Zu Alt? Zur Theorie des Ageism und zur Empirie der Altersdiskriminierung auf Arbeitsmärkten. Wiesbaden: Verlag für Sozialwissenschaften.
- Gotoh, F., Kikuchi, T., & Stamov Roßnagel, C. (2008). Emotional Interference in Enumeration: A Working Memory Perspective. Psychology Science Quarterly, 50 (4), 526-537.
- Stamov Roßnagel, C. (2008). Motivationsregulation älterer Beschäftigter. In K. Brauer & G. Korge (Eds.), Perspektive 50plus? Theoretische und Praktische Ansätze zur regionalen Arbeitsmarktförderung Älterer (p. 71-86). Wiesbaden: Verlag für Sozialwissenschaften.
- Stamov Roßnagel, C. (2008). Mythos "Alter Mitarbeiter": Lernkompetenz jenseits der 40? Weinheim: Beltz PVU.
- Stamov Roßnagel, C., Picard, M.A., & Voelpel, S. (2008). Weiterbildung jenseits der 40. *Personal*, 36-38.

- Lehner, F. & Roßnagel, C. (2008). iVideo

 An Easy-to-use Authoring Tool for Interactive E-Learning Videos. In Luca, J. & Weippl, E.R. editors, Proceedings of ED-MEDIA 2008 World Conference on Educational Multimedia, Hypermedia & Telecommunications (5373 5378). Chesapeake, VA: AACE.
- Staudinger, U. M., Roßnagel, C., & Völpel, S. (2008). Strategische Personalentwicklung und demographischer Wandel eine interdisziplinäre Perspektive. In K. Schwuchow & J. Gutmann, J., editors, *Jahrbuch Personalentwicklung 2008 Ausbildung, Weiterbildung, Management Development* (295-304). München: Luchterhand.
- Roßnagel, C. & Schulz, M. (2007). Beschäftigungsfähigkeit erfahrener Mitarbeiter. sichern - welche Rolle spielt die betriebliche Weiterbildung Ergebnisse einer Befragung von Unternehmen in Ostwestfalen-Lippe. Gütersloh: Bertelsmann.
- Roßnagel, C. & Voelpel, S. (2007). Qualifizierung älterer Mitarbeiter: Keine Einheitsweiterbildung. *Persorama*, 35, 24-29.

3.5 A Perspective from Business Administration on the Aging Workforce

3.5.1 WISE Research Group in Business Administration

Research Team Sven Voelpel (Professor of Business Administration), Torsten Biemann (Postdoctoral Fellow; since 09/2007), Robert Eckhoff (Doctoral Fellow; since 10/2007), Polina Isichenko (Doctoral Fellow), Eric Kearney (Postdoctoral Fellow; since 10/2007), Jörg Korff (Doctoral Fellow; since 08/2007), Claudia Licklederer (Doctoral Fellow; since 07/2008), Daniela Noethen (Doctoral Fellow; since 04/2007), Anne Sauer (Doctoral Fellow; since 10/2008), Stefan Schaffer (Doctoral Fellow; since 11/2007), Katharina Speckmann (Doctoral Fellow; since 05/2008), Eden Tekie (Doctoral Fellow), Chunli Zhao (Doctoral Fellow).

Organizations must respond to a number of challenges brought about by major economic, technological, and demographic changes as well as heightened competition. There are many ways in which organizations can meet these challenges and gain competitive advantages. Generally, we examine the topics of wisdom, innovation, strategy, and energy in organizations. We investigate how the ongoing demographic changes and the rising average age in the workforce effect organizational outcomes in these domains (Voelpel, Leibold, & Früchtenicht, 2007). Figure 16 provides an overview of these research efforts.

As a specific example of our research, we study how organizational teams should be composed to ensure high levels of performance and low levels of dysfunctional processes. In this regard, many authors view team heterogeneity (diversity) as a potential for increased creativity and innovation. Most importantly, we study under what conditions and through what processes age diversity can enhance team performance (Kearney, Voelpel, & Gebert, 2008).

Central Reference

Voelpel, S., Leibold, M., & Früchtenicht, J.-D. (2007). Herausforderung 50 plus: Konzepte zum Management der Aging Workforce: Die Antwort auf das demographische Dilemma. Erlangen - New York: Publicis-Wiley (Vorwort von Heinrich von Pierer; Vorwort von Klaus Jacobs).

