Psychology

Abstract Book
From the 5th Annual International
Conference on Psychology, 30 - 31
May, 2011 & 1 – 2 June, 2011,
Athens, Greece.
Edited by Gregory T. Papanikos

TABLE OF CONTENTS

(In Alphabetical Order by Author)

Preface

This abstract book includes all the abstracts of the papers presented at the *5th Annual International Conference on Psychology, 30-31 May & 1-2 June 2011*, organized by the Athens Institute for Education and Research. In total there were 53 papers and 66 presenters, coming from 21 different countries (Argentina, Australia, Austria, Brazil, Canada, Czech Republic, Finland, France, Germany, Israel, Italy, New Zealand, Portugal, Russia, South Africa, Spain, Sweden, Turkey, the United Arab Emirates, the United Kingdom, and the United States of America). The conference was organized into 12 sessions that included areas such as Workplace Issues, Personality, Psychological Issues in Education e.t.c. As it is the publication policy of the Institute, the papers presented in this conference will be considered for publication in one of the books of ATINER.

The Institute was established in 1995 as an independent academic organization with the mission to become a forum where academics and researchers from all over the world could meet in Athens and exchange ideas on their research and consider the future developments of their fields of study. Our mission is to make ATHENS a place where academics and researchers from all over the world meet to discuss the developments of their discipline and present their work. To serve this purpose, conferences are organized along the lines of well established and well defined scientific disciplines. In addition, interdisciplinary conferences are also organized because they serve the mission statement of the Institute. Since 1995, ATINER has organized more than 100 international conferences and has published over 100 books. Academically, the Institute is organized into four research divisions and nineteen research units. Each research unit organizes at least one annual conference and undertakes various small and large research projects.

I would like to thank all the participants, the members of the organizing and academic committee and most importantly the administration staff of ATINER for putting this conference together.

Gregory T. Papanikos
President

FINAL CONFERENCE PROGRAM

Athens Institute for Education and Research
Social Sciences Research Division
Psychology Research Unit

5th Annual International Conference on Psychology
30-31 May 2011 & 1-2 June 2011, Athens, Greece

PROGRAM

Conference Venue: Titania Hotel, 52 Panepistimiou Avenue, Athens, Greece

Organization and Scientific Committee

- Dr. Gregory T. Papanikos, President and Director, ATINER.
- Dr. Thanos Patelis, Head, Psychology Research Unit of ATINER & VP Analysis, The College Board, USA.
- Dr. Nicholas Pappas, Vice-President of Academics, ATINER & Professor, Sam Houston State University, USA.
- Dr. Gregory A. Katsas, Head, Sociology Research Unit, ATINER & Professor, The American College of Greece-Deree College, Greece.
- Dr. Daphne Halkias, Research Associate, Long Island University, USA.
- Dr. Gregory Alexander, G., Lecturer, University of the Free State, South Africa.
- Dr. Andrew Demirdjian, Professor, California State University, USA.
- Dr. Kostas Fanti, Lecturer, University of Cyprus, Cyprus.
- Dr. Anthony Perry, Professor, North Central University, USA.
- Mr. Efstathios Polychronopoulos, Ph.D. Student, Old Dominion University, USA.
- Ms. Angeliki Polychronopoulou, Administrator, Greek Department of Health, Greece.
- Dr. Margarita Kefalaki, Researcher, ATINER.
- Ms. Gina M. Bondi, Researcher, ATINER.

Administration

Fani Balaska, Chantel Blanchette, Stavroula Kiritsi, Apostolos Kotsaspyrou, Eirini Lentzou, Konstantinos Manolidis, Katerina Maraki & Sylia Sakka

CONFERENCE PROGRAM

Monday 30 May 2011
09:00-09:30 Registration
09:30-09:45 Welcome and Opening Remarks
- Dr. Gregory T. Papanikos, President, ATINER.
- Dr. Thanos Patelis, Head, Psychology Research Unit of ATINER & VP Analysis, The College Board, USA.

09:45-11:30 (Room A) Session I: Psychological Issues in Education I
Chair: Papanikos, G.T., President, ATINER.

1. McDonald, B.L., Head of School of Educational Psychology, University of Wellington, New Zealand. The Elusive X Factor: Engaging Transfer of Training. (Monday, 30th of May 2011).
2. Marshall, A.E., Professor, University of Victoria, Canada. Possible Selves Mapping. Research and Practice to Facilitate School and Work Transitions for Emerging Adults.
3. Golski, S., Associate Professor, Rider University, USA, Hartman, A., Associate Professor, Rider University, USA, Sacchetti, D., Associate Professor, Rider University, USA, Carstens, M.B., Associate Professor, Rider University, USA, & Friedman, K. Associate Professor, Rider University, USA. Plan To Succeed: Subdomains of Executive Function Differ Between High- and Low-Performing College Students.
4. Contarello, A., Full Professor, University of Padova, Italy. Social Representations of Technology by University Students from Diverse Disciplinary Grounds.
5. Kamboukos, D., Assistant Professor, New York University Child Study Center, USA, Dawson-McClure, S., Assistant Professor, New York University Child Study Center, USA, Huang, K.Y., Assistant Professor, New York University Child Study Center, USA, Calzada, E., Assistant Professor, New York University Child Study Center, USA, Palamar, J., Assistant Professor, New York University Child Study Center, USA & Miller Brotman, L., Professor, New York University Child Study Center, USA. A Randomized Controlled Trial of ParentCorps/TeacherCorps in Urban Elementary Schools: Promoting Parent Involvement, Academic Achievement and Behavior from Pre-Kindergarten to 2nd Grade.
6. Duarte, A., Assistant Professor, University of Lisbon, Portugal, Goncalves, M.D. University of Lisbon, Portugal, Bahia, S., University of Lisbon, Portugal, Veiga-Simao, A.M., University of Lisbon, Portugal & Lopes da Silva, A., University of Lisbon, Portugal. Learning with Difficulties, Strategically and Creatively: A Way for University Students.

11:30-13:30 (Room A) Session II: Personality I **Chair:** Kamboukos, D., Assistant Professor, New York University Child Study Center, USA.	11:30-13:30 (Room B) Session III: Therapy **Chair:** Marshall, A.E., Professor, University of Victoria, Canada.
1. Bermeitinger, C., Professor, University of Hildesheim, Germany & Unger, B., Professor, University of Hildesheim, Germany. Subliminal Persuasion: Psychological and Juristic History and Current State of Affairs. 2. Wolfson, S., Programme Director, Northumbria University, UK & Goltsi, V., Ph.D. Student, Northumbria University, UK. The Social Identity of Football Fans In Greece: A Qualitative Analysis. 3. *Chami-Sather, G., Senior Consultant, J&R Business Consultancy, UAE. Conflict Resolution and Violence Prevention: Using Moral Neuro-Linguistic Programming In schools in the UAE. 4. Catechis, S., Adjunct Professor, Central Michigan University, USA. Best Practices Model for Adolescents and High Risk Behavior. 5. Reyes, T.L., Ph.D. Student, University of Chicago, USA. Fatherhood, Oxytocin, and Self-Report Altruism: Affiliative Behaviour Promotes Helping Behavior Along Multiple Pathways. 6. Onayli, S., Ph.D. Student, Middle East Technical University, Turkey & Barutcu Funda, K., Researcher, Middle East Technical University, Turkey. Relationship between Self Esteem and Self Types.	1. Fleury, J., Professor, Arizona State University, USA, Belyea, M., Professor, Arizona State University, USA & Perez, A., Assistant Professor, Arizona State University, USA. Predictors of Physical Activity Maintenance in Older Adults with Coronary Heart Disease. 2. Walker, T., Ph.D. Student, Cornell University & Rochester Institute of Technology, USA. Increasing Caregiver Responsiveness to Infant Behaviors: The Effects of a Brief Early Childhood Intervention Program. 3. Cortegoso Prezenszky, B., Undegraduate Student, Federal University of São Carlos, Brazil, Bachega, D., Federal University of São Carlos, Brazil & Reis, M.J.D., Federal University of São Carlos, Brazil. Post-Traumatic Stress Disorder and Obsessive-Compulsive Disorder: Functional Analysis of Clinical Case.

13:30-14:30 Lunch

14:30-16:00 (Room A) Session IV: Addictions **Chair:** Catechis, S., Adjunct Professor, Central Michigan University, USA.
1. Catley, D., Professor, University of Missouri, USA & Goggin, K., Professor, University of Missouri, USA. Motivational Interviewing for Smoking Cessation. 2. Leino, T., Researcher, Finnish Institute of Occupational Health, Finland. Work-Related Violence, Debriefing and Increased Alcohol Consumption among Police Officers in Finland. 3. Metz, V., Researcher, Medical University of Vienna, Austria & Fischer, G., Researcher, Medical University of Vienna, Austria. Sex and Gender in Addiction Research and Therapy. 4. Zanki, M., Researcher, Medical University, Austria, Metz, V., Researcher, Medical University of Vienna, Austria & Fischer, G., Researcher, Medical University of Vienna, Austria. Does our Brain Reward System Differentiate Between Substance and Behavioral Craving?

16:00-18:00 (Room A) Session V: Cognitive Psychology, Learning & Memory
Chair: *Chami-Sather, G., Senior Consultant, J&R Business Consultancy, UAE.

1. Pennequin, V., Professor, University of Tours, France, Sorel, O., Ph.D. Researcher, University of Tours, France. Radafshar-Faget, C., Student, University of Tours, France. Links between Metacognition and Children's Self-Esteem.
2. Rader, N., Professor, Ithaca College, USA. A Development Shift from Infancy to Preschool in Looking at a Speaker's Eyes.
3. Sorel, O., Ph.D. Researcher, Université F. Rabelais3 rue des tanneurs, France, Casquet, L., Student, Université F. Rabelais3 rue des tanneurs, France & Pennequin, V., Professor, Université F. Rabelais3 rue des tanneurs, France. Concurrent Verbalization, Metacognitive Processes and Planning Problem Solving on 5th Grade Schoolchildren.
4. Eichner, M., Research Assistant, Justus-Liebig University, Germany. Links of Eye-movements, Working Memory, Reading Strategies and Comprehension of Texts with Different Degrees of Difficulty.
5. Lee, K., Assistant Professor, Case Western Reserve University, USA, Jeong, D., Case Western Reserve University, USA, Floyd, B., Case Western Reserve University, USA, Cooper, R., Case Western Reserve University, USA, & Short, E.J., Case Western Reserve University, USA. Games for Automated Assessments of Cognitive and Fine-Motor Skills: Design and Preliminary Evaluation.
6. Stern, F., Private Practice, New York City, USA. Catherine Stern's Structural Arithmetic Method and the Work of Max Wertheimer: The Value of Gestalts in Teaching Arithmetic.
7. Schmidt, J., Ghent University, Belgium. Conflict or Contingency: The Parallel Episodic Processing (PEP) Model Outperforms Conflict Monitoring Models of the Item-Specific Proportion Congruent Effect.

18:00-19:30 (Room A) Session VI: Workplace Issues I
Chair: Rader, N., Professor, Ithaca College, USA.

1. Martins, M.C.F., Pos Graduate Professor, Methodist University of Sao Paulo, Brazil & Siqueira, M., Pos Graduate Professor, Methodist University of Sao Paulo, Brazil. The Mediator Paper of the Work Engagement in the Relationship between Perceptions of Organizational Support *versus* Well-Being at Work. (Monday, 30th of May 2011)
2. Cakirpaloglu, P., Associate Professor, Philosophical Faculty University Palacky, Czech Republic, Dobesova Cakirpaloglu, S., Associate Professor, Philosophical Faculty University Palacky, Czech Republic, Rehan, V., Associate Professor, Philosophical Faculty University Palacky, Czech Republic, Cakirpaloglu, S., Associate Professor, Philosophical Faculty University Palacky, Czech Republic & Smahaj, J., Associate Professor, Philosophical Faculty University Palacky, Czech Republic. Mobbing in Czech Republic.

21:00-23:00 Greek Night and Dinner

Tuesday 31 May 2011

8:30-10:30 (Room A) Session VII: Personality II
Chair: Bondi, G.M., Researcher, ATINER.

