



research supporting embodied and situated spatial cognition will be described.

#### Dynamic movement feedback

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Our bodies move in the three dimensions of space, time and gravity. This series of experiments varies aspects of these basic dimensions of movement to investigate dynamic body feedback. It focuses on the influence of movement quality (here: sharp vs smooth movement rhythms), and movement shape, i.e., movement related to the three primary axes (here: approach vs avoidance motor behavior) on affect, attitudes, and cognition. Results suggest systematic influences of movement rhythms on affect, of movement shape on attitudes, and a moderating influence of rhythms on the impact of shape on attitude formation.

#### Is the body image influenced by primary sensorimotor experiences?

**Schütz-Bosbach, Simone** *Cognitive and Brain Sciences, Max-Planck-Institut, Leipzig, Germany*

The term "body image" refers to the conscious visual representation of one's own body, including the structural and geometric details as well as visual and affective aspects. The scientific concept corresponds roughly to the everyday use of the term, namely as the way we see ourselves when we look in a mirror. However, so far little is known on how we learn the (canonical) structure of our own body. A series of experiments will be presented which investigated the possibility that primary sensorimotor experiences may influence the mental representation of one's own body structure.

#### The conceptualization of body parts

**Majid, Asifa** *Dept. of Psycholinguistics, Max Planck Institute, Nijmegen, Netherlands*

According to embodiment theories mental content derives from the body – that we have the concepts we do is due to the particularities of the bodies we have. But little attention has been paid to how people conceptualize the body in the first place. Rather, there is widespread consensus that body parts are based on perception, and thus universal. Cross-cultural experiments, however, show that the body is not conceptualized in the same way by people speaking different languages. The relationship between linguistic and non-linguistic representations of the body need to be re-examined in light of this evidence.

#### Embodiment in cultures of honour

**Ijzerman, Hans** *Leerstoel Semin, Utrecht University, Utrecht, Netherlands*

We tested the hypothesis that cultural orientations have an embodied component. In particular, we investigated the embodiment of honor in two studies, showing that values related to male respect and female 'purity' are affected by erect versus slumped posture directly for individuals from honor cultures, and for individuals from individualist cultures after an honor prime. A third experiment showed that only individuals from honor cultures walked more upright after an honor prime than after a control prime. This demonstration of cultural embodiment is a first experimental support for anthropological suggestions of forming the culturally situated social mind via physical experience.

#### The subtle effects of writing direction on the perception of human action

**Suitner, Caterina DPSS, University of Padova, Padova, Italy**

The embodiment approach not only implies that cognition is affected by the body's momentary state, but also by its habitual interaction with its

environment. One such habitual interaction is writing and reading which, in our culture, evolves from left to right. We propose that, as a result, people develop a left-right scheme for action, such that action observed with a left-right (rather than right-left) trajectory is (a) imagined and identified with greater ease, (b) perceived as more powerful and impactful. Empirical evidence, including applications to consumer psychology, will be presented.

### S-153: Work design for an aging workforce

**Ekkehart Frieling, Jürgen Wegge** (*chair*)

In many countries the proportion of elderly employees is continuously increasing. This leads not only to difficulties within social security systems but also to problems within organizations as the whole work force is aging and age diversity is also rising. This symposium investigates the relationship between working conditions and aging processes. The understanding of this link is an important precondition for the implementation of age-differentiated work designs, i.e. age-specific distribution of tasks, age-specific design of work equipment and age-specific personnel development strategies. Recent findings about the effectiveness of such interventions with respect to performance, stress and strain are presented.

#### Age-differences in work-related motives: Chronological age versus future time perspectives

**Grube, Anna** *Organisationspsychologie, Universität Münster, Münster, Germany* **Hertel, Guido** *Psychology III, University of Muenster, Münster, Germany*

Considering age-related differences in work motivation is important for successful human resource management, particularly in light of an ageing workforce. Age-related differences in work-related goals, needs, and interests were explored in an online study (N = 358). Age-related differences in the ranking of these motives were observed as expected. However, most of these differences disappeared when participants' future time perspectives were controlled (future work time perspective, date of retirement, work-activities planned after retirement). The results emphasize the importance of perceived time perspectives in comparison to chronological age of employees.

