### **Division oi: Organizational Psychology**

### DIVoi-DPL

09:30 - 10:30

#### **Divisional Presidential Address**

Handan Kepir SINANGIL

Turkey

Abstract not available

### DIVoi-DKLoi

11:00 - 12:00

The value of leadership: how investors determine what leadership is worth

Bruce AVOLIO United States

Abstract not available

### DIVoi-DKLo2

14:00 - 15:00

# Fostering innovation in organizations: human resource strategies at the individual and group level

### Adalgisa BATTISTELLI

EA4139 Laboratory Psychology, Health and Quality of Life, University of Bordeaux, Bordeaux, France

Promoting and fostering innovation has become a strategic objective for all types of organizations. In the last 30 years organizational scholars, practitioners and managers have increasingly recognized the importance of innovation as a critical resource for ensuring effectiveness, growth and continuous development within organizations. Particularly, organizational scholars are interested in the relationships between the personal and contextual factors with employee innovative work behaviour (Hammond, Neff, Farr, Schwall, & Zhao, 2011). This behaviour refers to the intentional generation, promotion and implementation of new and useful ideas in order to benefit the individual, the group, the organization, and wider society (West & Farr, 1990). Research in the last decades has produced knowledge about the important antecedents of individual and group innovative work behaviour, such as individual differences (e.g., Bunce &West, 1995), job characteristics (e.g., Oldham & Cummings, 1996), relationships with their supervisors (e.g., Janssen & Van Yperen, 2004), social/group context (e.g., Munton & West, 1995), and organizational factors (e.g., Scott & Bruce, 1994). If research on predictors of innovative work behaviour has produced some important evidence, research regarding the psychological processes that would explain how and why different individual, group and contextual antecedents affect innovative work behaviour are quite unexplored and sometimes ambiguous (e.g., Anderson, De Dreu, & Nijstad, 2004; Bledow, Frese, Anderson, Erez & Farr, 2009; Choi, 2004; Shalley, Zhou, & Oldham, 2004; West & Farr, 1989; Zhang & Bartol, 2010). The outcomes of innovative work behaviour too are quite unexplored, as are the impacts that it will have on performance and psychological process (e.g. Anderson et al.,

2004). And in what ways will human resource practices affect individual and group innovative behaviour at different stages (idea generation, promotion, and realisation)? Following the idea that human resource strategies and practices affect employee attitudes and behaviours (at the individual and group level), this conference first presents some empirical evidence (eg. Axtell, Holman & Wall, 2006) followed by pathways of human resource strategies intended to foster innovation in organizations. Some propositions for future research are also presented.

Keywords: Innovative Work Behavior, Human Resource, Performance

### DIVoi-DKLo3

### 15:30 - 16:30

Errors are a central fact of life: dealing with them and learning from them

### Michael FRESE

NUS Business School & Leuphana, University of Lueneburg, Singapore and Germany, Singapore

I summarize 30 years of research on action errors and how to learn from errors.

Action errors relate to health and safety, reliability, quality, performance and other issues. An important question is how one deals with errors. I distinguish between error prevention and error management: One can either attempt to prevent errors or one can intervene after the error has appeared (error management). Error management is defined as an approach that avoids the negative error consequences, deals quickly with error consequences once they occur, and reduces future errors (because of error learning and lack of error cascades). For error management, one has to clearly differentiate between the error and the error consequences. Error management is oriented to reduce the negative error consequences but not necessarily to prevent the error sthemselves.

In a second step, I summarize many error management training studies, which show that people can learn from errors under certain circumstances. In error management training, participants are provided with minimal information required for task completion so that errors appear frequently. Additionally, error management instructions reframing errors as learning opportunities are presented (e.g., «I have made an error, great! Now I can learn!»). Several studies have shown that error training leads to superior performance compared to an error avoidant training which provides detailed information for task completion. Effective mediators of error management training are control of negative emotions and metacognitive activity (thinking aloud protocols). There are a number of implications for everyday life.

In a final step I show that there is also something like an organizational culture or climate that produces error management and that is related to higher profitability in medium sized companies (replicated in the Netherlands, China, and Germany)..

**Keywords**: Organizational Culture, Errors and Mistakes, Training, Learning

### 571

## Wednesday, 9 July

### **Division oi: Organizational Psychology**

### DIVoi-DKLo4

9:30 - 10:30

# Gender stereotyping and requisite management characteristics: implications of gender balance

### Virginia SCHEIN

Gettysburg College, Gettysburg, United States

Women have yet to achieve full equality in management, especially at senior levels. Worldwide women hold 24% of senior management positions. Forty years ago Schein identified gender stereotyping of the managerial position as a major barrier to women's advancement in management. Her 1973/75 research showed that women are perceived as less likely than men to possess the characteristics required of successful managers. Although women's status in management has improved over the last 40 years, gender stereotyping of the managerial position persists, especially among males, across time and cultures. The "think managerthink male" attitude appears to be a global phenomenon.

By fostering a view that men are more qualified than women for managerial positions, gender stereotyping of the managerial position limits women's progress in management. The purpose of the presentation is to consider the implications of this barrier to women's full parity in management for organizational outcomes. By reviewing relevant research streams, it explores the question: If we had a more balanced representation of women in positions of power and influence, would it matter? The effects of female representation on boards of directors and in senior management on organizational outcomes are examined, with a particular focus on critical mass as gender balance. The possible dynamics underlying gender balance, including expansion of viewpoints and promotion of gender role flexibility, are discussed. Some recent research on gender balance and world peace is also examined. Based on the research review, the presentation concludes that the "think manager-think male" attitude as a barrier to women's advancement into positions of power and influence may diminish both organizational and national outcomes.

Keywords: Equality, Gender, Management, Stereotypes

### DIVoi-DKLo5

15:30 - 16:30

# The psychology of workplace innovation: key findings and future directions

### Neil ANDERSON

Business School, Brunel University, London, United Kingdom

In this keynote address I will present an extensive historical and future-conditional meta-review of research into innovation and creativity in organizations (ICO). Using a multi-level perspective, I will explore the calls for future research needs over the last 20 years at four distinct levels-ofanalysis: individual work role, work group or team, organizational, and cross-level and multi-level research. In taking a rather critical perspective, I will overview the major findings of antecedent factors research into predictors of innovativeness at these four levels-of-analysis. In exploring the meta-trends across these findings, I will present the case for more processual and emergent social order research into ICO. In conclusion I will present a number of major directions for future research and a critical state-of-the-science metareview of ICO research and consultancy practice internationally.

### Keywords: Creativity, Innovation

## Thursday, 10 July

## **Division oi: Organizational Psychology**

### DIVoi-DKLo6

9:30 - 10:30

# Individual differences in the prediction and modeling of counterproductive work behaviors

### Deniz S. ONES

University of Minnesota, Minneapolis, United States

Counterproductive work behaviors (CWB) are "scalable actions and behaviors that employees engage in that detract from organizational goals or well-being. They include behaviors that bring about undesirable consequences for the organization or its stakeholders" (Dilchert & Ones, 2013). Regardless of cognition (i.e., whether or not explicit reasoning is involved) or motive (e.g., malevolence, clumsiness, habit), behaviors that detract from organizational goals and wellbeing are counterproductive. Every year, the consequences of individuals' counterproductive work behaviors incur severe costs to organizations and societies around the world. Potential damage caused by deviant behavior increases as a function of an individual's position power. Consequences of CWB are especially severe in some sectors (e.g., financial, service). This invited address will describe the "ethical impulse" conceptualization of CWB (vis-à-vis "ethical calculus" perspective [cf. Kish-Gephart, Harrison, & Treviño, 2010]). Theoretical and conceptual underpinnings of CWB that take into account individual differences will be described. Meta-analytic relationships with cognitive ability and personality variables will be presented. Personality variables examined include the Big Five personality factors, their aspects and facets as well as higher order personality factors such as Factor Alpha-also referred to as Socialization/Plasticity and perhaps best measured using integrity tests. Individual differences in wayward impulses (Gough, 1971) are best understood in the light of individual differences correlates and explain the strong positive manifolds observed among different types of counterproductivity, spanning across different life domains, including in the world of work.

**Keywords**: Counterproductive, Work, Behaviors, Employee, Deviance, Ethics, Integrity

### DIVoi-DKLo7

### Stress and recovery

### Sabine SONNENTAG

Work- and Organizational Psychology, University of Mannheim, Mannheim, Germany

Research on the detrimental effects of job stressors on employee health and well-being has a long tradition within work and organizational psychology and related fields. During the past decade progress has been made in uncovering recovery processes (i.e., processes during which employees unwind and recuperate from daily work and its stressors). This presentation gives an overview on findings from recent recovery studies. It particularly focuses on the stressordetachment-model that emphasizes the crucial role of psychological detachment from work during off-job time as a mediator and moderator in the stressor-strain process. The presentation summarizes empirical findings from betweenperson and within-person studies. It discusses future research questions as well as practical implications that can be derived from recovery research.

Keywords: Recovery, Detachment, Over-commitment, Work Demands, Leisure Activities

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## Friday, 11 July

15:30 - 16:30

## **Division oi: Organizational Psychology**

#### DIVoi-DKLo8

9:30 - 10:30

# Human resource management and the search for the happy productive worker: the contribution of W/O psychology

### David GUEST

Management, King's College, London, London, United Kingdom

The past two decades have seen a major growth of research on the relationship between human resource management and performance. This interest is predicated on a recognition that effective management of human resources is one of the major sources of competitive advantage for organiza-tions. However the desire for full utilisation of human resour-ces raises questions about the impact on employees. So how far is it possible to apply human resource practices that lead to mutual gains reflected in both high organizational performance and high employee well-being? This presenta-tion will review current knowledge in this area, highlight the central role of theory and research in work and organizational psychology for understanding the impact of human resource management and outline how psychologists can further contribute to research and practice in this field. It will also argue that human resource management presents a major opportunity for W/O psychologists to have a positive influence on policy and practice in the workplace.

Keywords: Happy Productive Workers, Human Resource Management, W/O Psychology

#### DIVoi-DKL09

15:30 - 16:30

### Cooperation and leadership in high-risk teams

#### Gudela GROTE

## Management, Technology, and Economics, ETH Zurich, Zurich, Switzerland

Many teams in organizations face dynamic and turbulent contexts within which they make decisions and take actions critical to organizational success. This is especially true for teams in high-risk environments such as aviation, medicine, or rail transportation. I will present a series of studies we have undertaken in such teams with the special focus on the mechanisms used to balance stability and flexibility of coordinated action. Drawing on and integrating multiple literatures I propose that stability and flexibility are analytically distinct dimensions and mutual enablers for team effectiveness. Building on these dimensions I offer a team classification outlining four types of teams (experiential, exploitation, exploration, ambidextrous) and examine their stability and flexibility demands. Adopting a multi-level approach, I discuss different forms of leadership, coordination, and structural mechanisms at the team and organizational level as examples of stability- and flexibility-enhancing mechanisms. Our results on cooperation and leadership in high-risk teams, which in this classification represent one kind of ambidextrous teams, will serve as illustrations for the operation of these different mechanisms. These findings will be juxtaposed with first results from innovation teams, another kind of ambidextrous teams, in order to sharpen the understanding of how stability and flexibility are achieved in team

functioning. I propose avenues for meso-level research into stability- and flexibility-enhancing mechanisms that will also help to elucidate the impact of currently favored concepts in team research, such as adaptive coordination and shared leadership. Finally, I will point to practical implications for improving performance in high-risk teams and possible extensions into performance of other kinds of ambidextrous teams, such as innovation teams.

**Keywords**: Cooperation, Coordination, Leadership, Risk, Safety, Teams

### **DIVoi-DKLio**

Older workers and late career; the contribution of work and organizational psychology

### Franco FRACCAROLI

Dept. of Psychology and Cognitive Science, University of Trento, Rovereto, Italy

Age and work: an upset balance. The relationship between age and work has been rendered increasingly complex by the great demographic upheavals characterizing the first decades of the twenty-first century. The baby-boomer generation is approaching retirement age, swelling the ranks of pensioners and the costs of pensions systems with its demographic surge. The increase in life expectancy and an overall improvement of health make work possible also at an advanced age, and a growing proportion of people work even after reaching pensionable age. Also to be pointed out are the marked imbalances which persist at European level in the labour market participation of people aged between 55 and 64. Such imbalances in activity levels have important repercussions on the competitiveness of country systems and social security budgets. The contribution of work and organizations psychology. The traditional relationship between age and work has therefore been severed. There are increasing pressures to work longer at a mature age (raising of the pensionable age); there are more favourable individual conditions to continue working (good health); it is increasingly necessary for work organizations to manage complex generational relationships (between young work entrants and mature adults); the transition to retirement often combines with work more or less central for the individual. These social and organizational processes also require responses and interventions by work and organizational psychologists. How do workers' abilities, skills, and motivations change with age? How can the presence in work of mature people be assured while at the same time favouring efficiency, guality of working life, and individual well-being? How can the consolidated negative stereotypes of elderly workers be overcome? How can human resources management in work organizations be differentiated according to the ages of workers? Some answers will be offered to these questions by drawing on the numerous studies and meta-analyses conducted in recent years on these topics. In regard to other unresolved issues, the paper will suggest possible lines of inquiry to be pursued in the near future.