The WISE research domains are depicted in the following figure:

3.5.2 WISE Demographic Network (WDN)

Research Program On March 28th 2007, we founded the WISE Demographic Network (WDN) at the World Business Dialogue in Cologne. In times of demographic change, it is our objective to create strategic cooperation that aims to provide competitive advantages by enhancing innovation and productivity. Based on

	<u>W</u> ISDOM	<u>[</u> nnovation	<u>S</u> trategy	<u>E</u> nergy
General	The Way from Information to Knowledge and to Wisdom	The Source of Organizations' Sustainable Competitiveness	The Fundament of Long- term Organizational Success	The Driving Force of an Organization
Aging	Sharing Knowledge & Wisdom Across Different Age Groups	Drivers of Innovativeness of an Aging Workforce	Competitive Strategies for the Demographic Shift	Enhancing Organizational Energy with an Aging Workforce
Asia	Knowledge Management within the Asian Context	Utilizing R&D and Innovativeness Potential of Emerging Markets	Entry and Sustainable Growth Strategies in Asia	Releasing Organizational Energy within the Asian Context

Figure 4: Wise Research Domains

cooperation between academic research and organizations, practically applicable recommendations are formulated and tailored for individual organizations. Furthermore, it is intended that best practices and knowledge be exchanged. Another objective of the WISE Group is profiling an interdisciplinary research area. We have eight partner companies in the WDN:

- Daimler AG
- Deutsche Bahn AG
- Deutsche Bank AG
- EnBW Energie Baden-Württemberg AG
- Lonza Ltd.
- Mars GmbH
- Otto GmbH & Co. KG
- Volkswagen AG

Research Highlights 2007/2008 The WISE Demographic Network has conducted a qualitative analysis of its members' current status in terms of their demographic fitness. On the basis of a tailored focus group guideline, we identified the major fields of action of each member company. The analysis and comparison of the data of all member companies provided a solid basis for deriving various potential research strands. We have focused on three major issues that are of interest to all organizations:

- (1) Mechanisms, requirements, and obstacles of workplace learning;
- (2) Employee organization amenable to achieving successful knowledge transfer (Teams) and

(3) Age-differentiated application of HR practices (Talent Management).

Three full-day WDN member conferences arranged in Bremen (October 07), Frankfurt (April 08), and Karlsruhe (October 08) helped to advance customized study efforts as well as best practice exchange.

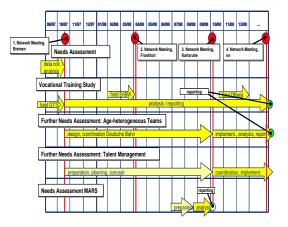


Figure 5: WDN Activities.

3.5.3 Enhancing Aging Talents - Adjustment of Human Resource Management

Research Program

Research from strategic human resource management has provided sound evidence for the positive association between HR practices and organizationally valued performance (HRM-P). No theoretical framework has yet been provided, however, that is able to explain this relation.

Research Highlights 2007/2008

In this project, an integrated HRM-P was developed that includes mediating variables that have been found empirically to be associated with organizational performance; these variables include (1) work motivation, (2) job satisfaction, and (3) organizational commitment (see Figure 18). The

moderating role of employees' age for the mediated association was analyzed. The model aims to provide organizations with a basis on which to adjust their management tools in order to meet personnel challenges that have evolved due to demographic changes; this will permit employers and other relevant actors to preserve competitiveness.

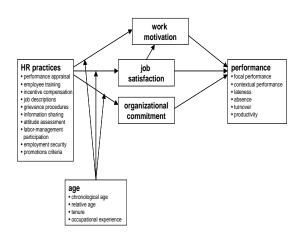


Figure 6: Basic Research Model for the moderated and mediated relationship between HR practices and performance.

The model delineated above is primarily intended to be applied in the context of actual work settings. Taking this into account, we plan to gather empirical data by conducting surveys within various organizations. The project is currently acquiring organizations that are interested in participating in the empirical study.

3.5.4 Knowledge Transfer: Demopass

Analysing data from the interdisciplinary demopass-project (see 2.1), we are looking at influences on knowledge transfer within teams with a special focus on knowledge transfer between older (i.e. over 45 yrs.) and younger employees (i.e. under 30 yrs.). Moreover, we are investigating the connection between these types of knowledge transfer and performance. In terms of influences on knowledge transfer, we found a

strong age effect with older employees engaging more in sharing knowledge with other team members while younger employees seek more knowledge from team members. In addition, employees in teams that have a lower average age in comparison to other teams seek more knowledge from team members. Furthermore, we found that extrinsic or intrinsic benefits motivate knowledge transfer within teams; while intrinsic benefits significantly influence individual knowledge sharing, extrinsic benefits motivate knowledge seeking. Finally, we found that high individual job autonomy encourages knowledge sharing while working in a team with high average job autonomy (compared to other teams) encourages individual knowledge seeking. Results on the connection between knowledge transfer and performance are forthcoming.

3.5.5 Intergenerational Knowledge Transfer to Prevent Knowledge Loss in Organizations

Research Program

In the last decade, a knowledge-based perspective of the firm has emerged in strategic management literature. Knowledge is now seen as a resource that enhances productivity and conveys a competitive advantage for organizations. If older employees, with decades of experience, leave an organization, they take with them critical knowledge that they alone may possess, and whose loss leads to high costs for the organization. Although it has always been the case that employees retire and new employees are hired, this is especially problematic today because:

- Knowledge-intensive domains have become increasingly more specialized, complex and interdisciplinary;
- Demographic changes, particularly waves of retiring baby boomers, have created new challenges; and
- Employees are now changing companies more often.

