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## **Abstract book**

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## Session 4

### Session 4.1: Life changing events; migration, integration, adaptation

#### P4.1.01

#### **Child Behavioral Disorders in Different Types of Family based on Family Process and Content Model**

Fatemeh Ahmadi<sup>1</sup>, Siamak Samani<sup>2</sup>, Sena Kalayci<sup>1</sup>

<sup>1</sup>Dep. Psychology, Marvdasht Branch, Islamic Azad University, Marvdasht, Iran

<sup>2</sup>Dep. Psychology, Shiraz Branch, Islamic Azad University, Shiraz, Iran

The purpose of the study was to compare child behavioral disorders among different family types in the Family Process and Content Model (FPC Model). Samani (2011) has defined four types of family in his FPC model (efficient family, inefficient family, and two types of problematic families). The sample consisted of 280 elementary students school in Shiraz city. Self-report family process scale, self-report family content scale, and Persian form of Rutter children's behavioral questionnaire were used in this research. Multivariate Analysis of Variance (MANOVA) was used to compare children behavioral disorders in different family types. The results of MANOVA and post-hoc test revealed that there are significant differences among these family types in child behavioral disorders. The results showed that child behavioral disorders in efficient families is lower than the other types of families and inefficient family type is faced with more child behavioral disorders than others. In sum, the research showed a significant role for family based of FPC model.

#### P4.1.02

#### **Factors Associated with Adjustment after Breakup: A Sample of Turkish University Students**

Sena Kalayci, Dilek Saritas-Atalar, Saliha Acikgoz

Ankara University, Ankara, Turkey

A strong emotional bond is established with romantic partners in adulthood. For this reason, breaking up is a distressing process that takes time to adapt for everyone. The question is why some people get through this process quickly while the others are quite worn out. This is especially important in emerging adulthood when the romantic relationships are frequently experienced. Thus, the present study examined factors associated with adjustment problems after breakup. For this purpose, a total of 168 university students, 109 female and 59 male, who had experience of breakup, were reached. The mean age of the participants was 21.58 (SD = 1.97). With the demographic form, participants were given scales measuring personality traits, perceived parental rejection, adulthood attachment styles. The hierarchical regression analyses revealed that the time passed after breakup, the importance of this relationship for the people, the current relationship status of individuals and the anxious-ambivalent attachment style appear as important risk factors for adjustment after breakup and explained 43% of the total variance. Although neurotic personality traits and maternal perceived rejection were related to adjustment after divorce, they lost their significance after inclusion of anxious attachment style into analyses. Findings were consistent with the literature highlighting the importance anxious attachment style for adjustment after break up.

#### **P4.1.03**

### **The Relationship between National and Psychological Identity and Psychological Well-being among Shahed and Non-Shahed Students**

Roghayyeh mousavi

*Shahed university, Tehran, Iran*

The aim of the present study was to investigate the relationship between different aspects of identity (religion, national and psychological) and psychological well-being among Shahed and non-Shahed students. The statistical universe consisted of the students of Tehran universities. The number of the samples were 1000 cases (500 Shahed and 500 non-Shahed) that were selected by stratified random sampling. Psychological well-being scale, religious and national identity scale, and revised identity style questionnaire were used as the research devices. The data were analyzed by correlation and Fisher Z. The results of the study indicated that: there is a significant positive correlation between psychological well-being sub-scales and religious and national identity, except the relationship between strict religious identity and happiness and optimistic sub-scales; information identity style, normative identity style and commitment have positive correlation with psychological well-being sub-scales; this is while the diffuse/ avoidant identity style showed a negative correlation with all the psychological well-being sub-scales; the relationship between the religious identity and psychological well-being showed no significant difference in Shahed and non-Shahed group. In non-Shahed group the relationship between Iranian patriotic identity and positive relations with others were stronger than Shahed group; the difference between Shahed and non-Shahed group were significant only in the relationship between information style and life satisfaction.

#### **P4.1.04**

### **Social adaptation in maltreated youth leaving from residential care**

Eiji Ozawa, Chikako Imamura

*Kagoshima University, Kagoshima, Japan*

In Japan, residential care is the most common form of out-of-home care for children. More than half of those in residential care have experienced maltreatment prior to placement. Moreover, previous studies indicate youth leaving from residential care tend to be maladapted. The purpose of this study is to reveal characteristics of social adaptation in youth leaving care and relationships between their experience of maltreatment.

Surveys were administrated to care workers at 89 residential care institutions for children in Japan. That included experience of maltreatment before entering institutions, course selection after leaving care, statements of continuing work or school in youth. Data were analyzed from 1089 youths.

The ratio of enrollment to higher education in youth leaving from residential care was 21.9% (n = 239), lower than the ratio of all youth in Japan (79.8%). There was no significant difference of continuance rates between the youth who experienced maltreatment or not. Among youth getting a job, 33.9% (n = 282) quit their job within three years. In addition, the turnover rate of maltreated youth was significantly higher than the youth with no experience of maltreatment. Results indicate a huge challenge for course selection and social adaptation in youth leaving from residential care. Experience of maltreatment continues to affect working youth. Therefore, it is important to provide continual care from in care to after care especially for maltreated children.

#### **P4.1.05**

##### **Relations between personality potential, coping and psychological well-being**

Valerii Olefir

*Kharkiv National University, Kharkiv, Ukraine*

Objective: Studying of the interaction of the complex construct "personal potential" with coping strategies in predicting of psychological well-being (PWB).

Method: We used multiple parallel mediator model in which the antecedent variable "personal potential" is considered as influencing consequent PWB directly as well as indirectly through two mediators-engagement and disengagement coping strategies.

Results: Direct effect,  $c = 0.434$ , quantifies the effect of personal potential on the PWB, regardless of the impact of coping strategies.

The first indirect effect through engagement coping was estimated as 0.474. Those individuals evaluate themselves as more psychologically affluent ones who have higher personal capacity and chosen engagement coping strategies. Bootstrap confidence intervals (0.364 to 0.625) support the claim, with 95% confidence.

A second indirect effect through disengagement coping was estimated as -0.089. Bootstrap confidence interval (-0.169 to -0.012) and considered as ns. The use of these coping strategies simultaneously makes it possible to overcome stress, but the far-term strategies do not provide the desired effect, which appears to reduce the PWB.

Conclusion: The personal potential has both direct and partly indirect effect on PWB. The personal potential is based on the idea that subject chooses coping strategies that are aimed to solve the problem, based on its perception, assessment and understanding of the situation. This allows the subject to successfully adapt to stressor. The results may be useful during individual consultations.

#### **P4.1.06**

##### **Life Trajectories and Sex offenders**

Julien Eloir<sup>1,2</sup>, Jean-Louis Nandrino<sup>1</sup>, Claire Ducro<sup>1</sup>

<sup>1</sup>Laboratoire SCALab, Lille, France

<sup>2</sup>Centre Hospitalier d'Arras, Arras, France

This study aims at establishing life trajectories of sex offenders. Researches currently using psychological autopsy methodology focus on auto-aggressive behavior and more specifically on suicidal behavior (Séguin & al., 2006 ; Fortune & al., 2007). Considering psychological autopsy as a retrospective analysis method which permits to relate life events (Henry & Greenfield, 2009 ; INSERM, 2008), we applied this methodology to hetero-aggressive behavior, and more precisely the sexual crime. Through interviews with their relatives, we aimed to retrace the entire life of sex offender inmates and to build individual life charts. These life charts grouped each individual life event categorized in 4 main domains : health, life events, relational sphere and judicial and prison sphere. We identified the existence of different profiles of sex offenders and therefore life trajectories according to the above-mentioned domains. This research has major clinical implications permitting to get the inmate out the hetero-aggressive act and to integrate the different life events into developmental trajectories. New appropriate care and support depending on the developmental trajectories will be discussed.

#### P4.1.10

##### **Need satisfaction and involvement in personal projects, and subjective well-being: mediators and moderators of relationships**

Boguslawa Lachowska<sup>1</sup>, Stanislaw Lachowski<sup>2</sup>

<sup>1</sup>*The John Paul II Catholic University of Lublin, Lublin, Poland*

<sup>2</sup>*Maria Curie Skłodowska University, Lublin, Poland*

The objective of the presentation is analysis of the relationships between pursuing life goals and well-being, approached as an indicator of adaptation of young adults to new developmental tasks. In accordance with the model by Omodei and Wearing (1990), the satisfaction of needs and experience of involvement while pursuing goals are two conceptually distinct sources of feelings of subjective well-being. The project allowed verification of this model in a group of young adults, and its expansion through consideration of subjectively perceived success in the attainment of goals, hindering and facilitating effects between goals, importance of goals and belief in effectiveness of reconciling work and family. The indicators of subjective well-being were: positive affect, negative affect, and life satisfaction. The study covered 196 individuals aged from 20 - 35. In the study, the idiographic and nomothetic approaches were combined: the respondents indicated the four most important life projects pursued by them, and subsequently, performed the evaluation of these projects (the method of Personal Projects by Little, and Omodei and Wearing). A direct positive relationship was found between satisfaction of needs and positive affect. The relationship between the satisfaction of needs and life satisfaction is mediated by the feeling of life success. Positive relationship between flow and negative affect is mediated by hindering effects between goals.

#### P4.1.11

##### **Examining the continuing bonds between deceased crime victims and their bereaved who conduct a social movement**

Misato Ota, Yuko Okamoto

*Hiroshima University, Higashihiroshima, Japan*

1. Objectives: "Continuing bonds" have been defined as the presence of an ongoing inner relationship with the deceased. This study aimed to clarify the continuing bond with the deceased that develops in the bereaved during the recovery process.
2. Methods: Semi-structured interviews and questionnaire surveys were conducted with 14 bereaved. Nine subjects had internal connections with the deceased. The data were analyzed using the modified grounded theory approach. The questionnaire consisted of the Impact of Event Scale-Revised (IES-R henceforth). The survey was conducted after explaining the purpose of this study to participants and securing their informed written consent.
3. Results: Six categories were generated. The bereaved experienced confusion and deep sorrow. Then they started thinking back on and talking to the deceased. They wanted to tell people about how precious life is, and therefore, they started a social movement. They felt stronger bonds with the deceased in this process.
4. Conclusion: Through social activities, the bereaved enhanced their internal connection with the deceased. However, it is suggested that the bereaved may be deeply involved in such activities owing to the bond they feel towards the deceased. Considering that the five subjects exceeded the IES-R cutoff value, they might need psychological support. This finding highlights the need for the enhancement of support for the bereaved and the need to expand the target groups for such activities.

#### P4.1.12

### Parental Rejection in Childhood and Long-term Consequences in Adulthood

Nadia Koltcheva, Liubomir Djalev

*New Bulgarian University, Sofia, Bulgaria*

The present study is focused on an investigation of various presumed correlates of parental acceptance-rejection in childhood, that occurs later in adult life. It is conducted within the framework of Ronald Rohner's IPARTheory, according to which perceived parental acceptance or rejection in childhood has a major influence on adults' personality, psychological adjustment and many other mental health-related issues.

We conducted 9 interconnected studies, searching for relations between perceived parental acceptance and rejection in childhood and their consequences in adulthood as depression, anxiety, relationship with intimate partner, aggressive behaviour, personality dispositions, heroin and tobacco addiction, and eating attitudes. A total of 517 subjects, all Bulgarians, aged 16 to 80 years ( $M=35.35$ ,  $SD=13.45$ ), participated in the study.

Most of the the results supported the theory's postulates. They also showed that maternal acceptance-rejection has more influence on risk behaviours and maladjustment later in life than paternal one. Experiencing maternal rejection in childhood relates significantly to depression, anxiety, aggressive behaviour, tobacco addiction and relationship with intimate partner. Paternal rejection has effects on some aspects of depression, anxiety, aggressive behaviour and tobacco addiction.

Most of our findings are consistent with other studies. They also raise new questions about differing effects of mother's and father's rejection later in life.

#### P4.1.14

### Psychological Assessment Of The Patient Affected By Macular Degeneration: A Prospective Study

Ugo Introini<sup>1</sup>, Maria Monica Ratti<sup>2,3</sup>, Giulia Bruna Delli Zotti<sup>2</sup>, Claudia Berger<sup>3</sup>, Elisa Soldi<sup>3</sup>, Giuseppe Casalino<sup>1</sup>, Lucio Sarno<sup>2,3</sup>, Francesco Bandello<sup>1,3</sup>

<sup>1</sup>*Department of Ophthalmology, IRCCS San Raffaele Hospital, Milan, Italy*

<sup>2</sup>*Health and Clinical Psychology Service, IRCCS San Raffaele Hospital, Milan, Italy*

<sup>3</sup>*Vita-Salute San Raffaele University, Milan, Italy*

**OBJECTIVES** Age-related macular degeneration(AMD) is the leading cause of legal blindness in western countries after the 65th year of age. Progressive vision loss due to AMD can severely impair quality of life and is often associated with depression (Brody B.L. et al., 2001). This research is carried out by the Clinical and Health Psychology Service and the Department of Ophthalmology at San Raffaele Hospital in Milan to study an emblematic case of the relationship between vision and psyche in the field of eye diseases. This project represents a cutting-edge research in hospital psychology.

**METHOD** The sample is made up of 64 patients ( $M=44\%$ ;  $F=56\%$ )(mean age=80,09; s.d.=  $\pm 7,487$ ) affected by AMD and treated with intraocular injections twice in six months. The sample is submitted to a test battery composed of Identity record, NEI-VFQ-25, HADS, BDI-II, MSPSS, LCBS.

**RESULTS** After six months of intraocular injections since the beginning of the study, data show higher visual acuity in 22% of patients, lower levels of depression( $t=2.503$ ;  $p=0.014$ ), higher levels of quality of life(DA  $t=-2.968$ ;  $p=0.004$ ; SF  $t=-2.814$ ;  $p=0.006$ ; PV  $t=-5.005$ ;  $p=0.000$ ), social support( $t=-2.197$ ;  $p=0.030$ ) and internal locus of control( $f(8.55)=3.111$ ;  $p=0.006$ ) if the time of intravitreal injections treatment is longer.

**CONCLUSION** Results suggest the importance of collaboration between ophthalmologists and clinical psychologists in order to provide a multidisciplinary model of care for AMD patients, which aims at improving their quality of life and mental well-being and also promotes adaptive coping strategies.

#### **P4.1.15**

##### **Students' intentions to leave Croatia: Potential "Brain Drain"**

Iva Jaksic, Bozo Vukojevic

*University of Zadar, Zadar, Croatia*

Objectives: "Brain Drain" from developing countries is a global problem which is hard to predict. One important implication of the "Brain Drain" is that investment in education in a developing country may not lead to faster economic growth if a large number of its highly educated people are leaving the country.

Method: In this study we examined students' intentions to leave Croatia after finishing their study. The research was conducted in 2017 among young ( $N=22,2$ ;  $SD=2,08$ ) undergraduate and graduate students ( $N = 169$ ; ) at the University of Zadar. The questionnaire consists of sociodemographic data and the scale of intention of going abroad taken from the BD-95 questionnaire (Šverko, 2004).

Results: It was found that 85,8% don't have anything against emigration of young people. Only 17,2% after graduating definitely wants to stay in Croatia, while others consider leaving Croatia. The main reasons for leaving the country are finding a job, better life conditions and career development. Only 37% of those who intend to leave are planning to stay and live abroad. Conclusion: Throughout the years, the tendency of "Brain Drain" was found to be a major problem in developing areas, such as Croatia. The implications of this study can help shape political and economic situation by emphasizing motivational factors that propel young people to leave the country. Even though the "Brain Drain" process is mainly present among medicine and engineering areas, this study showed its presence in social and humanistic studies as well.

#### **P4.1.16**

##### **The Effects of Emotional Clarity on Posttraumatic Growth after relationship loss : The mediating roles of cognitive emotion regulation strategies**

Jione Kim, Jungyoon Lee

*Sungshin Women's University, Seoul, Republic of Korea*

(Background) The experience of the relationship loss is one of the most traumatic experiences, but there exist reports about posttraumatic growth after the loss. Being aware of emotions and using adaptive cognitive strategies to change the belief causing trauma can be helpful in reducing pain after the traumatic event. (Objective) This study examined the mediating effects of cognitive emotion regulation strategies in the relationship of emotional clarity and posttraumatic growth after relationship loss. (Method) 304 undergraduate students who reported relationship loss was the most traumatic event completed the questionnaire of trauma and loss, Trait Meta-Mood Scale, Cognitive Emotion Regulation Questionnaire and K-Posttraumatic Growth Inventory. (Results) A bivariate correlation analysis revealed significant negative correlations between emotional clarity and maladaptive strategies. Adaptive strategies revealed significant positive correlations with emotional clarity and posttraumatic growth after relationship loss. Structural equation modelling revealed that only adaptive strategies fully mediate the relationship between emotional clarity and posttraumatic growth after relationship loss. (Conclusion) The results suggest that enhancing adaptive cognitive emotion regulation strategies through the reappraisal of the traumatic event rather than treating maladaptive strategies can effectively help individuals who reported relationship loss experience posttraumatic growth.



## Session 4.2: Open

### P4.2.02

#### **Self-regulation capacity and decision making of Slovak managers in routine and non-routine situations**

Peter Halama

*Slovak Academy of Sciences, Bratislava, Slovakia*

**Objectives:** The study aims to study the relationship between self-regulation and decision making of Slovak managers in work-related situations of routine and possible serious negative consequences of improper decision.

**Method:** 143 Slovak managers were asked to choose some work-related situation of decision making and to assess it on the scales provided (routine or not routine, with or without possible negative consequences). They were administered Self-Regulation Scale (Schwarzer et al., 1999) and Melbourne Decision Making Questionnaire (MDMQ) (Mann et al., 1997) adapted for assessment of current decision making behavior.

**Results:** The results showed that self-regulation correlated positively with vigilant decision making and negatively with maladaptive decision making as buck-passing, hypervigilance, and procrastination. Moderation analysis revealed that situation with possible negative consequences reduces relationship between self-regulation and both vigilance as well as maladaptive decision making.

**Conclusions:** The study confirmed that self-regulation plays an important role in the process of decision making performed in the work-related situations and this role is shaped by situational characteristics.

### P4.2.03

#### **Measuring and comparison implicit and explicit levels of values hierarchy. (On material of Tashkent subjects).**

Olga Mitina<sup>1</sup>, Olga Arestova<sup>1</sup>, Boris Chukarin<sup>2</sup>

<sup>1</sup>*Lomonosov Moscow State University, Moscow, Russia*

<sup>2</sup>*Higher School of Economy, Moscow, Russia*

Values studies are very popular in many countries. In our study two methods of attitudes towards values were used: Schwartz's value questionnaire (PVQ) for measuring explicit level of values hierarchy and Etkind's color attitudes test (CAT) for measuring implicit level of values hierarchy. To overcome the influence of social desirability in PVQ we ranked the values instead of using scales' scores. In order to determine the value preferences at the implicit level color attitudes test by Etkind was used. In CAT subjects performed Luscher test, and then attributed the same colors to 19 Schwartz values. The result was interpreted based on the assumption that the more pleasing colors are associated with more preferred values.

The subjects were 89 students of age 21-23 of both genders living in Tashkent.

The hierarchy of values on an explicit level is more stereotyped, follows the social norms, it has fewer individual differences. On the implicit level values have more individual differences.

Values, presenting an image of "the perceived ideal of self" (benevolence, caring for others, independence, achievement, reputation, public security) overestimated in explicit level.

Explicit underestimation is observed for values declaratively rejected or too much imposed by society (power, taking care of nature, conformism, tradition). Being rejected at a conscious level, these values are deeply meaningful to adolescence subjects.

#### P4.2.05

##### **Exploring clinical psychologists' perceptions of ethical practitioners, and themselves.**

John Fitzgerald

*Massey University, Wellington, New Zealand*

**Objectives:** Professional Codes of Ethics are increasingly aspirational and do not specify minimum standards of practice, but rather outline desired values and principles. There is now a significant literature on the resolution of ethical issues, including guidance about the steps psychologists should take when faced with a difficult ethical dilemma. One source of 'soft' data that practitioners utilise, and which is seldom discussed, is a consideration of what they believe their own supervisor, peers, or teachers would do or advise in a given situation.

**Method:** The aim of this study was the exploration of perceptions of ethical and unethical practice by peers. Using Repertory Grid Analysis we collected and analysed elicited constructs held by eight newly qualified and eight experienced clinical practitioners, and their responses to a number of supplied literature-based constructs relating to characteristics of ethical/unethical practitioners.

**Results:** General results indicate a high degree of uniformity regarding responses to supplied constructs, but a much broader range of elicited constructs of ethical practitioners was held by experienced practitioners. This suggests that while there is accord about the key dimensions of ethical practice as presented in the literature and basic clinical education, experienced practitioners may be more flexible and 'permissive' with respect to the application of ethical principles.

#### P4.2.07

##### **The Impact of Paternal/Maternal Support on Taiwanese College Students' Career Indecision: Differences between Male and Female Students**

Ching-Hua Mao

*Chihlee Institute of Technology, New Taipei, Taiwan*

This study examined the impact of paternal/maternal support on career indecision of college students and the differences between male and female students. Based on an integrative literature review, this study designed four constructs pertaining to paternal/maternal support: emotional support, informational support, autonomy support, and tangible assistance. And the career indecision comprised two subscales: "developmental indecision" and "indecisiveness". The first one was with an emphasis on information factors and the latter one was on personal-emotional factors. According to the results of regression analysis of 633 Taiwanese college students, maternal support had significant effects on the developmental indecision of both male and female students. However, for female students, paternal support was not a significant predictor of developmental indecision and indecisiveness. Male students who received more autonomy support from fathers and mothers showed less "anxiety about the outcome" of indecisiveness. Furthermore, the more tangible assistance fathers and mothers provided to male students, the less "unreliable information" of developmental indecision their sons encountered.

#### P4.2.08

##### **Social Information Processing in adolescents who assault their parents**

M. Carmen Cano<sup>1</sup>, Lourdes Contreras<sup>1</sup>, Patricia Jiménez García-Escribano<sup>1</sup>, Asunción Fernández-Suárez<sup>2</sup>, Francisco Javier Rodríguez-Díaz<sup>2</sup>

<sup>1</sup>*University of Jaén, Jaén, Spain*

<sup>2</sup>*University of Oviedo, Oviedo, Spain*

**Objectives:** Child-to-parent violence has become a matter of scientific interest due to its impact on family dynamics. Thereby, the current study was aimed to analyse if there were differences in some variables related to the social information processing between adolescents with child-to-parent violence behaviours and adolescents without these behaviours. The relation among these variables was also examined.

**Method:** Participants in the study were 246 from a high school of Jaén (a province in the south of Spain) of both genders (44.7% boys and 55.3% girls), aged between 12 and 18. The C-VIFIP Scale, The Social Information Processing Questionnaire (SIPQ) and the Impulsivity Subscale of The Attitudes and Social Cognitive Strategies Questionnaire were used. The variables analysed were child-to-parent violence behaviours, impulsivity, hostile attribution (including negative intentions and positive emotions), anger, the tendency to select aggressive responses, the anticipation of positive consequences of using the aggression, and the empathy or the anticipation of negative consequences of using the aggression.

**Results and Conclusion:** Results revealed that adolescents who assaulted their parents showed more difficulties in social information processing than adolescents without these type of behaviours. Concretely, differences in hostile attribution, anger and the tendency to select aggressive responses were found. Furthermore, most of the variables correlated to the different types of child-to-parent violence. These data could contribute to the design of specific interventions for families with this problem.

#### **P4.2.09**

### **Adaptation of Short Assessment of Patient Satisfaction (SAPS) Scale and Medical Adherence Report Scale (MARS) in Turkish Patients with Chronic Illness: Preliminary Results**

Esin Temeloglu Sen, Ozlem Sertel Berk

<sup>1</sup>*Istanbul University, Istanbul, Turkey*

**Objective:** Chronic illnesses are defined as slow progress, 3 months or longer survivors, multiple causes, affecting the quality of life of a person, requiring continuous medical service and thus restricting the daily life of a person (WHO, 2010). Studies on medication adherence, which is an important and vital health behavior in individuals with chronic physical illness, are important in the literature (Kelly, McCarthy ve Sahm, 2014). Another important concept for chronic physical illness is patient satisfaction, which is the product of a 'expectation' that encompasses cognitive evaluations and emotional reactions of a person to medical treatment (Crow ve ark, 2002). It is also very important to measure these concepts which are important in the evaluation of individuals with chronic physical illnesses. For this reason, it is aimed to implement Turkish adaptation of MARS and SAPS scales. **Method:** The sample included 104 patients with chronic physical illness. Sample didn't include patients with cancer which has different progress from others. The data collection process of study is still continuing. For this purpose, it was used Brief Symptom Inventory, European Quality of Life-5 Dimension, Morisky Medication Adherence Scale, Short Assessment of Patient Satisfaction, Medication Adherence Report Scale. **Results:** As a result of the evaluation, the Cronbach's Alpha values of the MARS were found .75, mean of test 26,75 (ss. 3,28) and SAPS were found .67, mean of test 15, 97 (ss. 3,95). **Conclusion:** Both of them are usable for Turkish patients with chronic physical illness. The results will be evaluated in the literature.

#### **P4.2.10**

### **The Relation between Married Women's Perfectionism and Marital Conflict: The Mediating Role of Perceived Partner Responsiveness**

Aylin Kocak<sup>1</sup>, Busra Dindas<sup>1</sup>, Hatice Karauzum<sup>1</sup>, Hilal Sonmez<sup>1</sup>, Ayse Avkan<sup>1</sup>, Sema Cavusoglu<sup>1</sup>, Aybegum Cekic<sup>2</sup>, Merve Seven<sup>1</sup>, Selin Akan<sup>1</sup>, Gülüzar Seyma Yalcin<sup>1</sup>, Melisa Parlak<sup>1</sup>, Busra Hilal Bolatkesen<sup>1</sup>, Busra Karaaslan<sup>1</sup>, Betul Yildizeli<sup>1</sup>, Betul Demir<sup>1</sup>, Sumeyye Begum Kucuk<sup>1</sup>

<sup>1</sup>*Hacettepe University, Ankara, Turkey*

<sup>2</sup>*Yildirim Beyazit University, Ankara, Turkey*

Several research have well documented the relations between marital conflict (MC) and some related outcome variables but only few research focused on the antecedents of it. In the present study, we examined both adaptive (e.g., organization and personal standards) and maladaptive components (e.g., concern over mistakes and doubts about actions) of perfectionism and perceived partner responsiveness as antecedents of marital conflict. To test our hypothesis, we recruited 259 Turkish married women (Mage = 41.72, SD = 4.80; age range: 30 to 57 years) with an online

survey. Specifically, we aimed to test whether Turkish married women's adaptive and maladaptive perfectionism are associated with perceived partner responsiveness which in turn is related to marital conflict. The hypothesized model was tested through Structural Equation Modeling (SEM) analysis and yielded acceptable fit:  $S-B\chi^2(226; N = 259) = 378.61, p < .001, CFI = .942, SRMR = .053, RMSEA = .051$  (90-CI: .043 - .059). Results showed that adaptive perfectionism was positively, maladaptive perfectionism was marginally negatively related to perceived partner responsiveness, which in turn was negatively related to marital conflict. These findings imply that perceived partner responsiveness operates as an intervening mechanism between adaptive and maladaptive perfectionism and marital conflict. These findings underscore the importance to consider the antecedents of marital conflict while talking about the relation between conflict and some related outcomes. Future intervention programs which aim to intervene marital conflict should take the personality characteristics of each partner into consideration and focus on enhancing responsiveness of them.

#### **P4.2.11**

### **Knowledge and attitudes about late-life depression among nurses in long-term care facilities**

Yeu-Hui Chuang

*School of Nursing, College of Nursing, Taipei Medical University, Taipei, Taiwan*

**Background and objectives:** The prevalence of depression or depressive symptoms in long-term care facilities (LTCFs) is high. Nurses are primary care providers in LTCFs. Therefore, this study aimed to understand nurses' knowledge level about late-life depression and attitudes towards depression in LTCFs.

**Method:** A national self-report survey was conducted in Taiwan. The questionnaires were posted to the LTCFs who agreed to participate in this study and nurse mailed back the questionnaire using a self-addressed stamped envelope. Finally, there were 556 valid questionnaires.

**Results:** The average score of Late-Life Depression Quiz was 7.27 ( $SD=2.06$ ), with 55.92% correct answers. The average score of Revised Depression Attitude Questionnaire was 72.74 ( $SD=6.25$ ). There were positive relationship between knowledge and attitudes ( $r=0.36, p<0.001$ ). Nurses with bachelor degree or above had more knowledge about late-life depression ( $t=-2.170, p=0.03$ ). In addition, nurses who had ever read late-life depression patient education pamphlets ( $t=-2.849, p=0.005$ ) or had experiences of taking care of older adults with depression or depressive symptoms in recent two years ( $t=-2.849, p=0.005$ ) had more positive attitudes towards depression.

**Conclusion:** Nurses' knowledge about late-life depression was poor and their attitudes towards depression were natural to slightly positive in LTCFs. The findings of the study not only fill in the gap of knowledge, but also provide the important information for faculty members and managers or directors of LTCFs in order to improve nurses' knowledge and attitudes about late-life depression.

#### **P4.2.12**

### **The Relationship Between Metacognition and Learning Performance: A Meta-Analytic Review**

Kazuhiro Ohtani<sup>1</sup>, Tetsuya Hisasaka<sup>2</sup>

<sup>1</sup>*Hokkaido University, Sapporo, Hokkaido, Japan*

<sup>2</sup>*Iwate University, Morioka, Iwate, Japan*

**Objectives:** Metacognition is higher order cognition and it is one of the most significant predictors of learning performance. Yet the reported correlations were sometimes extremely low and sometimes high. The aims of the present study were to (1) estimate the correlations between metacognition and learning performance as well as intelligence, (2) examine how these relations were moderated by the measurement of metacognition, and (3) ascertain the effect in which metacognition predicts learning performance when controlling intelligence by employing the meta-analytic procedure.

**Methods:** Articles published before February 2016 were searched for in the PsycINFO and Web of

Science databases. The 107 samples from 80 articles were analyzed. We coded the measurement of metacognition (on-line vs off-line) as the potential moderator of the relationship between metacognition and learning performance.

Results: The results revealed that, overall, metacognition moderately correlated with learning performance ( $r = .31, p < .001$ ) and intelligence ( $r = .35, p < .001$ ). These relationships were moderated by the measurement of metacognition, with on-line methods ( $r = .55, p < .001$ ) showing larger average effect sizes than off-line methods ( $r = .25, p < .001$ ). The results of the meta-analytic structural equation modeling revealed that metacognition predicted learning performance when controlling intelligence.

Conclusion: The findings are encouraging that metacognition was a significant predictor of learning performance when controlling intelligence, suggesting that educators can enhance students' academic achievement by intervening in their metacognition. The results also suggest that studies using on-line methods gauge metacognition correctly relative to those who use off-line methods.