1. Campbell, S., Associate Professor, Nova Southeastern University, USA, Hammelman, J., Student, Nova Southeastern University, USA & Henry, L., Student, Nova Southeastern University, USA. Personality Factors and Smoking Behavior in College Students. (Tuesday, 31st of May, 2011)
2. *O'Rourke, N., Associate Professor, Simon Fraser University, Canada & Elmer, E., Simon Fraser University, Canada. Depressive Symptoms among Older Husbands and Wives over Time.
3. Abdul Ghani, M., Student, Loughborough University, UK. Domestic Violence in Malaysia: A Descriptive Study of the Demographical Characteristics of Malay Abused Women and Perpetrators.
4. Hochel, M., Research Fellow, University of Granda, Spain. 4Elements Personality Inventory: A New Approach to Personality Assessment in Organizations.

10:30-12:30 (Room A) Session VIII: Psychological Issues in Education II
Chair: Kelley, K., Professor, North Central College, USA

1. Katz, Y.J., Professor, Bar-Ilan University, Israel. Internet Based Technology and Peace Education: Enhancing Positive Inter-Group Relationships between Jewish and Arab Adolescents in Israel.
2. Nail, P., Associate Professor, University of Cenral Arkansas, USA, Bihm, E.M., Associate Professor, University of Central Arkansas, USA & Simon, J.B., Associate Professor, University of Cenral Arkansas, USA. Is School-yard Bullying Driven by Defensive Personality? (Tuesday, 31st of May, 2011)
3. Bautista, A., Post Doctoral Fellow, Tufts University, USA, Brizuela, B.M., Associate Professor, Tufts University, USA & Ko, Y.Y., Post Doctoral Fellow, Tufts University, USA. Middle School Mathematics Teachers' Implicit Conceptions about Multiple Representations for Functions. (Tuesday, 31st of May, 2011)
4. Katz, B., Student, Yeshiva University, USA, Mandelbaum, Y., Student, Yeshiva University, USA & Isaacs, J., Assistant Professor, Yeshiva University, USA. Social-Cognitive Model for the Development of Research Oriented Careers. (Tuesday, 31st of May, 2011)

10:30-12:30 (Room B) Session IX: Interpersonal & Inter-Group Relations
Chair: *O'Rourke, N., Associate Professor, Simon Fraser University, Canada

1. Kozhukhar, G., Lecturer, Moscow City University Psychology and Education, Russia. The Relations between Basic Assumptions and Different Kinds of Interpersonal Tolerance in Psychology Students.
2. *Haydu, V., Professor, University Estadual of Londrina, Brazil, Gaca Botelho, L., Professor, University Estadual of Londrina, Brazil & Yukio Tomanari, G., Professor, University of Sao Paolo, Brazil. Equivalence Relations and Romantic Jealously.
3. Vila Abad, E., Full Professor, U.N.E.D. University, Spain. Interpersonal Empathy: Differences between Boys and Girls in a Spanish Population.
4. Banerjee, M., Ph.D. Student, Michigan State University, USA. Parents' Expectations and Experiences of Discrimination: Their Relationship to Academic Outcomes in Ethnic Minority Families in the United States.

12:30-13:30 Lunch

13:30-15:00 (Room A) Session X: Testing Issues **Chair:** *Haydu, V., Professor, University Estadual of Londrina, Brazil	13:30-15:00 (Room B) Session XI: Emotional Health **Chair:** Katz, Y.J., Professor, Bar-Ilan University, Israel.
1. Bonini Campos, J., Professor, UNESP, Brazil. Oldenburg Burnout Inventory – Student Version: Cultural Adaptation and Validation into Portuguese. 2. Campbell, M.M., Ph.D. Student, Rhodes University, South Africa & Young, C., Senior Lecturer, Rhodes University, South Africa. Introducing the CORE-OM within a South African Context: Validation of the CORE-OM Using a South African Student Population Sample. 3. Church, M., Associate Professor, Kings College, USA. Relationships between MCMI-III Personality Patterns and Anxiety and Depression Scales: Analyses of 1203 Tests Administered in an Outpatient Practice. (Tuesday, 31st of May, 2011) 4. Fidalgo, A.M., Associate Professor, University of Oviedo, Spain, Scalon, J.D., Associate Professor, University Federal of Lavras, Brasil & Aguerri, M.E., Associate Professor, University of Buenos Aires, Argentina. Statistical and Graphical Solutions for DIF Detection Using Mantel-Haenszel Methods. 5. Valadão Dias, F., Researcher, UIPES, Portugal. Study of the Psychometric Qualities of FSS-III (Fear Survey Schedule) in a Portuguese Sample.	1. Kelley, K., Professor, North Central College, USA, Balensiefen, B., Student, North Central College, USA &Vandenberg, J., Student, North Central College, USA. Short Term Positive Emotions: Building Resources and Unravelling Negativity. 2. Orgeta, V., Researcher, University College London, UK. Quality of Life in Dementia: Comparing Patient and Caregiver Perspectives the REMCARE study. 3. Thomten, J., Ph.D. Student, Mid Sweden University, Sweden, Soares, J.J.F., Professor, Mid Sweden University, Sweden & Sundin, O., Professor, Mid Sweden University, Sweden. The Influence of Psychosocial Factors on Quality of Life among Women with Pain: A Prospective Study in Sweden. 4. Bolcekova, E., Graduate Student, Charles University, Czech Republic, Kulišťák, P., Charles University, Czech Republic, Fiala, J., Thomayer Teaching Hospital, Czech Republic & Rusina, R., Thomayer Teaching Hospital, Czech Republic. The Cerebellar Cognitive Affective Syndrome.

15:00-16:30 (Room A) Session XII: Workplace and Other Issues II **Chair:** Patelis, T., Head, Psychology Research Unit of ATINER & VP Analysis, The College Board, USA.
1. Albrecht, S., Senior Lecturer, Monash University, Australia. How Job, Team and Organizational Resources Influence Employee Engagement and Employee Commitment: Qualitative and Quantitative Analyses. 2. Rozehnalova, E., Ph.D. Student, Charles University in Prague, Czech Republic & Hoschl, C., Ph.D. Student, Charles University in Prague, Czech Republic. Team Sociomapping a Teamwork Visualization Tool. 3. Lacev, A., Ph.D. Student, Charles University, Czech Republic. Using Sociomapping of Crew Communication and Cooperation as a Tool for Team Performance Management in the Ground-Based Experiment Simulating Manned Flight to Mars. 4. Malloy, D.C., Professor, University of Regina, Canada. Ethical Relativism, Idealism, & Religiosity: An International Study of Physicians.

16:30-19:30 Urban Walk
20:00-21:00 Dinner

Wednesday 1 June May 2011
Cruise: Departure at 07:00 Estimated Return Time: 20:30
Thursday 2 June 2011
Delphi Visit: Departure at 07:35 Estimated Return Time: 19:30

Mariny Abdul Ghani
Student, Loughborough University, UK.

Domestic Violence in Malaysia:
A Descriptive Study of the Demographical Characteristics of Malay Abused Women and Perpetrators

Domestic violence is a traumatic episode which is influenced by complex social, cultural, and psychological factors. It is often referred to as the violence between husband and wife or non-married partners. In Malaysia, however, domestic violence is only regarded as the violence occurring among intimate partners who are either spouses or ex-spouse of a legal relationship. Domestic violence in Malaysia is believed to be hugely underreported even though for over the last three decades, this issue has been recognized as a social problem in the country. Despite the modernization and urbanization of Malaysia, a patriarchal structure is still maintained in the society and this reflects in the cultural belief of male dominance. Due to the fact that many issues on domestic violence in Malaysia are still under-researched, therefore little is known regarding the domestic violence experiences among Malaysians. This research aims to investigate attributes of the women as the victims together with men as the perpetrators. The present study describes the characteristics of Malay abused women and their spouses/ex-spouses using self-reporting questionnaires. Data were collected from 23 women who identified themselves as having domestic violence experiences in some point of their marital relationships. The analysis of data was performed via the PASW Statistics 18 Advanced Statistical procedure. The data were used to examine the demographical features of the women and their male counterparts. Results showed that majority of the women were financially dependent to their partners, average age of 30 years. On the other hand, the abusers were typically in low income group with minimum educational level. Further aspects such as type of occupation as well as presence of children and other family members were also discussed in this paper.

Simon Albrecht
Senior Lecturer, Monash University, Australia.

How Job, Team and Organizational Resources Influence Employee Engagement and Employee Commitment: Qualitative and Quantitative Analyses

The science and practice of employee engagement continues to evolve with ongoing incremental refinements to existing models and measures. This research aimed to extend the influential Job Demands-Resources model (Bakker & Demerouti, 2008) by describing how job, team and organizational factors interrelate to influence engagement and downstream outcome variables. Qualitative interview data (n = 51 senior operational and human resource managers of a large multi-national mining company) and quantitative structural equations modelling of survey data (n = 3437 employees of a large multi-national mining company) show the important influence of organizational focused resources (e.g. organizational culture of fairness and support; senior leadership), team focused resources (team culture) and job level resources (career development, autonomy, supervisor support, and role clarity) on employee engagement, extra-role behavior and organizational commitment. The research provides researchers and practitioners with a simple but powerful framework, a suite of measures and a map of their inter-relationships which can be used to help understand, develop and manage engagement and its outcomes. Study limitations and future opportunities to further merge the science and the practice of employee engagement are outlined.

Meeta Banerjee
Ph.D. Student, Michigan State University, USA.
Stephanie J. Rowley
Associate Professor, University of Michigan, USA.

Parents' Expectations and Experiences of Discrimination: Their Relationship to Academic Outcomes in Ethnic Minority Families in the United States

For ethnic minority families in the United States, the effects of parents' experiences of racial discrimination on parenting and children's outcomes have been discussed, but rarely empirically tested (Garcia Coll et al., 1996). Findings within the literature have shown that within African American families, discrimination can influence certain parenting behaviors such as monitoring, involvement and socialization especially when parents expect their children to be discriminated against (Murry et al., 2008; Peters, 2002). Furthermore, previous research on discrimination within the school context has examined how parents' perceived discrimination is linked to their educational involvement and relationships with teachers (Rowley, Helaire & Banerjee, 2010). Studies have not examined the direct effects of parents' expectations of discrimination in school on children's academic outcomes. The current study examines whether African American and Latino parents experiences of discrimination and expectations for their child relate to their children's educational outcomes.

The study sample consisted of 73 Latino and African American parent-child dyads recruited from middle schools in the United States. Parents reported on their expectations that their children will be discriminated against within the school context (e.g., "School will be insensitive to his/her needs") and their own experiences with discrimination within the past year. Children reported on three different forms of academic outcomes: classroom engagement (e.g., "I participate when we discuss new things"), academic self-concept and self- efficacy (e.g., "Homework is easy for me").

Preliminary analyses show that parents' expectations for discrimination are negatively related to children's academic self concept, self-efficacy and classroom engagement. Furthermore, parents' discrimination experiences are negatively related to children's academic efficacy. Future analyses will examine possible moderators or mediators (e.g., racial identity, racial socialization) of this relationship. Implications for examining discrimination within school contexts within the United States will be discussed.

Alfredo Bautista
Post-Doctoral Fellow, Tufts University, The Poincare Institute for
Mathematics Education, USA.
Barbara M. Brizuela
Associate Professor, Chair of Department of Education, Tufts
University, USA.
Yi-Yin Ko
Post-Doctoral Fellow, Tufts University, The Poincare Institute for
Mathematics Education, USA.

Middle School Mathematics Teachers' Implicit Conceptions about Multiple Representations for Functions

Psycho-educational researchers within the field of mathematics education consider that multiple representational systems (e.g., natural language, algebraic notation, graphs, tables, pictorial representations, etc.) are extremely powerful to foster students' mathematical thinking and learning. According to recent studies, using multiple representations allows students to deepen their understanding of mathematical concepts, represent different aspects of their ideas in meaningful ways, and enhance their problem solving skills. Despite the importance of these representational tools, little is known about how teachers conceive of their usefulness in the teaching of mathematical problems. The purposes of this study are: 1) to investigate the implicit conceptions that middle school mathematics teachers hold regarding multiple representations in problems that deal with functional relations; and 2) to analyze if there are differences in the conceptions of teachers with different educational backgrounds. Participants were 58 Grades 5-9 mathematics teachers from nine school districts in the geographical area of New England (US). They are all currently participating in the first of three graduate-level online courses focused on the mathematics of functions. Regarding their educational background, 23 teachers have undergraduate or masters degree/s in mathematics and/or mathematics education, 12 teachers have degrees in other science-related disciplines (e.g., biology), and the remaining 23 teachers have degrees in other disciplines (e.g., history). The responses to several key questions were analyzed by means of descriptive and non-parametric statistical methods. Results showed that teachers from all three groups tend to use both natural language and algebraic representations with equal frequency. However, different implicit conceptions were found when comparing teachers with different educational backgrounds. Teachers who had science-related degrees made use of a wider variety of representations to characterize the problems (tables, functions,

ordered pairs of numbers). Fewer representations were identified in the responses of teachers who had degrees in mathematics (arrow diagrams) and other fields (pictorial representations). The main implications and limitations of the study are discussed.