Research Highlights 2007/2008

Several strategies have been proposed to prevent the costly loss of knowledge: they often involve, but are not limited to, HR processes, IT-tools, knowledge recovery initiatives, and knowledge transfer. This project is focusing on the latter, proposing a coherent model of antecedents of knowledge transfer, as well as trying to establish a link between knowledge transfer between employees and the reduction of the threat of knowledge loss for an organization (see Figure 19). The objectives of this project can be summarized in three broad research questions:

- 1. What are the main antecedents of knowledge sharing and knowledge seeking?
- 2. Where does age play a role?
- 3. Does knowledge transfer reduce the threat of knowledge loss?

The project is currently in the phase of analyzing the empirical data. In addition, we intend to acquire additional organizations as collaboration partners.

Within this broader framework of individual knowledge sharing in organizations, another focus is on knowledge exchange between different hierarchical levels, an aspect that very often also involves a difference in age. The objective of this empirical study is to investigate the decisive factors that influence employees' engagement in knowledge sharing with their supervisors.

3.5.6 The Effects of the Aging Workforce on the Innovation Process: A Large-Scale Study of Technology Intensive Companies

Research Program

How will the aging of the workforce affect the innovativeness of organizations? The foundation of the innovation is ideas, and it is people who develop, carry, react to, and modify ideas. It is therefore important to recognize that innovation is based on individual and group performance efforts. As a result of the dramatic increase in the number of older employees in the workforces of developed industrial countries, the necessity

to create innovation is more often than ever entrusted to aging employees. From this perspective, it is important to understand how this demographic trend changes individual and group behavior as it relates to innovation.

Research has only recently begun to consider the relationship between the aging of workforces and the state of innovation processes. Unfortunately, this research has produced equivocal outcomes. We suggest that this is caused by: (a) a failure of the studies to include intervening processes that explain differences in innovative work behaviors across age cohorts; (b) a lack of distinction between radical and incremental ideageneration behaviors; (c) a paucity of empirical research on the relationship between aging and innovation in organizational settings; and (d) a neglect of the effects of increasing age diversity on group innovativeness.

The goal of this research project is to overcome these knowledge gaps by developing a framework that explains the impacts of an aging workforce on innovation processes in organizational settings. This framework is meant to advance current knowledge in four important ways. First, it will connect aging to the behavioral activities involved in the innovation process through those factors that facilitate innovation. Innovative behavior across three behavioral activities will be analyzed: idea generation, innovation promotion, and implementation. Second, the framework will explore and explain the differences in idea generation patterns, innovation promotion, and implementation work behaviors across age cohorts. Understanding these differences will help us to draw possible conclusions about the implications of the aging of the workforce for organizational innovativeness. Third, it will explore and explain how innovation processes in workgroups are affected by an increase in those workgroups' age diversity. Finally, the framework will describe measures that enable organizations to intervene effectively into the relationship between aging and group innovation. Specifically, recommendations are expected to provide guidance for organizations on how to understand and benefit from innovative work behavior differences between younger and older-age cohorts across activity levels of the innovation process. They will also help companies integrate diverse innovative behaviors of age-dissimilar cohorts.

This project will collaborate with its industrial partner in order to access in-depth insights through interviews and surveys conducted in R&D and technical teams of the company. The R&D and innovation-related working groups of the industrial partner will serve as the units of analysis for quantitative and qualitative research.

Our study will employ a multi-method approach with a mix of quantitative and qualitative methods to generate and test our hypotheses. A concurrent triangulation strategy of the multi-method approach will be applied in order to confirm and cross-validate findings within a single study. The project will comprise a preparation phase, a study of mediators and moderators of the effect of age on the innovation behavior, a study of innovative behavior at individual and group levels, a comparative analysis, and a symposium.

We expect this project to generate a number of insights into this emerging and vibrant research topic, and to produce recommendations that will help organizations to improve the innovativeness of teams.