Keywords: Retirement, Age and Work,

### 574

## Saturday, 12 July

### 17:15 - 18:15

## **Division oi: Organizational Psychology**

### DIVoi-DKLii

9:30 - 10:30

# Workplace health promotion: perspectives and future directions

### David DEJOY

Department of Health Promotion and Behavior, University of Georgia, Athens, United States

Without guestion, workplace health promotion (WHP) has experienced considerable growth and development during the past three plus decades. This presentation begins with a brief historical overview but moves quickly to the key premise: that contemporary WHP, especially when viewed from an international vantage point, consists of several somewhat overlapping approaches rather than any single unified approach. Three such approaches or perspectives will be discussed. The first of these, health-oriented WHP, takes a basic public health approach and views the workplace as a convenient place to reach large numbers of people. Principal concerns are with lifestyle-related disease and disability and cost containment. The second approach, integrated WHP, seeks to combine health protection with health promotion, and ideally achieve mutually reinforcing effects. The third approach is referred to here as wellbeing-oriented WHP. Arguably, this perspective can be traced back through the work stress literature and may be most consistent with the wellness concept and its holistic definition of health. These three approaches will be compared and contrasted in some detail. Some predictions will be offered concerning their continued development and the likelihood of convergence or divergence. The interfaces or connections between these different perspectives and applied psychology will also be examined. The presentation will conclude with some overall implications for research and practice.

Keywords: Conceptual Models Intervention, Workplace Health Promotion

## DIV01-DKL12

### Impact of subconscious goal setting in the work place

**Gary LATHAM** Canada

Abstract not available

### 575

## Sunday, 13 July

13:00 - 14:00

### **Division o2: Psychological Assessment and Evaluation**

## Wednesday, 9 July

### DIV02-DPL

9:30 - 10:30

17:00 - 18:00

**Divisional Presidential Address** 

# International status of test development and use with children and youth

### Thomas OAKLAND

University of Florida, Gainesville, United States

Test development and use may constitute applied psychology's most important contribution to behavioral science. Test use has become somewhat common for persons from birth to death and is very common for children and youth. The purpose of this presentation is to summarize the status of test development and use internationally, especially on testing practices for children and youth. Conditions that impact test development and use together with changes occurring in test development and use will be reviewed.

### Critical questions in talent development: answered through 40-years of longitudinal research by study of mathematically precocious youth

David LUBINSKI United States

DIV02-DKL01

Abstract not available

## Division o2: Psychological Assessment and Evaluation

### DIVo2-DKLo2

11:00 - 12:00

### Evaluating tests: a continuing effort for psychologists

### Kurt GEISINGER

Buros Center for Testing, University of Nebraska-Lincoln, Lincoln, United States

Tests have been traditionally evaluated primarily on the basis of evidence of test validity for specified and generally intended uses. To a lesser extent, tests have also been evaluated on the basis of their reliability, freedom from various biases and fairness, and utility. Such characteristics have been memorialized in various sets of testing standards and guidelines. This presentation will systematically enumerate the various ways that tests should be evaluated. It will focus upon the goals of testing and providing the kinds of evidence to support such uses. While such information would often be considered validation information, it will also include specific kinds of validation, as well as those other sorts of evidence often considered to be reliability, fairness, and utility. Using a broad, post-Messick, construct validation paradigm, most of the above considerations can actually be considered to be part of the validation umbrella. Given the focus of ICAP, the international use of tests will be described as well with a special consideration to the guidelines and approaches for supporting the use of tests brought from one culture to another.

Keywords: Test Evaluation, Test Reliability,Test Review, Test Utility, Test Validity

Thursday, 10 July

17:00 - 18:00

### DIV02-DKL03

### Test adaptations: beyond translations

#### **Dragos ILIESCU**

Psychology, University of Bucharest, Bucharest, Romania

Test developers and users in emerging countries uniformly agree that tests should reflect current psychometric standards and should be more than mere translations of existing test. However, in most emerging countries, practitioners must rely principally on translated tests, namely those that reflect careful language translations and occasional analyses of internal validity. Empirical methods consistent with current psychometric standards are used rarely with them. This address summarizes best practice associated with test adaptation, including whether to adapt a test as well as methods to promote translation design, insure item and construct adequacy, promote test format equivalence, and to generate empirical support in test adaptation efforts.

Keywords: Adaptation, Testing, Translation

## **Division 02: Psychological Assessment and Evaluation**

## Friday, 11 July

17:00 - 18:00

### DIV02-DKL04

11:00 - 12:00

Assessment of well-being: global and local perspectives

### Fanny M. CHEUNG

Psychology, Chinese University of Hong Kong, Hong Kong, China

Social relationships and networks are important predictors of well-being. However, there are cross-cultural differences in what contributes to subjective well-being. In western studies, personality correlates of well-being have focused on selfrelated concepts such as self-esteem, personal control, extraversion and optimism. In collectivistic cultures, the role of relational concepts such as social support and interdependence in predicting subjective well-being are prominent. Studies using the indigenously derived personality measure, the Cross-Cultural (Chinese) Personality Assessment Inventory (CPAI) showed that scales associated with the Interpersonal Relatedness factor, including Harmony, Relationship-Orientation, and Family Orientation, are related to well-being among Chinese adults and adolescents. On the other hand, strong Self-orientation and emphasis on Face, and the lack of Interpersonal Tolerance, Harmony, and Family Orientation, contributed additional variance beyond Emotionality and Inferiority in predicting psychopathology. The implications for crosscultural testing and assessment are discussed.

Keywords: CPAI, Cross-cultural Difference, Harmony, Interpersonal Relatedness, Subjective Well-being

# Implications of personality differences between countries

#### Dave BARTRAM

DIV02-DKL05

CEB's SHL Talent Measurement Solutions, Thames Ditton, United Kingdom

Personality differences between countries together with evidence on country level differences in personality from earlier research and recent large data sets are reviewed. The data is obtained from in vivo assessment of people for employment related purposes (recruitment and selection, promotion, personal development etc). The correlates of these differences and their implications are discussed in the light of their relationships with a range of other country level metrics including measures of culture, well-being and economic metrics. In addition country level effects are compared with effects of personality homogeneity related to the organizations people work for or are attracted to. Implications for multinational assessments also are discussed.

### **Division 02: Psychological Assessment and Evaluation**

### Saturday, 12 July

### DIV02-DKL06

11:00 - 12:00

### Challenges to psychological testing in Gulf Cooperation Council (GCC) countries

### Mohammad ALGHORANI

College of Humanities and Social Sciences, Al Ain, United Arab Emirates

Psychologists working in GCC countries (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and UAE) generally work either without sufficient psychological tests or with improper psychological tests. A few psychologists from each of these countries were interviewed about psychological testing practices in their respective countries. Among the identified challenges were: (1) lack of preparation (education and training) in test development and adaptation procedures, especially among professional practicing psychological testing, and (2) unawareness of international adopted criteria for test adaptation, especially the International Test Commission's. Recommendations to overcome these challenges include: (1) securing funds for long-lasting test development and adaptation projects, and (2) putting a master plan of psychological tests to develop/adapt, according to usage necessity.

## **Division 03: Psychology and Societal Development**

## Wednesday, 9 July

### DIV03-DPL

9:30 - 10:30

**Divisional Presidential Address** 

Early adolescence and peace: an intervention to promote well-being in early adolescence

Cidgem KAGITCIBASI Turkey

Abstract not available

### DIVo3-DKLoi

15:30 - 16:30

### Collective self-regulation for our common future

### Yshihisa KASHIMA

Melbourne School of Psychological Sciences, University of Melbourne, Parkville, Australia

The ideal of sustainable development requires the balancing of economic development and environmental sustainability, and a simultaneous pursuit of both. Exasperatingly, however, research shows that people's prospection about our future is a continuing economic development despite worsening environmental degradation. And yet, there appears to be a general tendency for people to prefer short-term economic development at the expense of long-term environmental sustainability. Then, how is it possible for us to maintain a hope for our common future that is both prosperous and sustainable? From a psychological perspective, it is a classical case of selfregulation albeit a collective one. Just like weight watchers unable to stop themselves from reaching out for a chocolate despite their long term goal of weight loss, humanity appears unable to self-regulate our own behavior. How can we collectively regulate our individual behavior, and coordinate and cooperate among ourselves, for our global commons and future generations? This presentation outlines a conceptual framework for collective self-regulation by drawing on insights from the literatures on individual self-regulation and collective evolution of cooperation. I will provide what evidence that is available for its components and operations, and point to possibilities of collective self-regulation for sustainable development by outlining cultural models of human-nature relations that may be more suitable for its realization.

Keywords: Collective Self-Regulation, Prospection Sustainability

## **Division 03: Psychology and Societal Development**

## Thursday, 10 July

### DIV03-DKL02

9:30 - 10:30

# Value bases of socio-political attitudes across 15 countries

### Shalom SCHWARTZ

Hebrew University of Jerusalem, Jerusalem, Israel, International Laboratory of Socio-cultural Research, National Research University- Higher School of Economics, Moscow, Russian Federation

Do the political attitudes of the general public form a coherent system? Or are the political ideas of the public not clearly organized? If there is coherence, what might it come from? Political attitudes can be seen as expressions, in the political domain, of more basic personal values. According to the theory of basic personal values, values (e.g., security, achievement, benevolence, hedonism) form a circular continuum that reflects their conflicting and compatible motivations. I theorize that this circular motivational structure gives coherence to political attitudes. I will describe a study that tested this theorizing in 15 countries, 12 non-communist and three postcommunist. Respondents reported their support for eight core political attitudes (e.g., free enterprise, law and order) and the importance they ascribe to each of 10 basic personal values. Based on the motivations that each personal value expresses, I specify the political values it promotes or opposes. Hypotheses differ for the non-communist and post-communist countries where the political context suggests different meanings of a values or political attitudes. We tested the hypotheses in each country using correlation and regression. We also compared the contribution of basic values for predicting political attitudes compared with age, gender, education, and income. Multidimensional scaling analyses provide a visual picture of the way the circular motivational continuum of basic values structures relations among political attitudes. This study strengthens the assumption that individual differences in basic personal values play a critical role in political thought.

Keywords: Cross-National, Cultural Values, Political Psychology, Politics Values

#### DIVo3-DKLo3

15:45 - 16:45

# Psychology in the public interest - oxymoron or opportunity?

#### Heather GRIDLEY

Centre for Cultural Diversity and Wellbeing, Victoria University, Melbourne, Australia

For psychologists, advocacy around societal issues such as environmental sustainability, human rights, inequality, or social inclusion/exclusion can take various forms: from influencing public policy agendas to working for change within mainstream psychology contexts, or forming coalitions with like-minded community groups. This paper critically examines some of the dilemmas confronting professional bodies, activist groups and individual psychologists in choosing to advocate around such issues from a psychological base. While bodies such as the American Psychological Association have as their mission 'to advance the creation, communication and application of psychological knowledge to benefit society and improve people's lives', how do we define such benefits and improvements, and what if psychology is actually part of the problem? In what ways are human rights 'psychological', and what if the public interest might be best served by psychologists becoming redundant (if prevention strategies really work)? Are the voices of those most affected at risk of being silenced by the evidence-armed 'expert' voice? Can professional bodies always be expected/trusted to place public interest ahead of self-interest, on issues when the public interest might conflict with the association's commitment to 'advancing psychology as a discipline and profession' (Australian Psychological Society)? And when we do choose to engage in advocacy in the interests of community wellbeing and social justice, the next question is whether we have made any difference. What is the best use of our research base, our practice wisdom - offering advice on government policy, lending our support to public movements, cleaning up our own backyard - or all of the above? The presentation will draw on a specific case example of the process of developing a psychology-based submission to the Australian Social Inclusion Board's 'Public Consultation on Breaking the Cycle of Disadvantage', and its implications for advocacy attempts from within and beyond psychology.