Christina Bermeitinger
Professor, University of Hildesheim, Germany.
Benjamin Unger
Professor, University of Hildesheim, Germany.

Subliminal Persuasion: Psychological and Juristic History and Current State of Affairs

First, we will present an overview on the history of subliminal persuasion in advertising and (political) campaigns. A milestone of the debate represents the well known story of the marketing expert James Vicary ("Drink Coca Cola", "Eat Popcorn") which was eventually exposed as publicity hoax.

In a second part, an international comparison (at least Germany and Greece) on the juristic basis for subliminal persuasion is given. In the third part, we will show serious experimental research on subliminal persuasion in different fields of psychology (e.g., priming experiments, choice behavior).

There is overwhelming evidence that subliminal stimuli are able to influence reactions on subsequently presented supraliminal stimuli. In contrast, it is controversially debated whether choice behavior can be influenced by use of subliminal stimuli. In this context, some recent studies suggest that subjects' motivation is a crucial point. For instance, Karremans, Stroebe, and Claus (2006; JESP) showed that subjects were influenced in their intention to drink a specific brand which was subliminally presented only if they were thirsty. In own studies, we adapted their experiment to the concept 'concentration' and embedded the subliminal presentation of a logo into a computer game. Thus, we were able to replicate the results: only tired participants consumed more from the subliminal presented dextrose pills than from not presented brands. Therefore, the findings confirm that subjects were influenced from subliminal presented stimuli if these stimuli are motivation related and if subjects are in the matching motivational state. We will discuss what consequences these results will have.

Eva Bolcekova
Graduate Student & Psychologist, Charles University & Army
Rehabilitation Centre, Czech Republic.
Petr Kulistak
Neuropsychologist, Charles University, Thomayer Teaching Hospital &
Army Rehabilitation Centre, Czech Republic.
Jindrich Fiala
Neurologist, Thomayer Teaching Hospital, Czech Republic.
Robert Rusina
Neurologist, Thomayer Teaching Hospital, Czech Republic.

The Cerebellar Cognitive Affective Syndrome

Traditionally, the cerebellum has been considered to be a structure involved in coordinating skilled movements, posture, gait and muscle tone. However, recent findings have shown that its function also involves cognitive functions and emotion. The cerebellar cognitive affective syndrome (CCAS) is a clinical unit designed to describe these deficiencies in patients with cerebellar damage; it has been defined as a deficit of executive functions, visuospatial functions, language functions and personality change. However, there is still ongoing discussion about which „higher" functions are influenced by the cerbellum, and how.

We investigated 16 subjects with lesions limited to the cerebellum (11 male and 5 female, mean age 54.57 years, mean education 13.52 years) and 16 healthy, demographically matched controls. Our methods included a semi-structured interview, a neurological assessment of ataxia, an extensive neuropsychological assessment of cognitive, executive and affective functions and single-photon emission computed tomography imaging (SPECT).

Results of neuropsychological methods confirmed deficiencies in cognitive and executive functioning in patients with brain damage limited to the cerebellum, including visuospatial and verbal functions, attention, learning, memory, thinking, planning, fluency, and categorization. There were no significant differences between patients with lesions in the left and right hemisphere. Affective changes, although clearly present in the clinical picture of the research sample, were not confirmed by questionnaire methods. SPECT revealed that hypoperfusion in one cerebellar hemisphere was accompanied by hypoperfusion in contralateral frontal lobe, thus giving support to their mutual functional relationship.

Juliana Bonini Campos
Professor, UNESP, Brazil.
Joao Maroco
UIPES, ISPA – Instituto Universitário, Portugal.

Oldenburg Burnout Inventory – Student Version: Cultural Adaptation and Validation into Portuguese

Objective: to adapt the Oldenburg Burnout Inventory for College Students (OLBI-S) to the Portuguese language and study its reliability and validity. Methods: We conducted face and content related validity as well as construct and criterion related validities of the Portuguese version of the OLBI-S. The OLBI-S was deployed in the internet and answered by a sample of 958 Brazilian students and 612 Portuguese students. We conducted confirmatory factor analysis. To confirm the factorial structure of the OLBI-S the sample was divided into three equal parts: two thirds of the sample was used for probing and refining the factor structure and one-third was used for external validation with a Multigroup confirmatory factor analysis. We estimated the convergent validity using the Average Variance Extracted (AVE) and Composite Reliability (CR). Concurrent validity was assessed against the Maslach Burnout Inventory (MBI-SS). Divergent validity was assessed with the Beck Depression Inventory (BDI). The factor's internal consistency was measured by Cronbach's alpha (α). Results: The confirmatory factor analysis of the OLBI proposed two-factor structure showed good fit (CFI=0.913, GFI=0.944, RMSEA=0.058) but three items of the scale showed factor weights <0.50 and these two were removed. After item trimming, the two-factor structure showed good fit (CFI=0.928, GFI=0.951, RMSEA=0.059). We observed excellent simultaneous adjustment of the test and validation samples (CFI=0.911, GFI=0.938, RMSEA=0.042) with invariance of the model (Factor weights: χ^2_{dif}=19.666, p=0.074; Factor Covariances: χ^2_{dif}=24,181, p=0.062; Error Residuals: χ^2_{dif}=37.252, p=0.140). Convergent validity was low for both factors (AVE$_{Exhaustion}$=0.358, AVE$_{Disengagement}$=0.363; CR$_{Exhaustion}$=0.793, CR$_{Disengagement}$=0.797) but discriminant validity was good (ρ^2_{ExDist}=0.067). The scale had good concurrent validity with MBI (r=0.29-0.50) and good divergent validity compared to the BDI (r=0.12-0,25). The internal consistency of the scale was below the desired (α<0.70). Conclusion: Despite the confirmation of two-dimensional structure of the Portuguese version of OLBI-S this inventory showed low convergent validity and internal consistency and should therefore be used with caution in order to trace the burnout syndrome in Students.

Panajotis Cakirpaloglu
Associate Professor, Philosophical Faculty University Palacky, Czech Republic.
Simona Dobesova Cakirpaloglu
Associate Professor, Philosophical Faculty University Palacky, Czech Republic.
Vladimir Rehan
Associate Professor, Philosophical Faculty University Palacky, Czech Republic.
Snezana Cakirpaloglu
Associate Professor, Philosophical Faculty University Palacky, Czech Republic.
Jan Smahaj
Associate Professor, Philosophical Faculty University Palacky, Czech Republic.

Mobbing in Czech Republic

Research objectives: In the last ten years there has been increasing concern on victimization at work. The specific characteristics, aims and consequences of these phenomena are now generally referred to as mobbing behavior. Mobbing could be defined as a specific form of systematic, long lasting harassment and degradation of people in the workplace in order to force the victims of lobbing to end their working relationship. This phenomenon negatively affects the mental and physical health of its victims as well as their motivation and social relationship.

Mobbing can be originated by traditional causes such as eliminating an undesired individual or by a precise corporate strategy aimed at reducing the workforce organizations. The incidence of lobbing in the Czech Republic is relatively new and is linked to global democratization of society and the transformation from a centralized to a market economy.

Proposed methodology: A special method was used for collecting relevant empirical data about the mobbing in Czech Republic: A Negative Acts Questionnaire (NAQ). NAQ was used with two groups of employees in the private and the public sector. These data were statistically compared and analyzed.

Expected outcomes: The results confirmed the expectation about mobbing in Czech Republic as well as it's relation with the specific sector of work (private or public), with the subjective position in the work process, sex, age and other characteristics.

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Introducing the CORE-OM within a South African Context: Validation of the CORE-OM Using a South African Student Population Sample

The Clinical Outcomes in Routine Evaluation-Outcome Measure (CORE-OM) was originally introduced as a standardised, practice-based evidence tool for generating effectiveness data by practitioners within the context of routine clinical practice, in United Kingdom (UK) National Health Service (NHS) settings. Following wide application across UK NHS sites and subsequent translation into various languages including Dutch, French, German, Welsh, Chinese and Italian, the CORE-OM has proven to be a pragmatic, pan-theoretical measure of gross psychological distress, applicable across client populations, presenting problem, clinical setting and therapy models. The CORE-OM as a standardised measure of gross psychological distress holds the potential for international comparison and benchmarking of therapeutic outcome. However in order for South Africa to benefit from this tool, the CORE-OM must be applicable and relevant within a South African context. This requires its validation within South African populations fluent in English, and if successful, subsequent translation into other official South African languages, and validation of those translations, for use in African language speaking populations and Afrikaans speaking populations. The aim of this article is to demonstrate the cross-cultural validation of the CORE-OM, using a South African student population sample; and in so doing to provide both clinical and non-clinical South African student referential data for use in interpreting CORE-OM scores within South African University student counselling centre contexts. Data analysis was conducted in Statistica. Parametric t-tests, effect sizes and confidence levels were used to evaluate differences between population samples as was done within the analysis of the original UK referential data.

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Personality Factors and Smoking Behavior in College Students

The purpose of this study is to examine personality factors and smoking behavior in a college population. Cigarette smoking continues to be a major health concern in many countries. Although many individuals who smoke are aware of the health risks, smoking prevalence continues to increase. The linking of personality factors to smoking has been researched using clinical samples, with smokers scoring high on extraversion and neuroticism. Negative affect control and automatic habitual smoking are specifically associated with depression. Nicotine dependence is another large contributing factor to why smokers have such difficulty quitting. This study attempts to discover specifically why people smoke and what prevents them from quitting. A sample of sixty six current undergraduate and/or graduate students consisting of non-smokers, previous smokers, and habitual smokers completed a randomly formatted packet of self-report measures that included the Smoking Motivation Questionnaire (STAR-SMOQ), Karl Fagerstrom Nicotine Tolerance Questionnaire, the Revised NEO Personality Inventory (NEO-PI-R), and a Smoking Questionnaire. On the personality measure, smokers show significantly higher levels of openness to experience and significantly lower levels of conscientiousness than both non-smokers and previous smokers. Results also show a positive correlation between the four components of motivation and smoking tolerance scores. So as tolerance increases so does motivation in all areas. Correlations between personality and four factors of smoking motivation were also found. So as levels of neuroticism increase, so does reports of using smoking for enhancement of cognitive performance, and using smoking as a means of enhancing pleasure. No significant relationship was found between personality factors and tolerance. Results of this study were not consistent with recent findings which did not find personality differences between comparison groups. Failure to find group

differences in past research may be due to a lack of emphasis on examining types of smokers' personalities.

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Best Practices Model for Adolescents and High Risk Behavior

Research has shown that the key risk periods for drug abuse among adolescents are during major transitions in their lives. The first is when they enter the secondary educational environment. They often experience new academic and social situations and emotional challenges, such as learning to get along with a wider group of peers. At the same time, they may be exposed to greater availability of drugs and social activities involving drugs.

This paper presentation will present the findings of six recovery school programs in the United States, utilizing best practices in the development of not only an academic curriculum but also therapeutic intervention for adolescents. These six schools are considered a day treatment program providing a support system for adolescents in recovery.

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Motivational Interviewing for Smoking Cessation

Tobacco use is the leading cause of preventable death, and is estimated to kill more than 5 million people each year worldwide. While there are now effective behavioral and pharmacological treatments available for smokers who wish to quit smoking, the great majority of smokers are not motivated or ready to quit. Motivational Interviewing (MI) is a clinical method for enhancing motivation for change that focuses on eliciting smokers' "internal" reasons for change and emphasizing patient autonomy. Initially developed for treating addictions (such as alcohol and illicit drugs), it has more recently been applied to health behavior change. MI is consistent with principles of self-determination theory and patient-centered medical care. Our research has demonstrated that adherence to principles of MI when talking to smokers about quitting leads to improved engagement, collaboration, and benefit within the session. Recent meta-analyses suggest MI is more effective for smoking cessation than brief advice to quit; however, effects are more modest than anticipated. A review of many of these studies suggests future research should use larger sample sizes, focus on smokers who are less motivated, include fidelity assurance procedures, provide assistance to quit for those who make quit attempts, and use an attention control. Our group is currently conducting a randomized controlled trial (KC Quest) designed to address the limitations of prior studies, which we will describe. MI represents a promising avenue for increasing motivation for smoking cessation, although more research is needed to fully evaluate and maximize its effects.