3.5.7 Collaborations

- Massachusetts Institute of Technology, Age-Lab, Prof. Dr. David DeLong
- Intellectual Capital Institute of Ireland, David O'Donnell
- Harvard Business School, Prof. Dorothy Leonard
- Babson College, Prof. Thomas H. Davenport
- ETH Zurich, Prof. Dr. Georg Von Krogh

- University of Stellenbosch, Prof. Marius Leibold
- Hitotsbashi University, Prof. Ikujiro Nonaka
- Wharton, Prof. Dr. Martine Haas
- Open University, Dr. J.C. Spender
- University of St. Gallen, Prof. Heike Bruch
- Erasmus University Rotterdam, Prof. Daan van Knippenberg
- Autonomous Universidad Madrid, Prof. Ramon Rico
- University of Groningen, Prof. Gerben van der Wegt
- University of Amsterdam, Prof. Dr. Astrid Homan
- Peking University, Prof. Dr. Max von Zedtwitz Gerben van der Wegt
- Massachusetts Institute of Technology, Prof. Dr. Alan MacCormack
- Harvard University, Prof. Michael Beer
- University of California, Los Angeles, Prof. Barbara S. Lawrence

3.5.8 Publications

- Voelpel, S., & Kearney, E. (2008). Trust within organizations - Benefiting from demographic changes by fostering intraorganizational trust. Forum on Public Policy: Journal of the Oxford Roundtable, 4(1): 1-17.
- Kearney, E., Voelpel, S. C., & Gebert, D. (2008). Examining the interaction of demographic diversity and personality The role of need for cognition. *Academy of Management Best Paper Proceedings*, 1-6.
- Voelpel, S., Eckhoff, R., & Förster, J. (2008). David against Goliath? Group size and bystander effects in virtual knowledge sharing. *Human Relations*, 61(2): 273-297.
- Streb, C., Voelpel, S., & Leibold, M. (2008). Managing the aging workforce: Status quo and implications for the advancement of theory and practice. *European Management Journal*, 26(1): 1-10.
- Han, Z., & Voelpel, S. (2007). Knowledge Sharing in China: Reflections about

- Siemens' Experiences with ShareNet. *Journal of Asian Business*, 23(1): 123-143.
- Voelpel, S., & Koch, J. (2008). Erfahrene Talente Bringen Weitblick. Fachteil: Demographischer Wandel. *Personalwirtschaft*, 35(10): 44-46.
- Voelpel, S., & Koch, J. (2008). Zeitsammler und Talentjäger. Fachteil: Demographischer Wandel in KMU. *Personalwirtschaft*, 35(9): 46-49.
- Voelpel, S., & Koch, J. (2008). Wissen ist Marktstellung. Fachteil: Demographischer Wandel in KMU. *Personalwirtschaft*, 35(8): 44-46.
- Voelpel, S., & Koch, J. (2008). Die passende Dosis finden. Fachteil: Demographischer Wandel in KMU. *Personalwirtschaft*, 35(7): 46-48.
- Voelpel, S., Koch, J. & Afting, M. (2008).
 Wir sind DB. Gesichter, Stars und Hidden Champions: Das Talent Management der Deutschen Bahn wird als Kulturmanagement verstanden. *Personal*, 60(7): 62-64.
- Voelpel, S., & Koch, J. (2008). Der Blick auf die Stärken. Fachteil: Demographischer Wandel. *Personalwirtschaft*, 35(6): 44-46.
- Voelpel, S., Koch, J., & Korff, J. (2008). Die Großen im auf dem Weg zur demografischen Fitness. *Personalwirtschaft*, 35(4): 44-46.
- Roßnagel, C., Picard, A., & Voelpel, S. (2008). Lernen jenseits der 40. *Personal*, 60(4): 40-42.
- Voelpel, S., & Koch, J. (2008). Die neuen Davids. *Personalwirtschaft*, 35(2): 49-51.
 Otto, S., & Voelpel, S. (2007). Demographischer Wandel in der Wirtschaft: Warum Unternehmen ältere Arbeitnehmer brauchen. *Ökologisches Wirtschaften*, 26(4): 12-13.
- Voelpel, S. (2007). Der Student als König und Schwerstarbeiter. Eindrücke von der Lehre an der Universität Harvard. *Forschung & Lehre*, 14(10): 598-600.
- Voelpel, S. (2007). Demografischer Wandel
 Sage keiner, er sei nicht gewarnt worden.
 Personalwirtschaft, 34(8): 18-22 (Comment

- by Wolfgang Clement, Chairman of the Adecco Institute).
- Rossnagel, C., & Voelpel, S. (2007). Qualifizierung älterer Mitarbeiter: Keine Einheitsweiterbildung. *Persorama*, 31(1): 24-29.
- Voelpel, S., von Pierer, H., & Streb, C. (2007). The mobile company: An integrated model for mobilizing to innovate. *Profile*, 13, 59-65.
- Staudinger, U. M., Roßnagel, C. & Voelpel, S. (2007). Personalmanagement und demographischer Wandel eine interdisziplinäre Perspektive. In K. Schwuchow & J. Gutmann, editors, Jahrbuch Personalentwicklung 2008 Ausbildung, Weiterbildung, Management Development (295-304). Munich/ Unterschleißheim: Luchterhand.
- Voelpel, S., Leibold, M., & Früchtenicht, J.-D. (2007). Herausforderung 50 plus: Konzepte zum Management der Aging Workforce: Die Antwort auf das demographische Dilemma. Erlangen - New York: Publicis-Wiley (Vorwort von Heinrich von Pierer; Vorwort von Klaus Jacobs).