Keywords: Advocacy Community, Psychology Community, Well-being, Critical Psychology, Psychology and Public Interest

### DIV03-DKL04

17:00 - 18:00

# Culture and control orientations: an extended framework.

#### Susumu YAMAGUCHI

Department of Social Psychology, University of Tokyo, Tokyo, Japan

Primary-secondary distinction in control orientation has been widely accepted. As to cross-cultural differences in control orientation, the present author argues that the primary-secondary framework needs to be extended. Furthermore, it will be argued that the primacy of primary control is universal, because in any culture it is essential for human survival to control the environment. To support this claim, data from cross-cultural studies will be presented with theoretical clarification of the distinction between primary and secondary control strategies.

Keywords: Control Orientation, Cross-Cultural

## Division 04: Environmental Psychology

## Wednesday, 9 July

DIV04-DPL	9:30 - 10:30	DIVo4-DKLoi	15:30 - 16:30
Divisional Presidential Address		The role of social (versus financial) factors in environmental action	
Promoting sustainable well-being			
Linda STEG		Robert CIALDINI	
The Netherlands		Psychology, Arizona State University	/, Tempe, United States
Abstract not available		Social norms, which refer to what mos social norms) and what most peo social norms), are remarkably pow action. Equally remarkable is how this power at two critical decision p they decide how to interpret the ca and when, as communicators they the actions of others. Studies in contexts (e.g., home energy conserva hotel conservation programs) show nications that employ social norms environmental behavior are superi traditional appeals. A new variety of provincial norm, proved most effect	ple approve (injuncti erful in directing hum little note people take oints: when, as observe uses of their own actio decide how to influen a several environmen tion, household recyclir that persuasive comm -based appeals for pr or to those that empl f social norm, labeled t
		Keywords: Persuasion, Social Norms	5

## Division 04: Environmental Psychology

### Thursday, io July

DIV04-DKL02

17:00 - 18:00

On the Yin and Yang of habits: the power of repetitive action and thinking

Bas VERPLANKEN United Kingdom

Abstract not available

## Wednesday, 9 July

17:00 - 18:00

### DIV05-DPL

9:30 - 10:30

### **Divisional Presidential Address**

# East meets West: Chinese students' academic achievement and motivational strategies

#### Kit-Tai HAU

Educational Psychology, Chinese University of Hong Kong, Shatin, Hong Kong

Among the various cultural groups being studied, Chinese and other Asian students from the Confucian cultural heritage have drawn special attention because of their outstanding performance in international comparisons of achievement. In the Confucian-collectivistic culture, the motives to achieve involve fulfilling obligations to oneself as well as to the family and society. Educational achievement a virtuous pursuit, thus undermining the importance of personal interest or selfefficacy as necessary conditions for students to work hard. Furthermore, the dominant effort attribution for achievement outcomes, together with the belief that effort can change ability, makes low ability an unconvincing reason for not achieving. Chinese schools operate in a context with more uniform values and there is less need to convince students of the value of learning. Interest and cost are no longer of major concern. In other words, even if the task appears uninteresting, the student will more readily accept the need to accomplish it, as it is a duty to do so. Nevertheless, although research findings do suggest a generally lower sense of efficacy or self-concept among Chinese students, these do not seem to have deterred them from doing well. Other than the strong will to succeed, effort attributions and beliefs about the malleability of ability would also counteract the negative effects of low self-efficacy, fueling continuous striving and persistence even in the face of failure. Similarly, this effort-focused conception of learning would probably contribute to the necessary sense of control in learning, as effort is relatively controllable. In sum, two features are of particular salience in making Chinese students adaptive learners against all odds. Firstly, the high value accorded to educational achievement serves as a strong driving force: where there is a will, there is a way. Then, there is the phenomenal belief in effort: you will get there if you put in enough effort.

### Keywords: Chinese Motivation

# Cognitive education and learning disabilities in children.

### Fredi BUCHEL

DIV05-DKL01

FPSE, Université de Genève, Genève, Switzerland

Metacognitive theories and models of self-regulation have been increasingly more influential in the practice of school psychology over the past years. Since 1996, metacognitive theory, dynamic assessment, and cognitive education programs have been systematically administered at the «Atelier d'Apprentissage», a consultation and intervention service of the Faculty of Psychology and Education at the University of Geneva for children and adolescents with mild or moderate learning difficulties. This center is also a research laboratory in cognitive education. After undergoing a psycho-pedagogical analysis of their problems and of their learning capacities, children profit from a series of intervention sessions (12 to 25 meetings of 50 minutes each). Each session is recorded by two video cameras, one focused on the child and the other on the task sheet. Recordings are then transcribed according to a category system based on self-regulated learning models. We postulate that children and adolescents with learning difficulties have, above all, a deficit in metacognitive self-regulation. In the initial analysis, we observe if the knowledge and expected skills level, according to the child's age and education, have been acquired or not. For children whose problems are not related to intellect, we look for the root of the learning problem in metacognition, motivation, or working memory. With respect to metacognition, we distinguish between problems of metaknowledge and those of metacognitive strategies (anticipation, planning, control). It could be that the children have not developed a good relationship to themselves or are not capable of recognizing a concrete task as an instance of a certain task type, or finally, do not have good strategies. Sometimes their working memory is overtaxed due to cognitive or emotional reasons. With respect to motivation, we focus on causal attribution, feeling of competence, and achievement goals. The presentation will be illustrated by extracts from several sessions.

Keywords: Cognitive Education, Atelier d'Apprentissage, Metacognition,

## Thursday, 10 July

### DIV05-DKL02

9:30 - 10:30

17:00 - 18:00

# Relational thinking and relational reasoning: tapping roots of human learning and development

### Patricia ALEXANDER

Human Development and Quantitative Methodology, University of Maryland, College Park, United States

There is little guestion that the ability to recognize and derive meaningful patterns within any informational stream has always been necessary for human survival. Yet, this ability has taken on new import in today's post-industrial societies where individuals face an unrelenting and seemingly overwhelming flow of information. Understanding how individuals confront this informational deluge by quickly and meaningfully perceiving patterns (i.e., relational thinking) and expand on those perceptions through deeper reflection (i.e., relational reasoning) seems inextricably tied to learning and academic development. In this presentation, more about the foundational nature of relational thinking and reasoning will be explored, and particular manifestations of relational reasoning will be introduced. Also, the development of measures to gauge relational reasoning will be overviewed, along with data demonstrating associations between this capacity and measures of intelligence, spatial reasoning, and verbal and mathematical abilities. Finally, implications for psychological research and educational practice will be considered.

Keywords: Reasoning, Individual Differences

### A self-determination theory perspective on pedagogical practices intended to enhance students' motivation

### Frederic GUAY

DIV05-DKL03

Fondements et pratiques en éducation, Laval University, Quebec, Canada

Numerous meta-analyses of academic achievement indicate that teaching is probably one of the most central factors in fostering student achievement (Hattie, 2009). A promising research direction would therefore be to identify instructional and pedagogical practices that could be particularly effective in elementary school students. Indeed, waiting until later grades to address motivation- and achievement-related problems that originate in the early grades has not proven successful. Effective pedagogical practices should create a classroom environment in which students can develop their skills, knowledge, and motivation to learn. Drawing on selfdetermination theory (Deci & Ryan, 2002; Ryan & Deci, 2009), this lecture presents an overview of certain pedagogical practices that aim to foster student motivation and achievement. First, I provide an overview of self-determination theory. I then introduce five pedagogical practices: cooperation, autonomy support, authentic activities, structure, and involvement. Next, I underscore the core characteristics of professional development programs that could significantly improve teachers' instructional and pedagogical practices (Desimone, 2009). Finally, I present CASIS, a professional development program for teachers based on the five above-mentioned pedagogical practices. This program has been implemented in over 40 elementary schools in Quebec to date. The results of our study indicate that CASIS can effectively increase the use of these pedagogical practices and improve student motivation and achievement. Many school systems around the world have introduced structural innovations. Some noteworthy examples are education reforms, smaller classes, and extracurricular activities. However, innovative teaching practices have been less systematically implemented, and are not always widely adopted or embraced by educational institutions. In the case of CASIS, however, focusing on teachers' pedagogical practices as a way to improve student learning and motivation has proven effective. These results are in line with the findings of many studies that teachers and teaching practices are the cornerstone of student achievement.

Keywords: Motivation, Self-beliefs, Self-determination, Theory, Students Teaching

# Friday, 11 July

17:00 - 18:00

### DIV05-DKL04

9:30 - 10:30

Student evaluations of university teaching: recommendations for policy and practice

### Herb MARSH

University of Western Sydney, Sydney, Australia

Students' evaluations of teaching effectiveness (SETs) have been the topic of considerable interest and a great deal of research in universities all over the world. Based on reviews of research by myself and others, SETs are:

- multidimensional;
- reliable and stable;
- primarily a function of the instructor who teaches a course rather than the course that is taught;
- relatively valid against a variety of indicators of effective teaching;
- relatively unaffected by a variety of variables hypothesized as potential biases, such as grading leniency, class size, workload and prior subject interest; and
- demonstrably useful in improving teaching effectiveness when coupled with appropriate consultation.

Although SETs have a solid research base stemming largely from research conducted in the 1980s, it is surprising that research conducted in the last decade has not done more to address critical limitations previously identified and incorporate exciting methodological advances that are relevant to SET research. Perhaps the most damning observation is that most of the emphasis on the use of SETs is for personnel decisions rather than on improving teaching effectiveness. Why do universities continue to collect and disseminate potentially demoralising feedback to academics without more fully implementing programs to improve teaching effectiveness? Why is there not more SET research on how to enhance the usefulness of SETs as part of a program to improve university teaching? Why have there been so few intervention studies in the last decade that address the problems identified in reviews of this research conducted a decade ago? These, and other issues, are addressed in this presentation.

# Achievement emotions: functions, origins, and implications for educational practice

### **Reinhard PEKRUN**

DIV05-DKL05

Department of Psychology, University of Munich, Munich, Germany

Emotions are ubiquitous in academic achievement settings. Students frequently experience emotions such as enjoyment, hope, pride, anger, anxiety, shame, hopelessness, and boredom in these settings. Despite the relevance of these achievement emotions for students' learning, performance, and wellbeing, they have not received much attention by educational psychology, test anxiety studies and attributional research being notable exceptions. During the past ten years, however, there has been growing recognition that emotions are central to students' learning and achievement. In this presentation, I will provide a state of the art overview of this nascent field of research. Using Pekrun's (2006) control-value theory of achievement emotions as a conceptual framework, the presentation will focus on the following issues.

(1) Which emotions are experienced in academic achievement settings, how can these emotions be organized conceptually, and how can they be measured? (2) How can we explain the development of these emotions? What are their individual and social origins, and how do they develop over the school years? (3) Are achievement emotions functionally important for students' learning and performance? (4) Are achievement emotions and their functions universal, or do they differ between content domains, genders, and cultures? (5) How can achievement emotions be regulated and treated, and what are the implications for educational practices in the classroom?

In closing, open research problems will be addressed, including the development of more sophisticated measures and modeling methods, the prospects and limitations of neuroscientific research on achievement emotions, strategies to integrate idiographic and nomothetic methodologies, and the need for intervention studies targeting achievement emotions.

### DIV05-DKL06

11:00 - 12:00

How do school students navigate uncertainty and adversity? Exploring the roles of adaptability, academic buoyancy, and academic resilience

### Andrew J. MARTIN

School of Education, University of New South Wales, Sydney, Australia

This presentation explores a network of constructs that is relevant to how young people deal with academic adversity and how they deal with uncertainty and change. Academic buoyancy refers to students' capacity to deal with 'everyday' academic difficulty (e.g., study pressure, deadlines, negative feedback on schoolwork); academic resilience refers to a capacity to deal with chronic/acute academic adversity (e.g., school suspension, chronic failure) that is a major threat to educational development; adaptability refers to individuals' psycho-behavioral adjustments in response to changing, uncertain and/or novel situations and conditions. For this network of constructs, findings are summarized identifying their psychometric status, their yield for academic (e.g., achievement, engagement) and non-academic (e.g., life satisfaction, selfesteem, affect) outcomes, their empirical overlap and distinctiveness, and their relevance to educational practice.