#### P4.2.13

##### **Social-cognitive variables and its potential to promote physical activity within a community-based program**

Susana Barradas<sup>1</sup>, Carolyn Finck<sup>2</sup>

<sup>1</sup>Universidad Externado de Colombia, Bogotá, Colombia

<sup>2</sup>Universidad de los Andes, Bogotá, Colombia

Research has shown an increasing prevalence of physical inactivity worldwide, which affects both physical and mental health. Also, there is evidence that physical activity (PA) is a protective behavior capable of preventing the onset of chronic noncommunicable diseases. In Latin America, levels of PA in the population are not encouraging as well, and Recreovía is a community program that aims to promote the practice of PA, in a free and open basis in the city of Bogotá. There is evidence showing a relationship between social-cognitive variables and the practice of PA: higher levels of perceived self-efficacy (SE) and outcome expectations (OE) have been related with higher levels of PA. The aim of this study was to investigate whether the social-cognitive variables were able to explain PA levels between Recreovía participants. The sample was selected based on an age criteria ( $\geq 18$  years). SE was measured with the Self-efficacy for Diet and Exercise Behavior (Sallis et al., 1988), OE was measured with the Outcome Expectations Scale (King, Taylor, Haskell, & DeBusk, 1989) and leisure-time PA was measured with the International Physical Activity Questionnaire. The sample consisted of 753 participants from which 66.4% were women and 33.6% were men. The mean age of participants was 36.2 (SD=16.3). The mean score for weekly moderate to vigorous leisure-time PA was 284.3 (SD=375.8). The mean score for SE was 43.6 (SD=12.6) and for OE was 128.1 (SD=21.1). All mean scores indicate a good perception of social-cognitive variables regarding PA behavior. A regression analysis was performed and sex and age were included as control variables. As expected, greater levels of SE predicted higher levels of PA ( $\beta = 0.39, p < .001$ ). On the contrary, OE did not predict PA results ( $\beta = 0.07, p = .312$ ), nor sex ( $\beta = 0.05, p = .252$ ) or age ( $\beta = 0.06, p = .222$ ) of the participants. In sum, Recreovía participants with higher perception of SE also showed higher levels of PA, but no significant statistical result was found regarding OE. Further work is necessary to better understand the role of outcome expectations in the practice of PA and also the relation between the community program and social-cognitive variables.

#### P4.2.16

##### **Basic Needs Community Mental Health Development: An Exploration of the Perspectives of Key stakeholders**

Parveen Kalliath<sup>1</sup>, Thomas Kalliath<sup>2</sup>

<sup>1</sup>Australian Catholic University, Canberra, Australia

<sup>2</sup>Australian National University, Canberra, Australia

**Objectives:** to obtain perspectives of key stakeholders about the efficacy of the Community Mental Health & Development (CMH&D) program implemented by Basic Needs India, Bangalore.

**Method:** Qualitative study was conducted in three stages: (a) in-depth interviews with 14 stakeholders, including pioneers, trustees and staff of Basic Needs India; (b) seven focus group discussions involving fellows/mentors, members of local Federations, and carers/persons with mental illness (n=92); and (c) data collected via a workshop with 16 fellows/mentors who are field-level promoters of the CMH&D program.

**Results:** Perceptions of stakeholders about the CMH&D approach included their views on the efficacy of five components of the model including (a) community mental health; (b) capacity building; (c) sustainable livelihood; (d) research and advocacy; and (e) administration and management. The study found evidence to support transformations occurring in the lives of persons affected by mental illness using the CMH&D approach.

**Conclusion:** The research gap identified from the findings of the study was the lack of evidence on the impact of multi-pronged CMH&D interventions on the wellbeing of person's with mental illness using reliable and valid quantitative measures of wellbeing. This finding is expected to inform the development of a new measure to track the impact of CMH&D interventions on the wellbeing of person's with mental illness.

#### P4.2.17

### Eye-tracking study of consumer's responses to stress-relieving advertisement messages

Masami Asakawa, Masao Okano

*Bunkyo University, Chigasaki, Japan*

**Objectives:** In order to investigate the relationship between advertisements and the amount of attention people pay to them, this study used eye-tracking data to examine the hypothesis that the subjects who assign importance to the product selection criteria included in a commercial's message pay more attention to the commercials than do subjects who do not.

**Method:** An experiment was conducted with 45 college students using the following two commercials: "product A," advertised with the message "it helps me relax," and "product B," advertised with the message, "it helps me cope with stress." Eye-tracking data were collected using a remote eye-tracking system. A questionnaire about food selection criteria was administered to participants.

For each commercial, the above-mentioned text and the image of the product was set as the area of interest (AOI). The total fixation duration, fixation count, total visit duration, and visit count for the AOI were calculated.

**Results:** As a result, the "relax" valuing group had a significantly higher fixation count for the advertising message of the "product A" than the non-valuing group. For "product B," the "coping with stress" valuing group had a significantly higher total visit duration for the advertising message than the non-valuing group, with the fixation count being significantly higher.

**Conclusion:** In sum, a significant difference was observed between some indices of the two commercials. Therefore, it was concluded that the hypothesis was supported.

#### P4.2.18

### Numerical Estimation Deficit In High Math-Anxious Individuals: Evidence From A Number Line Task

María Isabel Núñez-Peña<sup>1,2</sup>, Àngels Colomé<sup>1,2</sup>

<sup>1</sup>*University of Barcelona, Barcelona, Spain*

<sup>2</sup>*Institute of Neurosciences, Barcelona, Spain*

**Objectives:** Ferguson, Maloney, Fugelsang & Risko (2015) suggested that worse spatial abilities might lead high math-anxious individuals to build up a weaker mental representation of number magnitude (number line). We aimed at investigating the difficulties they may face when estimating a number's spatial position on a line.

**Method:** Twenty-four high math-anxious (HMA) and 24 low math-anxious (LMA) individuals were presented with four lines (0-100, 0-1000, 0-100000 and 267-367) on screen and they had to mark where a given number would fall by using the mouse. After the experiment, participants judged



their performance in each line by means of a Likert scale.

Results: Although both groups produced estimates that were linearly related to the presented values in the four lines, the linear function fitted worse for the HMA than for the LMA group in the 267-367 line. HMA individuals were also less accurate than their LMA counterparts in this line. Estimations of both groups were worse in the 267-367 than in the other lines, but HMA also showed worse estimations in the 100000 line than in the 100 and 1000 lines. Finally, HMA individuals self-reported worse performance than their LMA peers in the four lines, even though no group differences were found either in accuracy of the 100, 1000 and 100000 lines or in response times.

Conclusion: HMA estimations were less accurate in non-familiar intervals. This suggests that HMA individuals might have a deficit in mapping numbers onto physical space or in applying proportion judgment strategies in these less familiar ranges.

#### **P4.2.20**

### **"A little 'more attention' ... to problematic behavior and learning difficulties An investigation on surveys towards neuro-didactics**

Roberto Ghiaccio, Leonarda Vinci, Domenico Dragone, Maria Di Carlo, Sara Cicchella

*ASL, Benevento, Italy*

This work stands as a data collection survey about learning disabilities and problematic behavior. The sample consists of 362 subjects between the 2Primary School and 3Secondary School (First grade) in order to translate the critical issues in neuro-didactic strategies. The project, divided into three phases 1) indirect collection of data through standardized questionnaires to teachers: KIWI (Fedeli, 2007) for attentional and behavioral problems; RSR-DSA (Gagliano, 2013) for learning difficulties and neuropsychological processes fundamental for reading and writing. Direct data collection by: MT understanding (Cornoldi, 2012), figure of Ray changed according to Benso, cancellation tests, dictation of non-words, test on spelling and lexical decision. 2) Translation of needs in teaching strategies. 3) Diagnostic procedure, according to the consensus papers and the regional guidelines. The results show: the correlation between low educational achievement and internal behavioural issues; connection between the attentional-inhibitory system, low academic performance and difficulties of outsourced behavior. A significant fact - that was not among the objectives of the work - is a correspondence between deficits in visual-constructive skills of visual-spatial memory with insufficient understanding of the written text. The conclusion is the prevalence of the difficulties with respect to the incidence of diseases that are on the average national incidence.

#### **P4.2.21**

### **Developing Psychosemantic test of cognitive interpersonal perception for children 5 - 10 years old.**

Victor Petrenko, Olga Mitina, Tatiana Menchuk, Marya Shestova

*Lomonosov Moscow State University, Moscow, Russia*

The test can reveal personal constructs (individual forms categorization themselves and significant others specific to the child), self-assessment and evaluation of significant others.

The child is getting the list of characters from well-known children's stories. The respondent should evaluate the characters in aspects of personality traits concerning interpersonal communication in the child's terms. In addition to the roles the child evaluates the image of self, and the list can include an image of mom, dad, the teacher.

The child's answers are grouped in a data matrix, which is processed using the method of principal components. The number of extracted components reflects the cognitive complexity of the child's mind in the area of interpersonal perception and content of the components shows the specifics of his/her personal constructs. On the basis of selected categorical structure the child's semantic space is built. The characters, the position of the child ("I myself"), as well as an additional images of significant adults in the form of coordinate points are placed in this space.

A comparison of the semantic space of the individual child with adults' normative semantic space allows measuring the similarity across semantic space to introduce a measure of socialization of the

child as the degree of proximity to average adult matrix. For validation tests of Gille, Raven, Self-esteem, Social desirability were used.

#### P4.2.22

##### **Frequency and persistence of psychiatric disorders among severely obese patients: comorbidity between affective, anxiety, and eating disorders.**

Leorides Duarte-Guerra<sup>1</sup>, Bruno Coelho<sup>1</sup>, Marco Aurelio Santo<sup>2</sup>, Francisco Lotufo-Neto<sup>1</sup>, Yuan-Pang Wang<sup>1</sup>

<sup>1</sup>*Institute & Department of Psychiatry, University of São Paulo Medical School, São Paulo, São Paulo, Brazil*

<sup>2</sup>*Departments of Gastroenterology, Clinical Surgery, University of São Paulo Medical School, São Paulo, São Paulo, Brazil*

**Background:** Non-standardized assessment and small size samples hamper conclusions the patterns on course and comorbidity of psychiatric disorders among patients with class III obesity.

**Methods:** For 393 treatment-seeking severe obese patients (79.1% women, mean age 43.0 years, mean BMI: 47.8 kg/m<sup>2</sup>) from a bariatric center, we ascertained their psychiatric diagnosis through Structured Clinical Interview for DSM-IV (SCID-I). Following, the frequency, persistence and comorbidity pattern of psychiatric disorders in this sample were determined.

**Results:** The rate of current psychiatric disorders was 57.8%, being anxiety disorders the most frequent diagnosis (46.3%). The rate of lifetime disorders was 80.9%, being mood disorders the most frequent diagnosis (64.9%). Over 60% of the sample presented 2 or more concurrent lifetime psychiatric disorders. Although mood and eating disorders were frequent conditions, anxiety disorders were the most persistent conditions (one month-to-lifetime prevalence ratio 84.7) and were significantly correlated with bipolar, depressive and eating disorders.

**Conclusions:** Psychiatric disorders are frequent and enduring conditions among bariatric patients looking for bariatric surgery. Comorbid anxiety, mood, and eating disorders are remarkable features in patients with obesity. Prognostic implications of the recognition and treatment of psychiatric disorders on surgery outcome should be demonstrated prospectively in intervention studies. Research supported by FAPESP (grant process 2012/17498-9 and 2012/17435-7).

#### P4.2.23

##### **Role of demographic, attitudinal and normative factors for electric car use**

Özlem Simsekoglu<sup>1,2</sup>

<sup>1</sup>*Norwegian University of Science and Technology, Trondheim, Norway*

<sup>2</sup>*Nord University, Stjørdal, Norway*

**Objective:** Increased use of electric cars contributes to reduction of environmental problems caused by road transport emissions. The aim of the present study is to investigate demographic, attitudinal and normative predictors of electric car use in a representative Norwegian sample.

**Method:** An online survey was used to collect data from 663 car drivers, including both electric and conventional car drivers. A binary logistic regression analysis was conducted to investigate the predictors of electric car use.

**Results:** Results showed that female gender, younger age, favorable attributes and perceived consequences of electric car use, and higher level of knowledge about electric cars increased the probability of using an electric car.

**Conclusions:** Perceived attributes and consequences of electric car use were the strongest predictors of electric car use, while normative factors, such as personal norm, did not predict the electric car use significantly. Results will be discussed in terms of their implications for increasing electric car use in Norway.



#### **P4.2.24**

##### **The effects of time perception on short-term memory performance.**

Shin-Yu Huang, Ming-Chou Ho

*Chung Shan Medical University, Taichung, Taiwan*

**Objectives:** Short-term memory (STM) is a time-based system. The performance of STM task decays as time passes by. In STM study, time is usually presumed as "objective"; namely, the delay time in STM task is perceived similarly across participants. We aimed to explore whether subjectively perceived delay time can affect STM.

**Method:** Experiment 1 (time estimation baseline) examined the time estimation range of 10s, 15s, and 45s. Experiment 2 (STM baseline) examined the STM performance under delay durations of 10s, 15s, and 45s. Three types of STM were employed: spatial, verbal and visual STM. Experiment 3 (manipulation of perceived delay durations) addressed whether the perceived delay times (e.g., shorter than, longer than and similar to the actual delay) can affect STM performances.

**Expected results:** In Experiment 1, the researcher assumes that there is no significant discrepancy between the length of the estimated time across participants, and later builds a time estimation baseline and calculate the standard deviation. In Experiment 2, the researcher searches for the STM performances under different duration and uses them as the baseline for Experiment 3. In Experiment 3, the researcher uses the results from Experiment 1 to manipulate perceived delay time. It is assumed that there should be a negative correlation between the length of perceived delay time and STM performance.

**Conclusion:** We suggest that perceived delay times can affect performance of STM.

#### **P4.2.25**

##### **On predicting treatment outputs in ketamine users: Implicit attitude and explicit attitude**

Hao-Han Chang<sup>1</sup>, Chieh-Liang Huang<sup>2</sup>, Ming-Chou Ho<sup>1</sup>

<sup>1</sup>*Department of Psychology, Chung Shan Medical University, Taichung, Taiwan*

<sup>2</sup>*Department of Psychiatry, China Medical University Hospital, Taichung, Taiwan*

According to the Ministry of Health and Welfare in Taiwan, ketamine is the most commonly used illicit drug between juvenile in high school, and the prevalence increased yearly. Many studies suggest that drug-addicted individuals (e.g., alcohol, heroin and cocaine) show implicit (e.g., approach and avoidance) and explicit (e.g., positive and negative) attitudes favoring drug-related cues (e.g., approach and/or positive expectancy). However, little is known whether implicit and explicit attitudes toward ketamine in the users can predict their treatment outcomes. We recruited 20 ketamine users (9 current users and 11 ex-users) in hospital referral from police for treatment and age from 14 to 24. Computer-based version of Affective Priming Task was used to assess implicit attitudes; whereas Drug Use Disorders Identification Test-Extended (DUDIT-E) was used to assess explicit attitudes. The urine tests for ketamine use were used as treatment outcomes. We found that the state of ketamine use (current vs. ex-users) can modulate the explicit attitudes (positive and negative) to predict the urine tests. That is, the current users (but not the ex-users) with the positive ketamine attitudes would have worse treatment outcomes. On the other hand, implicit attitudes did not predict treatment outcomes. The current results may shed some light on the understanding of attitudes and treatment outcomes.

#### P4.2.26

##### **Gender Differences In The Relationship Between Self-Efficacy In Mathematics And Math Anxiety**

Ilija Milovanović, Jasmina Pekić, Snežana Smederevac, Jasmina Kodžopeljić

*University of Novi Sad; Faculty of Philosophy; Department of Psychology, Novi Sad, Serbia*

The purpose of the study was to investigate the possibility of predicting math anxiety in both genders by using different sources of self-efficacy in mathematics. Three instruments have been applied to the sample of 514 high school students in Serbia (54.7% of girls; average age 16.8 years): 1) Sources of Math Efficacy Scale (SMES), which measures the mastery experience, vicarious experience, social persuasions and physiological and affective states as sources of math efficacy; 2) Math Anxiety Questionnaire (MAQ) which includes two components of math anxiety - a component of negative affective reactions and a cognitive component; 3) Abbreviated Math Anxiety Scale (AMAS) with factors of learning math anxiety and math evaluation/test anxiety. The results indicate that physiological and affective states show significant positive correlation with each component of the two types of math anxiety, regardless the gender. As for the remaining sources of self-efficacy in mathematics, social persuasions are negatively correlated with negative affective reactions in both gender, as well as with a cognitive component of math anxiety in the group of boys. Finally, the boys' vicarious experience predicts only cognitive component, while in the group of girls this source of self-efficacy also predicts math evaluation/test type of math anxiety. General conclusion that the sources of math self-efficacy are important predictors of math anxiety in high school, with a different gender-related patterns.

Keywords: self-efficacy in mathematics, math anxiety, gender differences

#### P4.2.28

##### **On The Relationship Between Dependence On Sms, Alienation, And Academic Burnout In Female Students**

Mohammad Narimani, Fatemeh Tamook, Vali Mohammadi, Azin Narimani

*University Of Mohaghegh Ardabili, Ardabil/Ardabil, Iran*

The current correlational study examines the relationship between dependence on SMS, alienation, and academic burnout in female senior high students in Ardabil, Iran. The population included all the female senior high school students during the 2012-2013 academic year amounting to 11716 students. The participants were selected through cluster sampling. To collect the data, Dependence on Cellphone SMS Questionnaire, Self-alienation Scale, and Academic Burnout Questionnaire were used. Pearson correlation and multiple regression were employed to analyze the data. The results indicated that alienation and dependence on cell phone SMS with its components have a positive correlation with academic burnout. Moreover, the results of regression analysis indicated that alienation and dependence on cell phone SMS predicts 82% of academic burnout, 59% of academic exhaustion, 14% of academic disinterest, 16% of academic inefficiency, respectively.

Key words: Dependence, short message, alienation, academic burnout

#### P4.2.32

##### **How self-presentation strategies on social network sites influence loneliness: The role of Internet social capital types**

Huanhuan Xu, Xiaojun Sun, Gengfeng Niu, Qingqi Liu, Zongkui Zhou

*Central China Normal University, Wuhan,Hubei, China*

**Objectives:** Based on the capitalization theory (CT) and the social penetration theory (SPT), the current study proposed a model to investigate the links between self-presentation strategies (positive and honest) on social network sites (SNSs) and loneliness, as well as the mediating role of Internet social capital (ISC). CT suggest that sharing positive aspects of lives with others

ultimately bring about personal and interpersonal benefits. SPT suggest that disclosing self-relevant information plays an important role in building and maintaining relationships.

**Method:** A total of 1417 Chinese adolescents ( $M_{\text{age}} = 14.64$  years,  $SD = 1.75$ ) were recruited to complete the Self-Presentation Questionnaire, Internet Social Capital Scales and the Chinese version of the UCLA Loneliness Scale (Version 3).

**Results:** Both self-presentation strategies had negative associations with loneliness. In addition, whereas positive self-presentation (PSP) had a direct negative effect on loneliness, honest self-presentation (HSP) had an indirect negative effect on loneliness via bonding ISC.

**Conclusion:** PSP and HSP were meaningful activities that bring users psychological benefits; The underlying mechanisms differed according to the role of ISC types; It was bonding ISC rather than bridging ISC mediate the relations between HSP and loneliness. This study verified and supplemented CT and identified the discrepancy of ISC types in applying the SPT.

#### P4.2.35

### High intuitive thinking, belief in health myths, and low analytical thinking predict positive attitude towards organic food

Marjaana Lindeman, [Joonas Anttila](#)

*University of Helsinki, Helsinki, Finland*

Research on the benefits of organic food and other natural products is scarce and inconclusive. Nonetheless, today's consumers tend to perceive natural products as healthier, safer and overall more desirable than conventional products. While this might be true in some specific cases, scientific evidence does not warrant an overarching, positive evaluation of natural products. Although the motives underlying organic food consumption have received much attention in nutritional studies, cognitive foundations underlying the positive attitudes are poorly understood. The purpose of this study ( $N = 424$ ) was to analyse the role of thinking styles and belief in unwarranted health myths in these attitudes. The results showed that positive attitudes towards organic food were associated with approval of unwarranted health myths (e.g., "Humans use only 10 percent of their brain"), strong reliance on intuition, and low analytical thinking. These findings imply a halo effect of natural, resulting possibly from the fusion of low cognitive motivation to reason carefully and the importance of nature as food resource during the human history. The results also suggest that future studies on consumer preferences can benefit from the application of cognitive frameworks.

#### P4.2.36

### Sexuality in pregnancy: changes in intimate relationships

[Roberto Ghiaccio](#) - MP Colatruglio S.Cozzi, L.Vinci, R. De Meo

*G.Rummo - FBF, Benevento, Italy*

**Purpose:** to analyze some specific features of sexual behaviour, male and female, during pregnancy, considering the changes in sexual trends, libido, satisfaction, considering the influence of socio-cultural and psychological factors during different gestational ages and the correlation between the changes in perception between the partners.

**Methods:** The sample ( $N = 30$ ) was recruited in Hospital "G. Rummo" and in the obstetrics degree course in the same hospital, and divided into 3 groups: A = 20-30 years; B = 30-40 years; C = cesarean delivery.

The time of testing was divided in 3,6,9 months prenatal, and 1.3 months after delivery; with involvement of the male partner.

**Results:** The questionnaires were analyzed according to parametric statistical analysis, calculating the highest percentage of frequency of response, thereby determining the fashion of the response itself. The "age" factor (B group) is significant on the desire and frequency of intercourse for the first 3 months of gestation; with the increase of gestational age the sexual life is stabilized for all age groups; for group B and C on the other hand, from the ninth month of pregnancy to the postpartum period, sex life is non-existent. **Conclusions:** changes in sexual desire and frequency of the intercourses can be reconnected to the age of pregnant women and, to a lesser extent, to the fear of harming the fetus.

Almost completely irrelevant are the findings from the questionnaires of male partners, for which the levels of desire were unchanged.

#### P4.2.39

### The Interaction Effect of Conscientiousness and Honesty in Predicting Breaking Behaviors and Peer Status in Taiwanese Youths.

Kung-Yu Hsu

*National Chung-Cheng University, Chiayi, Taiwan*

In the HEXACO model of personality structure, Honesty-Humility has been found to be negatively associated with adolescent aggression and bullying (Book et al., 2012). Furthermore, Ashton and Lee (2012) argued that people with low levels of Honesty-Humility and Conscientiousness have a tendency to commit chronically immoral and antisocial act without remorse. Thus, it was expected there is a significant interaction effect of Conscientiousness and Honesty-Humility on adolescents' rule breaking behaviors. This effect on rule-breaking behaviors would have an impact on adolescents' peer status. Therefore, the moderated mediation effect of Conscientiousness, Honesty-Humility, rule-breaking behaviors and peer status in Taiwanese youths was investigated. A short-term longitudinal study was conducted over two years. One thousand three hundred sixty-one junior and senior students, aged 13 to 16, participated this study. In the first year, HEXACO-PI-R was used to measure Honesty-Humility and Conscientiousness. In the second year, peer nomination in a class was used to measure peer acceptance and rejection and to calculate peer status (preference) and Youth Self-Report was used to measure the rule-breaking behaviors. The moderated mediation effects were analyzed using the SPSS macro designed by Hayes (2012). Results showed that the interaction effect of Conscientiousness and Honesty-Humility on rule-breaking behaviors was significant, even when the effect of other personality traits was controlled for. In further analyses, adolescents with low levels of Conscientiousness and Honesty-Humility would have high level of rule-breaking behaviors. Also, Those with high level of rule-breaking behaviors have a low level of peer preference. The cultural implications were discussed.

#### P4.2.40

### Examining Non-Suicidal Self-Injury in the light of Parental Acceptance and Rejection Theory

Burçin Akin, Emrah Keser

*Hacettepe University, Ankara, Turkey*

**Objectives:** Non-suicidal self-injury (NSSI) is defined as destructive attempts to the certain parts of the body without intent of suicide. The main features of NSSI are to be repetitive, unconsciously happened and not ended up with mortal danger. Perceived parental role of NSSI people plays a role in the etiology of NSSI. The present study aimed to compare the NSSI group and non-NSSI group in terms of perceived parental roles.

**Method:** The sample was composed of 316 participants and the age mean was 21.92 ( $SD = 2.90$ ). People who did not report any self-injurious behavior labeled as non-NSSI group, the rests labeled as NSSI group.

**Results:** One Way MANOVA analysis was conducted to evaluate whether NSSI group and non-NSSI group were different in terms subscale scores of PARQ/Control. Results revealed that there was a significant group effect on warmth, rejection, aggressiveness and neglect subscales ( $F[1, 312] = 3.98, p = .002, Wilks' \Lambda = .94, partial \eta^2 = .61$ ) whereas not significant effect on control subscale. The scores of neglect, aggressiveness and rejection of mother were significantly higher in NSSI group. In addition, warmth of mother score was significantly higher in non-NSSI group.

**Conclusion:** These results indicated that people who are intentionally harm to their body parts and tissues perceive more maternal rejection, aggressiveness and neglect as expected.

#### **P4.2.42**

### **Predicting financial planning for retirement in university students**

Viera Bacova

*Institute of Experimental Psychology, Slovak Academy of Sciences, Bratislava, Slovakia*

Given the demographic trends in many countries (aging populations and low birth rates), scientists and politicians seek to encourage people to think of the future when making financial choices. Planning for retirement is a complex and structured task, marked by multiple uncertainties (e.g. about health and financial market), and for young people retirement seems to be too far in the future. However, in many countries it is essential that young people decide on a pension scheme once they first start working. We examined psychological factors that underlie the intention to save for retirement in university students. A total of 340 students of economics and students of humanities and social sciences participated in the study. The methods of path analysis were used to verify the model in which psychological indicators (parental influence, future orientation, perception of retirement and financial risk tolerance) influence the students' intention to plan and save for retirement. The analysis supported the role of psychological indicators in retirement planning; differences between students of economic and non-economic fields were also observed. Students of economics were more financially literate, tolerated financial risk and planned to save for retirement more than students of non-economic disciplines. The findings may help to understand motivation of financial planning for retirement by university students and boost their planning and saving activities.

## Session 4.3: Organising effective psychological interventions

### P4.3.01

#### Exploring the role of agency and communion in a thankful appreciation

Agnieszka Malinowska, Malgorzata Szczesniak, Celina Timoszyk-Tomczak, Roman Szalachowski, Wojciech Rodzen, Adam Jedrzejewski, Oliwia Awierianow, Aleksandra Standio, Weronika Gulbinowicz, Laura Kaliczynska

*University of Szczecin, Szczecin, Poland*

The aim of this report is to assess a topic of agency and communion and their role in a thankful appreciation. As far as we know, there is only one study that considers relationship between agency/communion and gratitude. In fact, Grant and Gino (2010) reveal that gratitude increases prosocial behavior through communal perspective rather than agentic mechanism.

The present study was conducted on the group of 204 participants (45% women) whose age ranged from 17 to 26 years. The mean age was  $M=19,21$  ( $SD=2,02$ ). The data was collected with four tools. Two Scales of Agency and Communion (Wojciszke, Szlendak, 2010) measured agency (focus on the self), communion (focus on other people), unmitigated agency (excessive focus on the self) and unmitigated communion (excessive focus on others). Gratitude Questionnaire (McCullough, Emmons, Tsang, 2002) and a factor of gratitude from IPIP-Via assessed gratefulness (Najderska, Ciecuch, 2013).

A linear regression shows which of correlated factors were input variables of gratitude. In case of IPIP-VIA they were: communion ( $\beta=0.310$ ), agency ( $\beta=0.204$ ), and unmitigated communion ( $\beta=0.192$ ). In case of GQ-6 they were: communion ( $\beta=0.325$ ) and agency ( $\beta=0.185$ ). In both cases the model explained approximately 20% of the variance.

Outcomes increase the knowledge of the relationship between gratitude and agency/communion and prove that predictors of gratitude are not limited only to warmth and focus on other people but involve also focus on the self.

### P4.3.02

#### Variability in narcissists' self-concept: Effects of recent interpersonal acceptance and rejection

Osamu Fukushima

*Niigata University, Niigata, Japan*

Narcissists' self-concept manifests as a fluctuating pattern, but little is known about why it can be more variable than the non-narcissists' self-concept. Using an experience sampling method and a multilevel analysis, the present study assessed the impact of recent interpersonal acceptance and rejection (level one factors), the narcissistic personality (level two factor), and the inter-level interaction on the variability in self-concept. The participants were 215 undergraduate students. A composite measure consisting of the mean absolute deviations of scores on the big-five traits at each measurement point was used as an index of variability. Consistent with previous findings, higher narcissism was related to a larger variability in self-concept. Furthermore, although participants generally exhibited a larger variability when they experienced recent higher rejection with lower acceptance, only narcissists exhibited a comparable level of variability when they experienced recent higher acceptance with lower rejection. The results suggest that not only a uniform rejection, but also a uniform acceptance from their social encounters over a few days could cause the high variability in narcissists' self-concept. The vulnerable nature of narcissists' self-concept was discussed in terms of their evaluation sensitivity in everyday social interaction.

#### P4.3.05

### The Effectiveness of a Strength-Meaning Oriented Career Counseling Model for Taiwanese Undergraduate Students

Yu-Chen Wang, Chi-Lin Wu

*National Taiwan Normal University, Taipei, Taiwan*

The purpose of this study was to explore the effectiveness of strength-meaning oriented career counseling model (SMOCC). The participants were 26 undergraduate students, 7 men and 21 women, between the ages of 20 and 23 ( $M = 21.54$ ;  $SD = 0.98$ ). They were randomly assigned to an experimental and a control group. The experimental group received 6 individual SMOCC treatments. The control group was administered the Career Interest Scale and a vocational card sort. The instruments are *Career Calling Scale for College Students (CCS)*, *Depression tendency scale (DTS)*, and *Career self-efficacy scale (CSS)*. The study used Mann-Whitney U test to compare the variances of the scores for the pretest, posttest, and follow-up test.

The results showed that the posttest scores, altruistic and transcend summons ( $Z = -2.83$ ,  $p < .01$ ), interest and passion ( $Z = -2.43$ ,  $p = .02$ ), and involving and showing ( $Z = -2.77$ ,  $p = .01$ ) in the CCS and the CSS ( $Z = -3.25$ ,  $p < .01$ ) of the experimental group were significantly greater than pretest scores. Only the involving and showing ( $Z = -2.63$ ,  $p = .01$ ) of the control group were significantly greater than the pretest scores. Comparing the difference between the follow-up and pretest scores, only the experimental group showed a considerable improvement in the CSS ( $Z = -3.36$ ,  $p < .01$ ) and DTS ( $Z = -2.10$ ,  $p = .04$ ). This indicated that the SMOCC had positive and stable effectiveness in improving career calling and self-efficacy and is beneficial for career practice of undergraduate students.

#### P4.3.06

### Healthcare providers' opinions about preventing suicide amongst substance users accessing care in South Africa

Daniel Goldstone, Jason Bantjes

*Stellenbosch University, Stellenbosch, Western Cape, South Africa*

**Objective:** The objective of this study was to explore healthcare providers' perceptions of the difficulties of preventing suicide in substance users accessing healthcare services in South Africa.