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Conflict Resolution and Violence Prevention: Using Moral Neuro-Linguistic Programming in Schools in the UAE

The UAE has become one of the most desired spots in the Arabic world with major cities like Dubai and Abu Dhabi experiencing an exponential growth in the diversity of people making these cities their homes. This in turn is reflected in the schooling system trying to accommodate diverse populations of national and expatriate students. Based on the researcher's experience for the last five years in the UAE, prominent issues related to the behavioral domain seem to dominate schools impeding on the learning process in the classrooms. Fieldnotes from counseling with families indicate that parents and teachers are feeling the discomfort and stress particularly related to the children's self acceptance and self fulfillment.

The researcher working as a counselor with families and schools has collected evidence reporting behaviors that have been prevalent in the schools where their children attend. Certain characteristics of children within the age range of 11-15 seem to be more salient as the identity crisis is at onset. Issues such as bullying, segregation and prejudice seem to prevail causing anxieties and psychological threat to the wellbeing of families and their children away from home. Some of these issues are related to the lack of competence and the absence of proper language to deal with conflict resolutions. With English as the main communicative language, there is little attention or research conducted to use this competitive competence in order to create peaceful and constructive learning places, thus teaching moral neurolinguistic programming.

Based on previous research by Sather, Hicks, J. and Tappan, et al. This brief session will share recommendations of the moral NLP that needs to be modeled by teachers in the schools and by parents in the homes to prevent or resolve conflicts when they arise. Suggestions for future applications related to the school curriculum will also follow in order to teach our children the appropriate neurolinguistic behavior that would best suit their needs to survive in schools of diversities, thus dwelling on the commonalities of universal morals rather than differentiation based on cultural diversity.

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Relationships between MCMI-III Personality Patterns and Anxiety and Depression Scales: Analyses of 1203 Tests Administered in an Outpatient Practice

This paper documents two teacher educators' experiment to promote student teachers' learning in a blended learning environment. Through class presentation and e-learning tasks, student teachers are guided to make inquiries into their past experiences. Such inquiries serve to answer the questions such as who they are and why they are today. Their self-inquiry and dialogues within group enable them to see the impact of embedded stories on their growth and development. The task of looking for experiential threads leads them to reflect on the connection between experience and life. Since narrative is an effective way of organizing our experience of time, narrative inquiry is powerful to promote reflection that informs professional practices.

Blended learning is a potentially useful approach to promote collaborative and cooperative learning. It provides opportunities for students to exchange ideas and construct their own knowledge through asynchronous learning tasks. The challenge that tutors commonly encountered is developing strategies to integrate face-to-face interactions with the online learning, and encourage students to be actively engaged in the online task. This paper provides examples of planning blended learning and describes the critical role that students' narratives play in a blended learning environment. The sharing of lived experiences allows students to continue their dialogues beyond the classroom. Clandinin & Connelly (2000) pointed out that experience has a narrative quality, and thus making inquiries into narrative is a good way to understand one's experience that can be a source of knowledge for professional practices (Carter, 1993; Clandinin & Connelly, 1996). In this study, narrative inquiry is used as a tool: 1) to recollect the essence of lived experience; 2) to construct and reconstruct meaning through reflection on embedded stories; 3) to understand how narrative approach can be used in a blended learning environment. The purpose of this study was to investigate relationships between some forms of anxiety and depressive disorder and underlying personality

dysfunctions. Data were available from 1,203 outpatient psychotherapy clients assessed in a private practice setting with the Millon Clinical Multiaxial Inventory-III (MCMI-III). The MCMI is a 175 true-false questionnaire, widely used for diagnostic and treatment purposes. Observations of these data, as well as client feedback about their results, suggested strong personality patterns of avoidance in anxious and depressed clients. In order to investigate this hypothesis, those with significant elevations on the anxiety and depression scales of the MCMI were included for analyses. The percentages of patients with significant elevations on the anxiety and depression scales as a function of the total 1203 out patient population (from highest to lowest) were: Anxiety (63%), Dysthymia (49%), Major Depression (29%), Post Traumatic Stress Disorder (9%). For each of these four patient groups, the percentages of clients with significantly elevated scores on the 14 personality dimensions in the MCMI were calculated. In addition, correlations between the four anxiety and depression scales with the personality scales were determined. Results showed that for all four Axis I diagnostic categories there were high percentages of significant elevations for Depressive, Dependent, Negativistic, Masochistic, Avoidant and Schizoid personality patterns (from a low of 28% to a high of 82%), supporting a marked tendency toward experiential avoidance (thoughts, feelings and actions). Although consistent with a number of theoretical orientations, these results are particularly in line with a burgeoning Acceptance and Commitment orientation. The theoretical implications of these results, as well as practical considerations for those in private practice, are discussed.

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Social Representations of Technology by University Students from Diverse Disciplinary Grounds

Born from a wider interdisciplinary project aimed to critical assess the *leaky pipe* phenomenon, i.e. the progressive decrease in women's presence in science and technology at growing levels of the formative and professional route, the present intervention focuses on the representations of technology shared by university students enrolled in different curricula of the Faculties of Engineering, Mathematical, Physical and Natural Sciences and Psychology of the University of Padua, Italy.

In the last few years, a team composed of (mainly) women scientist working at the University of Padua in different scientific areas – social psychologists, information engineers, historians, sociologists - advanced a proposal in order to deepen knowledge on, and to provide an overview of, the components fostering the enquired phenomenon (Badaloni *et al.* 2008).

As the situation is today, more women than men initiate their academic career, obtain a degree and a PhD, but then drop out through the career path leaving men in majority. This trend suggests unequal opportunities for women in science & technology careers and high-tech employments which the European Agencies are monitoring and inviting to study (Enwise Report, 2004). The main aim of the present study is to explore the way in which "scientific knowledge" and "technology" are socially constructed by young women and men of different disciplinary fields and the powerful effects of this construction on individual choices and possibilities.

To this purpose, a paper-&-pencil instrument has been submitted to university students, meant as young researchers potentially devoted to science and technology. More than two hundred respondents (N=232) took part in the research.

Data were exploited through lexical content analysis, usual statistical analyses and to correspondence analysis with the aim to detect the underlying principles shaping the representation field. The results show various gender differences suggesting interpretations of the phenomena and indicating further research developments.

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Post-Traumatic Stress Disorder and Obsessive-Compulsive Disorder: Functional Analysis of Clinical Case

Post-traumatic stress disorder (PTSD), psychological disorder classified as an anxiety disorder, is characterized by: exposition to a traumatic event, avoidance responses of event-related stimuli, state of hyperarousal and recollection of the trauma. An important data about the disorder relates to the high rate of comorbidity with other mental disorders. This study aimed to formulate a functional analysis of the relations involved in the establishment and maintenance of these responses in a case with clinical diagnosis of obsessive compulsive disorder (OCD), characterized by intrusive thoughts and repetitive behaviors, possibly as a comorbidity of a post-traumatic stress disorder (PTSD). It describes the case of an adult male, married, removed from work due to the impossibility of fully developing his work due to frequent cleaning and elaborated rituals to avoid contamination. Systematic desensitization and exposure techniques used in the intervention process were proved ineffective in treating his OCD. During the treatment, evidence seems to indicate that the rituals of cleaning may be contingently related to the history of cancer treatment which the patient submitted by the age of five years. The psychological treatment, still in progress, had 20 sessions and verbal reports indicate a decrease of frequency of certain classes of inappropriate or compulsive behaviors such as throwing objects off and brushing teeth. Further assessments are aimed at comparing the levels of anxiety and depression at the beginning and end of treatment. An explanatory model found evidence of PTSD, coupled with the conditions of the complex contingencies that shaped and established the current chain of responses. Since the disorder is linked to aversive contingencies knowledge provided by the Behavior Analysis on coercive control behavior have been particularly studied to the formulation of the model. The final product is presented as a proposal for a functional analysis as an explanatory model of the installation and maintenance of PTSD behaviors. The proposed model may be useful in the clinical context in psychology, since it sets out the main variables to be tracked and worked during the treatment of trauma-related disorders.

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Learning with Difficulties, Strategically and Creatively: A Way for University Students

The presentation focuses on a package of three intervention modules centered on increasing university student's adaptation and achievement: "Learning with Difficulties", "Creative Problem Solving" and "Learning Strategies". These modules were developed and tested in the context of a wider project conducted by the University of Lisbon ("Underachievement and drop-out in the University of Lisbon: Scenarios and paths") funded by the FCT.

"Learning with Difficulties" module aims at the development of competencies to cope with learning difficulties. Using encounter group discussions the module works in promoting self-knowledge, reflection and awareness on: personal conceptions of learning difficulties; personal conceptions' role on coping with difficulties; and strategies for coping with difficulties. Evaluation of the module's impact was conducted through a single case experiment (a group of university students) which suggests a consequent gain of self-awareness, dispute of previous conceptions, discovery of alternative coping strategies and congruent behavioral changes.

The "Creative Problem Solving" module consisted in the guidance of nine university students in the elaboration of an academic group work using the "Creative Problem Solving" model. The effectiveness of the implementation of the CPS model was evaluated through a questionnaire. The results show that all participants were highly engaged in the process and pleased with the final work. More specifically, the students recognized the importance of this model in the increase of the number of adequate ideas for the work, the clarity of the problem definition and the richness of the debate between group members.

Finally, "Learning Strategies" module aims at improving the quality of learning though promotion of self-awareness and self-control on one's learning strategies (on the theoretical framework of SAL –

Students' Approaches to Learning). The module uses a purposely built software application (PAE v.1.1.) that allows its users to assess their own learning strategies, to know alternative ones and their different consequences on the learning product, to learn how to modify them and how to self-regulate them. Module's evaluation was carried through a single case experiment that was replicated in a group of university students. Results suggest an improvement in the quality of the learning process (increase of "deep" and "organized" learning strategies) but not in the quality of the learning product.

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Links of Eye-movements, Working Memory, Reading Strategies and Comprehension of Texts with Different Degrees of Difficulty

Research in eye-movements and reading is going on for over 100 years. Since then competing computational models to predict saccades and fixations in reading have been developed (see Reichle, Rayner, Pollatsek, 2003). Though there has been extended research on basic influences on eye-movements in reading, e.g. word length and frequency effect, the question about text comprehension has seldom been addressed with text and not sentence as unit of analysis. Kaakinen and Hyönä (2005) did research on the influence of perspective on eye-movements in text reading. Burton and Danemann (2007) used the same texts to find associations between working memory, epistemiological beliefs (EBs) and eye-movement parameters. They found subjects with low reading span, a complex working memory measure, who made more regressions, recalled more correct information of the text. The probability of regression was moderated by EBs. One question rising from this finding was if text-comprehension should be fostered by changes in EBs in poor readers rather than by reading-strategy training? An alternative explanation could be that EBs are mediated by reading strategies or goal orientation. Furthermore can eye-movements in reading be connected to other parameters used in educational science?

To address these questions I examined eye-movements in an eye-tracking study (SMI RED4, 50 Hz) with 80 participants using a german translation of the texts mentioned above. The study used a 2x2 randomized design, with difficulty as within and perspective as between subject factor. Findings did not reveal an interaction effect of epistemiological beliefs and reading-span on text "comprehension" but showed a relation of mean fixation times and the reading span. Number of fixations controlled for time contributed uniquely to explained variance in recall of information for a given perspective, but not for the non-perspective.

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Statistical and Graphical Solutions for DIF Detection Using Mantel-Haenszel Methods

Mantel-Haenszel (MH) methods are one of the most popular non-parametric differential item functioning (DIF) detection procedures. They have satisfactorily resolved the testing of the H_0 of no DIF in the general case (Landis, Heyman, & Koch, 1978). So, as described in Fidalgo and Madeira (2008), we can apply the generalized MH statistics to DIF assessment in multiple groups both for dichotomous items and polytomous items (Fidalgo & Scalon, 2010). So, we should use statistical significance tests, but there are at least two reasons why the graphical analysis of the DIF is of particular relevance. First, for assessing the type of DIF. And second, to optimize statistical power of the MH statistics used for DIF detection. This papaer provides some guidelines to choice between different MH statistics depending on the results of the graphical analysis.