3.6 The Socio-Economics of Lifelong Learning and Aging

Research Team

Klaus Schömann (Professor of Sociology), Paula Aleksandrowicz (Doctoral Fellow; until 06/2008), Stefan Baron (Doctoral Fellow; since 04/2007), Anette Fasang (Doctoral Fellow; until 08/2008; now Postdoctoral Fellow, Yale University), Sara-Izabella Geerdes (Doctoral Fellow), Daniel Schelkes (Doctoral Fellow; since 04/2008), Liuben Siarov (Doctoral Fellow BIGSSS; since 09/2008).

Socio-economic research on lifelong learning has to address the increasing impact of aging societies. We do this by applying a combination of economic research (e.g. human capital formation and accumulation) and sociological research (e.g. the social processes of inequality). Identifying market failures and understanding incentive structures with the potential to overcome unequal access to lifelong learning is part of our research program. The research group studies transitions over the life course and analyzes the impact of transitions on learning and employment careers. The life course perspective provides the central analytical tool that allows us to study individual trajectories, their institutional embeddedness, and the evolution of societies as a whole.

Our research focuses on processes of social stratification as they are co-determined by learning processes for adults. We model social processes using two-step procedures: (1) we analyze participation in lifelong learning using age, cohort, and education levels as major determinants of participation and; (2) we observe that participation in lifelong learning is an important explanatory factor in processes of labor market mobility. In addition, our research group is carrying out projects with different firms as cooperation partners, focusing particularly on the aging of the workforce, health and safety at the workplace, strategies of lifelong learning, and skill needs assessment. We apply multilevel approaches that combine information from employees and management on the same topic, in a structured way.

In each of these fields we analyze individual behavior as well as the impact of institutions on the life course. We have a particular interest in the link between working and learning as they concern individuals, households, firms and whole country systems. We study transitions throughout the life course that range from labor market entry and reentry after career breaks to gradual retirement; we pay special attention to changes in labor market institutions. These social dynamics are modeled using a transition theory that is based on notions of coupled oscillations (Schömann & O'Connel, 2002) and synchronization techniques. In order to compare the impact of different institutional settings on individual behavior, we apply comparisons of industrial sectors, regions within a country, or US-EU-wide comparisons. Co-financed research projects deal with socioeconomic aspects of lifelong learning and institutional development in two major areas: (1) lifelong learning and the labor market, and (2) aging and the prevention of early retirement.

Central Reference

Schömann, Klaus (2002) "The theory of labour market transitions applied to the transitional labour market of education and training in: Klaus Schömann and Philip J. O'Connell (eds.), Education, Training and Employment Dynamics: Transitional Labour Markets in the European Union, Cheltenham, Edward Elgar, pp. 8-38.

3.6.1 Lifelong Learning and the Labor Market

Research Program

Research in this area analyzes the link between lifelong learning and the labor market. We analyze sources of market failure, for example multiple factors responsible for underinvestment in lifelong learning. Persistent imbalances in supply and demand for training lead to a lack of participation in further training. Causal analyses of such behavior that seriously consider the evolution of the life course begin by investigating early labor market experiences and their implications for later experiences in the labor market. Analyses typically focus on transition processes like the first integration into the labor market, job to job transitions or further training transitions.

Research Highlights 2007/2008

Our analyses show that labor market integration of youth follows different trajectories depending on the young person's ethnic background. Young people with a second-generation migration background do not reach comparable entry-level labor market positions. In cases where they do reach jobs with similar types of contracts at entry, they nonetheless tend to have longer job search times



(Geerdes et al. forthcoming, based on data from the Socio-economic Panel in Germany). Research also shows that youth and experienced workers do not compete for the same jobs in the labor market. Changes in economic growth have a much stronger impact on youth employment than they do on overall employment; this makes the youth labor market more volatile in general. This leads to better recruitment during favorable business cycles, but decreasing chances at times of slack growth (Hilbert et al., 2007)

Early labor market experiences, and particularly educational trajectories, are powerful predictors of participation in lifelong learning. Although the costs of training are due at the moment of participation, returns to training (e.g., increases in productivity or wages, job stability, or promotion) accrue only at some later point in time. Many employees therefore hesitate to take time out from productive work, or reduce working time in the labor market, in order to invest in further training. Risk aversion and budgetary constraints in the form of access to loans for purposes

of learning also explain why people are reluctant to participate in training (Dissertation Siarov). In addition, firms might fear the "poaching" of training costs of employees by other firms (although this problem can be addressed by adequate contractual arrangements). Further ways of tackling the barriers to participation in training include: ensuring access to loans, promoting information availability, facilitating certification, the recognition of professional experience, and targeting groups that are the least likely to participate, such as less qualified and older employees.