**Method:** In this exploratory qualitative research, in-depth, semi-structured interviews were conducted with 18 mental healthcare workers (psychiatrists, clinical psychologists, social workers, registered counsellors, and lay counsellors) working in public and private healthcare facilities in Cape Town, South Africa. The data were analysed using thematic analysis and Atlas.ti software was used to code the data inductively.

**Results:** Three categories of themes were identified in the data: (a) systemic issues that make suicide prevention a challenge, (b) fragmentations in healthcare provision, and (c) ideas for suicide prevention. Many service providers felt that the fragmented system of healthcare provision for suicidal substance users prevented them from doing their jobs effectively, and many felt overwhelmed by their responsibilities. Socioeconomic problems such as poverty adversely affected service provision and made service providers feel that suicide was unpreventable. However, better education about suicide, integration of healthcare service provision, treatment of substance use, and repurposing of existing resources were thought to be important for suicide prevention.

**Conclusion:** The insider perspectives of healthcare providers are important for understanding how to address health issues like suicide while keeping in mind the limitations of overburdened, understaffed, and under-resourced healthcare systems. The findings of this study suggest that preventing suicide in substance users requires promotion of healthy behaviours, re-integration of substance users into their families and communities, more integrated health services, and addressing substance use on individual and community levels.



#### P4.3.07

##### **The efficacy of Memory Specificity Training in improving Symptoms of Posttraumatic Stress Disorder in Bereaved Afghan Adolescents**

Sayed Jafar Ahmadi<sup>1</sup>, Mohammad Bagher Kajbaf<sup>2</sup>, Hamid Taher Neshat Doost<sup>2</sup>, Tim Dalgleish<sup>3</sup>, Laura Jobson<sup>3</sup>

<sup>1</sup>*Kateb University, Kabul, Afghanistan*

<sup>2</sup>*Isfahan university, Isfahan, Iran*

<sup>3</sup>*Cambridge UK, Norwich UK, UK*

**Introduction:** The purpose of this study was to study the effectiveness of Specific Recall Training on the Symptoms of Post-Traumatic Stress Disorder (PTSD) of Bereaved Afghan Adolescents.

**Method:** In this study, a quasi-experimental design with pretest-posttest and follow-up with experimental and control group was used. The samples of this study selected from a shelter in Kabul city in Afghanistan (n Exp=8 and n Con=8). They had PTSD of war as experimental. The instruments were the Impact of Event Scale-Revised) IES-R-13(, clinical interview and demographic questionnaire. The MEST group (n=8) participated and consisted of five sessions. Data were analysed by AVCOVA test.

**Results:** The results of ANCOVA test showed that there was a significant different between whole Symptoms of Post-Traumatic Stress Disorder (PTSD) in control and experimental group after Memory Specificity Training in post-test and follow-up. The effect size rating of MEST on PTSD symptoms in post-test was 0/57 and in follow-up was 0/49.

**Conclusion:** On the whole it can be concluded that the MEST intervention is effective in reducing PTSD symptoms.

**Keywords:** Memory Specificity Training, PTSD, Autobiographical Memory, Reminiscence and Bereaved Afghan Adolescents.

#### P4.3.09

##### **Identification and intervention in early numerical competencies**

Lilia Marcelino<sup>1</sup>, Ricardo Cunha Teixeira<sup>2</sup>, Joana Rato<sup>3</sup>

<sup>1</sup>*Universidade Lusófona, Lisbon, Portugal*

<sup>2</sup>*Universidade dos Açores, Ponta Delgada, Azores, Portugal*

<sup>3</sup>*Universidade Católica Portuguesa, Lisbon, Portugal*

Identification and intervention at the earliest signs of learning difficulties are the strategies that have the greatest consensus in combating school failure (Portuguese National Council of Education, 2015). For this, it is necessary to develop valid identification measures, and effective early interventions. This study aims to analyse the effectiveness of a Number Sense Method (MSN) in the classroom context. It is a method that stimulates early numerical competencies (counting, number relations and basic arithmetic operations) which are considered a powerful predictor of mathematics achievement at the early years of schooling. The sample included 130 children enrolled in the 1st year of schooling with a mean age of 6.51, and 9 primary teachers trained to apply the MSN. The children were screened with a cognitive measure that evaluates early numerical competencies, pre- and post-test with a neuropsychological measure that assessed emerging mathematical competencies (e.g. executive functions, visuospatial memory); and finally, mathematics achievement evaluated with a numerical knowledge test. The sample was divided into two groups: a) high, medium and low achievement in early numerical competencies; b) experimental (with MSN application) and control group (without MSN application). The results confirm the following hypothesis: experimental groups of children had more significant advances in mathematics achievement compared to control groups of children; experimental group children with low numerical competencies evidenced significant advances in neuropsychological and mathematics achievement at the end of the first year of schooling. With this results we may infer that MSN is an effective intervention method in combating the first mathematical learning difficulties in the classroom context.



#### P4.3.10

### **Development and validation of the MSQoL-C: A quality of life battery for carers of people with Multiple Sclerosis**

Gogem Topcu, Heather Buchanan, Aimee Aubeeluck

*University of Nottingham, Nottingham, UK*

**Background:** Informal carers of people with Multiple Sclerosis (MS) experience several unique obstacles within their role due to the complex and unpredictable nature of MS. Research suggests that MS has a negative impact on carers' quality of life (QoL). However, there are no adequate scales available to measure MS carers' QoL due to lack of satisfactory conceptualisation of QoL in MS caregiving context. Therefore, the aim of this cross-sectional study, which was a result of three previous exploratory studies, was to develop and validate an MS-specific QoL measure for carers (MSQoL-C).

**Methods:** In total, 96 MS carers completed the MSQoL-C and generic QoL measures to assess the reliability and validity of the MSQoL-C.

**Results:** Exploratory factor analysis resulted in three domains (difficulties of MS caregiving, satisfaction with life and consequences of MS) with eight MS-specific QoL facets. The MSQoL-C demonstrated good internal consistency, test re-test reliability, congruent validity, face and content validities.

**Conclusion:** The MSQoL-C has been established as a multi-dimensional and psychometrically sound MS-specific QoL instrument for carers which incorporates both negative and positive aspects of QoL issues in MS caregiving. It is hoped that the MSQoL-C will provide an understanding of MS carers' QoL for researchers and health professionals in order to design and implement therapeutic interventions to support MS carers in maintaining a good standard of life quality.

#### P4.3.11

### **Examining the Factors Associated with Grandiose and Vulnerable Narcissistic Personality Characteristics in the Context of Schema Therapy Model**

Elif Üzümcü, Gonca Soygüt Pekak

*Hacettepe University, Ankara, Turkey*

**Objectives:** This study examined the relationships between grandiose and vulnerable narcissistic personality characteristics, perceived parenting styles and early maladaptive schemas. In the study it was aimed to evaluate the mediator role of early maladaptive schema domains in the relationship between perceived parenting styles and grandiose and vulnerable narcissistic personality characteristics.

**Method:** The sample of the study consisted of 460 Turkish university students. Young Parenting Inventory (YPI), Young Schema Questionnaire Short Form-3 (YSQ-SF3), Narcissistic Personality Inventory (NPI-16) and Hypersensitive Narcissism Scale (HSNS) were used in the study. A series of Parallel Multiple Mediator Analysis was conducted to investigate the mediator roles of early maladaptive schema domains.

**Results:** Results indicated that the relationship between perceived maternal overpermissive/boundless and paternal conditional/achievement focused parenting and grandiose narcissistic personality characteristics was mediated by impaired limits schema domain. It was also found that other directedness and unrelenting standards schema domains mediated the relationship between perceived maternal and paternal normative, belittling/criticizing and pessimistic/worried parenting and vulnerable narcissistic personality characteristics. Results showed that impaired autonomy, impaired limits and other directedness schema domains mediated the relationship between perceived maternal overprotective/anxious parenting and vulnerable narcissistic personality characteristics; other directedness and unrelenting standards schema domains mediated the relationship between perceived maternal punitive parenting and vulnerable narcissistic personality characteristics. Finally, results indicated that impaired autonomy, impaired limits and unrelenting standards schema domains had a mediator role in the relationship between perceived paternal emotionally depriving parenting and vulnerable narcissistic personality characteristics; other directedness and unrelenting standards schema domains had a mediator role in the relationship between perceived paternal restricted/emotionally inhibited parenting and

vulnerable narcissistic personality characteristics.

**Conclusion:** In conclusion, in this study it was found that early maladaptive schema domains mediated the relationship between perceived parenting styles and grandiose and vulnerable narcissistic personality characteristics. Results indicated that grandiose and vulnerable narcissistic personality characteristics differentiated from each other.

#### P4.3.12

### Subconceptual Processing: From Body & Mind to Health & Healing

Jean-Luc Mommaerts, Dirk Devroey

*Vrije Universiteit Brussel, Brussel, Belgium*

This lecture, highlighting parts of my doctoral thesis (2014), brings together mind and body at the subconceptual level, where patterns of neuronal activation and connectivity represent concepts. The individual components of these patterns do not embody concepts - instead, it is the activation of overall patterns that gives rise to conceptual thought. This is also the level of deep meaning, where we are profoundly touched emotionally - the level of poetry and art. Empathy and autosuggestion are channels through which these patterns communicate. If the mind does influence the body, it is at this subconceptual level - although this may be an arbitrary distinction, since in view of subconceptual processing, mind and body are two perspectives of a single entity. This does not mean that the psyche can be rationalized away. On the contrary, mind and body are as art and paint within an accomplished work of art. The value of the painting lies in the art that arises from the paint - without this art, there is no meaning.

Subconceptual processing has huge implications for placebo, empathy, double-blind studies, healthcare related causal thinking and other areas. It is our hope that ultimately this research will lead to a future of medicine in which psychology will play a huge part. We believe that this fundamental shift will allow many health-related domains to be managed much more cost-effectively and sustainably. The most important outcome will be a vast increase in humanity.

#### P4.3.13

### The role of pain appraisal variables in discriminating disability-based fibromyalgia groups

M. Pilar Martínez<sup>1,2</sup>, Ana I. Sánchez<sup>1,2</sup>, María J. Lami<sup>1</sup>, Germán Prados<sup>3</sup>, Rafael Cáliz<sup>4</sup>, Elena Miró<sup>1,2</sup>

<sup>1</sup>*Department of Personality, Assessment and Psychological Treatment, University of Granada, Granada, Spain*

<sup>2</sup>*Mind, Brain and Behavior Research Center, University of Granada, Granada, Spain*

<sup>3</sup>*Department of Nursing, Health Science Faculty, University of Granada, Granada, Spain*

<sup>4</sup>*Rheumatology Service, Virgen de las Nieves University Hospital, Granada, Spain*

**Background and objectives.** According to the Fear-Avoidance Model of Musculoskeletal Pain, pain anxiety, pain catastrophizing and pain vigilance are involved in exacerbation of pain and deteriorated functioning. This study examined in fibromyalgia (FM) patients the contribution of the pain appraisal variables in distinguishing disability groups.

**Method.** The sample was composed by 181 FM women who completed the following self-reports: McGill Pain Questionnaire, Pain Catastrophizing Scale, Pain Anxiety Symptoms Scale-20, Pain Vigilance and Awareness Questionnaire, and Impact Fibromyalgia Questionnaire (FIQ). Pearson's correlation coefficient, Student's t-test, and binomial logistic regression were computed.

**Results.** Two groups were established based on the cutoff points of <59 (mild/moderate disability) and ≥59 (severe disability) in the FIQ. In both groups fear, rumination and helplessness significantly correlated with pain intensity. Severe disability group showed greater negative appraisal of pain than mild/moderate disability group. The model of pain appraisal variables classified 74.3% of the cases, being helplessness and attention to changes in pain significant variables.

**Conclusion.** Dysfunctional attitudes towards pain contribute to the disability in FM. The multidisciplinary management of FM can benefit from the inclusion of psychological therapy aimed at addressing these cognitive-affective parameters. Research projects: PSI2009-13765PSIC and PSI2014-58379-P.

#### P4.3.15

##### **Training for peer mediators in Communicative and Emotional skills to improve their performances and prevent bullying in schools**

Susana Avivar-Cáceres, M<sup>a</sup> Carmen Giménez-Espert, Vicente Prado-Gascó

*Universitat de Valencia, Valencia, Spain*

**Background:** A Peer Mediation program can be a very effective method to prevent bullying (Boqué, 2014; Noaks & Noaks 2006). **Aims:** This study aims to prove how training in 4 psychological skills as Empathy, Assertiveness, Active listening and Proactivity enriches mediators' performances in order to improve the School's climate, as Emotional Education is essential to get a balance between reason and emotional response (Lantieri, 2001). **Method:** The training was held in a British Secondary school in Valencia (Spain) during the Second and Third Term of 2015/2016. We trained 15 mediators for the experimental group and measured the school's climate before the training and after the evaluation of 10 mediations, using a questionnaire of 36 items with a 5-level Likert scale in a sample of 42 students aged from 11 to 15 years old, aleatory divided in experimental (N=22) and control (N=21). The necessary consents from the school's parents and ethical university commission were obtained before recruiting the children. **Results:** The experimental group improved its perception of the School's climate significantly ( $M=3.96$ ,  $SE=.046$ ) than control ( $M=3.70$ ,  $SE=.030$ ,  $t(40)=-4.58$ ,  $p<.05$ ,  $r=0.99$ ). **Conclusions:** Despite only having a small sample and little time to develop the program, we saw how these psychological strategies aided the mediators' interventions to help change the students' perceptions to a more positive and safer relationship with both peers and teachers.

#### P4.3.17

##### **"Building my life project": Intervening with youth to promote a better insertion into the labour market.**

Luísa Soares<sup>1,2</sup>, Carla Vale Lucas<sup>1</sup>, Filipa Oliveira<sup>1</sup>

<sup>1</sup>*University of Madeira, Funchal, Portugal*

<sup>2</sup>*M-ITI, Funchal, Portugal*

**Background:** The prevalence of youth not in education, in employment or in training (NEET) in UE raise new concerns. As so it is urgent to help youth develop psychological resources and design their life projects to become more prepared, satisfied and committed in the transition for the workplace.

**Objectives:** The present study evaluates the efficacy of a micro-intervention named "Building my life project", set up to promote a) self-knowledge, b) psychological capital (PsyCap) - personal attributes as hope, self-efficacy, resilience and optimism and c) self-efficacy in the transition to work.

**Method:** 52 youngsters, aged between 16 – 31 years, enrolled in a program called "Mex-te E5G" ("Move E5G") developed by the local government to fight youth unemployment and social disengagement, participated in this intervention as they were to initiate their first work experience. Psychological Capital Questionnaire and the Transition-to-Work Self-Efficacy Scale were administered pre and post intervention.

**Results:** Overall, the results indicate that the micro-intervention resulted in statistically significant differences in the levels of PsyCap, from time 1 to time 2 and that PsyCap is positively correlated with self-efficacy in the transition to work.

**Conclusion:** Current data allows further reflections on how can we develop psychological capital and assist these youngsters draw their life project, elements that should be taken into consideration while designing formal and informal learning experiences in schools or employment programs.

#### P4.3.19

##### **Treatment Adherence Programme for People in Prison with Mental Health Problems**

Alexander Muela, Nekane Balluerka, Bárbara Presa, Jone Aliri, Arantxa Gorostiaga, Aitor Aritzeta, Goretti Soroa

*University of the Basque Country, San Sebastian, Gipuzkoa, Spain*

**Objectives:** Compared with the general public, the prison population presents higher rates of physical and mental health problems, disability, sexual health problems, suicide and self-harm behaviour, and problematic substance use. In the prison context, various studies have shown that detainees with mental health problems also show poor adherence to psychopharmacological and psychotherapeutic treatment. This has been associated with a worsening of the person's situation, including increased rates of treatment drop-out, of relapses, of completed suicide, of assault and homicide, and of hospital admissions, as well as longer sentences. The goal of this study was to examine the influence of the treatment adherence programme (TAP) on the adherence to prescribed psychopharmacological treatment and the psychosocial adjustment of people in prison with mental health problems.

**Method:** The TAP is a systematic, psychoeducational programme designed to be implemented by a team of prison health professionals. The TAP comprises ten sessions, distributed across three modules: Module 1. Introduction to treatment adherence (sessions: 3). Module 2. Enhancing treatment adherence (sessions: 4). Module 3. Preventing risks to treatment adherence (sessions: 3). Participants were 120 prisoners divided into two groups: A treatment group of 60 inmates and a control group of 60 inmates.

**Results:** The prisoners who underwent the TAP program had higher treatment adherence, understanding of their mental health problems, and subjective wellbeing.

**Conclusion:** These results suggest that TAP can be effective to achieve maximum adherence to prescribed psychopharmacological treatment and to enhance the personal adjustment of people in prison with mental health problems.

#### P4.3.20

##### **PTSD And Crisis Interventions Among Victims Of Disasters: A Critical Analysis**

Haseena S, Kullai Reddy L, Chandraiah K

*Dept. of Psychology, Sri Venkateswara University,, Tirupati, AP, India*

**Theoretical Framework:** Disasters, both natural and man-made are recurrent phenomena in India. These complex situations impede the overall development of the country. However, Indian communities are heading towards building resiliency to prepare for the forthcoming disasters.

**Objective:** To examine the impact of crisis intervention on PTSD and resiliency among women victims of natural disasters.

**Sample:** sample for the present investigation is consisted of 240 women who had experienced natural disaster in 2004 Tsunami in India. They were selected by using simple random sampling technique.

**Methodology:** A self reported questionnaire of PTSD was used and the case studies were prepared where ever necessary. A pre-post experimental design was used in the study. Crisis intervention for example Grief Counseling, Anticipatory guidance, Problem solving counseling and Psycho-education were adapted during the intervention process.

**Results and conclusions:** Results of the study revealed that, based on the severity of the disaster (moderately affected and severely affected), the PTSD levels among women participants have decreased and effective Crisis counseling has resulted in building resiliency among the victims of disasters.

#### P4.3.21

##### **A qualitative assessment of creativity and ingenuity in the solutions of problem situations.**

Andranik Suleimanian, Maria Tishina

*Moscow State University of Psychology and Education, Moscow, Russia*

The essence of this problem – how to assess the genuine creative intelligence and ingenuity, not the erudition, capacity to clear logic, cram for examination. Our theoretical foundation based on the ideas of intuition of H.Bergson and insight of W.Kohler.

The aim of study – to create and test the qualitative method of assessment, which includes three kind of non-standard tasks, selected from the folklore sources unfair forgotten and therefore rare used. There is four criteria the choice of tasks: heuristic, the real problem situation requiring decision, no necessity in special professional knowledge and multidisciplinary. There is three items for decision: two questions of Queen the Sheba to King Solomon and a Russian folk puzzle how can blind to solve a problem which can be solved only by seeing?

The sample of examinees – senior pupil in two schools: ordinary public school and for intellectually gifted children. The ability to define the essence of the problem, capacity to find the immediate practical solution and problem time were examined. The significant differences between two samples in results and methods of solving were noticed.

Our and similar tasks may be used both for selection the persons capable for research work, invention and creating know-how and for diagnosis of the educational programs for development of creativity.

Direction for future researches – age and cultural modification, improving evaluation criteria and comparative cross-cultural investigations.

#### P4.3.22

##### **Future Teachers' Professional Consciousness Development Program: Testing Results**

Nataliia Shevchenko

*Zaporizhzhya National University, Zaporizhzhya, Ukraine*

**Introduction.** Analysis of works of Ukrainian (A. Tsokur; O.Chepishko, . Yu. Shvalb) and foreign (G.Akopov, N.Guslyakova, Ye.Isaev) researchers has showed that during professional training future teachers' professional conscience does not reach an adequate level of development. This necessitates the development of a special future teachers' professional consciousness development program.

**Objective.** To develop and test a program for the development of professional consciousness of future teachers.

**Methods:** We used active training methods (training exercises, simulation games, etc.) and different diagnostic instruments: Color metaphors (I. Solomin), Self-assessment of Teacher' Motivation (N. Fetiskin), Orientation questionnaire (V. Smekalov, N. Kucher), S. Schwartz questionnaire, Educational Situations (R. Nemov). The sample was made up of teaching department students of Zaporizhzhya National university (experimental group - 41 students, control group - 41 students).

**Research results.** We developed a 50 hours psycho-educational program of future teachers' professional consciousness development.

Analysis of the program's testing results using Wilcoxon T-test ( $\alpha = 0.01$ ) confirmed the significance of changes in the components of professional consciousness in the experimental group (EG) and their lack in the control group (CG). There were found significant differences in the pre- and post-program respondents' scores on the educational categories assimilation (EG  $p = 0.000$ , CG  $p = 0.096$ ), teacher motivation (EG  $p = 0.000$ , CG  $p = 0.029$ ), professional interests (EG  $p = 0.000$ , CG  $p = 0.076$ ), education values (EG  $p = 0.014$ , CG  $p = 0.767$ ), and profession perception (EG  $p = 0.000$ , CG  $p = 0.160$ ).

**Conclusions.** The research results showed that the structural components of professional awareness could be developed. The obtained findings can be used in future teachers' training.

### P4.3.23

#### Current state of cross-cultural psychotherapy research: Trying to feel the way out

Volkan Koç<sup>1</sup>, Gülnihal Kafa<sup>2</sup>

<sup>1</sup>*Istanbul Sabahattin Zaim University, Istanbul, Turkey*

<sup>2</sup>*Istanbul University, Istanbul, Turkey*

Psychotherapy models, most of which can be traced back to more than a century ago now, have been practiced worldwide; however, their spread is not accompanied with adequate effort and emphasis on their adaptation to the cultures they interact with, and that the theory and practice does not address local needs can pose a problem. It is of critical importance to question whether these models that have been shaped substantially by the Western culture can be efficiently applied in both multicultural countries and non-Western world. Though there are a number of studies on intercultural adaptations necessitated by the needs of multicultural societies, we have limited local psychotherapy models available. There is no doubt that ethnocultural groups living in Western multicultural societies will be interacting with Western culture more profoundly compared to people living in non-Western countries such as far east countries. In this case, the most important question is whether adapting psychotherapy models to be able to address non-Western cultures without amending their fundamental assumptions is possible, and if so whether this is conducted efficiently. With these questions in mind, it is aimed to review the current state of scientific studies on cross-cultural psychotherapy. In addition, considering the large spectrum of cultural migration taking place in modern days and that it is difficult to receive mental health services in underdeveloped countries, the importance of local psychotherapy research is emphasized and some suggestions to be considered in future research are made.



## Session 4.4: Promoting excellence and stimulating labour market participation

### P4.4.01

#### **Study of the impact with the implementation of the Manual: "Having ideas to Change the world", to educate for entrepreneurship for children 3 to 12 years old**

Cristina Guerra<sup>1</sup>, Gastão Marques<sup>1</sup>, Dionísia Gomes<sup>2</sup>, Carlos Pepe<sup>2</sup>

<sup>1</sup>*Instituto Politécnico de Portalegre, Portalegre, Portugal*

<sup>2</sup>*Centro Educativo Alice Nabeiro, Campo Maior, Portugal*

This manual was recognized by OCDE in 2014 as one of the 20 more inspiring projects under the subject "Entrepreneurship Education for children 3 to 12 years old", as by the European Union in the "Entrepreneurship Education - A Guide for Educators" as a pioneer and innovative project.

The sample was built with the stakeholders associated to the project: promoters team; 8 operational teams; 10 trainers; 114 teachers; 174 in charge educators and 65 pupils.

The study was conducted with the VER program (ACSR, 2016), which intends to measure the social impact of projects, defined as the set of transformations, broader and global, forecasted to occur in society, because the results achieved and measured in the short term considering their replicability and scalability.

To measure the social impact level tangible and intangible indicators were built. The firsts collecting information about the possibility of the project compose a social and educational differentiated opportunity, contributing for a future superior employment and quality of life. The seconds allowing the long term impact forecasting of child employment, as their quality of life.

The tangible indicators, on average, reach an impact capacity of 77%, and the intangible indicators show a social transformation of 70%.

From these results is possible to conclude that children subordinated to this methodology gather better conditions of employment face to the remaining ones, thanks to the soft skills achieved with the project.

### P4.4.04

#### **Entrepreneurial network centrality and the selection of imitate the best decision heuristic: the moderating role of innovative cognitive style**

Oana Fodor

*Babes Bolyai University, Cluj Napoca, Romania*

**Objectives:** Entrepreneurs are decision-makers embedded in various social networks (they can ask advice from other entrepreneurs, consultants, family etc.), which can be the source of ecological heuristics (i.e. cognitive shortcuts aligned with the structure of the decision context, beneficial for the decision outcomes) such as imitate the best entrepreneur in the market (IB). By building on Sitkin and Pablo's (1992) model on the determinants of risky decision making, we argue that social capital factors (i.e. the centrality of the entrepreneur in his network) impact the risk perceptions associated with IB ecological heuristic.

**Methods:** In an experimental design carried out on 133 entrepreneurs (56 men, Mage = 33.38), I use vignettes to manipulate the centrality of the entrepreneur in his network (i.e. central vs. peripheral) and measure the risk perception associated with imitating the best (as an ecological decision heuristic), while also exploring the moderating role of the innovative vs. adaptive cognitive style of the entrepreneur (KAI scale, Kirton, 1978).

**Results:** The findings show that entrepreneurs who have a central position in their network perceive the alternative of imitating the best as less risky compared to the peripheral entrepreneurs. The interaction between centrality and the innovative cognitive style is marginally significant. Conditional effect analysis reveal that the negative relation between network centrality and risk perception associated with imitating the best is stronger at mean and especially at high levels of innovation.

**Conclusion:** The study sheds light on the contextual factors (i.e. network centrality) that influence risk perception associated with an ecological heuristic: imitate the best entrepreneur on the market.

#### **P4.4.05**

### **Psycho-social conditioning of paid work among Polish adolescents aged 13-15 years**

Stanislaw Lachowski<sup>1</sup>, Boguslawa Lachowska<sup>2</sup>

<sup>1</sup>*Maria Curie Skłodowska University, Lublin, Poland*

<sup>2</sup>*The John Paul II Catholic University of Lublin, Lublin, Poland*

The objective of the presentation is evaluation of the phenomenon of paid work among Polish adolescents aged, and determination of psycho-social factors conditioning the undertaking of such an activity. Analyses were performed based on the results of survey studies on the representative group of approximately 4,600 respondents aged 13-15, selected from among the total number of Polish adolescents at this age.

Theoretical models were taken into consideration concerning the conditioning of the employment of adolescents: the Basu and Van's model developed based on the general equilibrium theory and the Ranjan's model explaining the phenomenon of child labour by the distribution of unpaid work, as well as models referring to the work of rural children. The following 5 groups of variables were considered in the analysis: the respondents' socio-demographic characteristics, their motivation for work, skills of effective acting, socio-economic situation of the family of origin, and the economic situation of the region of residence. The analysis showed that more than 1/3 of Polish adolescents undertake paid work activities during the school year, and more than a half – during summer vacations. In one week, an examined adolescent had worked for 4.5 hours, on average, during the school year, and 5.4 hours during vacations. The social situation of the adolescents and their predispositions for effective action exerted the greatest effect on the undertaking by them of paid work activities.



## Session 4.5: Strengthening society's resilience; prevention and early intervention

### P4.5.01

#### How children, parents or educators gender affects adults interactive behavior and children participation/involvement in activities?

Marina Fuertes<sup>1</sup>, Otília Sousa<sup>2</sup>, Isabel Fernandes<sup>2</sup>, Andreia Ferreira<sup>2</sup>, Catarina Veloso<sup>2</sup>, Ana Ladeiras<sup>2</sup>

<sup>1</sup>*Centro de Psicologia, Porto, Portugal*

<sup>2</sup>*CIED-ESELX, Lisbon, Portugal*

**Introduction:** Infant development is associated with the quality of their interaction, communication (e.g., adult repetitions, meaning making, and contents generalization) and play with adults. Parents and educators are both significant: educative, interactive and affective figures. Gender studies have indicated differences in the way mothers and fathers act with their children. Fewer research published with female and male educators' presents mixed results. Rare research was performed to compare parents and educators of both gender.

**Aims:** To investigate the children, parents and educators' (of both genders) contribution to the quality of interactive behaviour (cooperativity, empathy, ability to challenge the child, reciprocity, elaboration) and communication in a play/individualized situation. We also want to learn more about children involvement/participation in this situation.

**Method:** A quasi experimental study with 40-dyads of female educators-children (3 to 5 years old), 20-dyads with male educators, 20-dyads with mothers and 20-dyads with fathers. Adults and children were videotaped independently using a variety of materials and tools to produce something of their choice during 20-minutes.

Adults and children agreed and consented to participate. Experimental conditions were suitable, pleasant and age appropriated.

**Results:** Gender of both children and adults affected the results. Adults acted differently with girls and boys (e.g., female educators were more empathic with girls and used more tools to work with boys). A multiple regression analysis indicates that the variable "parent versus educator" predicts adults interactive behaviour and children involvement in task.

These results can guide early intervention practices to promote child participation and gender adequate opportunities.

### P4.5.02

#### Patterns of regulatory behavior in FFSF at 3 and 9 months

Miguel Barbosa<sup>2</sup>, João Moreira<sup>2</sup>, Marina Fuertes<sup>1</sup>

<sup>1</sup>*Centro de Psicologia, University of Porto, Portugal*

<sup>2</sup>*Faculdade de Psicologia, University of Lisbon, Portugal*

**Objectives:** Fuertes et al. (2006, 2009) found three patterns of infant regulatory behavior in the Face-to-Face Still-Face (FFSF) paradigm with a Portuguese sample of healthy preterm infants at 3-months corrected age. In our research, we aimed to study whether full-term infants exhibit the same patterns and to examine the stability of such patterns from 3 to 9-months.

**Methods:** 108 healthy full-term infants were assessed at 3 and 9-months, including infant behavior, heart-rate in the FFSF paradigm and mothers' reports of infant temperament.

**Results:** Three patterns of regulatory behavior were observed: Positive other-directed, negative other-directed and self-directed. At 9-months, the heart-rate of babies in the positive and self-comfort patterns increased from baseline to the still-face episode and decreased in the reunion episode. In the positive patterns, there was a partial recovery during the reunion episode, whereas in the self-comfort style a complete recovery was observed. In the negative pattern, the heart rate increased from baseline to the still-face episode and increased further in the reunion episode. Positive other-directed coping was the most prevalent pattern in both moments. A significant stability was found from age 3 to 9-months: 81.48% for positive, 85.71% for negative, 64.29% for self-comfort patterns. Mothers' perceptions of infant temperament were unrelated with self-regulation patterns.

**Conclusion:** Our results suggest that infant self-regulation can be described in different styles of

behavior in FFSF and these patterns are quite stable from 3 to 9-months. Individual variations in the still-face do not seem to be dependent of infant characteristics, but a result of dyadic regulatory processes.