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Predictors of Physical Activity Maintenance in Older Adults with Coronary Heart Disease

Little is known about the social contextual or motivational determinants through which physical activity is maintained following cardiac rehabilitation. The research is based on the wellness motivation theory, which conceptualizes behavioral change as a process of intention formation and goal-directed activity that guides the creation of positive health patterns. The objective was to determine which social contextual and motivational variables within the theory were significant predictors of physical activity among individuals with diagnosed coronary heart disease (CHD), who had completed a program of cardiac rehabilitation. The study was longitudinal survey conducted over a period of 6 months following graduation from cardiac rehabilitation. Measures were taken within two weeks of graduation from cardiac rehabilitation (Time 1), 3 months following graduation (Time 2), and 6 months following graduation (Time 3). 183 participants completed the study (76% male, 94% Caucasian, age 63.6 (s.d. 10.24), years of education 15.9 years (s.d. 3.33). The outcome variable, physical activity was measured using the 7-day Physical Activity Recall. Social contextual measures captured environmental safety and resources, and perceived social support of family and friends. Motivational measures captured self-knowledge, motivation appraisal, and self-regulation. Demographic variables included age, gender, education, and co-morbid conditions. A linear growth model for time spent in physical activity was run with demographic and social contextual variables as time invariant and time varying covariates, respectively. None of the demographic variables predicted initial level of physical activity. However neighborhood environment was positively related to the amount of physical activity, with higher perceived neighborhood resources related to more physical activity. Home environment had a negative relationship with physical activity time spent, with higher perceived resources resulting in less physical activity. There was a positive relationship between social support from friends and time spent in physical activity. Of the motivational time varying covariates self-regulation was positively associated with physical activity. The

model adequately fitted the data (TLI=.845, CFI=.917, and RMSEA=.072). Data provide a basis for ongoing programmatic research investigating motivation in the maintenance of physical activity in patients with diagnosed CHD.

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Plan To Succeed:
Subdomains of Executive Function Differ Between High- and Low-Performing College Students

Frontal lobe function is related to executive behaviors such as planning and organization. As the frontal lobe continues to develop into late adolescence and young adulthood, it is reasonable to consider the impact of executive functions on school achievement, even into the college years. Most studies, however, have considered this relationship only in younger children. The goal of the present study was to assess executive function in college students on academic probation and students with a 3.0 GPA or better. Executive function was measured by self- report (BRIEF-A, Roth, Isquith, & Gioia, 2005) across nine theoretically and empirically-distinct domains (Inhibit, Shift, Emotional Control, Self-monitor, Initiate, Working Memory, Plan/Organize, Task Monitor, and Organize Materials) in students on academic probation (n=58, GPA M=1.52(+/-0.49)) and those with a 3.0 GPA or higher (n=110, GPA M=3.39(+/-0.26)). Self-reported problems with the ability to inhibit, emotional control, working memory, and organization of materials did not differ between groups. Those on academic probation had significantly more self-reported problems with ability to shift, self-monitor, initiate, plan, and monitor tasks. Academic interventions should target those domains most related to poor performance.

BRIEF-A subscale	High-performing M(+/-SD)	Academic probation M(+/-SD)	t result
Inhibit	13.16 (+/-2.64)	13.71 (+/-2.70)	ns
Shift	9.21 (+/-2.00)	10.02 (+/-2.94)	t(166)=2.11, p=.02
Emotional Control	16.74 (+/-4.47)	16.03 (+/-4.95)	ns

27

Self-monitor	9.08 (+/-2.33)	9.84 (+/-2.33)	$t(166)=2.02$, $p=.02$
Initiate	12.14 (+/-2.74)	13.93 (+/-3.11)	$t(166)=3.85$, $p<.0001$
Working Memory	12.47 (+/-3.08)	13.10 (+/-3.24)	ns
Planning/Organization	14.56 (+/-3.33)	16.79 (+/-3.99)	$t(166)=3.85$, $p<.0001$
Task monitor	10.15 (+/-2.03)	11.11 (+/-2.35)	$t(166)=2.53$, $p=.006$
Organization of Materials	12.44 (+/-4.00)	12.83 (+/-4.18)	ns

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Equivalence Relations and Romantic Jealousy

Considering that few studies have been conducted to analyze factors that may prevent equivalence class formation, this study aimed to investigate whether pre-experimental relations involving the name of a person with whom one is emotionally involved affects the emergence of equivalence relations. Additionally, the degree of correlation between the score on a Romantic Jealousy Scale and the percentage of responses accordantly to arbitrary equivalence classes involving the name of the boyfriend and an unknown female name or the name of the girlfriend and an unknown male name were analyzed. Seventeen heterosexual college students, who were dating for at least 6 months, responded initially to a questionnaire to inform the name of their boyfriend or girlfriend and the name of unknown people. Subsequently arbitrary equivalence relations to establish four equivalence classes with four stimuli each class were trained and the emergent relations tested (symmetry, transitivity, and equivalence). The stimuli were (a) the name of their boyfriend or girlfriend, (b) a name of an unknown person, (c) two non-familiar graphics stimulus. In the last phase of the procedure, participants responded to the Romantic Jealousy Scale. Three of the 17 participants don't demonstrated stimulus equivalence classes and responded incorrectly to all the trials that tested the equivalence relations between the boyfriend name and the name of an unknown woman or the girlfriends name and the name of an unknown man. The number of responses according to the classes established by the experimenters was compared to the score of the Romantic Jealousy Scale (the greater the score the lower the jealously), and a positive correlation were obtained. It was concluded that pre-experimental relations involving the name of the boyfriend or girlfriend interfered with the emergence of equivalence relations, and that the equivalence relations method probably is an objective way to measure romantic jealously.

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4Elements Personality Inventory: A New Approach to Personality Assessment in Organizations

Nowadays personality assessment methods are routinely employed in organizations for several purposes such as preliminary screening of job applicants or as a part of assessment centers. In addition, the increasingly widening range of learning and development methods employed within Human Resources has expanded the use of psychometric tools beyond its traditional domain of personnel selection. The 4Elements Personality Inventory is a new psychometric method that, unlike most of other commonly used personality tools, has been created specifically as an aid for personal and professional development. While the inventory has demonstrated good psychometric properties (internal consistency Cronbach α ranging from .78 to .86; Guttmann's split-half ranging from .78 to .85), it is at the same time based on a construct which is intuitive and easy to understand for the general (non-professional) public. The underlying four factor personality model was inspired by the ancient philosophical concept of the four elements (fire, water, air and earth) which has proven to be a useful metaphor of human personality. The presentation of this new method is focused on three aspects: introduction to the four elements personality model as a new approach to personality assessment; validity, reliability and psychometric properties of the 4Elements Personality Inventory (including correlations with other personality measures) and a cross-cultural study on American, Czech and Spanish sample populations.

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A Randomized Controlled Trial of ParentCorps/TeacherCorps in Urban Elementary Schools: Promoting Parent Involvement, Academic Achievement and Behavior from Pre-Kindergarten to 2nd Grade

A substantial literature documents a multitude of risk factors for underachievement, especially child behavior problems and lack of parent involvement in education. The association between early behavior problems and achievement increases with age and students with both early learning and behavior problems are at even greater risk for underachievement. In fact, approximately half of children with significant conduct problems at school entry are expected to show more serious behavioral and academic difficulties throughout elementary school and into adolescence. Early interventions that successfully alter trajectories of conduct problems in school settings may result in important educational and mental health outcomes among young children.

This paper will present long-term outcomes from a school randomized controlled trial of *ParentCorps/TeacherCorps (PC/TC)*, a universal family and school intervention for Pre-Kindergarten (Pre-K) minority students living in urban, disadvantaged neighborhoods. *PC/TC* aims to promote family engagement, prevent behavior problems and improve student academic achievement. Ten elementary schools serving primarily Black, low-income students were randomized to *PC/TC* or a no intervention control condition. 1050 **children** participated, representing 77% of the Pre-K population. Children were 4.3 years old; 51% were boys and 91% were Black (African American or Caribbean). Children and their parents were assessed using multiple methods and informants from Pre-K through 2nd grade (ages 4 – 7).

Using intent-to-treat analyses, intervention significantly improved teacher and parent behavior management practices and parent involvement in education. Analyses of 6 repeated teacher ratings (Pre-K to 2nd grade) on conduct problems, academic performance and social competence revealed intervention effects for the total sample and the high aggression group (20% of the sample), with intervention effects for the high aggression group being discernable earlier in time and larger in magnitude. Results support that a culturally-informed, empirically-supported school and family intervention for young children from high-risk environments could have an enormous public health impact.

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Social-Cognitive Model for the Development of Research Oriented Careers

Social Cognitive Learning Theory (SCLT; Bandura, 1986) is a theoretical framework that helps to conceptualize the origins of behavior, focusing largely on self-efficacy as a source of behavioral motivation. Lent, Brown, and Hackett (1994) have laid the theoretical groundwork for applying SCLT to the sphere of career choice, resulting in Social Cognitive Career Theory (SCCT). They argue that self-efficacy in an occupational area should make it more likely to pursue that area professionally. In this study, we further connect the theoretical groundwork of SCCT to SCLT by analyzing not only the effects of self-efficacy, but also its potential causes. In particular, we examine the effects of mastery experiences, social/vicarious experiences, and affective states on self-efficacy, focusing on the pursuit of research oriented careers. We hypothesize that both mastery experiences and social/vicarious experiences doing research as an undergraduate student will predict research related affect, which will then predict research self-efficacy. This will, in turn, predict goals that include pursuing additional research training and a research related career. Participants were 194 individuals with undergraduate college research experience. They filled out questionnaires assessing experiences of research mastery, social/vicarious research experiences (support from the research mentor and research lab), research related affect, self-efficacy for research, and research goals. Results from the path model show that both mastery and social/vicarious experiences did predict research goals, but these effects were mediated by research affect and self-efficacy. Thus, both personal and interpersonal experiences predicted future career plans but these effects were largely due to related affect and cognition. This study supports Lent et al's application of SCCT to SCLT, further extends the theory to detail sources of career self-efficacy, and provides specific suggestions how mentors of undergraduate students can encourage their own students to pursue research-based careers.

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Internet Based Technology and Peace Education: Enhancing Positive Inter-Group Relationships between Jewish and Arab Adolescents in Israel

A review of the research on inter-group relationships indicates that inter-group encounters and dialogue are useful in the promotion of positive relationships between conflict groups. However, despite the general positive significance of such inter-group activities, there are specific social conflicts that are not successfully solved or reduced by accepted conflict resolution methodology. One of these particular conflicts is that which involves Jews and Arabs in Israel. This conflict is based on historical, religious, cultural and national roots.

It should be noted that as a democratic state, both Jewish and Arab citizens of Israel enjoy equal rights and are considered as fully-fledged members of Israeli society. Nevertheless the relationship between the two groups is mitigated by the continuous tension between Israelis and Palestinians.

The present study attempted to plot a new strategy for enhancing Jewish-Arab relationships using internet-based technology. The methodology used in the project was based on two major assumptions. The first assumption was that the use of carefully planned internet contact for inter-group activities can overcome problems evident in face-to-face contact. The second assumption was that the use of internet technology is especially motivating and attractive for adolescents and is a positive mediating tool.

Eighty two Jewish and Arab 11th grade high school students participated in the project. Participants were randomly assigned to a research group (40 students, half Jewish, half Arab) and to a comparison group (42 students, half Jewish, half Arab). Students in the research group participated in a four-month internet-based inter-group dialogue as part of their formal school activities. At the same time students in the comparison group participated in regular daily school activities which included formal instruction as to the importance of inter-group dialogue. Two social aspects of the inter-group relationship, inter-group attitudes and social distance, were examined in a pre-post research design. The first aspect deals with the way students in each group perceived students in the conflict group and the second aspect

dealt with the willingness of Jewish and Arab students to socially integrate in their activities.

Results of the research indicate that students in the research group became more positive in both their perceptions of their conflict group counterparts and their willingness to integrate with them in social activities, while no positive change was detected for both aspects among students in the comparison group.

These findings support the strong social potential of internet-based methodology for the solution of inter-group problems at the high school level. Further studies are necessary in order to examine the long-term effect of internet-based interactions as well as to investigate what happens when students who participate in internet-based dialogue meet in real life situations.

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Short Term Positive Emotions: Building Resources and Unravelling Negativity

Within a given day, we are likely to experience a range of positive, neutral, and negative emotions. Although patterns of these experiences will vary among individuals, most will experience moments of positive emotions. Fredrickson (1998) suggests that these emotions broaden our thought-action patterns (increasing creativity, flexibility, and openness) and build a variety of resources. These resources include psychological (sense of well-being), cognitive (our ability to mindfully attend to information and integrate options), social (enhanced relationships with others, providing and accepting support) and physical (enhanced immune system functioning and stress response). In addition, these positive emotions can provide buffers against, or assist in undoing (down-regulation) of negative experiences. Thus, rather than just viewing them as a nice consequence or goal, they seem to provide important benefits to the individual.