Research in these fields makes use of longitudinal data (both retrospective and panel), large European surveys, and our own data collected through our Lab III resources such as computer assisted telephone interviews, web-based surveys, or face-to-face interviews. Recent findings show that there are effective policies that can reduce stigmatization of older workers and combat the notion that older workers are less able or less willing to learn. It is therefore not sufficient to increase budgets; it is also necessary to tackle the stigma that perpetuates the view that older people are less interested in learning. Our results, based on an analysis of 20 years of household panel data from Germany, show that younger birth cohorts continue to have higher participation in further training than previous birth cohorts. The generation born between 1950 and 1960 participates on a higher level in further training than earlier cohorts (Schömann & Baron, 2008).

Participation in lifelong learning provides mutual benefits to individuals, firms and society as a whole, and innovative ways to co-finance lifelong learning are particularly promising policy solutions. However, participation in further training remains highly selective with respect to previously obtained levels of education. Our results from a comparative survey (the Eurobarometer, 2005) show that lower qualified individuals are indeed dissatisfied with their lower rates of participation in lifelong learning. This indicates that increasing targeted programs that match specific

skill requirements should be successful at raising these low participation rates.

We are also interested in discovering subjective and objective reasons for (non-) participation in lifelong learning (dissertation Baron). More specifically, with data from the interdisciplinary demopass project (see also 2.1) we examined potential influences on individuals' self-confidence in their own training competencies. ing social rational choice theories (e.g. Breen & Goldthorpe, 1997, Esser, 2001), high selfconfidence in one's own competencies is an important precondition for future participation in We found that people perceiving a higher training support by their supervisor and better learning climate tend to report a higher selfconfidence (Baron & Schömann, in prep.). This is particularly important for lower educated and older employees. It also constitutes new ways to enhance training participation rates of otherwise disadvantaged groups. However, we also identified mismatches between supervisors and associates in the evaluation of teams' training climate. Team members attach less importance to further training than their supervisors, whereas management does not meet employees' training needs.



Figure 7: Matches/ Mismatches in firms' training climate. Source: Demopass, Dissertation Baron.

Such mismatches can lead to discontent on both sides and as a direct consequence to lower participation rates in training. In sum, our results indicate that training programs should match specific skill requirements as closely as possible. This seems to be a necessary condition to raise the low participation rates of "silver" workers and low training groups in the labor market.

3.6.2 Aging and the Prevention of Early Retirement

Research Program

The aging of the working population and the shrinking size of the population of working-age individuals in the near future will create a challenge to all components of welfare states. In order to enable a continuing potential for economic growth in rapidly aging societies, it will be necessary that more "silver workers" continue to work from each birth cohort. At the same time, new ways need to be found to facilitate an extension of working lives for these silver workers. This is the subject of our research interest in the field of productive aging.



Research Highlights 2007/2008

We analyze this topic, for example, with emphasis on how to reverse the trend towards earlier and unequal retirement ages across industrially advanced societies. For this purpose we have compared retirement processes of the 1930-1940 birth cohorts in West Germany and those in the United Kingdom in order to assess how country specific labor market and pension regulations interact in structuring retirement processes. Our results indicate that, for Germany, the standardizing effects of the male breadwinner model occur across all different pathways to old-age pension. This has resulted in comparatively low household inequality at older ages. It is interesting to note that this somehow compensates for high personal inequality between women and men. For the United Kingdom, access to occupational or private pensions by at least one household member aggravates the divide between financially advantaged and less advantaged households (Fasang, 2008).

In addition to labor and pension regulations, we include family biographies in our analyses of productive aging. We compare West Germany and the United Kingdom in order to assess how divorce effects the pension entrance of men and women born between 1930 and 1939. The life courses of these cohorts evolved in a strong male-breadwinner context in both countries, but were subject to different pension regulations (i.e. enforced pension sharing upon divorce in West Germany, and optional pension sharing in the United Kingdom). Pension sharing in Germany leads divorced women to enter old-age pension earlier and divorced men to enter later. In the United Kingdom, where pension sharing was not practiced, we find opposite effects (Fasang & Schömann, 2008).

Working jointly with local enterprises, we assessed the potential of older employees to continue working despite early retirement offers. The results of a company survey comparing early retirees and a similarly aged control group (still working) show that, while at work, employees

have a high tendency to accept early retirement, but once in early retirement they soon begin to search for new challenges in the form of work or civic engagement (Aleksandrowicz et al., in press; see also 3.3).