### P4.5.03

#### Which character strengths are most predictive of gratitude?

Wojciech Rodzeń<sup>1</sup>, Laura Kaliczynska<sup>1</sup>, Malgorzata Szczesniak<sup>1</sup>, Sylwia Golab<sup>2</sup>, Roman Szalachowski<sup>1</sup>, Malgorzata Maria Kulik<sup>1</sup>, Oliwia Awierianow<sup>1</sup>, Aleksandra Standio<sup>1</sup>, Weronika Gulbinowicz<sup>1</sup>, Krystian Konieczny<sup>1</sup>

<sup>1</sup>University of Szczecin, Szczecin, Poland

<sup>2</sup>ZUT, Szczecin, Poland

This research aims at assessing the relationship between character strengths and disposition to gratitude. A handful of studies have found that character strengths and life satisfaction share almost 50% of variance (Harzer, 2016). Yet, we know very little about character strengths as predictors of gratitude. To our knowledge, no systematic empirical research exists addressing this topic.

In total, 151 people (70% females) participated in the study, and their age ranged from 16 to 22 years ( $M=17,26$ ,  $SD=1,05$ ). The data was collected with the International Personality Item Pool Values in Action (IPIP-VIA) and Gratitude Questionnaire (GQ-6).

A linear regression shows that out of all character strengths factors that correlated with gratitude, five were input variables: kindness (0.393), zest (0.367), forgiveness (0.271), leadership (-0.322), and capacity for love (0.196). The model was significant ( $F(98,5)=27.60$ ;  $p<0.001$ ) and explained nearly 58% of the variance.

Our findings empirically confirm theoretical research that includes gratitude among strengths "of the heart" together with zest, hope, and love (Seligman, Steen, Park, Peterson, 2005). It also suggests that leadership, understood as a character strength that expresses such behaviors as influencing others, authority and dominance, is the only one negative predictor of gratitude. It can be exclaimed by correlations with ambition (King, Johnson, Van Vugt, 2009), associated with putting one's own interests before another's.

### P4.5.04

#### Combined training pathways focused on strengthening and mentalization of attention and self-regulation in preschool children with impairments in cognitive domain

Concetta Polizzi, Giovanna Perricone, Gabriella Papadia

University of Palermo, Palermo, Sicily, Italy

**Introduction:** This work shows a study about the efficacy of a training that aims to strengthen particular early abilities of 5 years old children, such as attention, which means maintained, shared, controller attention and behavioural and emotional self-regulation. These abilities form the basis of executive functions development and are important for the educational and social success of children. This is about a treatment characterized not by a sequence of exercises, but by a lab paths where children are oriented to go through attention and self-regulation and in addition are pushed to mentalize that experiences. Furthermore, children learn to "fix images in their mind" and how to pay attention and how to control themselves. The mentalization of the mentioned abilities represents the possibility of promoting the health of the child developmental trend. Moreover the mentalization process reduces the risk that from cognitive domain fragilities could develop important frameworks of developmental impairments. The study assumes the prevention perspective that guides the research of precursors/predictors of evolutionary risk, in order to start supportive or rehabilitation interventions as soon as possible. Besides, this training gives the idea that the efficacy of a treatment for the children strengthening depends also on operating involvement of the main caregivers (parents and teachers), because, often parents and teachers appear in difficulties in managing relationships with distracted and without self-regulations, showing high stress levels and offering to the child emotional environments that often are based on inattention or negligence.

#### P4.5.05

##### Results of Touchpoints intervention on Early Intervention practices

Hélia Soares<sup>1</sup>, Ceú Barbeiri<sup>1</sup>, Marina Fuertes<sup>2</sup>

<sup>1</sup>ICBAS - University of Porto -, Porto, Portugal

<sup>2</sup>Centro de psicologia - University of Porto, Porto, Portugal

**Objectives:** In this study, we investigate the effect of implementing the TP methodology in mother-infant quality of interaction, infant development and maternal representations of child temperament.

**Methods:** The participants are eighty four mothers and their infants. In this quasi-experimental study, the number of participants is equally distributed in the Group with-Intervention (GI) (n=42) and Group Without-Intervention (GWI) (n=42). The two samples were paired according to: maternal age; SES; family structure; child health; physical or psychological health of parents; twins; nationality of the family; risk during pregnancy; baby APGAR. Two Touchpoints interventions sessions were applied in the GI at 12 months and at 18 months of children live.

**Results:** Positive maternal representations about their infant and motherhood enhanced in GI. According to CARE-Index, no significant differences were found concerning mother-infant interaction between the studied groups. Nevertheless, maternal sensitivity and infant cooperative behavior increased from 12 to 24 months in the GI (especially in dyads with children at risk for developmental problems) whereas it decreased in the GWI. The results of Growing Skills indicate that children at risk for developmental problems improved their development in Speech and Language; Hearing and Language and in Self-care Social after the intervention with TP from 12 to 24 months. All children in GI improved in Locomotor compared with GWI.

**Conclusion:** The TP intervention implemented had a positive effect on the following dimensions: infant development; maternal representations; and maternal-infant interaction. The intervention seems to be even more effective in children identified as having potential development risks.

#### P4.5.06

##### Predicting subjective well-being in adolescents: Emotional intelligence and feelings

Vicente Prado-Gascó<sup>1</sup>, Lidón Villanueva<sup>2</sup>, Ana Belén Górriz<sup>2</sup>, Inmaculada Montoya-Castilla<sup>1</sup>

<sup>1</sup>Universitat Valencia, Valencia, Valencia, Spain

<sup>2</sup>Universitat Jaume I, Castellón, Castellón, Spain

Trait emotional intelligence (EI) is a key concept related to different well-being indicators. These relationships, moderated by affective variables, have been mainly found in adults. However, little is known about these associations in adolescents and when several well-being indicators are included.

**Objectives:** To examine the moderating role of feelings in the relation between trait emotional intelligence and several well-being indicators (life satisfaction, self-perceived stress and somatic complaints) in adolescents. **Method:** 1286 pupils of 10 high schools, aged between 11 and 18 years, 52.3% were girls. **Results:** The results support direct and indirect pathways between trait EI and well-being indicators via feelings. Indirect effects of emotional attention and clarity on different indicators via negative feelings were stronger than those via positive feelings. Our findings support two pathways to improving well-being in adolescents. The direct pathway is based on EI components: low attention to emotions, a high understanding of one's emotional states and a good regulation were associated with low perceived stress, few somatic complaints and high life satisfaction. The indirect pathway to improving well-being is moderated by feelings. The research is specially interesting as we evaluated well-being as a multidimensional construct on a big sample of adolescents and considering not only direct effects of trait emotional intelligence but also the moderating role of feelings.

#### **P4.5.07**

##### **Type 1 Diabetes Mellitus in adolescence: anxiety and adjustment to disease**

Laura Lacomba-Trejo, Sara Casaña-Granell, M<sup>a</sup> Antonia Pérez-Marín, Inmaculada Montoya-Castilla, Vicente Prado-Gascó

*Universitat Valencia, Valencia, Valencia, Spain*

The presence of a chronic disease in adolescence such as Type 1 Diabetes Mellitus (T1DM) may negatively impact causing high levels of anxiety. The anxious symptomatology is related to negative adjustment to disease, worsening treatment adherence and glycemic control. The aim of this study is to assess anxiety and negative adjustment in pediatric patients with T1DM. Participants were 115 adolescents with T1DM, from hospitals of Valencia. After signing the informed consent, questionnaires were filled in a single testing session. The analyzed variables were anxiety (Hospital Anxiety and Depression Scale) and adjustment to T1DM (Adaptive response to disease questionnaire in diabetic patients). Descriptive statistics were performed, one-sample t test, t test for independent samples and Pearson correlations. Among the results we highlight that: a) approximately 24% have anxiety, 8% have a clinical anxiety problem; b) 75,5% are poorly adapted; c) negative relationship between anxiety and adaptive response to disease, in terms of assessment of severity, barriers to compliance, discomfort associated with the disease and psychological repercussions. D) There is no relation with age e) neither differences according to sex. . This data indicates the need to develop intervention protocols for those patients in order to decrease anxiety increasing adjustment to disease.

#### **P4.5.08**

##### **An Interpretative Phenomenological Analysis of young Irishmen's experience of accessing counselling**

Josh Cotter, Inge Nieuwstraten

*University College Cork, Cork, Ireland*

**Objective:** Male suicide rates in Ireland indicate mental health issues in young Irishmen that are not reflected in the statistics around help-seeking behaviours. The aim of this study is to explore the experiences of young Irishmen who have experienced the process of accessing psychological help.

**Method:** Four young Irish men (aged 18-25) were recruited for the study. One-to-one semi-structured interviews were conducted, and transcripts were then analysed using Interpretative Phenomenological Analysis.

**Results:** Three super-ordinate themes were identified: barriers to accessing counselling, why counselling is pursued and how the barriers were eventually overcome. The subordinate themes included: stigma, a changed sense of self, fears of what lay ahead and that it would not work, and doubts about connecting to the counsellor. Counselling was pursued because of a struggle with functioning, overwhelming feelings and anxiety reaching a critical point and reaching for help. Barriers were overcome by challenging fears, the realisation of not having a choice and thinking 'it might be worth it'.

**Conclusion:** Each of the participants was encouraged to seek help, which suggests social support may be a critical 'tipping point.' The study may contribute to an understanding of barriers to help-seeking in vulnerable young males.

#### **P4.5.09**

##### **Effects of corporal punishment on self-affirmation and inhibiting factors**

Kayo Takahashi<sup>1</sup>, Fumika Funatsu<sup>2</sup>, Nobushi Matsushima<sup>3</sup>

<sup>1</sup>Kagoshima University, Kagoshima, Japan

<sup>2</sup>Kyushu University, Fukuoka, Japan

<sup>3</sup>Kaisei, Hospital, Japan

In Japan, corporal punishment in school has been considered undesirable and prohibited by law. However, it has been tolerated and 6,721 cases were reported in 2012. In junior high school and high school, the largest number of corporal punishment in "club activities" has been made. Therefore, it will be necessary to examine the background and factors of why corporal punishment has been accepted in club activity settings and show the evidence that corporal punishment adversely affects personality development.

This study's purpose is to examine the situation and effects of corporal punishment. First, conditions related to receiving and inflicting corporal punishment will be investigated. Next, "self-affirmation" was focused on as an index of healthy mental and physical development, and correlations between corporal punishment and self-affirmation will be examined.

A questionnaire was conducted with university student planning to become sports coaches (N=655). Questions assessed the participants' experience of having received or used corporal punishment. Participants also responded to the Self-Affirmation Scale. The results indicated that about half of participants had experienced receiving corporal punishment, and most participants recognized that the experience had positive effects, including "developing mental strength," and "improving skills," among others. Participants also recognized negative effects of physical punishment including, "developing a rebellious spirit". Differences in self-affirmation based on the participant's perspectives on experiencing corporal punishment were examined, indicating ambivalence.

#### **P4.5.10**

### **The mediating role of self-efficacy, prosocial behaviour and aggression in the relation between parenting and peer attachment**

Elisabeth Malonda-Vidal, Anna Llorca-Mestre, Vicenta Mestre-Escrivá, Ana Tur-Porcar, Paula Samper-García

*University of Valencia, Valencia, Spain*

In adolescence, maintaining good relationships with peers contributes positively to social development (Mota & Matos, 2013). Several studies reveal the positive effects of parental warmth on the peer attachment (Samper, Mestre, Malonda, & Mesurado, 2015; Smith, Maas, & Tubergen, 2015). Likewise, research shows that the social rewards in the family context are related to the prosocial behavior of the children (Carlo, Samper, Malonda, Tur-Porcar, & Davis, 2016). Personal factors such as prosocial behavior and self-efficacy are decisive to manage fulfilling relationships with others (Belgrave, Nguyen, Johnson, & Hood, 2011; Nocentini, Pastorelli, & Menesini, 2013). This study analyses the mediating role of prosocial behavior, aggression and self-efficacy in the relationship between parenting styles and practices and peer attachment in adolescence, using longitudinal data.

417 Spanish adolescents completed all two surveys. The mean age was 14.70. Participants completed measures of peer attachment, parenting styles, parenting practices, self-efficacy, prosocial behaviour and aggression. SPSS 19 and AMOS 17.0 were used to calculate the analysis. The results show that prosocial behaviour and self-efficacy are mediator variables between warmth, social rewards and peer attachment. It is necessary to design programs for adolescents that develop prosocial behaviour and self-efficacy in expressing positive emotions and in managing negative emotions.

#### **P4.5.11**

### **The Relations Between Parental Marital Conflict Resolution Styles, Adolescent Emotion Regulation And Adolescent Conflict Resolution Behaviors**

Tugba Uney, Nihal Mamatoglu

*Abant İzzet Baysal University, Bolu, Turkey*

In this study, relations between parental marital conflict resolution styles, emotion regulation and conflict resolution behaviours of adolescents aged 11 to 14 were examined.

The sample of study consists of 186 state secondary school students aged 11 to 14 and their parents. In the study for parents, "Conflict Resolution Styles Scale", and for adolescents, "Determining the Conflict Resolution Behaviour Scale" and "Emotion Regulation Scale for Adolescents" are used in order to assess parental conflict resolution styles, emotion regulation and conflict resolution behaviours of adolescents.

The findings show meaningful relations among some sub-dimensions of parental marital conflict resolution styles, emotion regulation and conflict resolution behaviours of adolescents. Negative conflict resolution style of the mother is associated with aggressive behaviours in adolescents while positive conflict resolution style of the mother is related to adolescent's problem-solving behaviour. At the same time, the father's subordination conflict resolution style has been shown to be associated with adolescent aggression. On the other hand, the internal functional emotion regulation and the external dysfunctional emotion regulation were found to have mediation effect on the relation between negative conflict resolution style of the mother and aggressive behaviours in adolescents. Likewise, it was shown that the internal dysfunctional emotion regulation has a partial mediation effect on the relation between the father's subordination conflict resolution style and aggressive behaviours in adolescents. The findings of the research were discussed in the framework of relevant literature.

#### **P4.5.12**

##### **ParentWorks: Preliminary effectiveness of a national, free, online, father-friendly parenting program addressing conduct problems**

Patrycja Piotrowska, Lucy Tully, David Hawes, Matthew Burn, Meryn Lechowicz, Daniel Collins, Frances Houwing, Mark Dadds

*University of Sydney, Sydney, NSW, Australia*

The Like Father Like Son project is investigating a range of innovative strategies for enhancing engagement of fathers in evidence-based interventions for childhood conduct problems at the national level. It is well established that childhood conduct problems are the most identifiable and reliable precursor for a lifetime of antisocial behavior and violence, as well as other mental and physical health issues. Evidence-based parenting programs are effective in reducing the early signs of violence and antisocial behaviour, and evidence indicates that these treatment programs are more effective when fathers participate. However, fathers have a relatively low level of engagement with mental health agencies. The key strategy in the project is the development of Australia's first free, national, online, father-friendly parenting program called ParentWorks. This program, launched in August 2016, includes evidence-based parenting strategies and has been developed to meet the needs and preferences of fathers as well as mothers. A national media campaign called 'The Father Effect' is also being used to encourage father participation in this program. This presentation will report on the preliminary findings of this online parenting program in terms of changes in child externalising behaviour and parenting practices from pre-to post-intervention.

#### **P4.5.13**

##### **Changing the attitude towards depression and apathy in dementia: the effect of a workshop for home care workers**

Jennifer Reijnders, Erlinde Brus, Roeslan Leontjevas, Nele Jacobs

*Open University, Heerlen, The Netherlands*

Background: Depression and apathy in people with dementia belong to the most common neuropsychiatric conditions that cause significant distress for both patient and caregiver. Professional home care workers often encounter clients with dementia displaying neuropsychiatric symptoms. However, professional home care workers are often not sufficiently educated to recognize and handle these neuropsychiatric symptoms.

Method: A two-hour workshop was designed for home care workers in which the following topics were discussed: prevalence and symptoms of depression and apathy, conceptual overlap in diagnosis, possible treatment options, and recommendations on how to assist people with dementia that suffer from depression and/or apathy.

In a pre-posttest study, the effects of participation in the workshop were explored on the attitude towards depression and apathy. Furthermore, we examined whether there was an increase in knowledge about depression and apathy, and whether professional home care workers were better able to recognize and deal with the conditions in their clients with dementia.

Results: Preliminary results indicate that there was a positive attitude change towards apathy after participation in the workshop. Furthermore, the attitude towards depression improved for middle and higher educated participants. The results and implications of this study will be presented at the congress.



#### P4.5.14

### Compassion fatigue: A relevant lens to understand the social-emotional experience of teachers of students with special needs

Newsha Ziaian-Ghafari, Derek Berg

*Queen's University, Kingston, ON, Canada*

**OBJECTIVES** This study examined aspects of teachers' professional roles that influence their social-emotional experiences working with students with special needs understood through the lens of compassion fatigue. Compassion fatigue is particularly important as it develops from the impulse to help others and is rooted in the relationship between professionals and their clients. Teachers working with special needs students often have negative experiences in their early career leading them to consider leaving the profession despite the potentially rewarding nature of their work. Teacher attrition is financially costly and psychologically harmful for teachers. Limited research has considered compassion fatigue in teachers and no research has studied the experiences of compassion fatigue in teachers working with special needs students in regular education classrooms.

**METHOD** Interviews were conducted with five regular classroom teachers who teach students with special need.

**RESULTS** Although participants did not succumb to compassion fatigue, elements of compassion fatigue were evident throughout the interviews. Compassion fatigue emerged in relation to the challenges their special needs students faced in the regular classroom context, their difficulties meeting the needs of these students, and limited resources to support these students.

**CONCLUSION** Results suggested that compassion fatigue is a relevant lens when considering the experiences of teachers of special needs students.

#### P4.5.15

### Investigating the impact of robberies and thefts exposure on jewellers and tobacconists

Ilaria Setti<sup>1</sup>, Valentina Sommovigo<sup>1</sup>, Maria Santa Ferretti<sup>1</sup>, Piergiorgio Argentero<sup>1</sup>, Peter G. van der Velden<sup>2</sup>

<sup>1</sup>*University of Pavia, Pavia, Italy*

<sup>2</sup>*INTERVICT, Tilburg University, Tilburg, The Netherlands*

**Objectives.** Targets of thefts and robberies can be traumatized developing distress and PTSD which, in turn, impair health. The aim of this study is to explore how experiencing robberies and/or thefts at work may affect employees' wellbeing. The theoretical contribution of this study is to investigate the psychological sequelae of robbery and theft since little is known about the consequences of these potentially traumatic events.

**Method.** 362 Italian jewellers and tobacconists, in direct contact with clients and handled valuables, filled in an anonymous self-report questionnaire investigating: robbery/theft experience, psycho-somatic wellbeing, robbery/theft-related symptoms. Differences between those exposed and non-exposed to events were analysed through descriptive and ANOVA analyses.

**Results.** The type of traumatic event impacts on both psycho-somatic wellbeing and post-traumatic symptoms, so that employees being exposed to robberies experienced more dysphoric ( $F(1,226)=6,50$ ;  $p<.05$ ) and dysfunctional symptoms ( $F(1,226)=12,95$ ;  $p<.001$ ) compared to those who weren't exposed to any event, and more avoidance symptoms ( $F(1,131)=5,64$ ;  $p<.05$ ) than those exposed to thefts only. Victims of both events reported more dysphoric symptoms ( $F(1,360)=10,84$ ;  $p<.001$ ) than those who didn't experience any event, and in general referred post-traumatic symptoms.

**Conclusion.** In conclusion, our exploratory results may be the basis for deepening a topic currently few examined in literature, especially referring to small traders.



#### P4.5.16

##### **Personal experience as a mediator between imagination and prejudice reduction: a comparison between imagined contact and exposure to fiction.**

Ligia Orellana, Peter Totterdell, Aarti Iyer

*University of Sheffield, Sheffield, UK*

**Objectives:** Research has shown that, separately, imagined contact and exposure to fictional stories can help improve intergroup attitudes. The purpose of this study was to compare the potential of these two instances of imagination to reduce homophobia, by examining attributes of a story (imagined by oneself or by others) that relate to the individual's personal experience.

**Method:** 338 participants who identified as heterosexual responded to an online questionnaire in which they were randomly assigned to one of four conditions: two fiction conditions that required them to either watch a film trailer or read a short story; and two imagined contact conditions, one of which served as a control. The common element in the four conditions was positive contact with another person or group, and the three experimental conditions involved contact with gay men and lesbians. Participants were then asked to evaluate the story that they had been shown or that they imagined, by reporting how much it related to their personal experience.

**Results:** There were no statistically significant differences between the four conditions in terms of prejudice [ $F(3, 324) = .713, p = .545$ ]. The attributes scale showed significantly higher scores in the imagined contact conditions than in the fiction conditions [ $F(3, 332) = 8.896, p = .000, \eta^2 = .077$ ]. This score was tested as a mediator between each instance of imagination and prejudice. Exposure to fiction in written and video form, compared to the imagined contact condition, was a negative predictor of personal experiences perceived in the story, which in turn was a negative predictor of prejudice.

**Conclusion:** Participants who imagined contact with a homosexual individual reported less difficulty in relating their imagined story to their personal experience; and less difficulty to relate was associated with less prejudice towards gay men and lesbians. Those exposed to fiction depicting homosexual individuals related less to the story they watched or read. This finding questions the degree of control and bias that imagined interaction affords the participant, in comparison to being exposed to an imagined interaction with an out-group created by others.

#### P4.5.17

##### **Promoting psychosocial adaptation of youths in residential care through animal-assisted psychotherapy**

Alexander Muela, Nekane Balluerka, Goretti Soroa, Aitor Aritzeta, Arantxa Gorostiaga, Jone Aliri

*University of The Basque Country, San Sebastian, Gipuzkoa, Spain*

**Objectives:** The goal of this study was to examine the influence of animal-assisted psychotherapy (AAP) on the psychosocial adaptation of a group of adolescents in residential care who had suffered traumatic childhood experiences and who presented mental health problems. **Method:** Participants were 63 youths (mean age = 15.27, SD = 1.63) divided into two groups: A treatment group of 39 youths (19 female and 20 male; mean age = 15.03, SD = 0.51) and a control group of 24 (5 female and 19 male; mean age = 15.67, SD = 1.63). The program consisted of 34 sessions involving both group (23 sessions) and individual (11 sessions) AAP. Behavior Assessment System for Children (BASC) was used to evaluate clinical and adaptive dimensions of behavior and personality. **Results:** The youths who underwent the AAP program had higher school adjustment than their peers who did not receive treatment. Their hyperactive behavior decreased and they showed better social skills, more leadership, and fewer attention problems. They also showed a more positive attitude toward their teachers than controls. No differences were observed in other variables associated with clinical symptoms or personal adjustment. **Conclusion:** AAP can be effective with teenagers who have suffered childhood traumas and who present problems of psychosocial adaptation.

#### P4.5.18

### **The Relationship between Emotional Dissonance and Emotional Exhaustion among Teacher : the Moderating Effects of Sleep quality and Emotional Labor Strategy**

Junsong Lang, Qiao An, Xiang Yao

*Peking University, Beijing, China*

Employees with high emotional dissonance have more emotional exhaustion, which will do harm to their occupational health. However, previous researches didn't pay attention to the harm to teachers career life. Based on conservation of resources theory, this research aims to investigate moderating effects of emotional labor strategy and sleep quality on the relationship between emotional dissonance and emotional exhaustion among teachers. A two-week diary study was conducted among 72 Chinese middle school teachers.

The results indicated that: 1) Emotional dissonance were positively correlated with emotional exhaustion. 2) Expressing what they feel buffered the relationship between emotional dissonance and emotional exhaustion, meaning that the individuals expressing what they feel had less emotional exhaustion caused by emotional dissonance. 3) Sleep quality buffered the relationship between emotional dissonance and emotional exhaustion, meaning that the individuals with high sleep quality had less emotional exhaustion caused by emotional dissonance. The implications in management situations and practices were also discussed.

#### P4.5.19

### **The Role of Meta-cognition and Childhood Traumas in Predicting Emotion Dysregulation in Patients with Substance-related Disorders**

Zeynep Erdogan Yildirim, Mine Degirmenci, Ozge Kurulus, Serap Tekinsav Sutcu, Ender Altintoprak, Ebru Aldemir

*Ege University, Department of Psychology, Izmir, Turkey*

**Objectives:** As substance use becomes a serious and increasing problem from past to present, it has begun to focus on the underlying reasons. And high comorbidity of childhood traumas and substance related disorders has let to search for a specific solution in treatment. Particularly, many researchers stated that emotions and their regulation had central role to psychopathology especially substance use and abuse. On the other side, meta-cognitions were proposed to be a factor affecting emotions and substance use. From this perspective studies showed that metacognition, emotional regulation, and childhood traumas play an important role in the maintenance and treatment of substance-related disorders. Taking into account all of these literature, the aim of this study was to investigate the relationship between meta-cognition, childhood trauma and emotion dysregulation in patients with substance-related disorders

**Method:** The participants in this study consisted of male (approximately 200) who had been diagnosed with substance related disorders according to DSM-V-TR in Institute on Drug Abuse, Toxicology and Pharmaceutical Science, Ege University, Turkey. Childhood Trauma Questionnaire, Difficulties in Emotion Regulation Scale, Addiction Profile Index- Clinical Form, Meta- Cognitions Questionnaire-30 and demographic information form were used. Data collecting process of the study is continuing. Correlation and multiple regression analysis is going to be used. It was hypothesized that both meta-cognition and childhood trauma scores are predictors for emotion dysregulation in patients with substance-related disorders.

**Results:** Results are going to be discussed in terms of related literature, implications for psychotherapy and limitations.

**Conclusion:** This findings could offer some significant points which might be used to prevent the development of substance- related symptoms and also reduce symptom severity.

## P4.5.20

### Career Adaptability and re-employability after long periods of inactivity

Elena Foddai<sup>1</sup>, Alba Civillieri<sup>2</sup>, Francesco Pace<sup>1</sup>, Valentina Lo Cascio<sup>0</sup>

<sup>1</sup>Università degli studi di Palermo, Palermo, Italy, <sup>2</sup>Università di Trento, Trento, Italy

There is an increasing interest in re-employment of unemployed workers or workers after long period of inactivity. In Italy, one of the biggest productive sites of the automotive industry in Termini Imerese (Sicily) has closed about seven years ago and, during the last years, it moves towards the re-opening. Our research is the result of an agreement signed between the Department of Psychology of the University of Palermo, the new company owner and the consulting firm who has in charge with this delicate transition process. We explored the psychosocial variables related to the long period of inactivity, among approximately 700 employees who are in this delicate life transition. We assessed the degree of Career adaptability defined by Zacher et al. (2015) as a psychosocial resource that can help employees to effectively manage career changes and challenges. The construct of Career Adaptability refers to four different dimensions: concern, control, curiosity, and confidence (Savickas & Porfeli, 2012). Purpose of this paper is to assess how the Career Adaptability of workers, explored through the ladder Career Adapt-Abilities Scale (CAAS - Italian form, Soresi, Note & Ferrari, 2012) is able to predict the employability of workers to the new company, and the role in this process of some personality variables.

## P4.5.21

### Child Psychoanalysis in sport context: prevent mental distress, risk behaviour, in young people influencing cultural trends.

Elisa Deponte, Giovanni Lodetti, Alessandra Cova

AIPPS Association Internazionale Psychologie et Psychanalyse du Sport, Milan, Italy

**Objective:** The project regards an intervention to enhance the well-being and to prevent mental distress in young people using sport sailing context. The aim was to intervene on psychological distress symptoms that interfere with general well-being in normal life and sport. To maintain the long-term interventions' efficacy with children, studies continued with networking between teams and Sailing Federation activities to raise awareness of the importance of psychological well-being and increase the use of psychological tools by technicians as a community resource and new cultural trend. Data was recorded on about 80 youngsters monitored over three years.

**Method:** The method used clinical psychoanalytical observation to monitor, record and analyse data on which interventions were created using group dynamic.

**Results:** To verify the hypothesis that intervention made positive changes in children's well-being and their characteristic can influence the cultural trend, were collected clinic data and feedback on the intervention by the participants. Qualitative analysis on changed perceptions, using the Losito Theory, was performed on the aural and written reports. Results confirm the hypothesis that it is possible to have positive behaviour changes in sport and in the overall life context.

**Conclusion:** Thank to sport clinic psychology, applying AIPPS's model, we confirm that the characteristics of the project are becoming part of the heritage of the community.

## Session 4.6: Technological scientific topics; technology and changing behaviour (e-coaching, research on the brain)

### P4.6.01

#### **An evidence for the beneficial effect of some hats but not all six thinking hats and velocity on the creative performance**

Oznur Gocmen, Hamit Coskun, Bedirhan Gultepe

*Abant Izzet Baysal University, Bolu, Turkey*

In the literature six thinking hats have been suggested to be beneficial to creativity (de Bono, 1999). However, no reported research has examined the effects of six hats on creativity. To see which types of thinking hats are more beneficial to creativity, In Experiment 1, the effects of six thinking hats (white, red, yellow, green, blue, black hats) on the idea generation performance were for the first time investigated. The participants were allowed to exercise on the uses of cell phones by using rules of the relevant hats before brainstorming session for five minutes. After that, they were brainstormed on the ways to improve a university for ten minutes. Findings of Experiment 1 showed that the participants in the yellow ( $M = 20.84$ ), green ( $M = 17.50$ ), and white thinking hats ( $M = 18.78$ ) generated more uses than those in the red one ( $M = 12.95$ ),  $F(5, 113) = 2.40$ ,  $p < .05$ .

In Experiment 2, the effects of yellow (emphasizing opportunities and possibilities), green (emphasizing new and creative ideas), and red hats (emphasizing emotions and feelings) were again compared and their possible effects on creativity were investigated with the instruction of velocity or being fast. The procedures were the same as those in Experiment 1. Half of participants were received instruction that they shall write their ideas as fast as they could. Those in the control condition received no such feedback prior to the brainstorming session. In Experiment 2, they were brainstormed on the different uses of projector machines for 10 minutes. Findings showed that the participants in the velocity condition ( $M = 11.70$ ) generated more uses than those in the control condition ( $M = 9.07$ ),  $F(1, 50) = 4.37$ ,  $p < .05$ . Those in the green hat ( $M = 13.97$ ) generated more uses than those in the yellow one ( $M = 9.43$ ) and red one ( $M = 7.76$ ), with the last two being significantly different from each one,  $F(2, 50) = 7.93$ ,  $p < .001$ . These findings will be discussed under lights of recent literature.

### P4.6.02

#### **Affective Creativity meets Classic Creativity in the Scanner**

Corinna M. Perchtold<sup>1</sup>, Ilona Papousek<sup>1</sup>, Karl Koschutnig<sup>2</sup>, Christian Rominger<sup>1</sup>, Elisabeth M. Weiss<sup>1</sup>, Andreas Fink<sup>1</sup>

<sup>1</sup>*University of Graz, Graz, Styria, Austria*

<sup>2</sup>*Biotechmed Graz, Graz, Styria, Austria*

**Objectives:** Modern creativity research is still in need to illuminate more complex, real-life creative behavior. For this reason, this fMRI study compared brain activation during classic creative ideation with creativity in an affective context, which was assessed via the generation of alternative appraisals for anger-evoking events.