Keywords: Academic Buoyancy, Adaptability, Resilience, Students

### Sunday, 13 July

## **Division o6: Clinical and Community Psychology**

## Wednesday, 9 July

### DIVo6-DPL

9:30 - 10:30

**Divisional Presidential Address** 

The twenty-first century scientist-practitioner: doing and applying science case-by-case

#### Neville BLAMPIED

Psychology, University of Canterbury, Christchurch, New-Zealand

For more than 50 years the concept of the professional psychologist as both a scientist and a practitioner (often called the Boulder Model) has been an inspirational ideal that has guided training and informed professional identities across a wide spectrum of applied practice. But, as many have lamented, it has been very difficult to put the ideal into practice. A fundamental reason for this difficulty is the mismatch between the epistemological model of science adopted by psychology - an outdated hypothetical-deductive approach completely dominated by the null-hypothesis statistical testing of between-group mean differences - and the needs of science, and especially, practice. This talk will present the single-case research tradition and its contemporary developments as an alternative approach to both science and practice, one that effectively meets the need for psychological research to be more ideographic, and best-fits the challenges encountered when we apply our science via evidence-based practice to the problems we will encounter in the 21st C.

Keywords: Scientist-practitioner, Evidence-based Practice, Single-case Science

### DIVo6-DKLoi

15:30 - 16:30

Psychological influences of the Great East Japan earthquake on rescue workers

#### Yutaka MATSUI

Institute of Psychology, University of Tsukuba, Ibaraki, Japan

This study analyzed the psychological influences of the Great East Japan Earthquake on rescue workers, based on results of surveys on stress among them, information obtained through clinical intervention and psychological support activities. Questionnaire and interview were conducted with (1) firefighters dispatched to the disaster area (in area)[2011], (2) nurses working in the Tsunami disaster area [2011], (3) nurses working in hospitals suffered from the nuclear power generation plant accident [2012], (4) journalists working in area [2012], (5) journalists working outside area [2012], (6) public servants in area [2012], residents of slightly damaged area for comparison [(7) 2011, (8) 2012], and (9) employees of companies in area [2012]. We also took charge of the surveys conducted by FDMA with firefighters in area [(10)2013] and firefighters dispatched to the area [(11) 2013]. We also conducted clinical interventions, psychological support activities and consultation for (12) firefighters dispatched (2011), firefighters in area ((13) 2011;(14)2011-2012), (15) nursery teachers in area (2011-2012), and (16) nurses in area (2012-2013).

Results and Discussion The Japanese version of Impact of Event Scale Revised (IES-R) was used in all surveys to measure Post Traumatic Stress Reactions. The percentage of high-risk people ("24 scores) was as follows: from (1) to (11): 5.1%, 33.7%, 38.4%, 22.4%, 12.7%, 26.8%, 13.0%, 14.0%, 20.7%, 3.6%, and 15.4%. The percentages of disaster workers and company employees in area were 15-38%, which were higher than for those outside area (5-15%). The stress reactions caused by disasters do not simply decrease with the course of time, but sometimes appear later, or are prolonged, depending on the characteristics of the disaster event.

Clinical interventions and psychological support activities suggested the following. Rescue workers in ares could not express their distress, due to discrete consideration for citizens. The narratives of people changed from describing life threatening dangers, to inconveniences of life as refugees, and finally to anxieties about the future. In the area damaged from the nuclear power generation plant accident was narrated over a long period. Generally, stressors and stress management techniques differed among distinct occupational groups. On the other hand, basic symptoms of traumatic stress were commonly observed

**Keywords**: Disaster, Trauma, Resilience, Intervention, Assessment, The Great East Japan Earthquake

## Division o6: Clinical and Community Psychology

#### DIVo6-DKLo2

11:00 - 12:00

From narratives of despair to narratives of hope through participation in community arts

Michael MURRAY United Kingdom Thursday, 10 July

### **Division 07: Applied Geropsychology**

### DIV07-DPL

### 13:00 - 14:00

**Divisional Presidential Address** 

### The challenges facing ageing in the 21st century

Florence DENMARK United States

Abstract not available

### Saturday, 12 July

15:30 - 16:30

### DIV07-DKL01

#### Time perception and ageing: the pace of life

### Constanca PAUL UNIFAI/ICBAS-UP, Porto, Portugal

Ageing, in the simplest manner, can be said to be the passage of time. The perception of time is a core issue of the ageing experience. Empirical data on how old people feel time will support current perspectives. From children that look at time in an egocentric and pre-operatory way, close to growing and size, disregarding birth order, time concept evolves to a notion of physical and psychological time, in the sense of operatory thinking (Piaget 1946). At age 7/8 years, ageing begins to be dissociated from growing and starts to be a function of time itself. The acquisition of the notion of time allows a child to progress to the idea of time as a coordination of movement, velocity and reversibility. The cyclic time of circadian rhythm, but also of crops and seasons, which is a more primitive way of understanding time, progressively turns into the notion of continuous time. The experience of time probably begins by living a distended time in which each year is a high percentage of lived time. This becomes less and less true, as a year in a long life is just a small part of it, and life seems to speed up when people get old (Draaisma, 2012). Whereas time goes by and people get older, time perception seems frequently paradoxical: days seems months full of hours hardly passing and years go on at a huge speed, one after another, toward a short end: the boredom of empty days in rush years, speeding up to death. The pace of life in old age encompasses frequently this contradiction that can be understood using Carstensen's social emotional selectivity theory that stresses the importance of time left to live, which means that people became conscientious about finitude of life, prompting them to invest in more rewarding affective objectives. Simultaneously, the fading of aims to achieve or possess things may result in void hours, particularly in cultures that value work and constant stimulation. When everything runs around people, and even relationships have to be scheduled, velocity of events and routines brings the contradiction of speed to slow gestures, as when seated in a stationary train with the illusion of movement due to another approaching. The way old people perceive time, particularly the contradiction between the perception that time pass slowly or fast, may influence well-being and the prosecution of objectives and life engagement, that seems unworthy due to the lack of life time to profit from them.

## **Division o8: Health Psychology**

### DIVo8-DPL

9:30 - 10:30

### Divisional Presidential Address

# Cognitions, environment, and obesity-related behaviors

### Aleksandra LUSZCZYNSKA

University of Social Sciences and Humanities, Warsaw, Poland, Trauma, Health, & Hazards Center, University of Colorado, Colorado Springs, United States

The lecture discusses the processes and mechanisms by which social-cognitive variables may affect weight-related health behaviors and body weight directly, indirectly, interacting with other cognitions and environmental factors. Examples of indirect effects of self-regulatory cognitions and environmental factors will be drawn from studies involving children, adolescents, adults, and child-parent dyads. First, the direct effects of environment factors will be discussed, followed by the discussion of effects of cognitions. Finally, the synergistic effects of cognitive and environmental factors will be addressed. The accumulated evidence, presented in umbrella reviews, shows a significant change in nutrition and physical activity occurs due to changes in school environment, such as activity breaks, physical activity education programs accounting for parental involvement. However, a majority of school-based interventions fails to show significant effect on obesity reduction in children and adolescents. Systematic reviews provide evidence for selected parenting strategies, such as monitoring, low parental pressure to consume foods, and family meals. These strategies are of significance in case of weight change in childhood, but they have no direct significant effects in adolescence. Further, systematic reviews indicated that among other environmental predictors stronger support for the effect on weight-related behaviors was obtained for II out of 98 environmental variables. In sum, focusing on environmental factors rarely results in changes in weight-related behaviors or body weight. Experimental research showed that addressing social-cognitive variables such as self-efficacy or action planning may result in short-term body weight changes among adolescents and adults with obesity. The evidence for long-term effects of interventions enhancing planning or self-efficacy is rare and findings are inconsistent. Finally, a promising line of research accounts for modifiable cognitive and environmental factors. In particular, research shows indirect effects of at-home and out-of-home environment (e.g., food accessibility, intake discouragement). These environmental factors may operate indirectly, fostering selfregulatory beliefs and skills which in turn affect food intake. The evidence from research conducted among adolescents and in child-parent dyads will be presented.

Keywords: Health, Behavior Change, Implementation, Obesity, Social Cognitive Theory

## Wednesday, 9 July

### DIV08-DKL01 17:00 - 18:00 Reasoned and implicit processes in sexual health risk

and prevention John B.F. DE WIT Australia

Abstract not available

## **Division o8: Health Psychology**

### DIVo8-DKLo2

### 11:00 - 12:00

# Using the question-behavior effect to change behavior

### Mark CONNER

Psychology, University of Leeds, Leeds, United Kingdom

The guestion-behavior effect (QBE) refers to the fact that the measurement of cognitions such as intentions can lead to behavior change. It has been widely studied and has gained interest in recent years as a simple yet effective means to change behavior. In this paper example applications of the QBE plus a meta-analysis of effects will be presented. The example applications focus on using the QBE to change various health behaviors such as exercise, blood donation, screening attendance and vaccination will be presented. For example, in one study we examined the QBE in relation to cervical screening in a sample of 4,277 women. Objectively assessed attendance for screening was significantly lower among women who only received an invitation for cervical screening and information leaflet compared to those who received these same materials plus intention measures and other questions. Among women who completed and returned a guestionnaire attendance was significantly higher when the questionnaire contained anticipated regret questions followed by intention guestions than when regret guestions were omitted. The example studies and meta-analytic findings will be used to assess a number of moderators of the QBE. The moderators assessed include aspects of the behavior (e.g. difficulty, frequency etc.), the sample (e.g., variations by gender, age and social class), the type of question asked (e.g., intentions, expectations, anticipated regret) and individual difference variables (e.g., personality, motivation to perform the behavior). Implications for using the QBE to change different behaviors will be drawn.

Keywords: Health, Psychology Intentions, Question-Behavior Effect

## Thursday, 10 July

17:00 - 18:00

### DIVo8-DKLo3

### Self-regulation interventions in chronic disease

### Stan MAES

Health Psychology, Leiden University, Leiden, The Netherlands

Self-management of chronic disease is nowadays a very important issue in the management of these diseases. Self-regulation or goal theory provides a solid theoretical framework to improve the effectiveness of current self-management interventions. Self-regulation can be defined as a goal-guidance process occurring in phases (a goal selection and setting phase, an active goal pursuit phase and a maintenance phase) aimed at task- and time-specific outcomes. Different psychological mechanisms play an important role in this process such as goal setting, formation of action plans, self-monitoring, feedback, feed forward (self-efficacy and outcome expectations) and attention and emotion control. In this lecture, I will present, after a brief introduction on self-regulation theory and basic intervention principles, the results of four different randomized controlled trials of self-regulation based intervention programs for patients suffering from diabetes type 2, coronary heart disease, rheumatoid arthritis and chronic fatigue syndrome. At the end of the presentation, advice for the development and evaluation of future self-regulation programs for patients suffering from chronic diseases will be given.

Keywords: Chronic Disease, Health Psychology, Psychological Intervention, Self-Regulation

### **Division o8: Health Psychology**

### DIVo8-DKLo4

11:00 - 12:00

# Self-efficacy and social support as coping resources predict resilience, autonomy, and health behaviors

### Ralf SCHWARZER

Psychology, Freie Universität Berlin, Berlin, Germany

Coping with challenges and adversity can be facilitated by personal resources such as perceived self-efficacy as well as by social resources such as social support. The theoretical background of personal and social resource factors will be described, and the mechanisms how they may be related to various psychosocial outcomes and behaviors will be investigated. Such mechanisms are mainly studied in terms of mediation and moderation. One example is a reanalysis of PTSD and resilience in New York police officers who were involved in the 9/11 terrorist attack. Other examples are on East German migrants, cardiac surgery patients, and Costa Rican factory workers. In multimorbid senior citizen, friend support as well as self-efficacy predict physical exercise frequency and autonomy: those with low support were less likely to be active even if they were highly self-efficacious; low self-efficacy and low support were jointly associated with lack of autonomy; receiving social support bolstered autonomy in lower self-efficacious individuals, but support threatened autonomy in highly self-efficacious individuals. Advances in the study of personal and social resources, using more complex mechanisms, are discussed

Keywords: Coping Health Behavior, PTSD Resilience, Self-Efficacy, Social Support, Stress-Coping Strategies, Well-Being

## Friday, 11 July

17:00 - 18:00

### DIVo8-DKLo5

### Social exchange processes in health behavior change

#### Urte SCHOLZ

Department of Psychology, University of Zurich, Zurich, Switzerland

Social integration is known to be related to better health and lower mortality rates. One potential explanatory pathway for this relationship is that social integration is related to more social exchanges, such as social support and social control. Social support is commonly understood to be beneficial for reducing or even preventing stress and thereby positively influencing health and well-being. Another potential pathway, which has not yet been focused on extensively is that social support and even more so social control might promote health behavior change. Better health behavior, such as eating a balanced diet, not smoking, being physically active, is then related to better health and lower mortality rates.