Overall, our work on retirement transitions and health and safety at work (Dissertation Schelkes) gives reason to believe that the prevention of early retirement is a multifaceted transition that requires careful analytical approaches in order to disentangle relevant causalities. The prevention of early retirement, and even the extension of working lives beyond 65, have become more feasible solutions based on sound analytical work.

he recently approved project on "Job Mobility and Developmental Outcomes", co-financed by the Volkswagen Foundation (joint project with Staudinger and Godde; see also 2.2), allows us to assess the impact of cumulative labor market careers on individuals' learning strategies and adaptability at older ages. In a counterfactual design we will contrast matched (medium and lowskill) samples of persons with long labor market careers with meaningful, voluntary job changes, with those who have had few job changes. In a subsequent FMRI study both groups will participate in neurophysiologic tests. The results will give insights on cognitive and personality related adaptability (including learning strategies) of individuals in the two groups, and the interaction of adaptability with underlying neuronal processes.

3.6.3 Collaborations

- Center for Research on Inequalities and the Life Course (CIQLE), Yale University; Prof. K.U. Mayer.
- Center on Migration and Development, Princeton University; Prof. Marta Tienda.
- Institute for Labour Studies (OSA), University of Tilburg; Prof. Ruud Muffels and Prof. Joop Schipers.
- Economic and Social Research Institute (ESRI), Dublin; Prof. Philip O'Connell.

- Social Economic Research Rotterdam (SEOR), University of Rotterdam; Prof. Jaap de Koning.
- Institut für Höhere Studien (IHS), Wien; Prof. Dr. Lorenz Lassnigg.
- MATISSE, Centre National de la Recherche Scientifique, Paris I; Prof. Bernard Gazier.
- Centre for Labour Market Research (CARMA), Aalborg University; Prof. Per Madsen.
- Research Centre for Education and the Labour Market (ROA), Maastricht University; Prof. Rolf van der Velden.
- Institute for Labour Studies (HIVA), Catholic University Leuven - co-ordinator Dr. Tom Vandenberghe.
- University of North Carolina at Chapel Hill; Prof. Dr. Arne Kalleberg.

3.6.4 Other Professional Activities

- Consultant to OECD, European Commission DG Employment, Brussels and the European Foundation for the Improvement of Living and Working Conditions, Dublin.
- Editorial Boards 2007/2008
 Formation Emploi, Revue Française de Sciences Sociales (since 2000).

3.6.5 Publications

- Aleksandrowicz P., Fasang A., Schömann K., Staudinger U.M. (in press). Die Bedeutung der Arbeit beim vorzeitigen Ausscheiden aus dem Arbeitsleben, Zeitschrift für Gerontologie und Geriatrie.
- Schömann, K. & Baron, S. (in press). Zustandsbeschreibung der Erwachsenenbildung in Deutschland und im europäischen Vergleich. In Staudinger, U. M. & Heidemeier, H. (Hrsg.), Bildung und Lebenslanges Lernen als Chance und Herausforderung einer alternden Gesellschaft. Halle (Saale): Acta Nova Leopoldina. Stuttgart: Wissenschaftliche Verlagsgesellschaft.
- chömann, K., & Hilbert, C. (2008). Europe's Youth = Europe's Future. Benchmarking

- Working Europe (7), 43-49.
- Schömann, K., Geerdes, S. & Siarov, L. (2007). Institutional arrangements in support of adult competences and its nexus to flexicurity. In Jørgensen, Henning and Madsen, Per Kongshøj (eds.), Flexicurity and Beyond: Finding a new agenda for the European Social Model (pp. 421-450). Copenhagen: DJØF Publishing.
- Schömann K., Liuben, S. Geerdes, S. (2007). Lifelong Learning. Benchmarking Working Europe (6), 67-80.
- Fasang, A., Geerdes, S., Schömann, K.,
 Siarov, L. 2007. Job satisfaction and labour market mobility. Report for the European Foundation for the Improvement of Living and Working Conditions: Dublin. http://www.eurofound.europa.eu/publications/htmlfiles/ef071 Luxembourg: Office for Official Publications of the European Communities, ISBN 92-897-0955-3

3.7 Political Science in an Aging Society

Research Program

Max Kaase, Founding Dean of the School of Humanities and Social Sciences (SHSS) and Vice President of the International University Bremen (IUB) from 2000-2006, has been invited to become a Wisdom Professor of Political Science at the Jacobs Center on Lifelong Learning and Institutional Development (JCLL) starting September 1, 2007. Since then, he has given a presentation on "The European Social Survey (ESS) -A High-quality Instrument for Comparative Survey Research" in the context of the JCLL Distinguished Lecture Series, and has been involved in teaching in the PhD Program of the JCLL "Productive Adult Development" and at the Bremen International Graduate School of Social Sciences (BIGSSS) with the intent to add perspectives from political science to these programs.

Not the least because of his JCLL position and his role as Chair of the Kuratorium of the Max-Planck-Institute for Demographic Research

in Rostock, he has increasingly become interested in the political dimension of demographic changes into the direction of an ever-aging population. A core interest here is to analyze to what extent this change (and recently the global financial crisis) will impact the future of the welfare state, especially in its Scandinavian variant (with a changing emphasis on more individual accountability instead of a further extension of welfare politics). This aspect deserves to be studied on the following two dimensions: the extent to which the above-mentioned changes will influence age-related voting and party membership patterns up to the potential emergence of a generation-based new conflict cleavage in contemporary democratic societies, and, in parallel with more general developments with respect to the structure of political participation, the extent to which older cohorts will turn more and more to elite-challenging actions (unconventional political participation) to represent and enforce their interests.