**Method:** 45 participants worked on the Alternate Uses Test (classic creativity) and the Reappraisal Inventiveness Test (affective creativity) while undergoing fMRI.

**Results:** Performance of both creativity tasks yielded strong activation in left prefrontal regions, underlining shared cognitive control processes like the inhibition of prepotent responses and flexible memory retrieval. Regarding task-specific differences in brain activation, classic creative ideation revealed a characteristic divergent thinking network comprising the left supramarginal, inferior temporal and inferior frontal gyri, part of which have been linked to the originality facet of creativity. Affective creativity on the other hand specifically recruited the right superior frontal gyrus presumably involved in inhibition of negative responses, as well as core hubs of the default-mode network (angular gyrus, precuneus) which are also substantially involved in social cognition.

**Conclusion:** By taking creativity research to the realm of emotion, these results considerably advance our knowledge on how real-life creativity is rooted in the brain.

#### P4.6.03

##### Gender Differences In Harmful Use Of Technology: Association With Emotional State

Rigoberto Honrubia<sup>1</sup>, Alberto Morcillo<sup>1</sup>, Maritza Villanueva<sup>2</sup>, Marta Nieto<sup>1</sup>, Jorge Ricarte<sup>1</sup>

<sup>1</sup>Psychology Department UCLM, Castilla La Mancha, Spain

<sup>2</sup>Nursing Department UNAP, Iquitos, Peru

**Objectives:** Technology addiction is an increasingly serious public health problem, especially among younger individuals. As with any type of addiction, for correct management and prevention of the disorder, it is important to determine gender differences and their relation to emotional variables. **Method:** This study analyses consumption habits and their association with emotional state in a sample of 547 university students (78.3% females) with a mean age of 21 years. **Results:** A total of 80% of participants reported using technology more than is necessary. With regards gender differences, use of video games ( $p < .000$ ), online gambling ( $p = .019$ ) and television consumption ( $p = .007$ ) was higher in males than females. Furthermore, males presented higher levels of problems (excessive time, more arguing, being "hooked") in the case of video games and gambling ( $ps < .000$ ). Frequency of video game use in males was positively associated with higher anxiety and depression scores, as measured on the Depression Anxiety Stress Scales (DASS),  $r = .26$ ,  $p = .04$ ,  $r = .31$ ,  $p = .01$ , respectively. However, although problems with video games correlated highly with gambling ( $r = .48$ ,  $p < .01$ ), we found no correlation between gambling and anxiety or depression. **Conclusion:** These results suggest that video game addiction in males may be associated with emotional disorder, while gambling addiction is a more complex phenomenon that does not directly depend on males' emotional state.

#### P4.6.04

##### Differential Role of Socialization and Social Network Interaction in Predicting BMI: The Moderating Role of Gender

Haziq Mehmood, Jamil A Malik

National Institute of Psychology, Quaid e Azam University, Islamabad, Pakistan

**Objective:** The present study examined the effect of need to belong, impression management, Facebook and socialization on body mass index (BMI). Additionally, this study investigated the moderating role of gender.

**Method:** The sample of the study comprised of 400 students of both gender male  $n = 140$  (38.9%) and female  $n = 220$  (61.1%). The age of university students ranged between 18-24 years. The purposive convenience sampling technique was used to collect data. Data was collected by Need to Belong Scale (Leary et al., 2005), Facebook Intensity Scale (Ellison et al., 2007), Impression Management Scale (Shelly et al., 2007), and Network of Relationships Inventory (Furman & Buhrmester, 1985).

**Results:** Data was analyzed through SPSS and AMOS. This study explored the mediating role of Facebook use, socialization and impression management between need to belong and BMI. Impression management is directly positively predicted by need to belong in both males ( $\beta = .56$ ,  $p < .01$ ) and females ( $\beta = .31$ ,  $p < .01$ ). Socialization is indirectly positively predicted by need to belong in both male ( $\beta = .09$ ,  $p < .01$ ) and female ( $\beta = .03$ ,  $p < .01$ ). Finally, BMI appeared to be directly predicted by need to belong ( $\beta = -.21$ ,  $p < .01$ ), and socialization ( $\beta = .20$ ,  $p < .01$ ), and indirectly predicted by impression management ( $\beta = .03$ ,  $p < .01$ ), and social networking behavior ( $\beta = .07$ ,  $p < .01$ ) in males, explaining a total of variance 6.5% variance. In females model, BMI directly predicted by the need to belong ( $\beta = .10$ ,  $p < .05$ ), socialization ( $\beta = -.10$ ,  $p < .05$ ), and indirectly predicted by impression management ( $\beta = -.01$ ,  $p < .05$ ), and social networking behavior ( $\beta = -.02$ ,  $p < .05$ ), explained 1.5% variance in BMI.

**Conclusion:** The present study is valuable to understand the socialization pattern between both genders, and how socialization is effected by BMI.

#### P4.6.05

##### **What is the gender of your selfie? A Self-Objectification and Neuroticism Analysis of Selfies**

Maria Sofia Skaltsa, Chryssoula Karakitsou

*The American College of Greece - Deree, Athens, Greece*

The present study explored the relationship among the existence of gender stereotypical cues found on Instagram selfies and the user's self-objectification and neuroticism levels. The sample consisted of 78 Greek undergraduate students, who self-identified a series of given cues from their own Instagram's selfies. Social media studies have revealed that certain cues are gender-specific and this study indeed revealed that men tended to expose more often their muscles compared to women, who more often touched their body and did the duckface. Self-objectification, which refers to the person's expectations to be evaluated, treated and consequently treats the self as an object, was not found to be significantly associated with the expression of these cues but there was an important tendency that may have a significant effect on larger samples. Contrary to what was expected, neuroticism levels were not significantly different among genders and no association with the duckface cue was found. Possible explanations based on the existing literature are discussed.

#### P4.6.07

##### **The Roles of Emotional Regulation, Social Support, Psychological Inflexibility and Stress on Internet Addiction of Students**

Elçin Yorulmaz, Umut Çivgin, Orçun Yorulmaz

*Dokuz Eylül University, Izmir, Turkey*

**Objectives:** Despite its widespread use and advantages, frequent internet use may lead a psychological problem, called as internet addiction. Among several factors found to be associated with this, stress is a prominent determinant construct. Conversely, instead of assuming a direct relationship, in line with other findings, it is plausible to recommend that some other relevant concepts such as emotional regulation, psychological flexibility and social support would play a role between stress and internet addiction. Hence, the aim of the current study was to investigate the mediator roles of emotional regulation, psychological flexibility and social support on the association between stress and internet addiction trend in Turkish undergraduates.

**Method:** To investigate this aim, 396 students completed the self-report measures on sociodemographic information, difficulties in emotional regulation, psychological flexibility, perceived social support, life stress, and internet addiction.

**Results:** The results supported only the mediator role of emotional regulation between stress and internet addiction.

**Conclusion:** It seems that stress experience contributes to the problems in emotion regulation, in turn which results in increase in internet use. Thus, the current findings may be viewed as preliminary clues for a new challenge: possible role of difficulties in emotion regulation in transformation of a technological improvement into psychological problem.

#### P4.6.08

##### **The Brain Correlates of Humor Creation**

Anastasiya Lavreshina, Liudmila Dikaya

*Southern Federal University, Rostov-on-Don, Russia*

Psychologists note such similarities of creativity and humor as mismatch, surprise and novelty. While neural correlates of humor perception have been studied, the generation of humor as an example of the creative insight has not been unexplored in neuroscience yet.

**The objective** of the research was to reveal the brain correlates of humor creation.

**Method.** We studied EEG power and coherence in cerebral cortex of 69 art specialists (28 males



and 41 females, mean 22 years old).

EEG signals were recorded in a resting state and during passive non-creative (perceiving and appreciation of humor) and active creative (generating of the humorous or the mundane verses and captions for drawings by insightful way) mental activity from 21 scalp electrodes according to the 10-20 System. We used statistical post hoc analysis.

**Results.** The active humor creation resulted in a progressive increase in temporal EEG power throughout the trial, suggesting the sequential construction of humoristic meaning via the discovery and linkage of remote associations. We observed the most great medial prefrontal cortex activity during humor creation in contrast with other kinds of subjects' mental activity ( $p < 0.05$ ).

**Conclusion.** The brain correlates of active real-time humor creation in art specialists' cerebral cortex have been revealed. Based on the performed empirical research and its' analysis, we conclude the functioning of the neural network, in which the frontal and temporal areas of the brain are involved in the generation of both creativity and humor.

#### P4.6.09

##### **From the selfie portrait to the self-ie surgery: a revised version of the Body Image Control in Photos questionnaire.**

Valentina Boursier<sup>2</sup>, Valentina Manna<sup>1,2</sup>

<sup>1</sup>Association for Social Promotion "Roots In Action", Acerra (NA), Italy

<sup>2</sup>Department of Humanities – University of Naples Federico II, Naples, Italy

Self-portrayal is one of the most popular online activities, especially among adolescents and young adults (Lenhart et al 2010): 93 million selfies are taken each day by smartphone users and online photo sharing in 2014 was about 880 billion (Lee & Sung, 2016). Literature explored self-presentation through photographic material posted online (Zhao et al, 2008), the advantages of a positive self-image's presentation on social networks (McAndrew & Jeong, 2012) and how the use of social media can impact one's self-view (de Vries, 2014).

The selfie-craze explosion through photo-sharing represent a new task for adolescents' researchers but few instruments explore how adolescents can control their body image through self-portraits. One of this is the Body Image Control in Photos questionnaire (Pelosi et al 2014).

The aim of this study is to develop and validate a revised short version of the BICPQ, administered to 640 Italian adolescents. We conducted EFA and CFA by MPLUS also testing a 2nd order model and calculating Cronbach's  $\alpha$  as measure of internal consistency. The scale reliability is good ( $\alpha = .900$ ) and the emerged 2nd order model was fully satisfactory

(RMSEA = .06, CFI = .92, TLI = .90, SRMR = .057). The analysis highlighted a 5 factors structure, quite different from the original version in revealing the role of sexual and relational dimensions in controlling the body image via self-portrait. These are key aspects to consider when planning future preventive interventions for adolescents on this issues.

#### P4.6.10

##### **Investigation Of The Relationships Among Decision Making Processes, Some Cognitive Processes, Personality Traits And Affect With Structural Equation Model**

Selin Yilmaz, Hatice Kafadar

Abant Izzet Baysal University, Bolu, Turkey

The purpose of this study is to examine the relationships among decision making, reasoning, working memory, planning, selective attention, personality and affect and to investigate these relations with the help of SEM (Structural Equation Model).

A total of 100 participants, which consist of 59 female and 41 male were participated in this study. The mean age of the participants was 20.42 (SD = 1.37). Decision making, set-shifting, selective attention, planning, working memory, personality and affect were measured by IGT (Iowa Gambling Test), WCST (Wisconsin Card Sorting Test), Stroop Test TBAG Version, TOL<sup>DX</sup> (Test of Tower of London), Wechsler Memory Scale-III Letter-Number Sequencing Subtest, (BPTI) Basic Personality Traits Inventory and PANAS (Positive and Negative Affect Scale), respectively. Instruments were administered individually.

The data was analyzed using Pearson moment correlation coefficients and SEM. The findings were



evaluated at .05 significant levels.

Using the SEM, it was concluded that Decision Making as a dependent latent variable predicted IGT Total Score and Net Score significantly. Moreover, Working Memory, Set-shifting and Planning which are the independent latent variables significantly predicted the Decision Making, too. In contrast, the contributions of Selective Attention, Personality and Affect as the independent latent variables on Decision Making were not significant. Finally, YEM that is constituted by Block Net Scores indicated that Set-shifting and Planning independent latent variables predicted Decision Making significantly.

These findings were discussed within the context of the relevant literature and suggestions for the future studies were discussed.

## Session 5

### Session 5.1: Life changing events; migration, integration, adaptation

#### P5.1.01

##### **Coping strategies Or: How to (not) turn stress in to trauma?**

Tatjana Stefanovic Stanojevic, Milica Tosic Radev

*Faculty of Philosophy, Department of Psychology, Nis, Serbia*

Serbia is a country that is, in recent decades, known worldwide for the bombing, migrations, inflation and many other stressors. Therefore, Serbia is a suitable testing ground for the relationship of stress and trauma. Most of the authors is of the opinion that only stress does not cause trauma, but the way we deal with it (Aldwin, 1944).

The problem of the study is to investigate whether the types of stressors are correlated with the ways of overcoming stressful situations and whether coping strategies are related to the degree of trauma. The survey was conducted on a sample of 200 students of the Faculty of Philosophy in Nis. Way of coping with stress was measured by CISS, (Endler and Parker, 1990), stressful situations was assessed by Risk Scale (Grossman et al., 1990), and the traumatic consequences were operationalized of SRD-10 Scale (Knežević, 2002).

The research results show a significant correlation between stressors and coping strategies, whereby groups of stressors related to family problems is closely linked to the coping strategy directed to the emotions ( $r = 0.217$ ,  $p < 0.03$ ), while a group of stressors associated with migrations and relocations are statistically significantly associated with the coping strategy directed to the problem ( $r = 0.414$ ,  $p < 0.000$ ). When it comes to the relationship of trauma and coping strategies, our findings suggest that subjects who are most traumatised are also the most likely to have coping strategy which is characterized by avoiding problems through distraction ( $r = 0.238$ ,  $p < 0.001$ ).

#### P5.1.02

##### **Relationship between big five personality factors Neuroticism, extraversion, agreeableness, openness, loyalty and marital adjustment**

Roghayyeh Mousavi

*Shahed university, Tehran, Iran*

The present research aims to study the correlation between big five personality factors Neuroticism, extraversion, agreeableness, openness, loyalty and marital adjustment.

This article Relationship between big five personality factors Neuroticism, extraversion, agreeableness, openness, loyalty and marital adjustment.

The population is composed of all married employed teachers of department of education in Nourabad within the academic year 2014 - 2015. The sample size includes 154 married teachers (77 couples) who were chosen through simple random sampling. The instrumentation contains NEO-FF-I questionnaire and twosome compatibility questionnaire (DAS). The data have been collected through these two questionnaires respectively which were related to five factors of personality and marital adjustment

The results of correlation coefficient show that among five personality factors, Neuroticism has a meaningful and negative correlation with marital adjustment ( $P < 0.001$ ) and extraversion, agreeableness ( $P < 0.001$ ), loyalty ( $P < 0.005$ ) have a positive and meaningful correlation with marital adjustment. It is noted that there is no correlation between Openness and marital adjustment. Also, the obtained results of regression analysis reveal that among these five factors, Neuroticism and agreeableness are the strongest indicators of marital adjustment respectively which have the power of prediction to a significant level.

Undoubtedly, personal features and factors are very important in marital adjustment. It must be considered by counselors before marriage. Evaluation of personality features in couples by counselors can play a key role in selecting the proper spouse and prevent the marital incompatibility and unsatisfactory.

### P5.1.03

#### **Cognitive Emotion Regulation And Externalizing Adjustment Problems In Adolescents Of Fathers Employed Abroad**

Zakia Bano<sup>1</sup>, Nabgha Batool<sup>2</sup>

<sup>1</sup>University of Gujrat, Gujrat, Punjab, Pakistan

<sup>2</sup>University of Gujrat, Sialkot Campus, Sialkot, Punjab, Pakistan

**Objective:** The aim of present study is to explore the predictive relationship between cognitive emotion regulation and externalizing psychological adjustment problems in adolescents of fathers employed abroad.

**Method:** A sample of 327 adolescent's age range from 12 -19 years was selected from various educational institutions of Sialkot, Pakistan. Two scales cognitive emotion regulation (CERQ; Garnefski, Kraaij & Spinhoven, 2001) and Reynolds adolescent adjustment screening inventory (RAASI; Reynolds, 2001) were used.

**Results:** Multiple regression analysis indicated significant predictive relationship of cognitive emotion regulation with anger control problems ( $R = .309$ ;  $p < .01$ ), with antisocial behavior ( $R = .326$ ;  $p < .01$ ), with overall externalizing problems ( $R = .343$ ,  $p < .01$ ). Further, gender based regression analysis indicated that in female adolescents showed ( $R = .364$ ;  $R^2 = .133$ ,  $p = .000$ ) and cognitive emotion regulation with antisocial behavior ( $R = .279$ ,  $p = .000$ ). While, the relationship between cognitive emotion regulation and anger control problems ( $R = .187$ ,  $p = .013$ ). Moreover, in male adolescents, result indicated the cognitive emotion regulation with psychological adjustment ( $R = .212$ ;  $R^2 = .045$ ;  $F = 7.121$ ,  $p = .008$ ). Besides, the relationship of cognitive emotion regulation with anger control problems ( $R = .187$ ;  $R^2 = .035$ ;  $F = 5.451$ ,  $p = .021$ ) and antisocial behavior ( $R = .155$ ,  $p = .056$ ).

**Conclusion:** To make earning better a vast majority of Pakistani men prefers to work abroad. Although, this policy helps in economic uplifting of the family but can also result in certain emotional and psychological problems in their children.

### P5.1.06

#### **The Effect of grandparents' co-parenting on young children's personality and adaptation: Chinese three-generation-families**

Yi Sun<sup>1</sup>, Na Jiang<sup>2</sup>, Xujie Sun<sup>3</sup>

<sup>1</sup>Ritsumeikan University, Osaka, Japan, <sup>2</sup>Keio University, Tokyo, Japan, <sup>3</sup>Songjiang Baiyun kindergarten, Shanghai, China

Due to the prevalence of grandparents' co-parenting of children in China, this study aimed to examine its influence on young children's personality and adaptation. With the cooperation of a kindergarten in Shanghai, 530 parents of children 3-6 years of age were invited to answer the questionnaire after giving their consent, and 422 of the questionnaires were effective. Three factors were extracted by Exploratory Factor Analysis for children's temperament: Fearfulness in Strange Situations (FS), Intensity of Reaction (IR) and Pro-social Activity (PA). Two factors were examined for children's adaptation: Separation Anxiety in attending kindergarten (SA) and Anxious Preoccupied Attachment (APA, one of the insecure types for parent-child attachment relationship). The results show that the children raised by only parents had higher PA than those co-raised by grandparents and lower APA than those raised by only grandparents. Even after controlling for the influence from temperament and grades, the effect of parenting styles on APA was still significant. For Grade 1 children, the parenting style was also significantly related to children's temperament (IR).

### P5.1.07

#### **Development of children's creative abilities (cross-cultural comparison: migrant children (1<sup>st</sup> and 2<sup>nd</sup> generation, Eastern European origin), Russian and British children).**

Valeria Carroll, Karen Pfeffer

*University of Lincoln, Lincoln, UK*

**Objectives:** The project will assess creative abilities of children in three groups: migrant children (1<sup>st</sup> and 2<sup>nd</sup> generation, Eastern European Origin), Russian children and British children (both parents are UK residents) to identify cross-cultural differences. Also this research project aims to explore how children of Eastern European origin living in the UK develop their creative abilities by being engaged in special educational activities (based on Gatanov's, programme, adapted by V.Carroll). Finally it will allow to resolve the methodological dilemma: a lack of norms for migrant children, whose development is mediated by belonging to at least two cultures due to migration trajectories.

**Methods:** *Participants:* approximately 30 migrant children will be invited to take part in the development of creative abilities study (all children from Eastern European School, age 4-9 years old). Similarly to create equivalent control groups - we will test creative abilities of 30 children in Russia (Moscow) and 30 British children (both parents are British) children in the UK (Donaster).

**Materials:** Torrance test of creative thinking (non-verbal part) and translated into Russian and adapted by H.Tunik Torrance test of creative thinking (non-verbal part); programme of development of creative abilities (Gatanov) modified by V.Carroll to address the needs of children from EESS.

**Results:** results demonstrate the dynamics of the creative abilities of children of the Eastern European origin, indicate age difference in dynamics of the creative abilities of children and young people of the Eastern European origin; explore whether special educational programme has a significant impact on the development of the creative abilities of children and young People in the Eastern European Supplementary School (EES); highlight cross-cultural differences in creative abilities of migrant children and a) children resident in Russian and b) UK-domicile children

**Conclusion:** There are cultural specificities and universal trajectories of development of creative abilities of migrant children.

### P5.1.08

#### **Friends Or Foes: Are Teachers' Values And Attitudes Facilitating Or Impeding Acculturation?**

Lucia Bombieri

*Higher School of Economics, Moscow, Russia*

We live in a world which is rapidly changing: migrations and cultural clashes have become a fast-paced process like never before. Societies, both on a national and international level, are struggling to tackle these pending challenges. Thus, they tend to react defensively or aggressively against any perceived threat to their own stability.

These phenomena can also be observed on an individual level. Psychological concepts such as prejudice<sup>1</sup>, stereotypes<sup>2</sup> and group biases<sup>3</sup> are deeply intertwined to personality and personal relations.

Previous research has provided paradigms and methods which are nowadays milestones in the field. It seems worthy, however, to concentrate our efforts on an aspect that has been partially neglected. Considering the key role that schools and teachers play in promoting socially acceptable rules, the main priority of this study is to start examining their own beliefs and attitudes towards migrants. Values are also included to provide more extensive and comprehensive data. This study's aim is to investigate the aforementioned mechanisms among this specific target-group, both as citizens and as professionals.

In order to analyse these factors, we rely on an online survey where we merge two tools: the Mirips questionnaire and the Schwartz Human Values Questionnaire. Teachers from different nationalities and background are invited to take part to the study. The data collected from these self-report instruments will be compared to the general population and between different

categories of teachers: experienced teachers vs. newly qualified ones.

The study is still ongoing. Results will be expected by March 2017.

When completed, the research may provide some important indications on the psychological well-being, strengths, and weaknesses of European teachers. School management could also benefit from this study, considering some adjustments in the training offered to teachers according to their level of expertise.

#### **P5.1.10**

##### **Group Therapy with Fibromyalgia Patients: A Systematic Review**

Ayla Hocaoglu, Esin Temeloglu Sen, Ozlem Sertel Berk

*Istanbul University, Istanbul, Turkey*

**Objective:** Fibromyalgia is a complicated syndrome which includes not only pain in tenderness points around the body but also lots of psychological, social and economical problems. Although pharmacological treatment is main treatment, multimodal treatment including pharmacological treatment, physical exercises, and psychological treatment is suggested to reach best therapy results. The aim of this study reviews all studies in group therapy intervention in FM. **Methods:** Studies were identified through an exhaustive bibliographic search in Medline, Science Direct and Ebscohost platforms. While searching, *group therapy* and *fibromyalgia* were used as keywords. After excluding studies which don't meet inclusion criteria, finally 27 original articles were fully analyzed. **Results:** CBT is mostly used in group therapy intervention and effective in improving patients' problems. Completing deficiency of CBT, third wave therapy approaches like mindfulness-based therapy and ACT are tested in studies. Also CBT is used with hypnosis in some studies. However, there is not enough study about these approaches for examining effectiveness in FM because of methodological problems. There are also necessary pharmacological treatment and exercise in FM. So group therapy focused on multimodal especially CBT, drug management and exercise program is recommended. The instrument also important to evaluate the effectiveness of intervention. Visual Analogue Scale is mostly used to evaluate pain level. Fibromyalgia Impact Questionnaire is also used in most of interventions but it couldn't be used in healthy control group. Studies also have some methodological problems including absence of active control group, lack of randomized controlled trial design, deficiency in instruments, mistiming in follow up assessment and high drop out rate. **Conclusion:** FM is a syndrome including biological, psychological and social components. Lots of approaches are improved to understand and treat FM patients. It is critical to evaluate cost-effectiveness, so group therapy is recommended in literature. CBT is most effective and common psychotherapy methods. Drug management and joining exercise program are also necessary for maximum benefit. The locus of treatment expands from decrease pain intensity to pain management. Because of various of patients, dropout rates are high level. Interventions should be planned according to patients' characteristics and tailored to patient.

#### **P5.1.11**

##### **Freshmen's Adaptability and Psychological Stress: The Mediating Role of Self-Efficacy**

Jing Mao, Xinyu Wan, Xiang Yao

*Peking University, Beijing, China*

The freshmen need to deal with the uncertainty matter for their first college year. Adaptability, as an important competence, has a positive effect on the adaptation of College Freshmen. This study focused on the influence of freshmen's adaptability to psychological stress (academic & life), as well as the mediating role of self-efficacy. A three-wave survey was carried out in a Chinese university, and 204 freshmen attended this study. The freshmen reported their work stress adaptability first; academic self-efficacy and life self-efficacy were reported three months later; academic stress and life stress were collected another three months later.

The results indicated that, 1) work stress adaptability negatively correlate with academic stress and life stress; 2) work stress adaptability positively correlate with academic self-efficacy and life self-efficacy; 3) academic self-efficacy mediates the relationship between work stress adaptability and academic stress; 4) life self-efficacy mediates the relationship between work stress adaptability and life stress. These findings add to the literature on clarifying the relationship between

freshmen's adaptability and psychological stress. In addition, practical implications for improving freshmen adaptation are also discussed.

### P5.1.12

#### **Multicentre Psychological Assessment Research On Patients Affected By Crf In Haemodialysis Or Peritoneal Treatment**

Giulia Bruna Delli Zotti<sup>1</sup>, Maria Monica Ratti<sup>1,2</sup>, Eleonora Sangiovanni<sup>2</sup>, Alessandra Portaluppi<sup>2</sup>, Donatella Spotti<sup>3</sup>, Aurelio Limido<sup>4</sup>, Marco Farina<sup>5</sup>, Silvio Volmer Bertoli<sup>6</sup>, Sarno Lucio<sup>1,2</sup>

<sup>1</sup>*Health and Clinical Psychology Service, IRCCS San Raffaele Hospital, Milan, Italy*

<sup>2</sup>*Vita-Salute San Raffaele University, Milan, Italy*

<sup>3</sup>*Nephrology-Hypertension Dialysis Unit, San Raffaele Hospital, Milan, Italy*

<sup>4</sup>*Nephrology-Hypertension Dialysis Unit, Fatebenefratelli Hospital, Milan, Italy*

<sup>5</sup>*Nephrology and Dialysis Unit, Lodi Hospital, Lodi, Italy,*

<sup>6</sup>*Nephrology and Dialysis Unit, IRCCS Multimedica, Sesto San Giovanni, Italy*

**OBJECTIVES** The Health Psychology intervenes in the hospital to support the patients suffering organic diseases. Chronic Renal Failure, the irreversible loss renal function, forced patients to haemodialysis or peritoneal treatment, that often trigger the onset of notable psychological distress, depressive symptoms, anxiety, concerns about body image.

**METHOD** The sample(n=152)(M,98, F,54)(mean age=65.85;d.s=13,96) from four Dialysis Centres:San Raffaele(n=48), Fatebenefratelli(n=23),Multimedica(n=46),Provincia di Lodi(n=36). The instruments used were Kidney Disease Quality of Life, Beck Depression Inventory, State-trait Anxiety Inventory, Body Uneasiness Test, Psychological Distress Inventory. Patients are on haemodialysis (n=141)(group 1) and peritoneal (n=12) treatments(group 2).

**RESULTS** The sample presented average levels of state anxiety(m=37,47;d.s=11,43) and trait anxiety(m=40,48;d.s=12,28), low distress(m=27,3;d.s=7,84), absence of depression(m=8,08;d.s=6,28). Depression is significantly correlated with state(r=.699;p<.001) and trait anxiety(r=.768;p<.001), distress(r=.790;p<.001). Results shows positive correlations between almost all subscales related to the Quality of Life, anxiety, depression, distress. ANCOVA shows a significant difference for the depression construct between Multimedica and Fatebenefratelli (F(5,72;1,61;P=.003). Group 2 experienced a higher dissatisfaction related to the thighs area than group 1(t=-2,41;p=.03).

**CONCLUSION** This multicentre study is in line with the model of "Action-research". The data provide important information about the psychological characteristics of the patient in substitution treatment; from the clinical point of view, this research allows to provide the patients with a moment of reflection about their difficulties, especially in Centres where Psychology Service is not available.

### P5.1.13

#### **The Experience Of Maternity And Nursing: A Preliminary Study About Mother-Child Relationship**

Maria Monica Ratti<sup>1,2</sup>, Eleonora Franchini<sup>1</sup>, Federica Bertin<sup>2</sup>, Benedetta Marconi<sup>2</sup>, Lucio Sarno<sup>1,2</sup>

<sup>1</sup>*Health and Clinical Psychology Service, IRCCS San Raffaele Hospital, Milan, Italy*

<sup>2</sup>*Vita-Salute San Raffaele University, Milan, Italy*

**OBJECTIVES** Maternity represents one of the most important life events for a woman and she needs to adapt herself to its psycho-physical changes, experiencing a particular emotional state, *Primary maternal preoccupation*(Winnicott, 1956). Based on the attention toward emotional and physical contact and nursing, the Health and Clinical Psychological Service of San Raffaele Hospital carried out a study in order to understand the complexity of maternity and the factors implied in the attachment between mother and child.

**METHOD** A particular registry paper and a set of ad-hoc items was administered through social networks. The sample is made up of 456 mothers(m=31,67;s.d.=±4,69) who had a child after 2011, mostly with an only child(76%) and who breastfed their last one(86%). 76% of them thinks expectations about nursing were confirmed by reality(G1) while 24% did not(G2).

**RESULTS** Results show significant differences between G1 and G2 in the quality of early interactions: G2 have higher levels of boredom and annoyance in the care of child( $t=3,614$ ;  $p=,000$ ) and more opposing feelings for the child in the first weeks after delivery( $t=-3,696$ ;  $p=,000$ ). Moreover G2 feels that the child was less up to their expectations( $t=2,161$ ;  $p=0,031$ ) and less attached to them( $t=3,035$ ;  $p=0,003$ ).

**CONCLUSION** Results show that "expectations" should be considered as a relevant factor in the creation of a mother-child bond. It suggests focussing deeper on mothers' expectations, in order to help women during this important life-changing event.



## Session 5.2: Open

### P5.2.02

#### **Social judgments push girls to exhibit strong conformity**

Peng Zhang, Xiangping Liu, Yibin Zhang

*Beijing Normal University, Beijing, China*

Conformity means that humans tend to follow the unanimous majority. There is a notable gender difference in conformity: compared to males, females-ranging from four-year-old children to adolescents-tend to conform more readily. However, some studies have failed to find this phenomenon. Considering of conformity stress may contribute to explain this complex results. There are two types of conformity pressure- social interaction stress (SIS) and social judgment stress (SJS)-which are determined by whether individuals have an public choice or not. SIS occurs when an individual must interact with a group to accomplish something or to communicate effectively, while SJS occurs when an individual's performance being observed, compared, and evaluated by others.

We selected children aged 8-12 as subjects, and administered them the Asch perceptual judgment paradigm modified for presentation on a computer. Drawing on Zhang et al. (2016), we established two conditions corresponding to the two types of conformity pressure-SIS and SJS. Furthermore, we measured subjects' pre-established convictions in advance to ensure that their conformity behavior was pushed by unanimous majority. Finally, we used three people as the unanimous majority.