Standard health behavior change models, such as the theory of planned behavior (Ajzen, 1986), protection motivation theory (Maddux & Rogers, 1983) or the health action process approach (Schwarzer, 1992) focus almost exclusively on individual self-regulation. What is rather neglected in all of the social-cognitive models of behavioural change, however, are social exchange processes. Thus, a systematic integration of these social exchange processes into existing theories of health behaviour change is still lacking.

This talk will present research from experimental, correlativelongitudinal, and prospective daily diary studies with different health behaviours and different populations on social exchange processes and health behaviour change. I will first present data emphasizing the importance of social exchange processes from a social network partner or the spouse with regard to the intended behaviour change. I will also focus on research demonstrating the usefulness of integrating social exchange processes into existing theories of health behaviour change. Finally, future directions for research and practical implications will be discussed.

Keywords: Health Action Process Approach, Health Behavior Change, Social Control, Social Support

### **Division 09: Economic Psychology**

### DIV09-DPL

9:30 -10:30

#### **Divisional Presidential Address**

# How do lay people understand macro-economics, and why does it matter?

### David LEISER

Psychology, Ben Gurion University of the Negev, Beer Sheva, Israel

Economic activity is affected by how people perceive it and so is the political process, whether at election time or by fueling mass demonstrations. This talk will present several instances we studied. The importance of the public's perception of inflation is widely recognized. The expectational Phillips curve describes the links between inflation and unemployment, taking into account expectations of inflation; unemployment varies with unanticipated inflation. The Central Banks in most advanced countries follow the regime of inflation targeting. Public trust in this target helps the Bank in its effort to maintain the inflation level. However, the determinants of that trust are not quite those assumed by central bankers. Much of lay understanding of macro-economics is captured by the Good Begets Good heuristic, and macroeconomic variables perceived as positive are believed to rise or drop together. A wave of pessimism among the public can trigger a decrease in aggregate demand. GBG enhances the effectiveness of monetary policy when the volatility of the public's sentiment is relatively low, but has a destabilizing effect when intense.

Turning to the politico-economic sphere, the public will accept policies judged necessary for prosperity if they match its understanding. The current economic crises are an extreme case in point. It is widely recognized that much of the effects and mechanism of spreading and deepening of the crisis are related to a deficit of trust. The backdrop of low understanding of mechanisms in economics and finance leaves extensive room for other influences. A large-scale international survey found that laypeople explain the crisis in terms of the shortcomings of individuals. Few blamed the system as such. This is striking as one might have expected the financial crisis to be the natural opportunity to take stock of the crisis of capitalism, globalization and the like. People with economic training in the west live in a mental world different from that of laypeople and of people in other countries. The differences are such as to cause suspicious and sullen opposition regarding proposals to handle the crisis put forward by economists and political decisions makers in the West, as was apparent in the latest worldwide social protests.

#### Keywords: Lay Understanding

## Wednesday, 9 July

16:00 - 17:00

# Money as the self-regulation tool: experiments in adults and children

#### Tomasz ZALESKIEWICZ

DIV09-DKL01

Faculty in Wroclaw, University of Social Sciences and Humanities, Wroclaw, Poland

This paper posits that, in addition to its practical utility for the exchange of goods, money helps manage different psychological resources. Contrary to the pragmatic understanding of money held by economists, sociologists and anthropologists emphasize this magical, sacred character of money. Examples of people treating money in a non-rational way abound include the public rejection of the introduction of the dollar coin in the United States, negative reactions against the introduction of Euro in European countries such as United Kingdom and Germany, and the moral restrictions on the use of money for certain types of exchanges (e.g., attaching monetary value to things like children, body parts or basic human rights; offering money in exchange for sex in a romantic relationship). These phenomena are not easily predicted from a strictly utilitarian, economic view of money and suggest that there must be deeper layers to the meaning money holds for people. Recent experimental work revealing that money is a psychological resource used in interpersonal regulation further supports the contention that money does far more for people than facilitating exchange and commerce. People who were primed with the concept of money were less willing to help others but also less prone to request support when working on difficult tasks. The present paper extends the understanding of the psychological effects of money in two ways. First, it shows that priming the idea of money makes people more "immune" to actions that induce threat to self-esteem and to the feeling of existential security. In this sense, it presents money, in its symbolic meaning, as a tool that people might use in self-regulation, because money offers them the experience of power and autonomy. Second, the paper reviews experiments showing that psychological effects of money are present not only in adults who use money in everyday life but also in children who are often not able to understand its economic, instrumental functions. We found in our experiments that young children (in the age from 3 to 8) who were primed with concept of money became less helpful when requested by experimenter and tended to reveal more selfish preferences when making simple allocation choices. On the other hand, they were also more more persistent in work when solving difficult cognitive problems compared to their peers from the non-money condition.

Keywords: Psychology of Money, Self-Regulation

### **Division 09: Economic Psychology**

DIV09-DKL02

Low-level processing of money as a medium of exchange

Sacha BOURGEOIS-GIRONDE France

Abstract not available

### DIV09-DKL03

9:30 - 10:30

17:00 - 18:00

### Credit use

### Erik HOELZL

Institute of Sociology and Social Psychology, University of Cologne, Cologne, Germany

In many countries, consumer credit use has strongly increased over the last decades. Credit takes a wide variety of forms, ranging from bank loans over credit cards to financing offers for purchases. Credit can be beneficial by opening up opportunities, but also results in financial problems for some consumers. This talk aims at providing an overview on the current state of knowledge on the psychological factors involved in taking up and repaying a credit. Adopting a view of credit use as a process evolving over time, these are grouped into six broad areas: 1) Socio-demographic and situational factors (e.g., family status, interest rates) are relevant because they influence both the demand for and the availability of credit.

### Thursday, 10 July

2) Knowledge and the correct perception of credit components (e.g., contract length, total costs) are relevant to choose an optimal contract. 3) Mental accounting (e.g., coupling between the costs of the credit and the benefits of the good) and inter-temporal trade-offs are relevant for economic efficiency. 4) Social norms (e.g., via socialization, peer influence) are relevant both for acceptance of credit use and for social support. 5) During repayment, credit use is related to wellbeing, especially when financial problems occur (e.g., marital conflicts, negative emotions). 6) Money management (e.g., prioritizing expenses) is relevant for avoiding a development from credit use into problem debt. The talk will close by discussing new developments in credit forms (e.g., internet loans, social lending) and intervention programs to improve credit decisions and repayment.

Keywords: Consumer Behavior, Credit Use, Money Management

## **Division 09: Economic Psychology**

### Friday, 11 July

### DIV09-DKL04

9:30 - 10:30

Kahneman lecture: how does neuroeconomics help us understand the human mind?

Ernst FEHR Switzerland

Abstract not available

## **Division 09: Economic Psychology**

DIV09-DKL05

14:45 - 15:45

# An anthropological approach to behavioral economics

### Luigi MITTONE, Giuseppe DANESE

Economics and Management, University of Trento, Trento, Italy

We present an experimental study of how norms of symmetry and centricity affect the allocative efficiency of two ways to allocate resources described in the economic anthropology literature, namely Reciprocity and Redistribution. The baseline Reciprocity study, with no explicit priming of the norm of symmetry, features near-zero levels of allocative efficiency. Consistently with the anthropological framework we use throughout, we find that priming the norm of symmetry among the players increases efficiency levels significantly. Next we study a game of Redistribution and allocative efficiency levels that in the final stages of the game consistently approach 100 %, regardless of the way the chief comes to acquire centricity in the group. We conclude that reciprocity rings and redistributive systems among players can seldom allocate resources efficiently in the absence of underlying norms of symmetry and centricity, respectively. By comparison, we find that a market Exchange game with no explicit priming of norms reaches efficiency levels that approach full efficiency after a limited number of rounds of play. We present an experimental study of how norms of symmetry and centricity affect the allocative efficiency of two ways to allocate resources described in the economic anthropology literature, namely Reciprocity and Redistribution. The baseline Reciprocity study, with no explicit priming of the norm of symmetry, features near-zero levels of allocative efficiency. Consistently with the anthropological framework we use throughout, we find that priming the norm of symmetry among the players increases efficiency levels significantly. Next we study a game of Redistribution and find allocative efficiency levels that in the final stages of the game consistently approach 100 %, regardless of the way the chief comes to acquire centricity in the group. We conclude that reciprocity rings and redistributive systems among players can seldom allocate resources efficiently in the absence of underlying norms of symmetry and centricity, respectively. By comparison, we find that a market Exchange game with no explicit priming of norms reaches efficiency levels that approach full efficiency after a limited number of rounds of play.

Keywords: Anthropology, Behavioral Economics

## Sunday, 13 July

### Division 10: Psychology and Law

### DIV10-DPL

9:30 - 10:30

## Divisional Presidential Address

### Ethical challenges in psychology and law

### Alfred ALLAN

School of Psychology and Social Science, Edith Cowan University, Joondalup, Australia

Some psychologists working in the psychology and law (psycho-legal) field feel that they lack ethical guidance even though the field is arguably one of the oldest, best established and socially useful applied fields of psychology. At one level this uncertainty is not surprising because psychologists are bound to face many taxing moral questions when they are involved in the administration of law, work with demanding people, and work in or for organizations and with colleagues with different moral rules. In these circumstances psychologists should be guided by their own professional ethics which are historically grounded and emphasize those social moral principles that allow them to best serve individuals and society. Even then they will still be confronted by real and apparent conflicting demands and although there are rules that can assist them to resolve these conflicts they, like all people, ulWednesday, 9 July

17:00 - 18:00

timately have to be guided by their conscience.

**Keywords**: Human Rights, Law, Moral Organizational Rules, Professional Ethics

### DIV10-DKL01

Recommendations for improving the quality of evidence in child sexual abuse cases

### Martine POWELL

Psychology, Deakin University, Melbourne, Australia

This paper draws on the authors' knowledge of witness testimony and investigative interviewing about sexual abuse to address three questions. First, what is considered 'best practice' interviewing from an eyewitness memory and prosecution perspective? Second, how well do interviewers adhere to best practice interviewing and what are the barriers to implementing the techniques? Third, what can organizations and professionals do to improve interviewing technique (and subsequently, the evidential quality) of witness statements about abuse?

Keywords: Child Abuse, Investigative Interviewing

### Division 10: Psychology and Law

DIV10-DKL02

### 13:00 - 14:00

Synthetic faces for eyewitnesses and face recognition - research and practice

### Collin TREDOUX

South Africa

Abstract not available

### DIV10-DKL03

15:30 - 16:30

Psychology, behavioral ethics, and lawyers

### Jennifer ROBBENNOLT

College of Law, University of Illinois, Champaign, United States

Complaints about lawyers' ethics are commonplace and are reflected in news reports, data describing ethical complaints against lawyers, and even lawyer jokes and movies. Some have suggested that lawyers behave badly because they are inherently "bad" or "stupid," because they are susceptible to undue pressure from their clients, or because they are underor even over-regulated. While it is surely true that some attorneys deliberately engage in misconduct in order to benefit themselves or their client, psychological research

## Thursday, 10 July

suggests a more complex story: that those who commit ethical infractions are not necessarily "bad apples," but are human beings. Ethical "blind spots," slippery slopes, and "ethical fading" all present risks for lawyers. In addition, there are specific aspects of legal practice-complex and ambiguous ethical rules and standards, agency relationships, the ethos of the adversarial system, the financial and temporal pressures of modern legal practice, and cues or pressures from othersthat the psychology suggests can add to the ethical challenges that lawyers face. This session will present a psychological view of legal ethics—a view that suggests that ethical lapses can occur more easily and less intentionally than one might imagine and that provides substantial insight into why attorneys sometimes behave unethically, why attorneys may have difficulty curbing or reporting the unethical conduct of their clients or fellow attorneys, and why it is often difficult for attorneys to recognize or to learn from their own ethical missteps and the missteps of others. At the same time, the psychological research also provides insight into how attorneys and legal organizations can improve their approach to legal ethics and resist the pressure to act unethically.