The current research explores the links among specific short-term emotions, resources, and undoing effects. Similar research by Fredrickson & Levenson (1998) found that the specific emotions of amusement and contentment reduced physiological arousal, which promoted undoing of negative experiences, but did not examine the effects of other emotions. We hypothesized that specific emotions will build different resources. Participants were randomly assigned to one of the following conditions: a gratitude building exercise, a loving/kindness meditation, a humors film, or a control condition. They then completed a series of questionnaires examining well being, mindfulness, and social relationships. To examine the effects of short-term positive emotions, participants were also asked to respond to the buffering effects of this experience and their ability to cope with upcoming stressful events (exams, presentations, job search issues). Yuan, McCarthy, Holley, & Levenson (2010) suggest that even these small moments of positive emotions can undo negative physiological arousal. The data for this project is currently being collected and the results should provide some interesting insights into these important questions.

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The Relations between Basic Assumptions and Different Kinds of Interpersonal Tolerance in Psychology Students

The urgency of the present research is determined by the need to improve social and communicative competencies in the processes of professional education of psychology students as their future special skills and competencies.

The aim of the study was to investigate the association between World Assumptions and different kinds of tolerance to other people in psychology students. The data were collected on 97 females and 23 males from 17 to 24 years old. Participants completed the following questionnaires: World Assumptions Scale (WAS, Janoff-Bulman, 1989), The Index of tolerance (Soldatova & etc., 2008), and Types of ethnic identity (Soldatova, Ryzhova, 2008). To investigate the received data the descriptive statistics for variables and the multiple regression analyses were used.

The regression results showed that several World assumptions influence the index of tolerance, which includes social, ethnic tolerance and tolerance as a personal trait. Also some assumptions influence various types of identity as a degree of expressiveness of ethnic tolerance. It was revealed that the increased tolerance index was associated 1) with the rise of benevolence of the impersonal world and general meaningfulness of the world; 2) with the decrease of justice and self-worth. The normal identity, expressed in the form of ethnic tolerance, is predicted by positive benevolence of the impersonal world and the controllability of the world; and is negatively determined by justice. The general assumptions as predictors of different types the ethnic tolerances were benevolence of the impersonal world and justice. There were other positive and negative relationships between Basic Assumptions and the types of tolerance.

The study provides further evidence for the connection between Basic assumptions and different forms of tolerance. The current research shows the importance of Basic assumptions in creating practical-oriented training programs for psychology-students aimed at the development of their professional communicative competencies.

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Using Sociomapping of Crew Communication and Cooperation as a Tool for Team Performance Management in the Ground-Based Experiment Simulating Manned Flight to Mars

Project MARS-500, hosted by the Institute of Bio-Medical Problems in Moscow in cooperation with the European Space Agency, is a multidisciplinary experiment simulating conditions during long lasting space flights. An international crew composed of 6 members has been placed in a ground based experimental replica of a spacecraft module. We employed a sociometric method termed Sociomapping in order to analyze crew communication and cooperation. The objective of our research was to verify usage of Sociomapping as a tool for monitoring of group dynamics and demonstrate whether or not it was possible to increase the crew safety during long lasting space flights by early diagnosis of possible communication failures between crew members. Findings from the pilot stage of this experiment (MARS-105) will be presented. The results show that the outputs from Sociomapping analyses (i.e., Sociomaps) can be used effectively for an early intervention in the crew as well as for the team development within the context of a long range space missions.

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Games for Automated Assessments of Cognitive and Fine-Motor Skills: Design and Preliminary Evaluation

Cognitive problem-solving, fine-motor, and working memory skills are closely linked to fundamental learning capabilities that ensure normal physical and mental development. Despite the need for objective and accurate assessments for these skills, most existing evaluation methods involve fixed sets of problems and controlled environments which may significantly reduce the sensitivity of the assays. In an attempt to address these limitations, recent studies have been exploring how play-based assessments can provide more detailed information about persons with developmental, behavioral, or social problems, better identify weaknesses, and lead to early intervention targeted at strengthening social, emotional, and cognitive functioning. However, the current approach in play-based assessment requires direct observations of behaviors by a trained professional based on continuous monitoring and recording of the entire test with undivided attention. This process is also highly costly.

This paper presents a novel play-based assessment tool, called TaG-Game (Tangible Geometric Games) for automated and objective assessments of a person's cognitive problem-solving, fine-motor, and working memory skills. TaG-Game consists of a set of interactive cube blocks with embedded sensors and a wireless communication module for real-time data collection and transmission and an interactive graphical user interface (iGUI) for administration of the test and monitoring the collected data. The game involves three sets of quizzes: assembly, shape-matching, and sequence-memory. Measurable performance data include, but are not limited to, incremental and total completion time and correctness at each manipulation step. To quantify difficulty associated with each geometric quiz, we defined the play complexity, Cplay, based on an information-theoretic approach.

For preliminary evaluation, we conducted a small-scale human

subject study involving 51 university students aged between 18 and 30, 25 females and 26 males. The results showed a strong correlation between Cplay and performance data implying potential use of Cplay for customizing test difficulties for specific populations. For validity evaluation, two subsets of the Wechsler Adult Intelligence Scale – 4th Edition (WAIS-IV), Block Design Test and Matrix Reasoning, were employed on a small group of participants who have also completed TaG-Game. Despite the small sample size in our validation study to date, the results show a correlation coefficient of 0.75 between the shaping-matching TaG-Game and Matrix Reasoning.

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Work-Related Violence, Debriefing and Increased Alcohol Consumption among Police Officers in Finland

This study examined the associations between increased alcohol consumption and work-related violence among police officers. Data consisted of a representative sample of Finnish police officers (n=1734), who responded anonymously to a postal questionnaire. Binary logistic regression analyses were used to calculate the odds ratios and their 95% confidence intervals (CIs) for increased alcohol consumption. Five percent of the study group rated that they had increased their alcohol consumption due to violence. The odds ratios of the increase were 6.96 (95% CI=2.08-23.25) for lack of debriefing. We also found that debriefing was rarely used in the police force in Finland. Among our study sample only 26% had received debriefing, 65% answered that they had never needed it, 6 % had never asked for it and one percent had never received debriefing although self asked for it. Those who lacked de-briefing seem to increase their alcohol use due to violence. Increased alcohol consumption may reflect attempts to cope with intolerable emotions originating from violent encounters as well as memories of their own ability to function during a violent encounter. The result of rarely used debriefing may reflect that police officers are reluctant to receive it. This reluctance is in line with earlier studies showing how police culture discourages the expression of personal feelings and distress. However, if alcohol consumption grows to alcohol misuse it can in the long run have serious consequences especially in the context of policing, which requires fast reflexes and quick thinking. Increased alcohol use can further create problems such as sickness absence, impaired performance of job-related tasks, accidents and injuries, poor attendance, high employee turnover, and increased health care costs for police organizations.

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Ethical Relativism, Idealism, & Religiosity: An International Study of Physicians

Physicians are trained to treat patients using sound medical practices. There are, however, circumstances in which ethical dilemmas arise. These do not have scientific answers. When such circumstances occur the physician may seek guidance from theological and/or philosophical sources. In this study involving 1255 physicians from Canada, China, Ireland, India, Japan, & Thailand, variance was found among cultures' religiosity and ethical ideology. In terms of religiosity, the findings are perhaps not surprising as the relative religious homogeneity of Thailand, India, and Ireland would typically lead to a normative acceptance of religion and religious involvement. China and Japan's complex, implicit, and often situational relationships with Confucianism, Buddhist, Taoist, and Shinto (i.e., in Japan) make the notion of religious observance extremely ambiguous. Canada, as perhaps the most culturally diverse country in this study, represents the west's distancing from established religions and religious practices and thus scored lowest on the religiosity measure. The countries scoring high on idealism (i.e., the belief that the greatest good and least harm can be achieved for all) were those countries whose cultural orientations have been broadly described as collectivist; whereas those scoring low in idealism were the two western countries, Ethical relativism was higher in Japanese and Indian physicians than those from the other four countries. This study is the first to explore the differences between ethical ideology and religiosity among physicians in an international setting as well as the relationship between these two constructs. Both religiosity and ethical ideology are extremely generalised and the extent to which they may impact the actual professional behaviour of physicians is unknown. This paper sets up a point of departure for future research that could investigate the extent to which physicians actually employ their religious and/or ethical orientation to solve ambiguous medical decisions.

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Possible Selves Mapping.
Research and Practice to Facilitate School and Work Transitions for Emerging Adults

Young people face significant challenges today as they transition into adulthood. Complex cultural and contextual factors impact decisions about romantic relationships, postsecondary education, work, and lifestyle opportunities (Arnett, 2004). Navigating these life transitions during emerging adulthood is an individualized process that draws on adaptive skills and socio-cognitive abilities (Dwyer, Smith, Tyler, & Wyn, 2003) and also carries significant implications for positive mental health (Schulenberg, Sameroff, & Cicchetti, 2004). Young people need concrete strategies to help them evaluate future options and successfully manage multiple life transitions.

Possible Selves (Markus & Nurius, 1986) is a future-oriented, personalized form of cognitive self-concept that includes an individual's repertoire of goals, aspirations, motives, fears, and threats. Representing a young person's unique socio-cultural and historical contexts, the exploration of possible selves incorporates models, images, and symbols from social experiences to impart meaning, give direction, and clarify the link between identity and motivation (Markus & Nurius, 1986; Oyserman, Bybee, & Terry, 2006). The interplay of cultural and contextual factors provides meaningful opportunities to negotiate identity, belief systems, values, and future pathways. Interactions among these factors shape young people's perceptions of education and work, gender and family roles, available resources, and lifestyle opportunities (Marshall, 2002; Shepard & Marshall, 1999). Our research team has developed a *Possible Selves Mapping Process* (Marshall & Guenette, 2008) that assists young people to identify school and work goals, to generate behaviours linked to those goals, and to make informed decisions about their future lives.

In this paper, I explain the concept of Possible Selves using examples from our research studies. A brief Possible Selves Mapping exercise will demonstrate its use in psychology, counseling, health, and vocational-related clinical and research settings.

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The Mediator Paper of the Work Engagement in the Relationship between Perception of Organizational Support *versus* Well-Being at Work

Among diverse attempts to transpose the positive psychology's proposals to the organizational context, the one which recognizes the work engagement as a positive mental state can be highlighted. Such work engagement is composed by the vigor or the high level of energy contained in the forces renewal's sensations and the disposition during the work, as well as by the absorption that professional activities exert; which takes the individual to recognize that he/she is taken and intent in its tasks, and makes he/she stop thinking about personal problems. The study principal aim was to investigate if work engagement would act, in the relations evidenced by the literature, as a mediator between the worker perception concerning the support offered by the organization and the well-being at work (WBW) - this one represented by three positive bonds: job satisfaction, job involvement and affective organizational commitment. 157 workers had taken part in the study, whose majority was man (53.5%), young (51%), with academic degree (51.6%) and collaborator of private companies (79.6%).The data had been gotten by means of a questionnaire that included validated measures to evaluate the investigated variables. Regression models had disclosed that organizational support perception exerts positive and significant impacts on the three dimensions of WBW, as well as that such impacts are stronger on affective organizational commitment, and less strong onto job satisfaction and job involvement. When work engagement was added to regression models, as an independent variable beside organizational support's perception, it was realized a significant increase in the impacts exerted, especially on job involvement. Models of hierarchic regression stepwise had disclosed that work engagement exceeds the impact value of organizational support perception on job involvement when it is placed as direct antecedent; however, the same circumstance did not happen in relation to the others two dimensions of WBW. In view of the evidences, it seems that the vigor and the absorption contained in the work engagement concept become itself an important factor to unmask which variables would be able to fortify the WBW state, which represents an indicator of positive health in the work context.

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The Elusive X Factor: Engaging Transfer of Training

Transfer of training has had a long history in psychology with an interest and debate first initiated in the late 1800s, the controversy being reflective of the evolution of behavioural and cognitive paradigms. Although since that time considerable research and theoretical development has occurred, it remains a problematic issue. It has become a complex and bewildering concept but most commentators would agree it commands a central focus in teaching and learning. It is also agreed that it is difficult to achieve in training programmes, despite the considerable resources allocated to training and human resources development. Indeed, lack of transfer is one of the key reasons developed to explain why training frequently fails. Even more so today, with the global economic and knowledge economies, its importance is increasingly emphasised. Identifying how best to achieve transfer in the field has been problematic however and overly governed by a theoretical and research agenda. Using what is known about learning and teaching has promise - the strategic management of transfer of training provides a basis for ensuring that learning can be used in different ways and in different contexts. There is however, a need to make transfer explicit, principles- based and dynamic if it is to achieve its purpose. This would provide a sound basis for making transfer a reality for training programmes that seek to have impact. In this paper, reference will be made to a number of cases of how this can be achieved.