We found that in the SJS condition, girls tend to show a greater tendency to exhibit strong conformity than do boys. The Social Role Theory predicts that people cater to expectations of their social roles to help integrate into a community and obtain social inclusion. In general, females are expected to be gentler and more submissive, whereas males are expected to be more assertive and adventurous. These expectations are brought on by a variety of channels, such as the media, parents, and peer. In this way, girls may be attempting to respond to these gender role expectations by submitting to the will of the majority in the condition of SJS. This finding support the Social Role Theory. These results may be helpful in understanding the mechanism of conformity among children. In the future, researchers might focus on creating more refined and stringent experimental conditions to more precisely understand the gender differences in children's conformity behavior, in particular identifying when girls are more likely to conform and why.

### P5.2.03

#### **Psychometric properties of the Emotional Regulation Questionnaire (ERQ-CA) in Spanish adolescent population.**

Jessica Navarro<sup>1</sup>, M<sup>a</sup> Dolores Vara<sup>1</sup>, Ausias Cebolla<sup>1</sup>, Rosa María Baños<sup>1,2</sup>

<sup>1</sup>*Department of Personality, Evaluation and Psychological Treatment, University of Valencia, Valencia, Spain*

<sup>2</sup>*CIBER Fisiopatología Obesidad y Nutrición (CIBEROBN), Santiago de Compostela, Spain*

Difficulties in the ability to regulate emotions usually are vulnerability factors or even symptoms of various mental disorders. The acquisition of adaptive emotional regulation skills is crucial, especially in adolescence. The "Emotional Regulation Questionnaire" (ERQ-CA) (Gullone & Taffe, 2012) is a brief questionnaire for assessing the tendency to regulate the emotions using two strategies: Cognitive Reappraisal and Expressive Suppression. This study assesses its psychometric properties of the Spanish version in a sample of adolescent. Method: 399 volunteers (221 girls) with a mean age of 15.27 (from 10 to 19) fulfilled the questionnaires ERQ-CA and "Difficulties in Emotion Regulation Scale" (DERS) (Gratz & Roemer, 2004). Exploratory factor analysis, internal consistency and convergent validity analysis were performed. Results: A two-factor structure emerged from the results. The internal consistency for the subscales was not acceptable compared to values obtained in validations with adults (.61 for Cognitive Reappraisal and .64 for Expressive Suppression). The ERQ-CA "Expressive Suppression" factor positively correlated with "Emotional rejection" ( $p < .001$ ) and "Emotional confusion" ( $p < .001$ ) factors and negatively with "Emotional neglect" ( $p < .001$ ) of the DERS scale. Conclusion: The questionnaire ERQ-CA shows low levels of

reliability with Spanish adolescent and more research is needed to confirm the use of the questionnaire in this population.

#### **P5.2.04**

##### **Factor Analysis of Dysfunctional Attitude Scale Form-A**

Farzaneh Fouladgar, Sima Dawood, Nashi Khan

<sup>1</sup>*The University of the Punjab, Lahore, Pakistan*

The present research explored dysfunctional attitude in Iranian and Pakistani university students. For this purpose, a total sample of 1500 students was taken including equal number from Iran and Pakistan with an age range of 20-40 years. The data were collected from Public Universities of Iran (Isfahan & Kashan) and Pakistan (University of the Punjab and Government College University). Participants' personal information was collected through self – constructed demographic information form. The Dysfunctional Attitude of participants was assessed through Dysfunctional Attitude Scale (DAS, Beck & Wiessman, 1980). A series of Exploratory Factor Analyses was run to identify the factors underlying each dimension of the Dysfunctional Attitude Scale Form-A. The independent t-test was employed to see gender differences and cultural differences among students. Exploratory Factor Analysis yielded four factor solution of 40 items of DAS-A, which reflected themes of Perfectionism (Fifteen items); Approval (Twelve items); Achievement (seven items) and Autonomy (six items). The findings indicated that Pakistani students showed more dysfunctional attitude of perfectionism, approval and autonomy than Iranian students, whereas, Iranian students scored high on dysfunctional attitude of achievement. Regarding gender differences, the findings revealed that Pakistani men showed more dysfunctional attitude related to achievement than Pakistani women and Iranian women showed more dysfunctional attitude of autonomy than Iranian men. No gender differences were found in the rest of the subscales of dysfunctional attitude for Iranian sample. It can be concluded that dysfunctional attitudes of university students vary from culture to culture.

**Keywords:** Dysfunctional Attitude, Gender Differences, Cultural Differences

#### **P5.2.05**

##### **Why do university students not consult with counselors about distress?**

Kenshiro Tanaka<sup>1</sup>, Takatoyo Umemoto<sup>2</sup>, Mariko Shimizu<sup>3</sup>

<sup>1</sup>*University of Yamanashi, Kofu, Yamanashi, Japan*

<sup>2</sup>*Kyushu Women's University, Kitakyushu, Fukuoka, Japan*

<sup>3</sup>*Nagoya University, Nagoya, Aichi, Japan*

Suicide is the leading cause of death among university students in Japan and accounts for half of all students' deaths in the country. Therefore, universities provide psychological support services. However, a previous study reported that students currently do not use the services despite some distress (Japan Student Services Organization, 2014). The aim of this study was to reveal the reasons behind hesitation in consulting a counselor. Participants were 144 Japanese university students who wrote about their reasons for not seeking help. A total of 177 responses were categorized into 19 categories by way of discussion with two counselors. The highest numbered reason was "because there is a friend or relative who students can consult." The second was "because students feel that it is burdensome to consult with counselors." The third was "because students do not feel that counseling is effective to decrease their distress." These three reasons accounted for 44% of all responses. The results indicated that university students do not consult counselors because they do not expect counseling to be helpful. If they felt that counseling was more effective than consulting their friends or family, they may be more inclined to use psychological support services from universities. It may be effective for universities and counselors to actively inform students about the efficacy and approachableness of counseling.

## P5.2.06

### **Occupational Stress And Personality Of Teachers Of Higher Education In Goiânia, Brazil.**

Mauricio Valadao<sup>1</sup>, Sebastiao Costa Neto<sup>2</sup>, Ivone Sousa<sup>1</sup>

<sup>1</sup>*Pontificia Universidade Católica De Goiás, Goiania, Goiás, Brazil*

<sup>2</sup>*Universidade Federal Of Goias (Ufg), Goiania, Goiás, Brazil*

This paper aimed to identify the occupational stress level, personality factors, as well as the correlation between occupational stress, personality and sociodemographic variables of higher education teachers of an institution in the city of Goiânia – Goiás, Brazil. Sixty-four teachers, both sexes, graduated in several areas of knowledge, took part in this study, to whom were applied the Sociodemographic Questionnaire, the Occupational Stress Scale, by Paschoal and Tamayo (2004), and the Inventory of the Five Large Factors of Personality or Big Five, adapted by Andrade (2008), analyzed quantitatively. The results have pointed to low and moderate levels of occupational stress, and neuroticism as the personality factor most found among the teachers. There was a positive correlation between neuroticism factor and occupational stress. There were no correlations between stress and sociodemographic data. When we analyzed sociodemographic data and personality factors, the data showed correspondence between marital status and these factors, except for neuroticism. It was concluded that teachers are in low and moderate levels of stress, and that understanding its relation with personality factors is extremely important for successful teacher's quality of life programs.

## P5.2.07

### **Generativity and stagnation in middle adulthood in the context of family of origin characteristics: Longitudinal view**

Katarína Millová, Marek Blatný

*Institute of Psychology, Academy of Sciences of the Czech Republic, Brno, Czech Republic*

The aim of the research was to examine the relationship between generativity, stagnation and characteristics of family of origin (parental socioeconomic status, parent-child relationship and family type). We proceeded from McAdams and St. Aubin's model of generativity and Bradley's model of stagnation together with our family typology: harmonious, average, disharmonic, and incomplete family. Our participants (77 persons, 52-54 years old; 33 men) were drawn from Brno Longitudinal Study running since 1961. Family characteristics were examined during their childhood: parental socioeconomic status (SES; education and occupation) and type of the family in 10 years of age, parent-child relationship in 15 years of age. They completed battery of questionnaires measuring generative concern (LGS), action (GBC), and stagnation (BSS) in adulthood. We found significant differences between harmonious and average families: people from harmonious families achieved significantly higher levels of generative concern and lower levels of stagnation. Higher parental SES was linked particularly to lower level of stagnation; higher mother's education was associated also with higher generative action. We did not find any significant result in the area of parent-child relationship. Our results indicate importance of family of origin characteristics in the context of development of generativity and stagnation in later life.

## P5.2.09

### Test construction on Information Literacy for Psychology Students: Validity and Reliability of IL Scale

Soheila HashemiKoochaksaraei, Abbas Akbari

*University of Mazandaran, Babolsar/Mazandaran, Iran*

**Objective:** This research was conducted with the goal of constructing a valid and reliable scale to assess information literacy in undergraduate psychology students.

**Method:** At first, a primitive scale with 35 questions was developed based on three educational psychologists' views who were well-experienced and knowledgeable in test constructing. Then it was presented to Ph.D. students to be modified and corrected. After completing and preparing the final version, by using random cluster sampling 280 students were selected. Data was analyzed by factor analysis, correlation coefficient, independent T test.

**Results:** The results of factor analysis indicated data was loaded on 5 factors. It included: 1) methodology, 2) conclusion and explanation, 3) information search, 4) statistical knowledge and 5) research knowledge base. By using test-retest and Cronbach's alpha reliability of scale was confirmed. In other words, by using Cronbach's alpha total reliability was 0.88 and for five subscales including methodology, conclusion and explanation, information search, statistical knowledge and research knowledge base were 0.83, 0.84, 0.71, 0.82, and 0.59 respectively. The result of T-test showed, there was no difference between female and male students in all five factors.

**Conclusion:** Results indicated this measure has psychometric goodness of fit and could be used in other research.

## P5.2.10

### The influence of Math anxiety on elementary numerical representations among French primary school children

Aminata Dione, Bruno Vilette

*Université Lille 3, Lille, Nord, France*

In this research, we aim to verify that Mathematical Anxiety (MA) influences not only adults (Nunez-Pena & Suarez-Pellicioni, 2014) but also elementary numerical processing (Dehaene and Cohen, 1998) before the end of primary school. This hypothesis is based on the Maloney, Ansari and Fulgesang's (2011) theory. In this research, the authors observed that elementary numerical processing were altered among adults, and MA did not appear as the consequence of the working memory (Ashcraft, 2002) but as the consequence of a deficit of the number sense and of basic numerical representations. Thus, we predict that the basic numerical representations should be less accurate among young children with High MA (HMA) than the ones with Low MA (LMA). We also expect that MA would be negatively related to mathematical performances and this relation would be modulated by gender differences (Devine, Fawcett, Szucs and Dowker, 2012). Overall, 150 children from Grade 1 to Grade 3 (6 to 9 years old) were tested on six tasks. Three tasks were administered collectively (arithmetic skills, general anxiety and MA), while the comparative tests of collections, verbal tasks and working memory were administered individually. The analyses support our hypotheses. New theoretical and educational implications emerge from this research. More particularly, two questions are discussed to conclude. On the one hand, how difficulties at the elementary level influence more complex numerical learnings? On the other hand, what are the factors which influence the development of the MA?

### P5.2.11

#### Explicit and implicit agency modulated by action-effect temporal congruency

Shu Imaizumi, Yoshihiko Tanno

*University of Tokyo, Tokyo, Japan*

Sense of agency stems from the congruency of an action and its sensory feedback based on internal prediction. An explicit measure of the sense of agency includes self-report judgment. In contrast, an implicit measure consists of the degree of intentional binding in which the temporal action-effect interval is perceived as shorter than the actual interval. Whether there is a relationship between explicit and implicit measures of agency remains controversial. We examined whether agency judgment and intentional binding correlate while being modulated by the action-effect temporal congruency. Participants performed voluntary key-presses that triggered a tone after a delay ranging from 100 to 900 ms. Subsequently, participants rated their agency over the tone and estimated the interval between the key-press and tone. The agency rating and degree of intentional binding were observed to decrease with increasing tone delays. Importantly, there was a positive correlation between the slopes of linear regression for agency rating and intentional binding with the tone delay as an independent variable. Our findings suggest a common basis for the explicit and implicit sense of agency in terms of temporal prediction.

### P5.2.12

#### Social dominance orientation and academic persistence

Fortunate Silinda, Michael Brubacher

*University of South Africa, Pretoria, South Africa*

Recent student protests in South Africa show that students still see the nation's colonial and apartheid past as existing within the country's higher education system. Social dominance theory argues that status differences between groups, such as those that apartheid was based on, is in line with the views that form social dominance orientation. The aim of the study is to determine whether social dominance orientation is positively related to identification, and better adjustment, to the university environment among university students, and whether these factors predict academic persistence. The study will also test whether these relationships vary across academic programs (e.g., economics, social work) and whether they vary across racial groups. The research hypotheses will be tested using a correlative research design. Implications of the results regarding student wellbeing and academic persistence will be discussed.

### P5.2.13

#### Are higher social class individuals more inclined to use aggressive humor?

Jorge Torres-Marin, Ginés Navarro-Carrillo, Hugo Carretero-Dios

*University of Granada, Andalucia, Spain*

**Objectives:** The current economic crisis has increased the importance of the study of social class and its psychological implications. Social class is a multifaceted social category that shapes numerous states and individual psychological processes, as well as how we relate to others. However, to our knowledge, the relationship between social class, assessed through objective or subjective indicators, and humor styles, that is, the uses or functions of humor in everyday life, has not been analyzed in previous studies. Thus, our main objective was to examine the potential association between social class membership and the willingness to use humorous manifestations of aggressive nature. The conceptualization of aggressive humor encompasses various behaviors oriented to denote superiority over other people; in other words, the hostile use of humor for the purpose of ridiculing others under the semblance of seeking mere amusement or fun.

**Method:** We conducted a correlational study composed of 244 adult participants [128 females; 18-68 years ( $M = 27.84$ ;  $SD = 11.26$ )]. The sample was obtained through a convenience sampling

procedure in a city located in southern Spain.

**Results:** The obtained results showed that objective and subjective social class were positively related to the use of aggressive humor. Moreover, it was found that subjective social class, unlike objective social class, predicted positively and significantly aggressive humor, regardless of participants' gender and age.

**Conclusion:** The implications deriving from these results (which are novel in this area of knowledge) are discussed based on previous scientific literature.

#### P5.2.14

##### **Eating Disorder (Anorexia Nervosa) In Teenage Male And Emdr**

Tatiana Spolador

*Studio Pensieri e Parole, Trebaseleghe Padova, Italy*

Starting from the Revision of scientific literature about the following clinical work aims to bring a casistic contribution and reflection around a clinical picture that takes in recent years an increasing epidemiological importance, clinical and raising debate around the trails and ways of care. It is described step by step integrated treatment approach between individual relational systemic therapy and EMDR.

It will analyze the single case, a boy, 16 years old, 16 years, firstborn, with 13 years younger brother, to whom 7 years ago, was crushed by a tractor in front of the House. F. is the only present during the incident. His brother, after 30 surgeries and years in intensive care and rehabilitation, is sufficiently well, though paralyzed limb and returned to school. F. began having obsessive symptoms immediately after the incident. Did another course of treatment with poor results.

For deepening the presentation will expose individual characteristics; socio-cultural influences; the role of family, maternal and paternal affection; and childhood trauma. Conditions that led to the onset of the eating disorder.

Materials and methods: therapeutic method integrated with relational systemic materials, and five session EMDR; psychoeducation; building of "the life line" with his photo, drawings and videos. Family Counselling and Psychotherapy with the boy and his brother, also in the sessions of EMDR. The results expected by the following brief treatment, are the focus and resolution of compulsive obsessive behavior and related food wing and its management, and its main boy opening toward his brother and then towards peers.

#### P5.2.16

##### **Factors Affecting The Performance Of Eyewitness Memory**

Nurdan Ulusoy<sup>1</sup>, Wayne Malachy Dinn<sup>2</sup>, Ayse Aycicegi Dinn<sup>2</sup>

<sup>1</sup>*Istanbul University, Istanbul, Turkey*

<sup>2</sup>*Istanbul 29 Mayis University, Istanbul, Turkey*

In this study, the effects of anxiety level, personality traits and gender related differences on eyewitness's memory is studied by giving each participant a live mock crime in separate sessions. For this purpose, in the first phase, tests measuring anxiety level and personality traits are given to 116 participants (93 female 23 male) in a classroom. According to the exclusion criteria, 67 of these participants were eligible for the second phase, in which 64 participants (48 female 16 male) attended. In the second phase, a memory test is given to the participants after the live mock crime in each session. The study's results showed that anxiety level and personality traits do not have any correlation with event memory performance. Furthermore, memory performance did not differ by gender, as expected.

In the study, social conformity is studied in the phase when participants identify the actor from photographs. In each session there were 1, 3 or 5 confederates. In the identification phase, confederates chose the same wrong photo each time, in order to create a social impact on the real participant. Only three participants showed social conformity. This number is too small to test conformity's relationship with anxiety level, personality traits and memory performance. An interesting finding is the importance of hair in face recognition. This finding and the reasons why



the study's results do not support the hypotheses are discussed.

Key Words: Eyewitness testimony, memory, social conformity, anxiety level, personality traits.

### P5.2.17

#### **Reactions to preschool children based on their physical appearance: A developmental study**

Carlos Hernández-Blasi<sup>1</sup>, David F. Bjorklund<sup>2</sup>

<sup>1</sup>University Jaume I, Castellón, Spain

<sup>2</sup>Florida Atlantic University, Boca Raton, FL, USA

We explored younger and older adolescents' and adults' reactions potentially related to caregiving toward preschool children when only some physical appearance cues (faces) were available about the children. 150 subjects (39 younger adolescents 10 to 13 years old; 45 older adolescents 14 to 17 years old; and 66 adults) were presented 4 pairs of children's faces, with each pair consisting of a mature vs. an immature morphed photograph of a same boy's or girl's face. Subjects had to make decisions on which of the two children (the "immature," appearing approximately a 4 to 7 years old, or the "mature," appearing approximately a 8 to 10 years old) fit better a series of 14 adjectives or short statements reflecting four trait dimensions: Positive Affect (e.g., "nice"), Negative Affect (e.g., "likely to lie"), Intelligence (e.g., "smart"), and Helpless (e.g., "feel more protective towards"). Results showed no developmental pattern, with both adults and the younger and older adolescents exhibiting more Positive Affect toward the immature than the mature child, but no bias regarding the other three trait dimensions. We concluded, following an evolutionary developmental psychological perspective, and taking into account some classical ethological studies on infants (e.g., Lorenz's baby-schema), that physical appearance plays a lesser role in potential caregivers' reactions toward children during early childhood than during infancy.

### P5.2.19

#### **How second language acquisition have an effect to conceptual system? : Category clustering in bilinguals**

Yuko Sakaki

*Chikushi Jogakuen University, Dazaifu, Fukuoka, Japan*

The purpose of this study was to extend research on bilingual word recognition process. It was investigated that how similarity of two languages in second language acquisition affect conceptual system.

Taiwanese students studying Japanese were assigned as participants with different level of second language (Japanese). These participants were divided into two groups, one was more proficient bilinguals in Japanese and the other was less proficient bilinguals. These two groups were instructed to read Chinese and Japanese stimulus lists silently and to serve free recall task. The lists were consisted of words with high and low levels of word typicality in two languages. The results were discussed in terms of the following two contexts: the construction of representations in conceptual system and the influence of the two - languages similarity. In the previous experiments, Japanese-English bilingual group with closely - related language similarity and Japanese - Korean bilingual group with distantly - related language similarity were served the same paradigm of the present experiment. As the results of combining these results, it showed that the patterns of semantic networks were different in conceptual system depending of the levels of typicality. Furthermore, the similarity of two languages and difference of the orthographic system had a strong effect on the organization of the conceptual representation.



## P5.2.21

### The Effects of Social Skills Training on the Social Interactions of Children with Epilepsy

Farshid Shamsaei<sup>1</sup>, Fatemeh Cheraghi<sup>2</sup>

<sup>1</sup>Research center for behavioral disorders and substance abuse, Hamadan University of Medical sciences, Hamadan, Iran

<sup>2</sup>Research center for Chronic Disease care at home, Hamadan University of Medical sciences, Hamadan, Iran

**Introduction:** Children with epilepsy have behavioral and social interactions problems more often than their peers. The purpose of this study was to investigate the effect of social skills training on the social interaction of Children with Epilepsy

**Methods:** This Quasi-experimental study was conducted from August to December 2014, in Iranian epilepsy association. The sample size included 40 children with epilepsy. Social Skills Rating System was used to collect data. The educational program was composed of 4 sessions and each session would last for 1 hour. Mean comparisons were performed using paired *t* test while effect sizes were estimated by Cohen's *d* coefficient. The significance level was considered less than 0.05.

**Results:** Social Skills Training have had a positive influence on the social interaction of kids suffering from epilepsy. This difference was statistically significant ( $p < 0.001$ ). This positive change was observed in all aspects of social interactions such as cooperation, decisiveness, responsibility and self-control.

**Conclusions:** The results showed that social skills training due to increase social interaction and improve social functioning and reduce high-risk behaviors in children with epilepsy.

## P5.2.22

### Late preterm and disability learning

Roberto Ghiaccio, L.Vinci, A.De Rosa, A.Casani, M.Puzio, M.Russo

ASL, Bn, Italy

This work aims to investigate the development of learning in children late preterm, comparing their performance with that of children born at term. The research sample consists of 28 children, 13 in-term and 14 late-term, all born in 2004 and attending the fourth grade in primary school.

Chronometry research: first-level evaluation using CPM, reading passage BVN and individual AC-MT; second level rating by means of WISC IV, test 2 and 3 of DDE2, testing MT speed, correctness and understanding and the BDE. The tests were administered in double-blind. Data analysis was performed using both excel and IBM SPSS. By comparing the performance of the two groups, it emerges that late term have a Competence Cognitive Index Lower than those born at term. The late term sample has significant difficulties in segmental sublexical reading. Significant problems are found in calculation ways, which are marked as immature modality of unwinding algorithms; common ring to the two constructs can be the active use of working memory. These "simple learning difficulties" could be resolved with specific ways of reinforcement, in order to prevent impacts on the child's psychological development, about the late prescription of standardized and not always effective rehabilitative choices that can overload the rehabilitation system and adversely affect on self-esteem and the style of attribution that the child has of himself/herself.

## P5.2.24

### Gender Equality Literacy and Gender Bully: Experiences in Taiwan

Shuo Lee<sup>1</sup>, Li-An Kuo<sup>2</sup>, Hsin-Chien Lee<sup>3</sup>

<sup>1</sup>*Open University of Kaohsiung, Kaohsiung, Taiwan*

<sup>2</sup>*National Changhua University of Education, Changhua, Taiwan*

<sup>3</sup>*Hsiuping University of Science and Technology, Taichung, Taiwan*

Bully is a crucial campus issue in the world because it has serious impacts on children and teenagers' physical and mental health (Chen & Huang, 2015; Craig & Pepler, 2003; Kuo, Zeng, & Lee, 2014). However, there is no practical solution regarding campus bully.

According to statistics, the rate of American students who have experienced bully is 10% to 30% (Nickel et al., 2005). In Taiwan, as the Child Welfare League Foundation of Taiwan's study shows (2011), 66.9% of school children recognize that there are campus bullies, while 63.4% of them have been bullied. The Japanese experience shows that even royal family member, such as Princess Aiko, could be afraid of going to school because s/he was intimidated by campus bully. Among different campus bully cases in Taiwan, gender bully is the most difficult to tell and the least to be reported (Kuo, Zeng, & Lee, 2014).

This study examines the statistics of gender bully on campus in Taiwan in the past six years. It argues that, according to students' personal experiences, although the number of reported cases have been decreasing, the unreported cases might become more. Having compared the reporting rate to their previous study on Taiwanese elementary and middle school teachers' gender equality literacy, the authors of this essay find out that the victims of gender bully are mostly gay students and students who do not show strong masculinity. Their bully cases are also the ones that could not be easily distinguished and reported.

The research methods applied by this study include literature review and survey. The authors analyze the collected data from a feminist perspective. For instance, due to the gender stereotypes promoted by mainstream heterosexual norms, those who do not fit the stereotypes become suppressed and discriminated. Although there are bullies targeted on females who traverse gender binary (Lee, 2010; Ko, 2008), their experiences on campus, compared to gays and male students who show less masculinity, seem better. In the last section of this essay, the authors provide five suggestions regarding gender bully for future governmental policy making.

**Keywords:** Gay, Gender Bully, Gender Equality, Masculinity, Taiwan.

## P5.2.25

### Same Story Different Languages: Comparing Children's Social Orientation in their Spanish and English Narratives

Raquel Plotka, Xiao-lei Wang

*Pace University, New York, USA*

**Objective:** Multilingualism and multiculturalism are an international fact of life, and the ability to speak more than one language typically correlates with understanding more than one cultural value system. North American and Latino cultures differ in their social orientations. North American culture embraces independence and self-expression, and Latino culture embraces social interdependence and solidarity. Bilingual Latino children growing up in the United States are expected to draw from both cultural value systems when generating narratives. The purpose of the study was to explore whether Latino children can employ different value systems in their Spanish or English Narratives.

**Methods:** Fourteen children (mean age = 6.7) were video-recorded reading the wordless book *Frog where Are you?* in Spanish and English. Narratives were transcribed verbatim and were coded for narrative complexity and social orientation by two coders.

**Results:** The result of General Linear Models show that narratives were equally complex in Spanish and English and no significant differences were found in volume of talk and degree of character development among languages. However, children differed in their social orientation among languages. Specifically, children expressed higher levels of social engagement in their Spanish narratives, and higher levels of emotional expression in their English narratives. Further analysis revealed that negative emotions were more likely to be expressed in English narratives, with a

trend of anger and upset emotions slightly more common in English than Spanish narratives.

**Conclusion:** The findings have implications for research and for practice in settings serving culturally and linguistically diverse families.

## P5.2.26

### Objective and subjective preoperative evaluation of verbal memory in BT patients

Aiste Pranckeviciene<sup>1</sup>, Vytautas Jurkuvenas<sup>2</sup>, Adomas Bunevicius<sup>1</sup>

<sup>1</sup>Lithuanian University of Health Sciences, Neuroscience Institute, Kaunas, Lithuania

<sup>2</sup>Vilnius University, Department of General Psychology, Vilnius, Lithuania

**Objectives.** This study aims to investigate verbal memory performance in a sample of primary brain tumor (BT) patients, and to clarify its relationship with tumor type and location.

**Method.** 111 BT patients (37.8% males, mean age 58.7, SD 13.6) admitted for elective BT surgery participated in this study. 58 (52.3%) were diagnosed with meningioma, 17 (15.3%) with grade II-III glioma, and 36 (32.4%) with glioblastoma. Data of 114 healthy controls matched according to the age and gender were also included for comparison. Hopkins Verbal Learning Test (HVLT-R) was used for verbal memory assessment. Two questions about memory and attention complaints from EORTC QLQ-C30 were included for evaluation of subjective evaluation of cognitive difficulties.

**Results.** BT patients scored significantly lower on all measures of verbal memory when compared to healthy controls. Subjective evaluation of memory and attention problems did not correlate significantly with any HVLT-R score in BT sample. Type of the tumor but not its location was related to worse memory performance when age and education were controlled, with glioblastoma patients demonstrating worse memory results.

**Conclusion.** BT patients demonstrate significant preoperative verbal memory impairment which is not effectively recognized.

**Practical implications.** Memory impairment is an independent predictor of BT patients' survival and tumor progression. Thus preoperative neuropsychological assessment may help identify early memory decline which might be not monitored by the patients themselves.

## P5.2.27

### Chinese university students' attitudes toward marriage and value of children: The role of perceived parenting

Ruyi Ding, Qian Wang

The Chinese University of Hong Kong, Hong Kong, China

China as a fast modernizing country witnesses postponed and decreased marriage and parenthood among young people. Perceptions of parenting they have received themselves may shape young people's attitudes toward marriage and value of children. We explored this issue among university students (134 females, 66 males; mean age=21.02 years, SD=1.20) in Guangzhou, a big city in Southern China. Males (vs. females) endorsed to a greater extent utilitarian value of marriage (e.g., marriage brings financial benefits, social recognition, regular sex, and offspring), and utilitarian value of children (e.g., children help carry on the family name, and provide for parents when they are old); there was no gender difference in psychological value of marriage (e.g., marriage brings love and happiness, meaning for life, emotional security, and social support) or emotional value of children (e.g., children bring fun and affection, and help parents grow personally). For both males and females, after adjusting for self-reported depressive symptoms (to reduce potential response bias due to general functioning), perceived parental warmth (e.g., "My parents accept me and like me as I am") was positively related to utilitarian and psychological value of marriage and emotional value of children, whereas perceived paternal psychological control (e.g., "My parents show that they love me less if I perform badly") was positively related to utilitarian value of marriage and utilitarian value of children.

## P5.2.28

### **The role of 5-dimensional personality type, procrastination, and ambiguity tolerance in predicting students' test anxiety**

Mohammad Narimani, Nasrin Babrzade, Vali Mohammadi, Parvin Nakhostinroohy

*University Of Mohaghegh Ardabili, Ardabil/Ardabil, Iran*

Anxiety is an important psychopathological cause and an expediting factor of mental illnesses as well as an effective factor for physical and mental health. The current descriptive-correlational study aims to investigate the role of 5-dimensional personality type, procrastination, and ambiguity tolerance in predicting students' test anxiety studying in public and private high schools. The population included all the senior high school students studying in public and private schools of Parsabad, Ardabil, Iran. The sample contained 150 participants selected through stratified random sampling. To collect the data, four different instruments were employed: the standard 5-dimensional personality type questionnaire, Tuckman's Procrastination Questionnaire, McLean's Ambiguity Tolerance Questionnaire, Spielberger's Test Anxiety Inventory. The content validity was confirmed by two experts and the reliability was calculated. Pearson correlation and multiple regression were used to analyze the data through SPSS. The results showed a significant correlation with respect to neurosis regarding the 5-dimensional personality type. However, the other dimensions showed no positive correlation with test anxiety. Furthermore, there was a positive correlation between procrastination and test anxiety. Nevertheless, no such significant correlation was found between ambiguity tolerance and test anxiety. Moreover, the variable of neurosis significantly predicted the test anxiety. Nonetheless, procrastination and ambiguity tolerance did not predict the test anxiety.

**Key words:** Test anxiety, 5-dimensional personality type, procrastination, ambiguity tolerance

## P5.2.32

### **Investigation Of The Relationship Between Understanding Of Marital Conflict And Interpersonal Problem-Solving Skills Among Preschool Children**

Sinem Hayali Emir<sup>1</sup>, Gul Sendil<sup>2</sup>

<sup>1</sup>*Istanbul University, Istanbul, Turkey*, <sup>2</sup>*Istanbul University, Istanbul, Turkey*

The purpose of this study is to examine preschool children's understanding of marital conflict and to investigate its impact on their interpersonal problem-solving skills. In addition, it is aimed to be found out if common effect of children's understanding over conflict frequency and type of parental conflict resolution make a difference in interpersonal problem-solving skills. Participants are consist of 106 children and their mothers. 'Six different types of picture cards showing varied parental relationships for determining the understanding of parental conflict' and 'Test of Preschool Problem-Solving Skills' are applied to 5-6 years of children. Moreover, their mothers are asked to fill out O'Leary Porter Marital Conflict Scale.