Keywords: Ethics, Ethical Decision Making, Law and Lawyering

### **Division II: Political Psychology**

### DIVII-DPL

11:00 - 12:00

16:30 - 17:30

### Divisional Presidential Address

# From the US 9/11 attacks to the Japanese 3/11 earthquake

### Takehiko ITO

Department of Psychology and Education, Wako University, Tokyo, Japan

The Great East Japan Earthquake, which occurred on March II, 2011, was a mega-earthquake followed by a large tsunami. The disaster was compounded by meltdowns at the Fukushima Daiichi Nuclear Power Plant. It goes without saying that the disaster caused tremendous suffering in Japan, but it also shocked the entire world and drew global attention to a variety of issues. Among these was the issue of widespread radiation leakage from the nuclear power plant. This leakage forced many people to evacuate their homes, and the large number of evacues continues to represent a grave problem. Due to the fact that the effects of radiation are long-lasting, the physical and emotional trauma that they caused will remain an important issue during the coming decades. Ito (2013) analyzed 161 essays written by school-aged children using the text mining technique and found that the victims of the nuclear plant accident in Fukushima are suffering more from their on-going relocation and limitations on outdoor play, whilst the sufferers from the tsunami tend to describe their bitter experience as a past event and want to convey what they learned from it to the future. The long term effects on the health of children will be discussed from the viewpoint of the free flow of information and people's media literacy by means of comparing the case of the media after the 9/11 attack in the United States in 2001.

Keywords: Nuclear Accidents, Tsunami, Media Literacy, Radiation, Fukushima, Children, Health

### **Division II: Political Psychology**

### DIVII-DKLOI

### What form of politics is «applied psychology»?

### lan PARKER

School of Management, University of Leicester, Leicester, United Kingdom

This talk explores the connection between the theory and practice of critical psychology, focusing upon the critique of essentialism, individualism and universalism of mainstream applied social psychology, and laying the basis for an approach to politics and justice working in and against the discipline. I argue that contemporary 'critical psychology' is always already necessarily social, and that as a form of 'critical social psychology' it is always already necessarily political, and therefore 'applied'. This political nature of 'critical psychology' needs to be clarified, however, and to be contrasted with the ways in which 'politics' is sometimes understood in 'community psychology'. I address guestions of 'alienation', the ways critical psychology configures itself as a response to mainstream psychology. I describe emerging areas of research in critical psychology, taking the particular example of critical psychology in Britain to illustrate the opportunities and dangers to our concern with social justice

posed by the approach. To do that we need to connect critical psychology with other currents of work on subjectivity and social change in other parts of the world and each tradition of work needs to examine how its critique is limited by the specific operations of capitalism, the psy complex and psychologisation. Critical social psychology cannot be 'universal', but our struggle and learning from each other is crucial if we are each to produce something different to the mainstream work in the discipline and to tackle social injustices that structure our world today.

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**Keywords**: Alienation, Community, Critical Psychology, Politics

## Sunday, 13 July

## **Division II: Political Psychology**

### DIVII-DKLo2

12:15 - 13:15

# Muslim women's well-being: challenges and opportunities

### Noraini NOOR

Psychology, International Islamic University Malaysia, Kuala Lumpur, Malaysia

While "women hold up half the sky", many in the Muslim countries are not given their basic rights. This presentation argues that in many Muslim countries, difficulty exists in distinguishing between patriarchal cultural practices and religious observations. Because patriarchy precedes Islam, it has influenced the interpretation of the religion, especially with regards to the status of women. As women's lives are circumscribed by the social-cultural contexts they lived in, these cultural practices posed the biggest challenge to Muslim women in obstructing their entry into the public space. Many women in Muslim countries are uneducated, unemployed, and subjugated with poor well-being. However, in recent times, access to education has pushed them into the public space, providing opportunities for them to be gainfully employed. Education has also enabled them to be politically empowered, giving them a voice in challenging the aged-old cultural practices often entwined with religious dogmas used to define their status and rights. Currently, many women's groups are networking and engaging in dialogue and cooperation with other Muslim women on a global level and this activism is helping them to claim their religious rights, and directly enriching their well-being. This presentation will highlight relevant findings on women's lives in several Muslim countries to show how cultural challenges like patriarchy, traditions and values, are conflated within a religious framework to justify the status and rights of women. Thus, despite the increase educational and employment opportunities as well as activism by women's groups, much still remains to be done.

Keywords: Challenges, Culture, Muslim Women, Opportunities, Religion

## Friday, 11 July

### **Division 12: Sport Psychology**

### DIV12-DPL

9:30 - 10:30

Perfectionism and its impact on the quality of motivation and achievement in sport

**Divisional Presidential Address** 

Howard HALL United Kingdom

Abstract not available

### DIV12-DKL01

14:30 - 15:30

What's old is new again: the rediscovery of the motivational properties of pleasure in post-cognitivist exercise psychology

Panteleimon EKKEKAKIS United Kingdom

Abstract not available

## Wednesday, 9 July

17:00 - 18:00

### DIV12-DKL02

#### **Recovery processes in sport**

### Michael KELLMANN

Faculty of Sport Science, Ruhr-University Bochum, Bochum, Germany

In performance-oriented contexts such as sports, the importance of optimizing the stress-recovery cycle is underscored. Effective recovery from intense training loads and match calendars elite athletes face is often the decisive factor between success and failure in sport (e.g. Budgett, 1998). These efforts have consistently come up against the limiting factors of overtraining, fatigue, injury, illness, and even burnout. These physiological and psychological limits dictate a need of research on avoiding overtraining, maximizing recovery, and successfully negotiating the fine line between high training loads and excessive loads. As Meeusen et al. (2013) furthermore stated, successful training must involve overload but also must avoid the combination of excessive overload plus inadeguate recovery. Consequently, to be successful, physiological and psychological recovery should be an integral and well planned component of the training regimen. Kellmann (2002, 2010) describes the complex recovery process and proposes characteristics of a general psycho-physiological concept and elaborates on the importance of communication in the coach-athlete relationship. In this context, using the term underrecovery instead of overtraining shifts responsibility from coaches to athletes to engage in appropriate recovery activities in their sport and non-sport life.

In this presentation, the features of recovery processes will be outlined, including practical examples. It also describes the importance of psychological monitoring to detect early signs of overload/overtraining and will present research using the Recovery-Stress Questionnaire for Athletes (RESTQ-Sport; Kellmann & Kallus, 2001). This instrument systematically identifies the recovery-stress states of athletes, indicating the extent to which someone is physically and/or mentally stressed, and subsequent guidance for which strategies are most appropriate. The RESTQ-Sport has been successfully used in sporting contexts for monitoring the impact of training (e.g., Barnett et al., 2012; Brink et al., 2013; Meister et al., 2013), and can be well used for research but also in applied practice for identifying athletes who are at risk of becoming underrecoved.

Keywords: Burn-Out, Overtraining, Recovery, RESTQ-Sport, Under-Recovery

## **Division 12: Sport Psychology**

## Friday, 11 July

DIV12-DKL03

15:30 - 16:30

A 4-year EU funded project on promoting adolescent health through physical activity

Joan DUDA, Howard K. HALL, Isabel BALAGUE United Kingdom

Abstract not available

## Division 13: Traffic and Transportation Psychology Wednesday, 9 July

15:30 - 16:30

### DIV13-DPL

9:30 - 10:30

DIV13-DKLo1

#### Distraction, fatigue and the automated vehicle

**Divisional Presidential Address** 

### Gerald MATTHEWS

Institute of Simulation and Training, University of Central Florida, Orlando, United States

Fatigue and stress impair attention in vehicle drivers. Furthermore, the safety risks of fatigue may be accentuated as transportation systems become increasingly automated. Fatigue provides challenges for emerging transportation technologies such as operation of Remotely Piloted Vehicles (RPVs), as well as conventional surface vehicles. Simulator methods may be used to investigate how fatigue and distraction may interact during normal and automated driving. Fatigue may take different forms, with differing safety impacts. A key distinction is between passive and active fatigue. Passive fatigue is produced by underload and monotony, associated with loss of task engagement and alertness, whereas active fatigue is a stress-like state driven by overload of cognitive capabilities. Operators of highly automated systems may be especially vulnerable to passive fatigue, as well as loss of situation awareness. Simulator studies confirmed that (1) automation rapidly produces passive fatigue, (2) passive fatigue is more detrimental to attention than active fatigue, and (3) driver control over automation does not mitigate passive fatigue impacts. Further studies investigated the role of distraction associated with cellphone use. Although phone use might exacerbate the attentional impairments produced by fatigue, there are also reports that talking may help to offset fatigue and maintain alertness. Simulator studies in my laboratory have shown that phone conversation provides no immediate relief of fatigue; indeed, conversation may elevate worry and impair drivers' abilities to evaluate their own performance. Furthermore, both talking and texting tend to elevate stress, even when drivers can choose their preferred mode of response. However, one study showed that phone use during fully automated driving serves to counter the loss of alertness produced by the fatigue induction, following the transition from automated to normal driving. Thus, there may be some scope for judicious use of distraction as a countermeasure. Other potential countermeasures include system design, regulation of level of automation, and selection of fatigue-resilient operators.

Keywords: Automation, Distraction, Fatigue, Human Factors, Stress, Vehicle-driving

#### Towards a theory of hierarchical control in driving

David STRAYER', Nathan MEDEIROS-WARD<sup>2</sup>, Joel COOPER' 'Psychology, University of Utah, Salt Lake City, United States, <sup>2</sup>Psychology, University of Illinois at Urbana-Champaign, Urbana, IL, United States

Evidence is provided for a hierarchical control network that coordinates the interaction between automatic, encapsulated routines and limited capacity attention. The talk will focus on lane keeping behavior and the effects of secondary task workload. Surprisingly, lateral position variability often improves under cognitive load. The gaze concentration hypothesis suggests that this is a byproduct of the tendency for drivers to fixate more on the forward roadway, under the assumption that drivers tend to steer in the direction of their visual gaze. However, three experiments will be presented that dissociate eye movements and cognitive workload thereby establishing that eye movements play a modest role in lateral position variability whereas cognitive workload plays a much more substantial and direct role. Hierarchical Control Theory (HCT: Logan & Crump, 2011) can help resolve the seemingly paradoxical relationship between lateral position variability and secondary task workload. Specifically, HCT predicts that performance based upon the outer (attentional) loop of control should get better with more attention allocated to the task and worse with less attention to the task. By contrast, performance based on the inner (encapsulated) loop of control should get better with less attention allocated to the task and get worse with more attention allocated to the task. To test the predictions of HCT, two experiments manipulated the predictability of the driving task and secondary task workload. As the driving task became less predictable (by adding wind gusts), more attention was required to maintain lane position. When drivers concurrently engaged in a secondary cognitive task in windy driving conditions, attention was diverted from driving and the ability to maintain lane position was degraded. By contrast, when the driving task was predictable (no wind), lane maintenance improved when a secondary cognitive task diverted attention from driving. We suggest that HCT describes a general a characteristic of human behavior that applies to real world tasks as diverse as playing a musical instrument, typing a manuscript, and driving an automobile.

Keywords: Driver Distraction, Hierarchical Control Theory, Traffic Psychology

## Division 13: Traffic and Transportation Psychology

Thursday, 10 July

### DIV13-DKL02

11:00 - 12:00

### The importance of civility in driving behaviour

### **Tony MACHIN**

School of Psychology, Counseling and Community, University of Southern Queensland, Toowoomba, Australia

Civility is receiving a great deal of attention from researchers in diverse fields including psychology, management, socials sciences, philosophy, education, and health. At the same time, there is increasing attention devoted to displays of aggression, violence, and harmful acts towards others. In the driving domain, terms like "road rage" are used to describe negative behaviour that is directed towards other drivers. Driving research will benefit from a greater focus on the antecedents and consequences of incivility as well as new interventions that promote civility and respect for other drivers and road users. The importance of civility in the driving context can be summed up with the maxim "Drive (do) unto others as you would have them drive (do) unto you".