In order to study such developments, increasingly comparative micro-studies of political orientations and behavior are necessary. One particularly relevant survey database is the European Social Survey (ESS), which has come into being in the time (1995) since Kaase was a member of the Standing Committee of the Social Sciences (SCSS), and later Vice President of the European Science Foundation (ESF). The ESS, which is conducted every second year in about 30 European countries, is presently in Round Four.

The structure of the ESS foresees a 30-minute part with core questions which are regularly repeated, and (usually) two 15-minutes-each rotating modules, which are given to European research groups involved in comparative research without any cost to them on the basis of an open Europe-wide competition. For questions related to aging and to attitudes toward the welfare state, these rotating modules are particularly pertinent; in Round Three there is a module on the life course, and in Round Four there is a module on

Experiences and Expressions of Ageism as well as one on Welfare Attitudes in a Changing Europe. These data open up fascinating avenues for analyzing the described developments with a topquality, up-to-date comparative database.

3.7.1 Other Professional Activities

Membership in Advisory Bodies or Academic Associations

- Past President and Member of the Executive Board, International Political Science Association (IPSA) 2006-2009
- Advisory Board to the University Mannheim (Universitaetsrat) 2007 -
- Chair, Scientific Advisory Board (SAB), European Social Survey 2000 -
- Chair, Scientific Advisory Board of the Swiss Foundation for Research in the Social Sciences (FORS), 2008 -
- Chair, Kuratorium des Max-Planck-Instituts fuer Demographische Forschung, Rostock 2004 -
- Member of the Social Sciences and Humanities (SSH) Panel of the Finnish Research Infrastructure Survey and Roadmap Project of the Finnish Federation of Learned Societies, 2008
- Member of the Review Panel of the NCCR Democracy for the Swiss National Science Foundation (Schweizerischer Nationalfonds zur Foerderung der Wissenschaftlichen Forschung (FNSNF), 2006 -
- Member of the EUROCORES Review Panel, European Science Foundation (ESF), 2007 Reviewer for the German-Israeli Foundation for Scientific Research and Development (GIF), 2008
- Member of the Scientific Advisory Board for the European Commission FP7 Infrastructure Upgrade Project "European Election Studies (EES)", 2008 -
- Member of the Monitoring Group for the European Commission FP6 Project intune (Integrated and United? A quest for Citizenship in an "ever closer Europe"), 2006 -

- Member SAB for the Continuing Student Survey organized by the Working Group on University Research, University of Konstanz, and funded by the Federal Ministry of Education and Research (BMBF), since 1980
- Member SAB for the Research Program on Social Stratification, Political Institutions and Human Orientations (SPION), directed by Stefan Svallfors, Umea University, Sweden, since 2008.

Reviews 2007/2008

International Political Science Review, British Journal of Political Science, American Journal of Political Science, European Political Science Review, Oxford University Press.

Editorial board 2007/2008

International Political Science Review, British Journal of Political Science, Journal of Media Psychology, Japanese Journal of Political Science, Acta Politica, Portuguese Journal of Social Science

3.7.2 Publications

- Kaase, M. (2008) Retrospect and Prospect.
 In: Heiner Meulemann (ed.), Social Capital in Europe Similarity of countries and diversity of people? Multi-level analysis of the European Social Survey 2002, Brill Publishers, Leiden, 313-319.
- Kaase, M. (2008) Perspektiven der Forschung zur Politischen Kultur. In: Dieter Gosewinkel, Gunnar Folke Schuppert (Hg.), Politische Kultur im Wandel von Staatlichkeit. WZB-Jahrbuch 2007, edition sigma, Berlin, 387-397.
- Kaase, M. (2007) The European Social Survey as a measurement model (with Roger Jowell, Rory Fitzgerald and Gillian Eva).
 In: Roger Jowell, Caroline Roberts, Rory Fitzgerald, Gillian Eva (eds.), Measuring Attitudes Cross-Nationally. Lessons from the

- European Social Survey, Sage Publications, London et al., 1-31.
- Kaase, M., Gabriel A. Almond, Sydney Verba (2007) The Civic Culture. Political Attitudes and Democracy in Five Nations.
 In: Steffen Kailitz (Hrsg.), Schluesselwerke der Politikwissenschaft, Verlag fuer Sozialwissenschaften, Wiesbaden, 4-8.
- Kaase, M. (2007) Perspectives on Political Participation. In: Russell J. Dalton, Hans-Dieter Klingemann (eds.), The Oxford Handbook of Political Behavior, Oxford University Press, Oxford, 783-796