Responses received from cards are analysed by content analysis to examine children's understanding of marital conflict. As a result of the analysis, it is determined that children's understandings of conflict verify model for 5-6 years under the scope of cognitive-contextual theory. According to multiple regression analyze, children's understanding of conflict frequency, their sense of sadness and understanding of parental conflict resolution type are significant predictors of interpersonal problem-solving skills. It is examined by two-way ANOVA if the common effect of frequency and type of conflict resolution perceived by children make a difference in interpersonal problem-solving skills. Finally, it is observed common effect makes no difference in interpersonal problem-solving skills. However, main impact of children's understanding of parental conflict resolution type is found to make significant difference in children's problem-solving skills. The results of the study are discussed in the light of the literature.

### P5.2.35

#### The prevalence of sibling abuse in adolescents

Rukiye Kızıltepe, Şeyda Aksel

*Ege University, Izmir, Turkey*

**Objectives:** Sibling abuse is defined as emotionally, sexually, and physically non-accidental behavior conducted by a sibling to other sibling in the family. Although there are numerous studies about family violence in the recent years, sibling abuse, a type of family violence, is confused with "normal sibling rivalry" and ignored by the researchers and families. It is known that sibling abuse is the most common form of family violence. However, the studies conducted over the years have given contradictory results because of methodological issues. Therefore, the aim of this study is to investigate the prevalence of sibling abuse in Turkish adolescents.

**Method:** The study sample included 1105 (589 female) participants, whose age is ranged between 12 and 18 ( $M = 14.54$ ,  $SD = 1.46$ ). The sample consisted of secondary ( $n = 553$ ) and high school students ( $n = 552$ ). The schools were from three different socioeconomic districts of the city. The schools were visited after obtaining necessary permissions from İzmir Directorate Education by the researcher. Data were collected through anonymous self-report questionnaires distributed in the classroom setting. Only the volunteer participants were chosen to take part in the study. Data were obtained from an altered version of Conflict Tactics Scale and demographic information form. The majority of sample lived with their nuclear family (%90) and their family were married (%93).

**Results:** It is found that 8.4% of the participants were abused by a sibling. While 8.68% of children were victims of physical abuse by a sibling, 5.61% of them were victims of emotional abuse.

Approximately 70 participants (8%) abused their siblings.

**Discussion:** The findings of the study will be discussed in the light of the current literature.

### P5.2.36

#### The impact of perspective in visualizing presentations: First-person and third-person visual perspectives

Aiko Morita, Shotaro Iwata

*Hiroshima University, Higashi-Hiroshima city, Hiroshima, Japan*

We investigated how first-person or third-person perspective in visualization affects attention and emotion in conducting presentations. Many studies have shown that these perspectives can affect responses-including judgment, emotion, and behavior-to visualized events. Visualizing an event from the first-person perspective evokes concrete features of the situation, apart from the broader context. The third-person perspective, however, integrates the event within its broader context. First-person perspective causes participants to experience a subjective sense of actually being. We conducted an experiment in which participants, before giving a presentation, visualized themselves giving it from either the first-person or third-person perspective. We then assessed attention and emotional response to the visualized presentation. Results showed participants paid more attention to themselves and the contents of the presentation when visualizing from the first-person perspective. From the third-person perspective, they were concerned with how they appeared to others. The results of a questionnaire and from salivary amylase examination suggested that picturing an event from the first-person rather than the third-person perspective evoked higher stress. Thus, in accordance with previous studies, it appeared that perspective in visualization affected attitude and emotion toward giving a presentation. However, further precise investigation is needed to clarify these effects on emotion.

### P5.2.37

#### Non-pathological aging of the executive functions: influence of the Val<sup>108/158</sup>Met nucleotide polymorphism of the COMT gene.

Jessica Gilsoul<sup>1</sup>, Marine Manard<sup>1,2</sup>, Fabienne Collette<sup>1,2</sup>

<sup>1</sup>GIGA-CRC in Vivo Imaging, Liège, Belgium

<sup>2</sup>Psychology and Neuroscience of Cognition, Liège, Belgium

**Objectives:** The aim of the study is to investigate the influence of the *COMT* Val<sup>108/158</sup>Met nucleotide polymorphism, associated with dopaminergic regulation, on executive functions in normal aging. Indeed, according to the *Dual-State Theory*, Val/Val polymorphism of the *COMT* gene would favor better *flexibility* abilities, whereas Met/Met carriers would favor better *stability* abilities. These genotypic effects should be magnified in older people, as a decrease in cognitive resources increases the influence of individual genetic differences on cognitive performance.

**Method:** We assessed the executive processes of inhibition, shifting, and updating - thanks to many different tasks in groups of young (n = 55) and aged participants (n = 45) carrying one of the three polymorphisms of the *COMT* gene (Val/Val, Val/Met, Met/Met). T-tests between our two groups (Young *versus* Old) but also a 6 (Group: Young-Met/Met, Young-Val/Met, Young- Val/Val, Old-Met/Met, Old-Val/Met, and Old-Val/Val) X 3 (Executive functioning: Inhibition, Shifting, and Updating) repeated measure ANOVA with Executive functioning as within-subject factor (p < .05) were carried out.

**Results:** Young and old participants significantly differed on the three executive functions. The comparison of genotypic groups showed no significant differences in young or older participants respectively. Interestingly, the Old-Val/Val group showed a lower performance than the young one on inhibition tasks.

**Conclusion:** As expected, we found an age effect on all the executive functions. The significant difference between the Young-Val/Val and the Old-Val/Val groups on inhibition suggests an age-related decrease in abilities requiring a stability component in individuals possessing a less favoring genotype for this component.

### P5.2.38

#### Relationship between Motor Ability and Self-Esteem in Japanese Preschool Children

Natsumi Sonoda

Yokohama National University, Yokohama/ Kanagawa, Japan

**Objectives:** This study examined the relationship between motor ability and self-esteem in Japanese preschool children.

**Method:** Participants were sixty-eight 5-to-6-year-old Japanese preschoolers. The motor ability test for preschool children (25-meter dash, standing long jump, tennis ball throw, continuous jump over, dipping endurance) was used to assess the children's motor ability. The children were also administered the Pictorial Scale of Perceived Competence and Social Acceptance and the Pictorial Scale of Social Self-Efficacy for Young Children to evaluate their self-esteem.

**Results:** Performance in the 25-meter dash ( $r=.34$ ,  $p<.05$ ) and the standing long jump ( $r=.38$ ,  $p<.05$ ) was positively related to social self-efficacy for boys and girls, respectively. Moreover, the girls' ability in the continuous jump over was positively correlated to their perceived physical competence ( $r=.44$ ,  $p<.01$ ), maternal acceptance ( $r=.34$ ,  $p<.05$ ), and social self-efficacy ( $r=.54$ ,  $p<.01$ ).

**Conclusion:** These results suggest important sex differences in the effects of motor ability on self-esteem in preschool children.



### P5.2.39

#### **Is it a shrine or a church? Spiritual directions ("Akwankyere") and its impact on mental wellbeing in the Ghanaian population**

Elizabeth Anokyewaa Sarfo, Joana Salifu Yendork, Lily Kpobi

*University of Ghana, Legon-Accra, Ghana*

**Objectives:** The concept of Spiritual directions ("Akwankyere") is a growing phenomenon in the Ghanaian charismatic Christian denomination. Spiritual directions are the instructions or directives given by a "man of God" to help an individual overcome a misfortune being faced by a person. Despite the pervasive usage of spiritual directions there is limited research on this phenomenon. **Method:** impact of spiritual directions on the mental well-being of 86 congregants of six selected Neo-prophetic churches in Ghana. In-depth interviews, focus group discussions and observations were used to gather data.

**Results:** Participants reported three main areas of their lives that Spiritual directions affected (spiritual, emotional and physical). [s1]These three main areas are believed to be affected positively and/or negatively. Positively, spiritual directions is able to foster spiritual growth and increase one's faith in the Higher Being while the negative impacts included exploitation of individuals by prophets or church leaders, experiencing faith crisis due to exploitation and possibly de-conversion from the religious faith that is adhered to. Emotionally, spiritual directions brings feelings of relief from the misfortune, conversely, others reported negative emotions such as anxiety and hopelessness when they are unsure of the efficacy of the spiritual direction.

**Conclusion:** The study concluded by discussing the implications of the findings on the individual.

### P5.2.40

#### **WISC-IV and SLD: the mean profile of an italian sample**

Fiorenzo Ranieri, Manola Andreoli, Alessio Damora, Marta Stoppielli, Luciano Luccherino

*UFSMIA USL Toscana Sudest, Arezzo, Italy*

This research investigates the WISC-IV profile (Wechsler Intelligence Scale for Children-Fourth Edition) of patients with Specific Learning Disorders (SLD) from Arezzo, Italy. Previous studies have emphasized the importance of Full-Scale IQ (Styck & Watkins, 2016), also showing a significant discrepancy between general ability and cognitive proficiency (General Ability Index [GAI] > Cognitive Proficiency Index [CPI]) in children with SLD (Poletti, 2014).

Authors examined a sample of 116 children and adolescents, who have been diagnosed with SLD in 2014-2015 (males 79 [68.1%], 37 females [31.9%]). The participant's mean age was just over ten years. All participants underwent a neuropsychiatric screening and a neuropsychological assessment, WISC IV and specific tests for reading, writing and calculation proficiency.

The mean score of the Full-Scale IQ was 97.98 (SD 12.36). All participants scores were equal to or above the statistical norm.

The analysis of the WISC-IV indexes showed lower scores in Working Memory Index (M 89,34, SD 14,32) and Processing Speed Index (M 90.59, SD 14,26). This result explains the mean discrepancy of 17.93 points (SD 15.36) between General Ability Index and Cognitive Proficiency Index. 78 subjects (67.2%) showed GAI>CPI 10 by 10 points or more; 53 subjects (45.7%) showed GAI>CPI 22 points or more. Only 13 subjects (11.2%) show a CPI>GAI.

This survey confirms the literature data. The Full-Scale IQ is the most significant index, as it allows to distinguish between Intellectual Disability and Specific Learning Disorders (Cornoldi et al., 2014). 88,8% of the participants showed GAI>CPI profiles.



#### P5.2.41

### **Elementary School Teachers' Assessment about Small-Group Learning and the Moderation Effects of their Beliefs.**

Keiichi Kodama

*The University of Tokyo, Tokyo, Japan*

Most studies on collaborative learning have focused on the effect for students' learning, while there's little about "teachers' supporting", especially about teachers' assessment of the situation of each small-group learning to support them adequately. The purpose of this study was to investigate how teachers assess the small-group learning during collaborative learning and the factors affecting the individual differences experimentally. Elementary school teachers in Japan ( $N=86$ ) participated in this study and completed hypothetical scenario task to measure their assessment and a questionnaire about their beliefs. The hypothetical scenario task included eight scenarios showing situations of small-group learning in sixth-grade class and controlling achievement of "goals of collaborative learning (Deguchi, 2001)", which were 'understanding learning content', 'interaction with friends', and 'participation in learning'. Also, "ideal children ('collaborative' or 'competitive') was measured as teachers' beliefs. Linear mixed model was used and the results showed followings: (1) achievement of "goals of collaborative learning", particularly 'participation in learning', predicted teachers' assessment significantly, (2) 'collaborative children' significantly interacted with 'interaction with friends' or 'participation in learning' positively. These may be basic evidence to understand professionalism of teachers and contribute to developing the educational program for them.

#### P5.2.42

### **Difference in consciousness of acceptance of corporal punishment among students of planning to be sports coaches and child minders.**

Nobushi Matsushima<sup>1</sup>, Kayo Takahashi<sup>2</sup>

<sup>1</sup>*Kaisei Hospital, Fukuoka, Japan*

<sup>2</sup>*Kagoshima University, Kagoshima, Japan*

In Japan, corporal punishment is completely prohibited clearly in the School Education Law. Nevertheless, it will be necessary to examine the background and factors of why corporal punishment has been accepted and continued. 6,721 corporal punishment cases were reported in 2012. In junior high school and high school, the report of the largest number of corporal punishment in "club activities" has been made. Therefore, the specificity of the connection between exercise instruction and corporal punishment should be considered more carefully and in detail. This study's purpose is to examine the consciousness of acceptance of corporal punishment among students planning to be sports coaches and child minders. A questionnaire was conducted with university students planning to become sports coaches ( $N=439$ ) and child minders ( $N=88$ ). Questions assessed the participants' consciousness of acceptance of corporal punishment. The result indicated that about 25% of students planning to be child minders supposed that corporal punishment is necessary or sometimes necessary. On the other hand, 35.9% of students planning sports coaches supposed so. The most frequent reason of acceptance corporal punishment is that sometimes physical correction or discipline is more useful than oral. It is thought to be acceptable when students do not hear the oral discipline. The consciousness of acceptance of corporal punishment is considered.

## Session 5.3: Organising effective psychological interventions

### P5.3.02

#### Addiction to the Internet and retrospective assessment of relationships in family

Wojciech Rodzen<sup>1</sup>, Roman Szalachowski<sup>1</sup>, Malgorzata Szczesniak<sup>1</sup>, Agnieszka Malinowska<sup>1</sup>, Sylwia Golab<sup>2</sup>, Joanna Krol<sup>1</sup>, Agata Hiacynta Swiatek<sup>1</sup>, Laura Kaliczynska<sup>1</sup>, Mateusz Morawski<sup>1</sup>, Krystian Konieczny<sup>1</sup>, Weronika Gulbinowicz<sup>1</sup>

<sup>1</sup>University of Szczecin, Szczecin, Poland

<sup>2</sup>ZUT, Szczecin, Poland

The purpose of this report is to describe how retrospective assessment of parental attitudes is related to the Internet addiction among Polish adolescents. Previous studies (Park, Kim, Cho, 2008; Yao et al., 2014; Wu et al., 2016) completed among Asian youth show that the quality of the relationships between parent and the child is an important factor in dysfunctional Internet use. The study was conducted on the group of 585 participants (51% women) whose age ranged from 15 to 19 years. The mean age was  $M=17,28$  ( $SD=0,86$ ). The data was collected with two tools. The Questionnaire of the Retrospective Assessment of Parents Attitudes (Plopa, 2008) measured five parental attitudes (separately for father and mother), regarding: acceptance/rejection, demands, autonomy, lack of consequence, and protecting ( $\alpha_{\text{fathers}}=0,776$ ,  $\alpha_{\text{mothers}}=0,833$ ). Young's Internet Addiction Test assessed Internet dependence level ( $\alpha=0,911$ ).

A linear regression illustrated precisely which of correlated factors were input variables of Internet addiction: fathers' lack of consequence ( $\beta=0.136$ ) and mothers' lack of consequence ( $\beta=0.132$ ). The model was significant ( $F(456,2)=12.45$ ;  $p<0.001$ ) and explained approximately 22% of the variance.

Results obtained in our research show that inconsistent parental behavior lead adolescents to counterproductive reactions related to Internet addiction.

### P5.3.03

#### Balanced time perspective and its influence on the grateful disposition

Wojciech Rodzen, Malgorzata Szczesniak, Celina Timoszyk-Tomczak, Roman Szalachowski, Oliwia Awierianow, Adam Jedrzejewski, Aleksandra Standio, Agnieszka Malinowska

University of Szczecin, Szczecin, Poland

The aim of this summary is to demonstrate how balanced time perspective (BTP) is connected to the grateful disposition. A systematic literature review shows the lack of studies that have explicitly undertaken this topic. However, some inquiries (Emmons, McCullough, 2003; Zimbardo, Boyd, 2008) illustrate that attitudes toward the past both influence the development of gratitude and affect appreciation of human life in the present.

The present study was conducted on the group of 204 participants (45% women) whose age ranged from 17 to 26 years. The mean age was  $M=19,21$  ( $SD=2,02$ ). The data was collected with two tools. The time perspectives were measured using abbreviated version of the ZPTI (Zimbardo, Boyd, 1999). Grateful disposition was assessed with a factor of gratitude from IPIP-VIA and GQ-6. A linear regression with gratitude measured with IPIP-VIA shows which of correlated factors were input variables of the grateful disposition: past positive ( $\beta=0.310$ ), present hedonistic ( $\beta=0.197$ ), and future ( $\beta=0.167$ ). The model was significant ( $F(187,3)=17.61$ ;  $p<0.001$ ) and explained approximately 22% of the variance. Similar statistics were obtained with the measure of GQ-6. Results prove that gratitude is predicted by the ideal time profile (Zimbardo, Boyd, 2008) that consists in a balance of past positive, present hedonistic, and future perspectives. These outcomes support previous studies (Zhang, Howell, Stolarski, 2013) which showed that having a BTP is related to higher gratitude.

### P5.3.04

#### The Mediator Roles Of Language Use And Insight In The Relationship Between Parental Attachment And Depression

Duygu Kuzu<sup>1</sup>, Berat Arifoglu<sup>2</sup>, Omer Faruk Simsek<sup>1</sup>

<sup>1</sup>*Istanbul Arel University, Istanbul, Turkey*

<sup>2</sup>*Okan University, Istanbul, Turkey*

It is clearly known that there is a relationship between parental attachment and depression. However, there is a little information about the mechanisms which have effects on it. In our study, the aim is to see the mediator roles of language use and insight in the relationship between parental attachment and depression. The data is collected from 512 adolescents between 14-19 ages by visiting 4 highschools in İstanbul and Sakarya. In the survey; Demographics Form, Inventory of Peer and Parental Attachment (IPPA-R)'s Parental Attachment subscale, Balanced Index of Psychological Mindedness (BIPM)'s insight subscale, Brief Symptom Inventory's Depression subscale were used. In the model, LISREL is used to analyze of the data. It is tested by second order structural equation model. Finally, insight has been found to be a mediator between language use and depression ( $r = .68$ ). The results show that language use has an important role on the relationship between parental attachment and depression in adolescence and secure attachment has positive effects on the language use of adolescents. This effect is both directly and, with the help of insight, is related to depression.

### P5.3.05

#### The use of the MMPI-2 with autistic subjects

Roberto Keller, Paolo Vaccarino, Stefania Bari

*Adult autism centre ASL TO 2, Turin, Italy*

**Objectives:** It is presented a preliminary analysis of the MMPI-2 administered to a sample of 30 male autistic subjects.

**Method:** The MMPI-2 allows to describe the personological characteristics using a series of clinical and content scales; some validity scales ensure the correct interpretation. The autism spectrum disorders are neurodevelopmental disorders, based on genetic, of early onset and multisystemic involvement. In high-functioning forms the misdiagnosis is not rare, so a study using questionnaires is needed.

**Results:** Validity scales: all profiles are interpretable ( $F < 95$ )

Clinical scales: in 33% of cases there are not psychopathological peaks  $\geq 65$ ; in 40% of cases Si scale is  $\geq 65$ ; in 36% of cases D and Pt scales are  $\geq 65$ ; in 33% of cases Pa scale is  $\geq 65$ ; in 30% of cases Sc scale is  $\geq 65$

Content scales: in 23% of cases there are no elevations  $\geq 65$ ; the most frequent elevations are referable to Dep scale (33%) and Sod scale (36%); in 8 cases (26%) the Anx scale is high; in 23% of cases the Obs, Wrk, Trt scales are high; regarding the supplemental scales it was chosen to consider the Pk scale that is high  $\geq 65$  in 36% of cases

**Conclusion:** Profiles are valid and interpretable, but it is necessary read the results in moderation. High scales can be linked to autism; however, a case study is required to ascertain the causes of the elevation that may also be due to misinterpretation or lack of conviction. Nevertheless the profiles obtained are consistent with the medical history and available data, making the MMPI-2 a test for autistic subjects.

### P5.3.08

#### Evaluation of pain in children using the EVENDOL scale

Marek Sobol<sup>2</sup>, Malgorzata Sobol-Kwapinska<sup>1</sup>

<sup>1</sup>John Paul II Catholic University of Lublin, Lublin, Poland

<sup>2</sup>Pediatric Hospital in Bielsko-Biala, Bielsko-Biala, Poland

Effectively relieving a child's pain is important in view of the long-term consequences brought about by ineffectively treated pain. Moreover, early experience of pain may make the child hypersensitive to pain in the future. An adequate measurement of pain is essential in relieving pain in children. The purpose of this study was to validate the Polish version of the EVENDOL Scale. It is a behavioral numeric scale for measuring pain - for children under the age of 7. EVENDOL can be used in any painful situation. It consists of 5 items: vocal or verbal expression, facial expression, movements, posture, and interaction with the environment. Scores are indicated on 3-point scales by an observer. Sixty children (aged from 3 to 6), undergoing abdominal surgery, were recruited to test the reliability and validity of the EVENDOL Scale. The scale was tested after surgery, at rest. The child's pain was rated independently by three people: an anesthesiologist, a nurse, and a parent present at the child's side. The value of Cronbach's  $\alpha$  coefficient was .87. Interrater reliability was .70. The correlations between the EVENDOL scores, age, and temperament traits measured by the EAS Temperament Survey were computed. The results of our study support the reliability and validity of the EVENDOL Scale in Poland.

### P5.3.09

#### Autobiographical narratives from street living people in Brazil

Nadja Silva, Priscila Guimarães

*Universidade Federal de Alagoas, Maceió, Brazil*

We discuss the autobiographical narratives for interventions in psychology. The autobiographical narratives have two main theoretical presuppositions: The historical and social basis of human development, which has the constant transformations in time as a characteristic; and the mediating function of language, which supports the cultural constitution of psychological functioning. Considering these assumptions, an intervention was carried out for the street living (homeless) population. The purpose was to encourage spaces for street living people to review their autobiography. This objective is justified because it is observed that a characteristic the homeless people is the extreme fragility of the experience of the self, due to the very precarious conditions of life to which they undergo. Homeless adults participated in this investigation. The methodology was episodic interviews, controlling the time during the questions. This control was to strategically enable the negotiation of meaning in these three times, believing that time is a relevant aspect for the organization the experiences of the self in the narratives. Three interviews were conducted with each participant for each time: past, present and future. The results highlighted the transition between the predominance of the narrator position and the position of a protagonist in the narratives as a process that indicated a situation of dynamic stability in the organization of the self.

### P5.3.10

An IPA investigation of a peer-led Irish self-help group for individuals with Obsessive Compulsive Disorder

Fiona Lowe, Inge Nieuwstraten

University College Cork, Cork, Ireland

Objectives: The study investigates an Irish peer-led self-help group for people with Obsessive Compulsive Disorder. The purpose of the study was to create a framework of understanding around the experience of using a peer-led group as a viable mental health service. This study is an

exploratory evaluation of the only self help group operating in Ireland that uses the Triumph Over Phobia model for OCD.

**Method:** Three male and five female participants were recruited: one of the participants was the group facilitator. Data for this descriptive design study were collected using open ended semi-structured interviews and analysed using An Interpretative Phenomenological approach (IPA).  
**Results:** Eight themes were identified: Peer Support, Building Resources, Facilitation, Therapeutic impact on group members, Symptom reduction, Peer-led Group vs other interventions, Implicit Assumptions, Barriers to accessing a peer-led group and Barriers to the development of such a group. The group was the primary mental health support for 87.5 % of participants with OCD.  
**Conclusion:** Multiple positive experiences from group members were identified, leading to a rationale for further development and utilisation of similar peer groups throughout Ireland.

### **P5.3.11**

#### **Two Cases Of Tuberous Sclerosis Combined With Wilms' Tumor And Specific Learning Difficulties**

Ivaila Georgieva

*Queen Joanna University Hospital, Sofia, Bulgaria*

(I.) Purpose of the study. We are presenting two rare cases in pediatric practice - a combination of tuberous sclerosis (TS) with Wilms' tumor (WT). Tuberous sclerosis (adenoma sebaceum or Bourneville's disease) is a phakomatoses with an autosomal dominant pattern of inheritance, with frequency 1: 6000 in the human population and second most frequency disease in this group after Von Recklinghausen's disease (1: 4000). The second most common embryonal tumor after nerublastoma, the Wilms' tumor is the most common of all cancer combined with other congenital malformations.

(II.) Material and Methods. Both children with WT in combination with TS were treated and monitored in the University Hospital "Queen Joanna" - ISUL. Additionally, specific learning difficulties (SpLD) and attention deficit disorder without hyperactivity were found.

(III.) Results. Psychological advice and support aimed at the somatic problem were made at each stage of the active treatment - as preparation before the radical removal of the tumor and during the chemotherapy to control anxiety, depression and low self-esteem of the patients.

(IV.) Conclusion. Early intervention and timely referral from pediatrician, oncohematologist, parent and psychologist to appropriate educational programs during and after the active therapy is essential for social adaptation, education and achieving independence in this risk group of long-term surviving children with congenital malformations and malignant tumors.

### **P5.3.12**

#### **Expressed emotions and support in families as predictors of severity of mental illness and dysfunction in patients diagnosed with schizophrenia**

Irena Stojadinovic

*University of Belgrade, Faculty of Philosophy, Department of Psychology, Belgrade, Serbia*

**Objectives:** The study focused on expressed emotions and family support and their prediction power related to the severity of symptoms and the level of dysfunction in patients diagnosed with schizophrenia. The aim was better understanding of both positive and negative characteristics of family dynamics and their importance for a successful treatment of schizophrenia.

**Method:** The study sample comprised 60 patients (mean age of 43) diagnosed with schizophrenia that live with family members. The following assessment instruments were applied: The Level of Expressed Emotional Scale (LEE), the Multidimensional Scale of Perceived Social Support (MSPSS), the Symptom Self-rating Scale for Schizophrenia (4S) and the Functioning Assessment Short Test (FAST).

**Results:** The results show that the level of expressed emotions of family members (especially its two characteristics: Criticism -18, 4% of variance and Irritability -19, 2 % of variance) is a predictor of dysfunction in everyday life, whereas it cannot predict the severity of symptoms. On the other hand, family support could not predict either severity of mental illness nor dysfunction in everyday life.

Conclusion: A high level of expressed emotions in families predicts the severity of dysfunction in everyday life in patients diagnosed with schizophrenia; therefore, it is an important factor of successful treatment as well as life quality of patients. Family therapy focused on emotional expression should be an integral part of schizophrenia treatment.

### P5.3.13

#### **School-based intervention program for high anxiety and tensed students going to school -Prevention and early intervention-**

Hirata Yutaro

*Kagoshima University, Kagoshima, Kagoshima, Japan*

**Objectives:** In Japan, many junior high school students are unable to attend school. One of the reasons is because they feel highly anxious and tensed when going to school. However, enough support systems have not been reviewed for helping these students in Japan. We suggested that these students should use a school-based intervention program. The purpose of this study was to clarify those traits of students that effectively improved through this program, and to do a process evaluation.

**Method:** This program involved using a living space in school, wherein students were helped in their study and counseled about their fears, tension, personal relations, etc. Twenty-nine students used this program for about 2 years and for 1046 times. We did an early intervention based on multiple assessments. For Example, we assessed their physical symptom, family background, scholarship, and psychological characteristics each profession. We were able to report two successful practices and evaluate the intervention process.

**Conclusion:** These practices indicate the importance of assessment for a student, particularly verbalizing their own intention, and explanation about program mean to student from an early time. There is also a need to share the results of program evaluation as done by the students for improving this program.

### P5.3.14

#### **Competition, be benefited in every way? Explore the destructive effect of the competitive psychological climate on workplace atmosphere and employee behavior: supervisor support as a moderated mediator**

Chin Tien Hsu<sup>1</sup>, Dan Te En Chan<sup>2,1</sup>, Jun Fang Liao<sup>3</sup>, Kuo Ching Yen<sup>4</sup>

<sup>1</sup>*Ming Chuan University, Taoyuan City, Taiwan*

<sup>2</sup>*China Development Financial, Taipei City, Taiwan*

<sup>3</sup>*Wenzao Ursuline University of Languages, Kaohsiung City, Taiwan*

<sup>4</sup>*National Twiwan University, Taipei City, Taiwan*

**Objectives:** Following the job demands-resources (JD-R) model, this study has five objectives: First, to examine the effect of perceived competitive psychological climate (PCPC) on the policemen's deviant behavior, turnover intention and perceived coworker incivility (PCI), respectively. Second, to assess the mediating effect of policemen's PCI on the relationship between PCPC and policemen's deviant behavior and turnover intention, respectively. Third, to explore the moderating effect of supervisor support on the relationships between policemen's PCI and their deviant behavior and turnover intention, respectively. Finally, to explore the moderated mediation effect of supervisor support in influencing the mediation.

**Method:** Using Preacher, Rucker, and Hayes (2007) moderated mediation framework, we tested the model with matched data from 468 supervisors and their immediate subordinates from a police substation.

**Results and conclusion:** Results indicated that the policemen's PCPC was positively related to their deviant behavior, turnover intention and PCI, respectively. Second, the policemen's PCI fully mediated the relationship between their PCPC and deviant behavior but partially mediated the relationship between their PCPC and turnover intention. Third, supervisor support buffered the relationship between policemen's PCPC and their deviant behavior and turnover intention, respectively. Finally, Moderated mediation analyses further revealed that PCI mediated the



relationships for only those policemen with low supervisor support such that the mediated relationship will be weaker under high supervisor support than under low supervisor support. Several limitations, directions for future research, and implications of environmental management in practice are discussed finally.

### P5.3.15

#### Does the psychopathological profile predict the perceived severity of physical symptoms in fibromyalgia patients?

M. Pilar Martínez<sup>1,2</sup>, Elena Miró<sup>1,2</sup>, Germán Prados<sup>3</sup>, Rafael Cáliz<sup>4</sup>, María J. Lami<sup>1</sup>, Ana I. Sánchez<sup>1,2</sup>

<sup>1</sup>Department of Personality, Assessment and Psychological Treatment, University of Granada, Granada, Spain

<sup>2</sup>Mind, Brain and Behavior Research Center, University of Granada, Granada, Spain

<sup>3</sup>Department of Nursing, Health Science Faculty, University of Granada, Granada, Spain

<sup>4</sup>Rheumatology Service, Virgen de las Nieves University Hospital, Granada, Spain

**Background and objectives.** Although the psychological variables play an important role in the pain experience, there are still knowledge gaps regarding the contribution of the psychopathological characteristics to the perceived physical symptoms in fibromyalgia (FM). This study examined the psychopathological profile of FM patients and its contribution to pain intensity, fatigue and poor sleep quality.

**Method.** One hundred and eighty one FM women completed several self-reports: McGill Pain Questionnaire, Multidimensional Fatigue Inventory, Pittsburgh Sleep Quality Index, and Symptom Checklist-90-Revised. Pearson's correlation coefficient and linear regression analysis were computed.

**Results.** All psychopathological dimensions, except hostility, showed scores above the cutoff point. Pain intensity, fatigue, and poor sleep quality were significantly related to most of the psychopathological dimensions. Somatization was a significant predictor of pain intensity, obsessive-compulsive and depression of fatigue, and somatization, and obsessive-compulsive of poor sleep quality.