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Sex and Gender in Addiction Research and Therapy

Historically, addiction research has neglected the scientific focus on women, and most studies have been conducted on male patients only, with the concluding results generalised to the female population. The role of sex and gender differences in susceptibility to the development of addictive disorders, and their consequences for prevention and treatment strategies require detailed studies, as do the increasing prevalence rates of addictive disorders among adolescents and the aging population. This literature review synthesises evidence of sex and gender differences in substance-related and substance-unrelated addictions, with particular emphasis on women's health. These differences are described in view to epidemiological and etiological factors, onset and course of illness, symptomatology, comorbidity, as well as treatment. Current research findings on gender aspects referring to specific licit (nicotine, alcohol, prescription drugs) and illicit (cocaine, heroin) substances as well as substance-unrelated conditions (pathological gambling, internet addiction) are presented. However, evidence-based science on differences between men and women in addictive disorders is still underrepresented in that target area, in addition to the fact that currently findings of different types of studies applying varied methods are reported. Finally, a critical discussion highlights common methodological flaws and limitations in research on sex and gender differences, and emphasizes the need for the implementation of a sex and gender-sensitive methodology in evidence-based studies.

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Is School-yard Bullying Driven by Defensive Personality?

Problem

According to the compensation model of aggression (e.g., Gondolf, 1985; Staub, 1989), school-yard bullying is driven by a defensive personality structure, as bullies strive to fend off their own feelings of weakness and vulnerability by dominating weaker schoolmates. Based on this model, we predicted that the higher the peer- and teacher-rated defensiveness, the greater the rated bullying.

Method

The participants were 93 sixth-graders enrolled in a public school in Arkansas, USA. They were evaluated by their classmates and four teachers in terms of Self-Esteem: "is pleased with himself or herself; etc." and Defensive Egotism: "Always wants to be the center of attention; thinks too much of himself or herself; can't take criticism." A few days later, students' bullying was rated, "Bullies Others: Starts the bullying; always finds new ways of harassing the victim; etc." All ratings were made on a three-point scale: "0 = Never, 1 = Sometimes, 2 = Often."

Results

We averaged the students' and teachers' ratings separately. The high correlations between these ratings support their validity (for self-esteem, $r = .52$; for defensive egotism, $r = .69$; for bullying, $r = .53$, all $p's < .001$). As predicted, peer-rated self-esteem was negatively related to peer-rated bullying ($r = -.27, p < .01$). Further, peer- and teacher-rated defensive egotism were both positively associated with rated bullying ($r = .63, p < .001; r = .73, p < .001$; respectively).

Conclusion

Children either lower in self-esteem or higher in defensive egotism may bully classmates to compensate for their own perceived weaknesses. As these findings are correlational in nature, however, the causal links of the compensation model are open questions. Future research showing that bullying increases following self-image threats and decreases following self-affirming experiences would provide stronger evidence that bullying is driven by defensive compensation.

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Depressive Symptoms among Older Husbands and Wives over Time

In this longitudinal study of 119 heterosexual long-wed couples, we examined levels of depressive symptoms within and between older couples 3 times over 2-years. Results of this study suggest that husbands are affected by their previous negative mood as well as their wives' negative as mood concurrently reported (year 3 only); in contrast, there appear to be no cross-over effects from men to women. These findings extend upon previous research that has examined the contagion effects of depression within couples (Joiner & Katz, 1999).

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Relationship between Self Esteem and Self Types

The aim of the study is to examine the relationship between global self-esteem and self-types in Turkey. Self-esteem can be defined as the belief of being lovable and competent (Carlock, 1999). Balanced Integration and Differentiation (BID) model (Imamoglu, 1995) proposed four self-types regarding the individuation and relatedness. These are separated-individuation (most differentiated), related-patterning (most integrated), separated-patterning (most unbalanced) and related-individuation (most balanced). BID model defines the individuation as an ongoing process only within the person and it can be better with a balance of not having negative feelings to being related to others (Imamoglu & Karakitapoglu-Aygun, 2007). If the relatedness and individuation can be balanced, this provides satisfaction (Imamoglu, 2003). The previous studies showed that there is a relation between self esteem and individuation. The results of the studies conducted in western cultures suggest that self is higher when people are more individualistic, however results of the studies conducted in eastern cultures suggest that self esteem is lower when the people are more individualistic. Turkey can be called as a modernizing collectivistic country (Hamon & Ingoldsby, 2003). Therefore, this culture is a good example to investigate the relationship between self types and self-esteem.

Sample of the study will consist of 200 university students. Data collection instruments will be demographic information form, The Rosenberg Self-Esteem Scale (Rosenberg, 1965), and Balanced Integration-Differentiation (BID) Scale (Imamoglu, 1998). The Rosenberg Self-Esteem Scale will be used to collect data on global self-esteem of the participants. Balanced Integration-Differentiation (BID) Scale will be used to collect data on self -types. Correlation analyses will be conducted to analyze the data.

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Quality of Life in Dementia: Comparing Patient and Caregiver Perspectives The REMCARE Study

Quality of Life (QoL) is one of the most important outcomes in improving well-being in patients with dementia. Aim: To determine the factors related to the discrepancy in patient and caregiver-rated patient QoL. Methods: A total of 315 dyads completed the Quality of Life – Alzheimer's disease (QOL-AD) scale. Results: Overall, patients scored their QoL as higher compared to caregivers. Higher levels of education and low levels of anxiety predicted higher QoL in patients' ratings. Caregivers experiencing lower levels of stress specific to the caregiving situation rated patient QoL as higher. When the carer was a spouse caregivers scored patient QoL as better compared to when the carer was a son or a daughter. Conclusion: Proxy ratings of QoL in dementia are significantly different from patients' own perception. Most of the variance in caregiver ratings of patient QoL is explained by experience of stress specific to the caregiving situation. Spousal caregivers perceive patient QoL as better compared to carers who are sons or daughters. Current findings demonstrate that screening and addressing anxiety symptoms could improve patient QOL in dementia.

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Links between Metacognition and Children's Self-Esteem

Efklides (2008) described and proposed a model with three distinct facets of metacognition: metacognitive knowledge, metacognitive skills and metacognitive experiences. These three facets of metacognition are distinct but closely related. Metacognitive knowledge refers to declarative knowledge about learning strategies and about oneself as learner or problem solver. Metacognitive skills involve the regulation of cognition: awareness of and monitoring one's own cognitive system and functioning. Metacognitive experiences refer to what the person is aware of and what she or he feels when coming across a task and processing the information related to it. The two first facets have a cognitive character but the last facet has clearly an affective character. Links between affectivity and metacognition have been studied by Rezvan, Ahmadi, & Abedi (2006) with young adult students: their results suggested that metacognitive training had increased the academic achievement average and also the happiness scores average of the experimental group. Ghourchian (1998) suggested that metacognitive strategies could generally be effective on learning, emotional happiness, creativity and intellectual potential of the students and simultaneously reinforce their self-confidence through learning.

Therefore, the main goal of this study was to analyze the impact of training metacognition on academic achievement and self-esteem of eleven years old children. So, the prediction of positive effect of metacognition on the children' mathematical problem solving achievement and self-esteem was tested. Twenty-three subjects took part in this study, divided into an experimental and a control group. The training metacognitive program took an interactive approach and was carried out over three training sessions. Results indicated that children in the experimental group had significantly higher post-test mathematical problem-solving scores. More, progresses on mathematical problem solving scores were correlated to progresses on self-esteem. Our results suggest and confirm that cognition was closely related to conative factors, like self-esteem and highlighted the role of metacognition in young student academic success.

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A Development Shift from Infancy to Preschool in Looking at a Speaker's Eyes

Previous work with infants (e.g., Rader & Zukow-Goldring, 2010) found that infants 9-15 months of age focus primarily on the mouth when looking at a speaker. Yet older infants make use of a speaker's eye gaze for joint attention; therefore, there must be a developmental shift such that attention turns more often to the speaker's eyes and away from the mouth.

To investigate this hypothesized attentional shift away from the mouth to the eyes of a speaker, we tested 20 children (10 males, 10 females) ranging in age from 19 to 49 months, all from upstate NY and primarily Caucasian. Using the same basic procedure and videos as in the infant study, the children viewed a speaker presenting nonce words for two novel objects. Eye gaze durations for the eyes and mouth of the speaker were measured using a Mangold Corporation eye tracking system. The dependent measure was the ratio of time spent looking at the eyes to the amount of time spent looking at the mouth. We compared our preschool sample ($M = 3.6$, $SD = 4.9$) with that of 17 infants aged 9 – 14 months ($M = .29$, $SD = .32$), finding a significant difference, $t(32) = 2.49$, $p = .018$.

These results document a developmental transition in which attention shifts from looking at a speaker's mouth during infancy to looking at the eyes in preschool children. It may be that when first developing language, infants focus on the mouth to create a visual representation of the sounds being produced, while later they can begin looking at other parts of the face for clues as to the speaker's meaning or emotional state. Implications for development in autistic children will be discussed.

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Fatherhood, Oxytocin, and Self-Report Altruism: Affiliative Behaviour Promotes Helping Behavior Along Multiple Pathways

The expanded Self-Report Altruism Scale and the Multi-Dimensional Emotional Empathy Scale were administered to 44 young adult males in St. Petersburg, Russia. Emotional empathy significantly associated with fatherhood, and self-report altruism significantly associated with marital status in the sample of Russian males, suggesting that affiliative and helping behaviors are expressed through similar pathways. A follow-up experiment sought to elicit an oxytocin response in 24 young adult pair-bonded fathers in Chicago who played with their infants or read alone. As in the Russian sample, self-report altruism and emotional empathy were significantly associated with number of children. Self-report altruism was positively associated with plasma oxytocin and negatively associated with cortisol and testosterone, independent of experimental group. Play with an infant led to increased oxytocin, and reduced cortisol and testosterone. These findings suggest that changes in oxytocin, testosterone, and cortisol have a measurable impact on prosocial behavior, and replicate previous findings of a negative association between self-report helping behavior and salivary testosterone.

Contrary to studies positing a relationship between oxytocin and empathy, emotional empathy was not associated with any endocrine measure. In both samples, frequency of helping behavior and emotional empathy scores were significantly correlated. Together, these findings suggest that affiliative behaviors promote helping behaviors along multiple pathways.

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Team Sociomapping - A Teamwork Visualization Tool

Analysing communication in teams or groups, we are facing specific problem which results from the difficulty in understanding complex relations among members. Assuming asymmetrical relationships, for instance, there are ninety relations among 10 people. If there are 30 group members, the number of their relations is nearly one thousand. Unfortunately, most methods designed for communication diagnostics experience difficulties in the field of analysing or visualizing such an amount of relations (especially the asymmetrical ones).

A Sociomapping tool enables to analyze and visualize different characteristics of a team work (communication, cooperation, decision making) in user-friendly manner. Therefore it can be used for discovering latent patterns inside teams and monitoring system dynamics and changes. The value and impact of Sociomapping has been demonstrated in the Czech Military and European Space Agency in the course of isolated group experiments. Paper will introduce basic principles of creating Sociomaps as well as several case studies from different areas of psychology. Furthermore, animation of team development dynamics will be presented. In order to introduce this teamwork visualization tool, several research projects focused on reliability and validity have been done. This paper will also briefly introduce some of them: remembering and perception of relational data and inter-rater reliability of Sociomap interpretation.

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Conflict or Contingency: The Parallel Episodic Processing (PEP) Model Outperforms Conflict Monitoring Models of the Item-Specific Proportion Congruent Effect

Recent conflict monitoring computational models by Blais, Robidoux, Risko, and Besner (2007) and Verguts and Notebaert (2008) have been presented as models of the item-specific proportion congruent (ISPC) effect. Of particular interest, these models suggest that conflict monitoring processes can happen flexibly on an item-specific level. However, Schmidt and Besner (2008) claim that the ISPC effect is due solely to word-response contingency learning, rather than conflict adaptation. Although several researchers have challenged this strong view, this paper presents the Parallel Episodic Processing (PEP) model, an episodic memory model that learns via contingencies. Simulation 1 replicates results from non-conflict learning paradigms. Simulation 2 produces an ISPC effect and provides a better fit to the data than the competing conflict monitoring models. Simulation 3 further demonstrates the ability of the model to simulate context-specific proportion congruent (CSPC) effects without any conflict adaptation processes. These simulation results are argued as further support for the contingency account of the ISPC and it is further argued that there is insufficient evidence for item-specific conflict monitoring.