#### Age and role clarity in the relations between demands, resources and psychological well-being: Results of a complete 2-wave study

**de Lange, Annet** *Experim. and Arbeidspsychology, Rijksuniversiteit Groningen, Groningen, Netherlands*

De Lange, AH, Van der Heijden, B. Kooij, D., Jansen, PGW In this study (based on a sample of N=2611 Dutch workers) we examine the moderating influence of the age-related variable Role clarity in the relation between (quantitative, emotional) demands, and several types of resources in predicting psychological well-being (measured as emotional exhaustion, job satisfaction and depression). The results revealed that role clarity moderated or buffered the effects of emotional demands in predicting job satisfaction and depression. For emotional exhaustion, role clarity moderated the effects of both emotional and quantitative demands, and for possibilities for development. We will discuss the practical as well as scientific implications of the results found.

#### Effect of emotion regulation on the health of teachers over time

**Philipp, Anja** *Arbeits- und Org.-Psychologie, Universität Freiburg, Freiburg, Germany* **Krause, Andreas** *Schüpbach, Heinz A&O-Psychologie, Universität Freiburg, Freiburg, Germany*

Teachers are facing high emotional demands in class. What characterises teachers who manage their emotions well and stay healthy compared to those with burnout? Which emotion regulation strategies have a long-term effect on the health and work ability of teachers? A study (N=91) conducted at two points in time tested these questions in a cross-lagged panel design using structural equation modelling. The results indicate that deep acting has a positive effect on the health of teachers. Surface acting is more frequently used if they feel already burned out. These findings contribute to the development of an age-mixed group supervision.

#### Supporting older adults to use interactive systems

**Sengpiel, Michael** *Inst. für Psychologie, Humboldt-Universität zu Berlin, Berlin, Germany* **Wandke, Hartmut** *Inst. für Psychologie, Humboldt-Universität zu Berlin, Berlin, Germany* **Struve, Doreen** *Inst. für Psychologie, Humboldt-Universität zu Berlin, Berlin, Germany*

The aging workforce is bound to use new technical systems that will often pose a challenge to use. We investigate ways to support them in using new interactive systems. We focus on areas of training and design of work equipment, exemplified by the use of a ticket vending machine, for which we developed an interactive learning environment for self-learning. Based on Selection-Optimization-Compensation Theory (Baltes) and Social-Learning-Theory (Bandura) we manipulate characteristics of the learning environment, including the simulation, the instruction and the video models, in experimental settings. Results will be presented and integrated in current research. Practical implications will be discussed.

#### Elderly employees in the automotive industry: Solutions for an age-based work design

**Weichel, Julia** *Inst. für Arbeitswissenschaft, Universität Kassel, Kassel, Germany* **Buch, Markus** *Frieling, Ekkehart* *Inst. für Arbeitswissenschaft, Universität Kassel, Kassel, Germany*

The demographic change leads to a continuously rising number of old employees. The focus of our project is on analysing elderly employees working on assembly lines. The sample consists of blue collar workers from two original equipment manufacturers (N=249, N=160). We used objective and subjective data to analyse the current work systems (e.g. decision latitude) as well as the employees' performance (e.g. adaptive performance) and health status (e.g. somatic complaints). We found positive effects of working conditions on the employees' performance which underlines the importance of adaptive work design that promote learning and health over the lifespan.

#### The impact of age diversity in workgroups on innovation, group performance and health

**Wegge, Jürgen** *Arbeits- und Org.-Psychologie, Technische Universität Dresden, Dresden, Germany* **Schmidt, Klaus Helmut** *Universität Dortmund, IFADO, Dortmund, Germany*

Age diversity in teams can have advantages (e.g., use of different experiences) as well as disadvantages (e.g., emotional conflicts). Under which circumstances these effects occur has been rarely studied. Therefore, we investigate in two longitudinal studies (N1 = 67, N2 = 145 groups) within the administrative sector the influence of age diversity on indicators of work motivation (e.g., satisfaction), group efficiency (e.g., performance) and health (e.g., burnout). Cognitive salience of age diversity, task complexity and diversity mind sets are considered as moderating variables. The results of both studies show that age diversity has positive effects under specific conditions (e.g., complex tasks).