Keywords: Civility, Driving Behaviour, Respect

### DIV13-DKL03 15:30 - 16:30 The automated automobile - Distributed cognition in driving

### Neville A. STANTON

Engineering and the Environment, University of Southampton, Southampton, United Kingdom

Vehicle automation is having a dramatic effect on the driver and driving, such that the cognitive and behavioural processes and functions and processes that were traditionally performed by the driver are increasing be performed by automotive software and hardware. Such functions include: perceiving objects and events; comprehending objects and events; developing situation awareness; remembering objects and events; problem solving; planning; judging objects and events; communicating; braking, accelerating and steering in response to objects and events. The perennial problem is what tasks are left over for the driver to perform and the effects of these left over tasks on performance. There is also some concern in the way in which vehicle control is passed between the driver and vehicle automation. Research to dates has shown that driver performance is generally decremented where automation replaces their performance but can be improved where automation augments driver performance. Such research shows that increasing vehicle automation significantly reduces the driver's ability to reclaim control of the vehicle when required to do so. Whilst the may seem like an argument for augmentation over automation, even examples of driver augmentation cannot guarantee improved performance if it is poorly implemented or executed. This research has been developing methods and models for examining distributed cognition in automobile automation as well as generating new insights into the nature of how distributed cognition works in practice. Ultimately this research aims to design automotive automation in a manner that improves driver performance and makes driving safer and more enjoyable.

**Keywords**: Automation, Distributed Cognition, Driver, Driving, Models, Task Analysis

## Division 13: Traffic and Transportation Psychology

11:00 - 12:00

## Friday, 11 July

### DIV13-DKL04

### A multi-level model of driver behaviour

### Ian GLENDON

School of Applied Psychology, Griffith University, Gold Coast, Australia

A 5-level system model of driver behaviour is presented. The central level comprises 15 key driving tasks or inter-linked performance elements. Some of these are continuous, as in observing, wayfinding, speed monitoring, and maintaining lane position. Others are occasional, as in pre-trip planning, turning, yielding, following, responding to signals, gap acceptance, changing lanes, overtaking, reversing, headlight use, and emergency responding. Performance depends upon such features as degree of task difficulty, complexity, and variability.

Immediately below the task level are cognitions that affect driving on a moment-to-moment basis. These include perception, attention, situation awareness, learning, memory, decision making, and problem solving. Also at this level are various emotions, moods, or affective states, both positive and negative, that may be experienced during driving, which at various times might include anger, aggression, stress, elation, fear, confidence, and pleasure. Below this level are the neural representations of the cognitions, affective experiences, and behaviours associated with driving, which engage a wide range of brain structures. These include higher-order structures, such as the prefrontal cortex, and regions within the parietal, temporal, and occipital lobes. Also involved are sub-cortical structures, such as the amygdala, hippocampus, brainstem, and cerebellum. Linkages between brain regions are critical to effective driving performance.

Immediately above the task level are individual differences that are relevant to driving performance. These include demographic variables such as age and sex, as well as taskrelevant inherent abilities, and skills acquired through training and experience. Also included at this level are personality factors that might indirectly impact the driving task, such as thrill-seeking, sensation-seeking, neuroticism, and conscientiousness. At the topmost level are socio-cultural factors, that could include cultural values relevant to driving (e.g., locus of control for driving), economic circumstances (e.g., which can determine the type of vehicle that is available), whether driving is for work or leisure, as well as family and peer influences. At this level also are features of the driving environment, including legislative, enforcement, and driving culture within a jurisdiction.

Keywords: Affect, Cognitions, Driving Tasks, Individual Differences, Socio-Cultural Factors, Systems Approach

## DIV13-DKL05 15:30 - 16:30

### Cross cultural differences in driver behaviour

**Lisa DORN** United Kingdom

Abstract not available

## **Division 14: Applied Cognitive Psychology**

## Wednesday, 9 July

15:30 - 16:30

### DIV14-DPL

9:30 - 10:30

# Applied cognitive research at the interdisciplinary crossroad

### **Boris VELICHKOVSKY**

Neurocognitive and social sciences, Kurchatov Research Center, Moscow, Russian Federation

At the 18th International Congress of Psychology, as early as in 1966, Jean Piaget presented his vision of psychology as a key interdisplinary science connecting big areas of biological, social and technical disciplines. Today, we see a full confirmation of these ideas in the development of applied cognitive research. Cognitive science in itself is a modern but mostly academic version of interdisciplinary quest for a better understanding of human mind and brain. Applied perspective leads to embedding of these studies in a genuinely integrative context of of the contemporary NBIC (or NBICS) converging technology. To this aim, integration of experimental methods and models from natural sciences as well as from social and human research is of increasing importance. Several examples of such new and emerging cognitive technologies will be discussed in this presentation. All these examples are related to the work of the Unit of Applied Cognitive Research at the Technical University Dresden and our department of neurocognitive and social sciences at the the Kurchatov NBICScenter. The latter is an umbrella organization for a number of subdepartments and laboratories. At the focus of their research activities are topics that spans from biochemical experiments with cell networks and model animals to brain imaging analysis, eye-brain-computer interfaces, psychophysiology of human memory and communication, cognitive robotics, and methodology of research at the crossroad social, human and natural science research. In particular, work in the direction of attentive interfaces ('technologies that are attentive to human attention') and the applied studies in the molecular cognitive psychology will be considered. As the whole, the results of these activities build a firm ground for a further progress of cognitive research in the years to come.

**Keywords**: Converging Technologies, Brain Imaging, Neurogenesis, Attention, Perception, Consciousness, Memory, Communication

# Digital reading: designing a platform for cognitive tests

### Thierry BACCINO', Olga MEGALAKAKI<sup>2</sup>

DIV14-DKLo1

<sup>1</sup>Psychology, University of Paris 8, St Denis, France <sup>2</sup>Psychology, University of Amiens, Amiens, France

Computers are used massively in our daily life having multiple forms as smartphones, tablets or interactive boards often in an educational environment. Since 2000. International Educational Assessment (as PISA or TIMSS) provided data to assess the education quality on mathematics, science, and reading for pupils that allowed comparing different education systems. As for as reading is concerned, PISA pointed out the needs to evaluate reading on different medium (print or digital), content (Narration, exposition...) and text format (continuous and non-continuous). Following the PISA recommendations, we present here firstly the general objectives of reading on digital devices and secondly a platform of reading tests aiming to assess digital reading in different contexts, devices and classrooms. The study assessed the use of interactive whiteboards (IWBs) versus computers for electronic reading activities by children at the first year of elementary school (reading learning) and at the first year of secondary school. The assessment of reading has been carried out on three dimensions of text literacy: visibility, legibility and comprehension. The visibility task consisted in detecting a light modulated target, legibility was assessed with a letter-search task, and comprehension was evaluated both on narrative and explanatory texts and with or without illustrations. The results of the visibility test showed that younger pupils found the light signal easier to detect on a computer, whereas secondary-school pupils seemed more comfortable with the IWB. For the legibility test, we observed differences in error rates and discriminability according to grade, medium, font size and congruence between the letter target and the distractor letters. In the comprehension test, the explanatory texts yielded more accurate answers than the narrative texts. Moreover, illustrations facilitated the secondary school pupils' comprehension of the explanatory texts. To conclude, our study shows that these three dimensions interacted in electronic reading activities and highlights the need to add more dimensions as posture, memory and attention if we need to assess reading levels on news devices. An open guestion remains about how to integrate these dimensions in a single reading index, some suggestions will be made.

## **Division 14: Applied Cognitive Psychology**

## Sunday, 13 July

11:00 - 12:00

### DIV14-DKL02

9:30 - 10:30

# Improving cognition in older adults with cognitive training and physical exercise

### Louis BHERER

Perform Centre, Concordia University, Montréal, Canada

Numerous studies suggest that cognitive training can help improve cognitive performance and that this improvement is associated with identifiable patterns of brain plasticity (see Belleville & Bherer, 2012 for a review). An issue is to what extent cognitive training interventions lead to significant benefits that transfer to real life situations. Other studies also suggest that physical exercise can help improve cognition in older adults (see Bherer, Erickson & Lui-Ambrose, 2013 for a review). Our studies tried to better understand how cognitive training and physical exercise can help improve cognition in healthy older adults and those suffering from non-neurological chronic medical conditions.

In our cognitive training studies, older adults were assigned to a cognitive training intervention or a control condition. In physical exercise studies, we assessed the impact of 3-month exercise training programs (3 times a week for 12 weeks) on cognition and quality of life in sedentary and frail older adults aged 61-89 years. Frailty was determined by specific criteria in a complete geriatric examination.

Results of cognitive training studies indicated that intervention groups showed larger improvement than the control groups in the training tasks and that the benefits transfer to untrained tasks of attentional control. Furthermore, dual-task training was associated with improved balance and postural control. In exercise studies, the intervention group showed significant improvement in physical capacity (functional capacities and physical endurance), cognitive performance (executive functions, processing speed, and working memory), and quality of life (global quality of life, leisure activities, and social/family relationships). Benefits were overall equivalent between frail and non-frail participants and were not observed in the control groups.

Our results suggest that cognitive training leads to more than just task specific learning and thus supports the notion that cognitive plasticity for attentional control is preserved in late adulthood. Moreover, physical exercise training can lead to significant benefits in cognitive performance in older adults. Results with patients at risk of cognitive decline also suggest that cognitive training and exercise interventions are promising non-pharmaceutical tools to help improve cognition in older patients.

Keywords: Cognitive Aging, Cognitive Training, Physical Exercise

### Talent versus expertise: experiments and models

### Fernand GOBET

DIV14-DKL03

Department of Psychological Sciences, University of Liverpool, Liverpool, United Kingdom

The study of extraordinary performance has been carried out almost independently in two research traditions, the first emphasising practice and the second emphasising talent. The practice tradition has collected empirical evidence strongly supporting chunking as a key learning mechanism and practice as a prerequisite for becoming an expert. The talent tradition has provided convincing data for the importance of (inherited) individual differences in intelligence and working memory as well as other factors such as starting age and handedness. If future research on extraordinary performance is to be successful, these two traditions must joint efforts to understand the mechanisms involved. Given the number of variables involved, their complex interactions and the fact that they evolve as a function of time, the use of formal modelling is necessary.

Keywords: Chunking, Deliberate Practice, Expertise, Models, Nature Vs. Nurture Debate, Practice Talent

## **Division 16: Counseling Psychology**

### DIV16-DPL

13:00 - 14:00

### **Divisional Presidential Address**

Constructin Careers: actors, agents, and authors

### Mark L. SAVICKAS

Family Medicine, Northeast Ohio Medical University, Kent, United States

Many vocational psychologists are innovating their practices by shifting concentration from fostering career development to designing lives. This shift in practice has been prompted by changes in the social organization of work and occupations. To respond to these changes, some counselors have turned to narrative models and methods for self-construction and identity shaping because this approach emphasizes life design rather than occupational choice. Looking at lives as novels being written focuses attention on the themes that activate and characterize individuals in both the work and partnership/family domains. From this narrative perspective, vocational interests are solutions to problems that people have experienced and work is an opportunity to actively master what has been passively suffered. This narrative approach to career counseling enables clients to fit work into their lives, rather than fit themselves to jobs. Thus, psychosocial mattering replaces occupational congruence as the goal of career intervention.

Keywords: Career, Counseling. Life Design, Vocational Psychology

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### **Division 16: Counseling Psychology**

#### DIV16-DKLo1

9:30 - 10:30

### Constructing the self through life-designing dialogues

#### Jean GUICHARD

INETOP, Conservatoire National des Arts et Métiers, Paris, France

In today's Liquid Modernity (Bauman, 2000), individuals must determine life bearings with which to organize their lives and navigate career pathways. Depending on the type of issues individuals encounter, counsellors can support individuals direct their own lives through either career guidance interventions or life designing. These dialogues help clients construct the future perspectives that give their lives meaning and direction. This presentation will describe the major characteristics of life-designing dialogues, especially in relation to a model of self-construction (Guichard, 2004, 2005, 2009). This model describes an individual's identity as an evolving system of subjective identity forms (SSIF). It posits that the dynamism of a SSIF, therefore of self-construction, originate both in the individuals' life experiences and in the tensions and diverse combinations of two types of reflexivity - ternary and dual – by which they relate to their experiences. Several examples of actual life-designing dialogues will be provided to show the dialogic processes involved in the gradual elicitation of such reflexivity and the subsequent transformations of an individual' system of subjective identity forms.