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Concurrent Verbalization, Metacognitive Processes and Planning Problem Solving on 5th Grade Schoolchildren

In the present study, we adopt the conceptual frameworks of Dominowski (1998) to assess effects of verbalization and metacognitive processes on planning problems solving. According to Ericsson & Simon (1994) there are three levels of verbalization: i) talk aloud, ii) think aloud, iii) metacognitive verbalization. Many researches (Berardi-Coletta, Dominowski, Bruyer & Rellinger, 1995) were conducted on adults to evaluate the effects on planning task obtained by verbalization, more specifically by the third level, but there was none on children. The results suggested that concurrent verbalization can both interfere with and facilitate planning (Biehal & Chakravarti, 1989).

Therefore, the aim of our research was to apprehend the effects of the concurrent verbalization during a planning problem solving in children. 46 schoolchildren of 5th grade were randomized in two groups: an experimental group which had to use a metacognitive verbalization during the Tower of Hanoï task (3 disks version) and an isomorphic problem solving. This isomorphic problem is more contextual and ecological (3 persons who take a small elevator). These two problems were counterbalanced during procedure. Time per solving, numbers of moves and errors were measured.

Our results indicated that the difficulty between the two isomorphic problems was not equivalent: participants need significantly more time, more moves and commit more errors to solve Elevator Task. Moreover, the concurrent verbalization facilitated the Elevator Task solving but didn't the Tower of Hanoï task.

These results are discussed in relation first to the differences between the two concepts of difficulty and complexity, and secondly to the differential effect to the concurrent verbalization according to the ecological aspect of the planning tasks. Therefore, a context can both facilitate and interfere performances depending on whether participant is expert or no and according his metacognitive level. To conclude, we propose educational applications.

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Catherine Stern's Structural Arithmetic Method and the work of Max Wertheimer: The Value of Gestalts in Teaching Arithmetic

I. A description of the collaboration between Max Wertheimer and Catherine Stern

On December 16, 1939 Max Wertheimer wrote to Catherine Stern, "You know how much I appreciate your general work with children and the concrete methods you developed for teaching arithmetic, making possible creative learning, opening of the mind instead of drill. Your methods seem to me important not only because I enjoy the practical results but because I hold that your work has fine bearance to basic theoretical problems in the Psychology of Learning. I started therefore to put a number of my graduate students to research work in connection with your methods."[1]

From 1940 until Max Wertheimer's untimely death, Catherine Stern worked with him as his research assistant at the New School for Social Research. He briefly describes her work in *Productive Thinking.* In 1949 she published *Children Discover Arithmetic* which she dedicated to Max Wertheimer. This collaboration will be expanded in the presentation.

II. An exploration of how gestalts are incorporated into The Stern Structural Arithmetic method and the advantage of this approach over counting.

The gestalts that Catherine Stern generated, and then helped children through hiding games to internalize vividly, serve as anchors in their development of a sophisticated number sense. Children recognize quantities in relationship to the 10 pattern board as well as the 10 block. The containers that children fit the blocks into help them to develop the gestalts and to recognize how the part relates to the whole – how for example 10 is made up of 9 and 1, 5 and 5 etc.. These become indelibly imprinted in the minds of children through both the use of 10-box and the 10-pattern. As Dorothy Latham writes.

Using multi-sensory structural apparatus such as Stern, with its built-in visual and spatial aspects and the way all components of arithmetical bonds are simultaneously displayed in the completed activities, is obviously a most apposite way of helping young children not only to use their Working Memory functions optimally to do simple arithmetic, but also actually to develop those functions.

III. The method will be demonstrated by Vikki Horner and Fred Stern.

Pictures of the Pattern Boards and 10-Box are illustrated below.

Footnotes:

1. This is a personal letter from Max Wertheimer to Catherine Stern in my possession. I plan to write to Michael Wertheimer for permission to present and/or publish it.

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The Influence of Psychosocial Factors on Quality of Life among Women with Pain: A Prospective Study in Sweden

To identify/quantify predictors of QOL among women with pain over time. *Methods:* The study comprised 2,300 women aged 18-64 years with and without pain. A longitudinal panel survey with two waves of measurement, 1 year apart, by means of questionnaires was used. Multiple linear regression analyses were used to identify and quantify predictors of QOL. *Results:* After controlling for socio-demographics, physical health, and baseline pain parameters, QOL, psychological factors and pain-related disability at base line, as well as their changer scores, predicted differential aspects of social, psychological and physical QOL respectively, over time. Aspects of social support were central for the social dimension of QOL and to a lower degree for the psychological dimension. Change scores of burnout were related to all dimensions of QOL. *Conclusions:* QOL seems to be a rather stable characteristic influenced not only by pain, but also related to psychosocial factors over time. Addressing such factors seems central in treatment interventions aiming at improving QOL among individuals with pain.

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Study of the Psychometric Qualities of FSS-III (Fear Survey Schedule) in a Portuguese Sample

Our purpose was to evaluate the psychometric properties of the Fear Survey Schedule-III, proposed by Arrindell (1980), in the Portuguese population. 1980 participants were gathered, through convenience sampling, from a normative adult Portuguese population. Psychometric evaluation was done through the Psychometric Sensitivity, Confirmatory Factor Analysis and Multi-group Analysis. The original measurement model showed no factorial validity ($X^2/df=8.149$; CFI=0.768; GFI=0.816; RMSEA=0.060), although it presented a high internal consistency ($\alpha_{Stratified}=0,98$). We first did a refinement of the model using a, randomly selected, part of the sample (n=1000). Items that presented serious deviations from normality, or factor loadings <0.45, or high correlations with other factors, were removed. The adjusted measurement model has a good factorial validity ($X^2/df=3.249$; CFI=0.904; GFI=0.912; RMSEA=0.047) and a high internal consistency ($\alpha_{Stratified}=0.98$). The fitted structural model was invariant in a second independent sample (n=980), regarding both the measurement ($X^2(33)=29.171$, p=0.658) and the covariance between factors ($X^2(43)=49.579$; p=0,227). Based on the correlations between the first order factors, we propose a second order factor named *fears and phobias*. Clinical application of the scale is analyzed.

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Interpersonal Empathy: Differences between Boys and Girls in a Spanish Population

On the basis of the concept of *Empathy* as the ability to put in place of others, to understand their points of view, their feelings and emotions, the aim of this paper is to consider whether there are significant differences in the underlying dimensions of the construct empathy between boys and girls in a Spanish population aged 6 to 16.

In order to carry out the assessment of the concept Empathy we used the questionnaire developed by Davis (1980): *Interpersonal Reactivity Index (IRI).* The research carried out by Davis (1983) makes an approach of the study of empathy in two dimensions, a cognitive dimension and an emotional dimension. Dimensions with which a majority of authors agree (Martínez, Redondo, Pérez García, 2008) Garaigordobil and García Galdeano, 2006; Mestre, Frias and Samper, 2004; Mestre, Samper and Lifeforms, 2002; Igartúa and Paez, 1998…). The instrument contains four seven-item subscales, each tapping a separate facet of empathy. The perspective taking (PT) scale measures the reported tendency to spontaneously adopt the psychological point of view of others in everyday life. The fantasy (FS) scale measures the tendency to imaginatively transpose oneself into fictional situations. The empathic concern (EC) scale assesses the tendency to experience feelings of sympathy and compassion for unfortunate others. The personal distress (PD) scale taps the tendency to experience distress and discomfort in response to extreme distress in others. The first two subscales analyze the cognitive dimension and the other two the emotional dimension.

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Increasing Caregiver Responsiveness to Infant Behaviors: The Effects of a Brief Early Childhood Intervention Program

Background and Aims

Researchers have consistently shown that caregiver responsiveness during the first year of an infant's life significantly impacts later vocabulary development (Hart & Risley, 1995; Tamis-LeMonda & Bornstein, 2002). Specifically, infants who have more responsive caregivers have higher vocabularies than infants whose parents rarely respond to the infants' behaviors. These studies provide clear evidence that the way parents communicate with their children affects subsequent cognitive development. Thus, this study aims to develop an effective early intervention program that will simultaneously improve infant-caregiver relationships and increase infant vocabulary.

Method

Ten 10- to 24-month-old infants (M = 16 months) and their primary caregivers participated in this study. Each dyad was observed and video-taped in three 20-minute play sessions which occurred approximately 2.5 weeks apart. At Session 1, caregivers completed a family demographic survey; caregivers completed a vocabulary checklist at all three sessions. At each session, the dyads were given a set of toys and asked to play as they would at home. At the end of Session 1, caregivers received information about caregiving behavior in the form of a 10-minute video which highlighted the importance of talking to infants. After watching the video, caregivers discussed the video with a trained researcher. Caregivers did not receive additional caregiving information at Sessions 2 or 3.

Results

Caregiver responsiveness to the following mutually exclusive infant behaviors was analyzed: object-related non-vocal (non-verbal behavior involving an object; e.g., manipulating a toy), object-related vocal (object-related behavior paired with a vocalization), dyadic non-vocal (face-to-face interaction involving eye contact and/or physical contact; e.g., touching), and dyadic vocal (dyadic behavior paired with a vocalization). Repeated-measures ANOVA indicated that, overall, caregiver responsiveness to infant behavior significantly increased from Session 1 to Session 2 ($p < .01$); there was no significant difference between Sessions 2 and 3 ($p = .63$). The greatest increase was in

responsiveness to infants' object-related behaviors ($p < .05$); there was no significant difference in responsiveness to dyadic behaviors ($p > .05$).

Conclusion

A brief, 10-minute intervention can effectively increase caregiver responsiveness. The increase in responsiveness to object-related behaviors indicates that caregivers were labeling objects more often and engaging their infants in more object-related play (as opposed to letting infants play alone). Even without additional information sessions, caregivers maintain an increased level of responsiveness to infants' behaviors. This increased responsiveness should have positive long-term effects on infant cognitive development.

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The Social Identity of Football Fans in Greece: A Qualitative Analysis

Social Identity theory (Tajfel, 1982; Tajfel and Turner, 1986) and Social Catagorisation theory (Turner et al, 1987) suggest that individuals belong to groups and define themselves according to these groups. Moreover, there is a tendency for every individual belonging to a group to protect his/her self-image by differentially evaluating his/her group and other out-groups. The relationship between social identity and psychological benefits for the individual has been discussed extensively. Wann (2006a, 2006b) introduced the model of team identification – psychological health which incorporates the assumption that high identification with a local team produces higher levels of psychological health. Previous research has showed that there is a relationship between identification and well being, making the distinction though between social well-being and personal well-being. Wann et al (2003) concluded that the relationship existed only for social well-being.

The present study employed a qualitative research methodology in order to examine fans' views in relation to: reasons for supporting a club team and personal outcomes of supporting a club team. 87 participants took part in the study. The results indicated that fans found team support and identification as a central characteristic of their life while they have mentioned a number of psychological and social benefits stemming out of their "love" for their team.

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Does our Brain Reward System Differentiate Between Substance and Behavioral Craving?

In neuroscience, imaging techniques have yielded results that provide new knowledge on neural mechanisms involved in the genesis of addiction. Substance abuse and excessive rewarding behaviors may both cause neuroplastic changes in brain structures; while altered perception and states of consciousness are induced by direct pharmacological effects on neurotransmission of the substance itself in substance use disorders, they are provoked by the implementation of excessively rewarding behaviors and subsequent endorphin release in nonsubstance addictions. These common effects and underlying mechanisms have initiated a global debate in the scientific community on the integration of substance-unrelated addictions like pathological gambling (since 1980 grouped in the category of impulse control disorders in the Diagnostic and Statistical Manual of Mental Disorder DSM) into the same diagnostic category as substance use disorders in the fifth revision of the DSM. However, reducing addiction to a brain disorder, does not account for the complexity of this phenomenon - development and maintenance of addictive behaviors constitute complex learning processes, in which physiological, cognitive-emotional, as well as social aspects are interacting. From the clinical perspective, exploration of the individual history is crucial to get a comprehensive view of the patient in order to develop an individually tailored treatment approach. Current findings from the field of addiction research are synthesized and critically discussed, yielding novel implications for clinical practice.