Keywords: Career Counselling, Career Development, Dialogues, Future Goals, Life Design, Self-Construction

### DIV16-DKL02

12:00 - 13:00

#### Connecting life-themes to construct life portraits

#### Jacobus MAREE

Educational Psychology, University of Pretoria, Pretoria, South Africa

Career construction counseling aims to better equip clients to negotiate career transitions by choosing careers, designing successful lives and making meaningful social contributions. The personal life story provides the script for life and should be drawn on in times of change to manage repeated occupational shifts (Savickas et al., 2009). Career counsellors' primary task is to be of value to clients by creating safe spaces where reflexivity is encouraged. Reflection and repeated reflection on their reflections helps clients to uncover and connect previously unconnected dots in their life stories. It equips clients to uncover their personal characteristics in relation to the characteristics of certain jobs and to develop and share past, current and projected future stories. The latter include all the micro- or small and macro- or larger stories and experiences that collectively constitute clients' 'grand' life stories (Savickas, 2011). Career counselors enable clients to meta-reflect on these stories, navigate career-related transitions and transcend

weaknesses experienced in the past and the present as well as the projected weaknesses in the future (Chen, 2007). These weaknesses can undermine clients' chances of making a proper living, establishing satisfactory social networks and becoming self-directed/-determined (Blustein, 2010). A few case studies are briefly presented to demonstrate how the Career Construction Interview (Savickas) can be used with or without auxiliary techniques/ strategies to facilitate career (construction) counselling by identifying and connecting previously unconnected dots (life themes) in people's career and life stories.

**Keywords**: Career Construction Counseling, Career Stories, Case Studies, Life Portraits, Life Stories, Life-Themes, Reflexivity

### DIV16-DKL03

### 14:30 - 15:30

### Couselling and well-being: on the road to realities

### Maria DUARTE

Faculty of Psychology, University of Lisbon, Lisbon, Portugal

The rationale and guiding principles with which to revitalize counselling to foster well-being are discussed. The starting point is understanding clients' current realities along with the contextual supports and resources available to improve the quality of their lives. Tackling social demands is another core theme in the recreation of counselling. From this perspective, practitioners view counselling as a social activity aimed at self-construction and life designing. The ideas of counselling as socially produced are examined. The argument of the reflection is to frame the development of counselling while considering the main issues related to utility (theoretical options) and the realism of research (real necessities that promote the search of well-being). The idea is to discuss counselling in turn of objective and subjective knowledge, but both objectivized: life stories or events are countable and consciousness representable, and at the same time, life stories can be recounted because they exist. It is the set of experiences that are made over time, which act as lessons that allows for the development of knowledge and a variety of ways to relate to oneself, which is fundamental for the individual in his/her effort to navigate through the rest of their existence. In the end, the intention is to provide a reflection founded on the universal principle of the rights of each person: counselling must be committed as not every issue can be resolved through financial means, but rather requires the management of social, theoretical, and political tools.

## Friday, 11 July

### **Division 16: Counseling Psychology**

### DIV16-DKL04

### 17:00 - 18:00

### Towards a portfolio model of adaptability

### Frederick T. LEONG', Siddharth CHANDRA<sup>2</sup>

'Psychology, 'Asian Studies, Michigan State University, East Lansing, United States

In this paper, we will introduce a Portfolio Model of Adaptability (PMA) by extending the concept of a diversified portfolio from the field of Finance to that of Psychology. Our proposed Portfolio Model of Adaptability is closely related to two conceptual models in Psychology. The first related is that of Linville's (1985, 1987) Self-Complexity model.

The second related model is the Risk and Resilience Model of developmental psychopathology (Rutter, 2012). Portfolio theory addresses the pervasive problem of risk. In many situations, risk can be mitigated or even eliminated by the process of diversification, which involves taking actions that insulate a person from the possibility of undesirable outcomes. Diversification is accomplished by "not putting all of one's eggs in one basket."

In this paper, we present a portfolio-theoretic model of social roles. An individual is modeled as being invested in a portfolio of roles. An investment in any role gives the individual the capacity to adapt to different states of the world as they unfold using the resources that the investment in that role provides. Investments in different roles give the individual the capacity to adapt to a greater variety of states of the world than investment in a single role, and the degree of investment in each role determines the degree to which the individual has the capacity to use that role to adapt to a state of the world. Over time, as the individual encounters different states of the world, the degree to which he can adapt to them depends on his role-portfolio at the time he encounters those states.

Finally, we present some preliminary data in support of the Portfolio Model of Adaptability. The goal of this study is to extend Portfolio theory from the domain of individual traits to the domain of social context. Social context is operationalized as life role diversification in our model and the outcome of adaptability is operationalized as depression and physical health. Data on psychological outcomes and life roles diversity were collected on two waves of college students. The results for both samples show a negative association between participation diversity and WPSI-Psychosomatic subscale. In addition, participation diversity was associated with a lower BDI-Somatic score. The implications of the results for our Portfolio model will be discussed as well as directions for future research.

Keywords: Adaptability Portfolio

### **Division 16: Counseling Psychology**

### DIV16-DKL05

### 14:30 - 15:30

Choosing is distinguishing: the relevance of habitus theory in career counselling

#### Gudbjörg VILHJÁLMSDÓTTIR

Faculty of Human and Social Sciences, University of Iceland, Reykjavík, Iceland

Choices, a core feature of Bourdieu's habitus theory, are based on judgments that are social in origin. In their choices people distinguish themselves from some groups that have different habituses, and adhere to others. Habitus is defined as a social subjectivity i.e. a meaning-making structure that originates in one's social environment. Habitus thus influences value systems, choices and everyday practices as well as bodily postures and ways of being. Choices are socially rooted, because they are based on socially embedded cognitive structures. Assisting people in making choices is at the heart of career counselling and choosing is mainly understood as a psychological process. Many researchers have underlined that knowledge on social phenomena in career choice needs to be improved. This presentation explores if and how habitus theory can be a basis for an improved understanding of the relationship between social variables and career choice. A study will be presented that investigated the relationship

of habitus to career choice in a sample of Icelandic youth aged 19-22 (N=476). Reported cultural and leisure activities were used as a measure of habitus. The analysis of leisure and cultural items progressed in two steps: factor analysis and cluster analysis. The clusters constitute the four different habitus groups: (I) Pop and fashion, (II) Sports and rock, (III) Music, (IV) Literature. Correspondence factor analysis was conducted to show how the habitus groups (clusters) relate to other social variables. The results of the correspondence factor analysis validate habitus theory as they reveal that social variables such as gender and class are fundamental in habitus. Among the cultural and leisure items in the habitus measure, the music items are the ones that distinguish most between the four groups. In addition, habitus measures were strongly related to career variables, such as occupational perception and preferred future occupation. The results support previous research in showing that habitus theory is relevant to career counselling theory and can be a basis of better understanding of the relationship between social structure and career choice.

**Keywords**: Habitus, Leisure Activities, Occupational Perceptions, Occupational Preferences, Social Variables In Career, Decision Making

# Friday, 11 July

## Sunday, 13 July

## **Division 17: Professional Practices**

### DIV17-DPL

9:30 - 10:30

**Divisional Presidential Address** 

Evidence-based professional practice: working with families and substance use problems

#### James H. BRAY

Family Community Medicine, Baylor College of Medicine, Houston, United States

Scientific study has advanced our understanding of families and substance use issues and this research has facilitated the development of evidenced-based interventions. This paper will review recent advances in couple, family and substance use research. Application of these findings to evidencebased practice will be discussed. In addition, this talk will review the status of current evidence-based couple and family therapies and screening, brief intervention and referral to treatment for substance use problems in professional practice. Learning Objectives: (1) Understand current family process research and its application to couple and family therapy. (2) Understand current evidence-based couple, family and substance use therapies. James H. Bray, Ph.D. was the 2009 President of the American Psychological Association. He is the president of Division 17 of IAAP. He is an Associate Professor of Family and Community Medicine at Baylor College of Medicine. Dr. Bray's NIH funded research focuses on adolescent substance use, divorce, remarriage and stepfamilies. He is a pioneer in collaborative healthcare and primary care psychology. His presidential themes were the future of psychology practice and psychological science as a core STEM discipline. He is the co-editor of the Handbook of Family Psychology.

**Keywords**: Families and Couples, Psychotherapy, Substance Abuse

## Wednesday, 9 July

15:30 - 16:30

# Tailoring psychotherapy to the individual client: treatment adaptations that work

#### John C. NORCROSS

DIV17-DKLOI

Psychology, University of Scranton, Scranton, United States

Psychotherapy is a treatment method and a healing relationship fit to the individual patient; however, only in the past two decades has sufficient research been conducted to operationalize these noble intentions into robust guidelines. This invited address will review the meta-analytic research and clinical practices compiled by an interdivisional APA task force on effective methods of adapting psychotherapy to individual patients. We will consider six client dimensions (reactance level, stages of change, preferences, culture, coping style, religion) that can be used to tailor treatment, as well as some promising directions (attachment style, expectations) for doing so. In this way, practice and research converge in evidence-based responsiveness that demonstrably improves treatment success.

Presenter: John C. Norcross, Ph.D., ABPP, is Distinguished Professor of Psychology at the University of Scranton, Adjunct Professor of Psychiatry at SUNY Upstate Medical University, a board-certified clinical psychologist in part-time practice, and an internationally recognized authority on behavior change and psychotherapy. Author of more than 400 scholarly publications, Dr. Norcross has co-written or edited 20 books, including Psychotherapy Relationships that Work, Psychologists' Desk Reference, Handbook of Psychotherapy Integration, Self-Help that Works, Changeology, and Systems of Psychotherapy: A Transtheoretical Analysis, now in its 8th edition. Dr. Norcross has served as president of the American Psychological Association (APA) Division of Clinical Psychology, the APA Division of Psychotherapy, and the International Society of Clinical Psychology. Among his awards are APA's Distinguished Career Contributions to Education & Training Award, Pennsylvania Professor of the Year from the Carnegie Foundation, the Rosalee Weiss Award from the American Psychological Foundation, and election to the National Academies of Practice.

**Keywords**: Clinical Psychology, Professional Practice, Psychotherapy

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## **Division 17: Professional Practices**

### DIV17-DKL02

11:00 - 12:00

# From human-computer interaction in a bank merger to sustained growth

### **Regina COLONIA-WILLNER**

Practical Intelligence at Work, Inc., Smyrna, United States

Mergers and acquisitions occur often today as corporations seek to acquire larger market share, improve profitability, and become stronger. A key success factor here, however, is to ensure that current and new clients are happy after merger. To achieve this objective, companies such as banks, ecommerce or retail point-of-sale businesses need to learn as much as they can about the characteristics and performance of merged customers as they transition to the new company's products and services. During a bank merger, to catch the customer "in action" is essential.

In this wide-ranging research study on customer usage of automated teller machines (ATMs) during a merger of two large international banks, cognitive psychologist Regina Colonia-Willner statistically analyzed a random sample of 15,099 ATM users, ages 16-79, as they performed a total of 60,259 financial transactions during 44,435 visits to 103 ATMs in real environments. She collected data from the merged customers unobtrusively, in real time, over 22 days, and cross-referenced the findings to generate rich demographic information for the bank. The results reveal with millisecond precision who visited the ATMs, when they visited, what business they conducted, what situations they had to handle, what outcomes resulted, and how long each transaction took in (a) human time and (b) computer time. The statistical investigation of the merger at the newly created \$3 billion international bank was also crucial to the examination of scientific hypotheses not amenable to be tested in the laboratory. For example, the transfer of performance in "expert" (existing) customers and "novice" (new customers) was tested in an everyday environment, without the interference of a visible investigator (1) by comparing user's performance across two different versions of ATM software and (2) by comparing user's performance at two different types of branches. Implications of the findings for the study of procedural knowledge, experience, aging, and compensatory abilities will be discussed during the presentation.

Keywords: Organisational Change, Professional Practice

## Division 18: History of Applied Psychology

## Sunday, 13 July

DIV18-DPL

11:00 - 12:00

### Divisional Presidential Address

### Applied psychology, as a psychological paradigm

Heliodoro CARPINTERO Spain

Abstract not available

### DIV18-DKLo1

12:30 - 13:30

# Applied psychology to education in Argentina. From its beginnings to the present

Hugo KLAPPENBACH Argentina

Abstract not available

### DIV18-DKLo2

14:30 - 15:30

# Female participation in the development of Brazilian psychology

### Ana JACÓ-VILELA

UERJ, Rio de Janeiro, Brazil

This work seeks to rescue the participation of women in the history of psychology in Brazil, but mainly to point out their importance to the autonomy of the field of the discipline in the country. Nowadays some works have been dedicated to show the effective contribution of women, especially in the field of Psychotechnic and the practice in psychology. While important, this view implies some reduction of women's work, because the kantian tradition says that Reason is a men's privilege. In this sense, it is a debate on the meaning of «practice» and to remember the theoretical contributions of female characters in the history of psychology in Brazil, bringing them to the location of the development of psychology in the country.

Keywords: Brazil, History of Psychology, Women