**Conclusion.** FM patients have a psychological profile with marked morbidity. Somatization, obsessive-compulsive, and depression were relevant dimensions involved in physical discomfort. Knowing the psychological style of FM patients can help to design cognitive-behavioral treatments that better respond to the needs of patients. Research projects: PSI2009-13765PSIC and PSI2014-58379-P.

### P5.3.17

#### Assessing emotional intelligence in nursing

M<sup>a</sup> Carmen Giménez-Espert, Susana Avivar-Cáceres, Vicente Prado-Gascó

Universitat de Valencia, Valencia, Spain

**Background:** Emotional intelligence (EI) is an essential skill for nurses in patients' care. Nurses must be able to control and detect their own emotions, as well as interpret the others' emotions, in order to identify needs and provide an individualized attention. On nurses, EI is related to lower levels of stress, high levels of well-being, greater organizational commitment and job satisfaction with a low level of burn out. The ability model (Mayer & Salovey, 1990) assumes that EI is a skill that involves 3 processes evaluated through the Trait Meta-Mood Scale (TMMS-24): perception, understanding and regulating emotions. There are not many articles published about it or that had explored the psychometric properties of it. **Aims and Method:** This paper aims to explore the psychometric properties of the TMMS-24 in a population of 530 nurses (aged from 22 to 64 years, 75.6% women) from 11 Spanish hospitals that analyse their EI levels and provide some criteria values for interpreting EI levels in Spanish nurses. **Results** suggest adequate psychometric properties of the TMMS-24 ( $\alpha=.81-.87$ ; CFA Fit index using ML and S-B robust correction: S-B  $\chi^2_{(149)}=370.20$   $p<.05$ ; NNFI=.9, CFI=.91, IFI=.91, RMSEA=.05), medium level of EI with higher levels on clarity of feelings. **Conclusions:** The importance of this research lies in the need to find validated instruments that measure the nurses' EI levels, in addition to develop and evaluate effective training programs.

### P5.3.18

#### **Re- Design of a psychological intervention program for overweight and obesity children in Mexico**

Cecilia Meza Peña, Edith G. Pompa Guajardo

*Universidad Autónoma de Nuevo León, Monterrey, Nuevo León, Mexico*

The present work represents the experience in the redesign of a psychological intervention for overweight and obese children attending a summer camp in Mexico, with a multidisciplinary approach to their health problem.

**Objective.** To share the results of the psychological evaluation, which help to adjust the psychological intervention during and after the camp.

**Method:** Participants were 18 children aged 7 to 12 years; indicators of depression, self-esteem and emotional balance were evaluated.

**Results.** The results show a high group of children with low self-esteem (56%) and none with normal self-esteem; 56% showed an emotional imbalance and 78% showed depressive symptomatology. These aspects allowed to sensitize the team of the camp where the intervention begins, framing the need for an empathic team for helping children to face their emotional difficulties, in addition to the physical limitations imposed by obesity. The activities focused on working on self-esteem, appropriate expression of emotions, containment and support. At the end of the camp we saw a group of children integrated, committed to themselves, enthusiastic to live a learning experience for the care of their health, expressing their emotions. Conclusions. Although the program is still under development, weight control has been observed in children whose parents have adhered the program, however, more follow-up is required to achieve the change of behavioral patterns around food, exercise, and emotional aspects.

### P5.3.19

#### **Executive functions and communicative competence in young children: A longitudinal perspective.**

Alannah Wallace<sup>1</sup>, Ofelia Flores<sup>1</sup>, Maureen Hoskyn<sup>1</sup>

<sup>1</sup>*Simon Fraser University, Burnaby, BC, Canada*

<sup>2</sup>*Centre for Research on Early Child Health and Education, Burnaby, BC, Canada*

This study examines the relations between the development of an executive system and communicative competencies in young children. Furthering understandings about the development of an executive system of cognitive resources in young children is important when designing early interventions, yet little is understood about organization of the executive system as it emerges in young children. Theoretically, in adults, the executive system involves 3 related but distinct components: information updating and monitoring, inhibition of pre-potent responses, and mental set-shifting (Miyake & Friedman, 2000). Children (n=108) were administered measures of updating, inhibition, and set-shifting 5 times between the ages of 5 and 8 years. Fluid intelligence, temperament, and communicative competence was also assessed. Analyses using latent growth modeling showed that cognitive flexibility emerges earlier than inhibitory control or working memory; communicative competencies, temperament and fluid intelligence moderated rates of growth in an executive system. The study concludes that the executive system that is differentiated over the course of the first 3 years in school influences and is influenced by fluid intelligence, temperament and communicative abilities. As communication skills are highly malleable and open to change through experience, these findings suggest that one way to accelerate growth in an executive system is to improve children's communicative competencies.

### P5.3.20

#### Effect of attention bias modification on quantitative electroencephalogram in irritable bowel syndrome

Jun Tayama<sup>1</sup>, Tatsuo Saigo<sup>1</sup>, Sayaka Ogawa<sup>1</sup>, Toyohiro Hamaguchi<sup>2</sup>, Kenji Inoue<sup>3</sup>, Atsushi Takeoka<sup>1</sup>, Shin Fukudo<sup>4</sup>, Susumu Shirabe<sup>1</sup>

<sup>1</sup>Nagasaki University, Nagasaki, Japan

<sup>2</sup>Saitama Prefectural University, Saitama, Japan

<sup>3</sup>Osaka University, Osaka, Japan

<sup>4</sup>Tohoku University, Tohoku, Japan

**Objectives:** One of the pathophysiological features of irritable bowel syndrome (IBS) is the presence of psychological abnormalities, including attentional abnormality. In this intervention-based study, we investigated the effect of Attention Bias Modification (ABM) therapy in patients with IBS. We hypothesized that the attentional abnormality in IBS would be normalized after ABM implementation, as indicated by event-related potentials (ERPs).

**Methods:** Thirteen patients with IBS and 10 healthy participants took part in this study. Five ABM intervention sessions were provided over a 2-month period. One session of ABM comprised 128 trials, resulting in a total of 640 trials across the intervention period. ERPs were measured during the first and fifth sessions using the international 10-20 system for EEG. Activity at the right parietal P4 electrode was measured, P100 activity at which has been associated with the attention component of facial expression.

**Results:** We found a significant difference in P100 latency at electrode P4 in session 1 ( $108 \pm 8$  vs.  $97 \pm 14$ ,  $t = -2.51$ ,  $p = 0.0203$ ), but not in session 5 ( $94 \pm 11$  vs.  $93 \pm 11$ ,  $t = -0.397$ ,  $p = 0.6954$ ,  $r = 0.09$ ). Moreover, after the ABM, psychological abnormalities were normalized in patients with IBS.

**Conclusions:** These results suggest that the implementation of ABM in patients with IBS may normalize brain function associated with attention.

### P5.3.21

#### How case experience affects clinical psychologists' professional identity formation.

Issui Manabe, Yuko Okamoto

Hiroshima University Graduate School, Hiroshima pref., Japan

**Introduction:** Support for professional identity formation (hereinafter called "PIF") for clinical psychologists is effective in preventing clinical psychologists' burn-out and it improves their quality of mental health.

**Objective:** The purpose of this research was to examine what role clients have in clinical psychologists' PIF.

**Methods:** Semi-structured interviews were conducted with three Japanese clinical psychologists who had more than 15 years of experience. Interviews were recorded with participants' permission and analyzed by the grounded theory.

**Results:** Eleven client case experiences were obtained, and two instances of client participation were extracted from the analysis. The following are some vignettes that have been modified for ethical considerations:

**1. Clients give feedback regarding the clinical psychologists' help.**

**Vignette:** A client upset a clinical psychologist in a session a few years ago, and the clinical psychologist regarded him with anger and did not feel good enough to help him.

**2. Clients are a source of rewards for clinical psychologists.**

**Vignette:** A client became healthy after a few years of sessions, and the clinical psychologist believed the effects were due to her helping the client.

**Conclusion:** Client feedback and positive changes are an important factor for clinical psychologists' professional development. Therefore, clients are a crucial being of clinical psychologists' PIF.

### P5.3.25

#### **Development and Validation of a Career Calling Scale for Taiwanese Undergraduate Students**

Yu-Chen Wang

*National Taiwan Normal University, Taipei, Taiwan*

**Objectives:** The purpose of this study was to develop a career-calling scale (CCS). A total of 106 university students were used as pilot participants. During the development of formal scale, 427 questionnaires were distributed and 414 copies were returned with a recovery rate of 96.96%. The participants were 134 men (32.4%) and 279 women (67.4%), 414 in total, and their average age was 21.19 years old ( $SD = 1.71$ ).

**Method:** The development of the scale was in three stages. First, the study conducted focus group interviews with 33 undergraduate students who had career calling experience. Second, the study conducted expert reviews and employed the item analysis, factor analysis after items were removed, and validity and reliability analysis. Then, the study administered the formal scale, conducted validity analysis and confirmatory factor analysis.

**Results:** The scale contains of 17 items rated on a 4-point scale and consists of three constructs—altruism and transcendent summons with 7 items, meaning and passion with 6 items, and involving and showing with 4 items. High scores obtained for one subscale indicated a high level of one construct. The internal consistency of the subscales of CCS ranged between .91 and .94, and that of the entire scale was .96. The correlations among the constructs of CCS ranged between .71 and .82. Using the PGIS and CHS as the criterion variables, the criterion-related validity analysis showed positively correlated with these two criteria. The confirmatory factor analysis reported moderate to good model fit ( $\chi^2 [df = 166, n = 548] = 489.04$ ,  $GFI = .88$ ,  $AGFI = .84$ ,  $RMR = .04$ ,  $RMSEA = .09$ ,  $NFI = .98$ ,  $RFI = .97$ ,  $CFI = .98$ ), demonstrating satisfactory construct validity. The factor loading ( $\lambda$ ) was .61 and .91, which reported that  $t$ -values were significant.

**Conclusion:** This is a scale with high validity and reliability and it will be a valuable reference for future practice and researches, especially the comparison between Taiwan and other countries.

## Session 5.4: Promoting excellence and stimulating labour market participation

### P5.4.01

#### Linking Leadership and Workplace Procrastination: The Role of Organizational Citizenship Behavior and Turnover Intention

Asli Goncu Kose<sup>1</sup>, Baran Metin<sup>2</sup>

<sup>1</sup>*Cankaya University, Ankara, Turkey*

<sup>2</sup>*Utrecht University, Utrecht, The Netherlands*

The primary aim of the present study was to explore whether paternalistic or transformational leadership styles of supervisors were significantly related to workplace procrastination. Moreover, in line with the propositions of Transformational Leadership theory (Bass & Avolio, 2001) and Paternalistic Leadership theory (Aycan, 2006) the potential mediation effects of organizational citizenship behaviors (specifically, civic virtue and conscientiousness) and turnover intention in the link between leadership style and procrastination of the employees were investigated on a heuristic model. Data was collected through online surveys from 126 Turkish full-time office employees. The goodness-of-fit of the proposed model was tested using structural equation modeling and the mediation analysis was performed by bootstrapping. As expected, transformational leadership and organizational citizenship behaviors were negatively related to workplace procrastination. However, there was no significant link between paternalistic leadership and procrastination. Moreover, turnover intention and organizational citizenship behaviors did not mediate this relationship. These findings suggest that transformational leadership style could be a more effective style for diminishing employees' excessive non-work related behaviors. The results are discussed in relation to theoretical and practical implications as well as direction for future research.

### P5.4.03

#### Transformational Leadership and Work Engagement in Civil Service: The Mediating Effect of Role Clarity

Irena Zukauskaitė, Dalia Bagdziuniene

*Vilnius University, Vilnius, Lithuania*

**Background.** Managers in civil service meet a big challenge of motivating their subordinates when the demands are getting higher, but available resources to motivate people are limited. The contemporary literature emphasizes the importance of transformational leadership style - a "...process through which leaders and followers help each other to advance to a higher level of morality and motivation" (Burns, 1971, p. 21). However, the process of influence through which transformational managers affect attitudes and work engagement of subordinates is often mediated by job related factors.

**Objective.** In this study it was aimed to analyse the relationship between transformational leadership and employee work engagement through the mediating role of employee job role clarity.

**Method.** A sample of 527 full-time employees working in Lithuanian civil service participated in the cross-sectional study. Survey questionnaire consisted of the transformational leadership scale (Carless, Wearing, & Mann, 2000), work engagement scale (May, Gilson, & Harter, 2004) and role clarity index (Lyons, 1971).

**Results.** The structural equation modelling showed, first, that the transformational leadership is related with subordinates' work engagement, and, second, this relationship was found to be fully mediated by employees' perceived role clarity.

**Conclusion.** These findings could be useful in improving training programs of managers, paying attention to subordinates' job characteristics, especially, their role clarity issues.

## P5.4.05

### **National survey of vocational teachers in Lithuania: career choice, personality and the strategies of quality teaching**

Kristina Kovalcikiene, Sigitas Daukilas

*Aleksandras Stulginskis University, Akademija, Kaunas distr., Lithuania*

The relevance of research is based on the significantly changing curriculum of vocational teacher's activity and the decline in the prestige of vocational teacher's profession. The purpose of the presentation is to report the findings of the national survey of vocational teachers in Lithuania. The aim of the research was to find interrelations between career choice of vocational teachers, components of teaching quality and the Big Five personality traits. The sample of a study consisted of 346 teachers from the Lithuanian vocational training system. The research results indicated that in Lithuania only 35.8 % of respondents has chosen the profession of a teacher as their vocation, while even 43.5 % - have chosen randomly. Moreover, only 4.4 % think that vocational teacher's career is a prestigious one. The analysis revealed that teachers with high levels of extraversion ( $p < 0.01$ ) and openness to experience ( $p < 0.01$ ) chose this profession as their vocation. Also, highly expressed neuroticism ( $p < 0.01$ ) is related with random choice of profession. The analysis between the components of quality teaching and the Big Five personality traits indicated that high level of agreeableness ( $p < 0.01$ ), conscientiousness ( $p < 0.01$ ) and openness ( $p < 0.01$ ) is related with the components of quality teaching. To conclude, career of vocational teacher is less challenging for those, who are planning, organising, setting tasks, are altruistic, have vivid imagination, and are emotionally stable.



## Session 5.5: Strengthening society's resilience; prevention and early intervention

### P5.5.01

#### Maternal confidence shapes maternal perception of their infant temperament

Miguel Barbora<sup>2</sup>, João Moreira<sup>2</sup>, Marina Fuertes<sup>1</sup>

<sup>1</sup>*Centro de Psicologia, University of Porto, Portugal*, <sup>2</sup>*Faculdade de Psicologia, University of Lisbon, Portugal*

**Objectives:** Maternal self-confidence, expectations and representations may influence the way mothers perceive their infants' behavior and their relationship with their infants. This study aims to assess the impact of maternal self-confidence on perception of infant temperament during the first year of life.

**Methods:** 197 mothers completed a short version of the Mother and Baby Scale in the first 72 hours after childbirth and at 3, 9 and 12 months.

**Results:** The results indicate that maternal confidence was significantly lower in the first days of infant life when compared with the other three moments. Individual differences in maternal self-confidence and perception of infant temperament remained quite stable during the first year. A cross-lagged panel analysis suggests that the lack of maternal self-confidence at birth significantly influenced the perception of the baby as irritable/irregular at 3 months.

**Conclusion:** Our results suggest that mothers with lack self-confidence during the neonatal period perceived their babies as more irritable/irregular at 3 months. Individual differences in maternal self-confidence and perception of infant temperament tend to be stable during the first year of life and shaped by maternal factors like primiparity.

### P5.5.02

#### The predictive value of character strengths on relational satisfaction: Prudence and humor

Wojciech Rodzeń, Adam Jedrzejewski, Adam Kucharski, Malgorzata Szczesniak, Roman Szalachowski, Celina Timoszyk-Tomczak, Malgorzata Maria Kulik, Krzysztof Wietrzynski, Manuela Domisiewicz

*University of Szczecin, Szczecin, Poland*

The purpose of this report is to illustrate how character strengths are related to relational satisfaction (RS). Although researchers have found a strong link between character strengths and life satisfaction (Niemic, 2013), literature shows that little empirical research has explored the role of character strengths in its relational feature.

In total, 151 people (70% females) participated in the study, and their age ranged from 16 to 22 years ( $M=17,26$ ,  $SD=1,05$ ). The data was collected with International Personality Item Pool Values in Action (IPIP-VIA) and Family APGAR used to assess relational satisfaction and family functionality.

A linear regression shows that out of character strengths factors that correlated with RS, two were input variables: prudence (0.399) and humor (0.237). The model was significant ( $F(100,2)=13.11$ ;  $p<0.001$ ) and explained approximately 20% of the variance.

Our findings indicate that prudence and humor are key character strengths of RS. In the aspect of humor, there are studies confirming that affiliative humor is positively related to relational satisfaction (Campbell et al., 2008) and aggressive – negatively (Meyer, 2013). However, because we do not dispose of the studies regarding prudence and RS, we presume that this relation is possible because prudent people use reason rather than passion to regulate their behavior (Niemic, Wedding, 2013), know what should be avoided, are concerned about consequences of their actions (Peterson, Seligman, 2004).

### P5.5.03

#### Investigating language bias in the English version of the South African Substance Use Contextual Risk Instrument

Maria Florence<sup>1</sup>, Musa Masiza<sup>2,1</sup>, Akhona Nkwanyana<sup>3,1</sup>

<sup>1</sup>University of the Western Cape, Cape Town, South Africa, <sup>2</sup>Human Sciences Research Council, Cape Town, South Africa, <sup>3</sup>Human Science Research Council, Durban, South Africa

**Background:** Adolescents in South Africa are susceptible to substance use due to the ease of access to and constant use of drugs by their peers. Various factors have been identified as possible contributors to the onset of adolescent substance use. The South African Substance Use Contextual Risk Instrument was developed for the purpose of identifying factors leading to substance use. Through the identification of these factors, appropriate preventative interventions can be informed. Early intervention is important because of the highly addictive nature of the drugs being used by these adolescents.

**Objective:** The study aimed to explore the language bias in the items of this instrument across the first and second language English speaking samples. The theoretical framework that guided the study was that of Bias and Equivalence.

**Methods:** The study employed a differential research design. Analysis techniques included Hotelling's T square tests, equality of reliabilities, Tucker's Phi coefficients of congruence and DIF analyses.

**Results:** The study found that certain items of the English version of the instrument were biased against the second language speakers. This version is thus not applicable for the second language speaking sample.

**Conclusion:** The study recommends that the instrument be adapted for this group in order to accurately assess the risk factors. Tailored interventions can then be developed for the different groups based on the information yielded by the different versions of the instrument.

### P5.5.04

#### How do people react to failure? The influence of self-esteem on emotional reactions and persistence

Virginie Paquette, Stephane Dandeneau, Viviane Poirier

*Universite du Quebec a Montreal, Montreal, Quebec, Canada*

**Objective** The role of self-esteem after a failure has most often been investigated during the reflexive stage (i.e. the stage immediately after experiencing distress; Williams, 2007). Related research has shown that personality traits, such as self-esteem, have greater influence during the reflective (or delayed) stage, a stage that is more subject to rational thought and threat coping. Since no research has yet investigated the role of self-esteem during the reflective stage after a failure, it will be examined.

**Method** In this study, 340 participants first completed the Rosenberg Self-Esteem Scale, followed by baseline levels of positive and negative mood (PANAS), the hard-failure or easy-success condition of the Remote Associates Test (RAT) and a distraction task to be sure they were in a reflective stage when their post-RAT reactions (i.e. PANAS and willingness to do another RAT) were assessed.

**Results** Conditional process modeling showed that the indirect effect of failure (X) on willingness to persist (Ys) through determination (mediator) is moderated by participants' trait levels of self-esteem. After failure, participants with low self-esteem, but not those with high self-esteem, were less determined which in turn was associated with less willingness to persist.

**Conclusion** These findings are substantial since they bring a nuance in our understanding of the role of self-esteem on determination and persistence and they can guide interventions. Indeed, low self-esteem people could work on what undermine their determination (e.g. ruminations) in mindfulness sessions in order to increase their persistence after a failure.

## P5.5.05

### Association Between Benovolent Sexism and Sexual Orientation Discreminations

Yung-Jung Chen, Chih-Fen Wei

*University of Taipei, Taipei, Taiwan*

This research aimed to explicate sexual prejudice's "sexism", in which gay seemed to receive more hostility than lesbian women. By combining patriarchy and Glick & Fiske's (1996) benevolent sexism, researcher hypothesized that benevolent sexists held greater anti-gay tendencies than non-sexist did, whether from their explicit or implicit attitudes. Online survey was conducted. Participants' (age from 18 to 45) explicit sexism and anti-gay tendency were measured with Modern Homonegativity Scale (MHS), Ambivalent Sexism Inventory (ASI), and implicit association test (IAT) of sex and sexual orientation discrimination. ASI positively predicted MHS, and sexism IAT positively predicted anti-gay IAT. As connecting two forms of sex prejudice, the research brings a new perspective for gay-rights movement with great theoretical and practical implications.

## P5.5.06

### Familial Functioning And Emotional Well-Being In Primary Caregivers Of Pediatric Patients With Short Stature

Sara Casaña-Granell, Laura Lacomba-Trejo, Vicente Prado-Gascó, Inmaculada Montoya-Castilla, Ma Antonia Pérez-Marín

*Universitat Valencia, Valencia, Valencia, Spain*

Introduction: Children with short stature (SS) have a height that is -2 SD in comparison with the population of reference. A good familial and social environment is crucial for the optimal development of the patient, and given the importance of physical appearance at these ages, the diagnosis can cause a negative impact on the adolescent and their family.

Objective: The aim of the present study is to study the relationship between family functioning and the emotional well-being of primary caregivers (PC) of pediatric patients diagnosed with SS.

Methodology: 121 PC of pediatric patients diagnosed with SS participated, attended to in several hospitals in the Valencian Community. Their functioning and family structure (CAF-FACES III; Cohesion and Family Adaptation Scale) and emotional well-being (HADS; Hospital Anxiety and Depression Scale) were evaluated.

Results: The correlation analyses indicate that a significantly negative relationship exists between familial functioning and the emotional distress of the PC.

Conclusions: Our data highlights the relationship that exists between familial functioning and emotional distress of the PC. Good familial functioning is linked to lower emotional distress scores and vice versa. It would be interesting to undertake more complex analyses in the future with the aim of understanding the directionality of this relationship. This all emphasizes the importance of developing intervention programs to promote a good family dynamic that favors a well adjustment to the illness.

## P5.5.08

### A mixed methods study of the barriers to help-seeking in young men working in construction in Ireland

Owen Jump, Inge Nieuwstraten, Mike Murphy

*University College Cork, Cork, Ireland*

Objective: Recent Irish research identified young men working in construction as being particularly at risk for suicide and self-injurious behaviour. Previous studies regarding young males' help-seeking behaviour have pinpointed masculine ideologies and stigma as possible contributory factors. The aim of this study was to measure factors influencing help-seeking in males in the construction industry both quantitatively and qualitatively.

**Method:** Young male participants working in the Irish construction industry (N=168, age-range 18-36 [M= 22.71 yrs, SD= 4.28]), completed a mixed methods survey measuring Self-Stigma, Perceived Stigma, Masculine ideologies and Attitudes Towards Seeking Professional Psychological help.

**Results:** Self-stigma was the best predictor of Attitudes Towards Seeking Professional Psychological Help. Qualitative analysis yielded 5 key themes: Damaging, negative views of help-seeking; Stigma; Masculinity; Problem awareness; and Moving towards a positive view of seeking help.

**Conclusions:** Inverse correlations show that as stigma increased positive participant attitudes towards help-seeking reduced. Certain aspects of masculine ideologies were shown to interact with help-seeking. Help-seeking attitudes in the group appear to be more complex than previously thought - being more culturally and context dependent.

#### P5.5.10

### **The value system of Spanish adolescents: its relationship with parenting styles and peer attachment**

Anna Llorca-Mestre, Elisabeth Malonda-Vidal, Paula Samper-García, Vicenta Mestre-Escrivá, Ana Tur-Porcar

*Universitat Valencia, Valencia, Valencia, Spain*

In the field of Psychology, values have been considered as psychological constructs that have an important motivational and regulatory component of human behavior (Schwartz and Bilsky, 1987; Schwartz, 1992; Villegas de Posadas, 2004). Values are formed and developed early in the life of children. The scientific literature refers to a combination of biological endowments, social experiences and culture (Delfino, 2009; Roccas, Sagiv, Schwartz and Knafo, 2002; Zubietta, Mele and Casullo, 2006). In this context, family and school are considered fundamental in the process of transmission and internalization of values. The **purpose** is to evaluate the value system in a representative sample of Spanish adolescents (471 adolescents) and its relationship with parenting styles of both positive and negative exercised by their parents and peer attachment. Results and conclusion: in relation to the hierarchy of values of the adolescents the results show that they value what guarantees mutual trust and stability and everything that facilitates and gratifies interpersonal relationships. On the other hand, the results show that the relationships between parents and children that are characterized by love with a certain degree of control, are the parenting styles that maintain a stronger relationship with the internalization of values. Implications: it is important to design programs for adolescents that develop adequate value system to act as a potentiator of health and social competence.

#### P5.5.12

### **The Differences between Moral Evaluations on Tobacco Consumption and Road Traffic Accidents**

Asli Eyrenci<sup>1</sup>, Burcu Tekes<sup>2</sup>, Turker Ozkan<sup>2</sup>

<sup>1</sup>*Maltepe University, Istanbul, Turkey*

<sup>2</sup>*Middle East Technical University, Ankara, Turkey*

**Objectives:** Traffic accidents and smoking related deaths are the most common problems in Turkey as it is worldwide. While smoking has become increasingly socially unacceptable by the preventive public health efforts, there are very few of such efforts to prevent road traffic accidents (RTAs). It was considered that moral evaluations (i.e. responsibility, control, blame) and affects (positive vs. negative) have roles on these issues and thoroughly they have an impact on political priorities. Accordingly, the aim of this study is to reveal moral evaluations and affect regarding RTAs and tobacco consumption.

**Method:** 300 respondents participated this study via online sampling method. Participants were provided 4 distinct vignettes of smoking and driver behaviors, which indicate active or passive roles of actors. They were also asked to answer moral evaluation questions and Positive and Negative Affect Scale.

**Results:** Passive and active RTAs have significantly higher mean scores of positive affect than

passive and active smoking, for negative affect active smoking and active RTA have the highest mean scores respectively. Moreover, drivers who had an active role in accidents were assigned more responsibility, control and blamed for the act. But active smokers were attributed negative affect more than active drivers.

**Conclusion:** The results are consistent with the current efforts of anti-smoking campaigns and the insufficient public health effort, legislations and regulations for RTAs.

### **P5.5.13**

#### **The Impacts of Situational Crisis Communication Strategy on Risk Perception and Sense of Safety when Faced with Terrorist Threats**

Yongyu Guo, Shenlong Yang

*Central China Normal University, Wuhan, China*

In order to explore an efficient way to improve the effectiveness of risk communication and to reduce public risk perception, it would be useful to understand the relationships of risk communication strategies, the public risk perception and sense of safety. According to situational crisis communication theory, communication strategies (denial, diminished and rebuilt) can make a huge difference. The present research designed two studies to investigate which communication strategy is the best one when a government is faced with terrorist threat. By a pre-experimental design, the results of study 1 (N=409) revealed that people would feel different risk perception and sense of safety when they received different risk communication strategies. Specifically, the people received denial communication strategies exhibited the highest level of risk perception and the lowest level of perceived safety. Based on the findings of study 1, study 2 (N=131) took an experimental method to reveal the causal relationship of risk communication strategy, risk perception and sense of safety. Participants were randomly assigned to experience one of three communication strategies. Study 2 showed the same results with study 1. Taken together, the findings of this research indicate that choosing communication strategy is vital when coping with terrorism. The rebuilt strategy is the most helpful and the denial strategy is the worst.

### **P5.5.14**

#### **Resilience in relation to Self-efficacy, Flourishing and Stress among college students**

Amreen Sekhon

*PU Research Fellow, Department of Psychology, Punjab University, Chandigarh, India*

According to Wagnild and Young (1990) resilience connotes emotional stamina and has been used to describe persons who display courage and adaptability in the wake of life's misfortunes. Researchers have found that resilient people are healthier, live longer, are more successful in school and work, are happier in relationships and are less prone to depression. (Masten & Coatsworth, 1998; Siegel, 1999). Resilience is vital for healthy human functioning as it helps oneself to overcome adversities and resume a normal lifestyle. Based on this definition of resilience, the present study intended to find its relationship with self-efficacy, flourishing and stress. Self-report measures to assess Resilience (Resilience scale by Wagnild and Young, 1993), Self efficacy (General Self efficacy scale by Schwarzer & Jerusalem, 1995), Flourishing (Flourishing scale by Diener et al., 2010) and Stress (Perceived stress scale by Cohen et al., 1983). The sample comprised of female (n=50) and male (n=50) college students within the age range of 18-21 years. Descriptive statistics was used in addition to intercorrelation analysis to calculate the results. Results showed definite correlation with chosen variables which has implications for enhancement of resilience among college students and offer a better understanding of resilient individuals.

Keywords: Resilience, flourishing, self-efficacy, stress.

## P5.5.19

### Strategies young monolingual and multilingual children use to write unfamiliar scripts

Guying Zan<sup>1,2</sup>, Dawn Chan<sup>1,2</sup>, Maureen Hoskyn<sup>1,2</sup>

<sup>1</sup>Simon Fraser University, Burnaby, Canada

<sup>2</sup>Centre for Research on Early Child Health and Education, Burnaby, Canada

This study describes strategies that young monolingual and multilingual children use to write symbols in an unfamiliar orthography. Little is understood about whether there is an advantage to being multilingual when learning to write unfamiliar orthographies. This mixed method study investigates this issue in four groups of pre-literate, Kindergarten aged children: Mandarin-English bilinguals, Cantonese-English bilinguals, mixed-multilingual and monolingual English speaking children. Children (n=155) were administered an English (familiar) and a Chinese (unfamiliar) orthographic awareness/copying task. Several strategies were observed: creating a pictograph, repetition, drawing on prior knowledge of an orthography or the strokes that made up the orthography. Language group differences in use of these strategies for each orthography was statistically detectable. Findings lead to the conclusion that preliterate children from diverse cultural groups have both common and unique strategies in their repertoires to support their memory and ability to copy an orthographic representation. The implication is children are active agents of their own learning and early intervention efforts to support children learning an unfamiliar orthography may benefit from building upon children's current repertoire of strategies.

## P5.5.20

### Cycle of violence: What about children?

Fatma Mahperi Uluyol

Hacettepe University, Ankara, Turkey

Even though the rate of intimate partner violence is alarmingly high throughout the world there are very few studies on violence against and homicide of women. It is estimated that each year seven million women experience physical, psychological, or sexual abuse by an intimate partner. A recent systematic review of global data revealed that 30.8- 45.3% of all female homicides is perpetrated by an intimate partner. Moreover, perpetrators often attack other family members or relatives as well, such as couple's children, other family members or new partners of the victims. Femicides have long-term effects on remaining family members. It is especially traumatic for children because murderer is their father. Hence, emotional burden is more complicated and has negative effects over grief process. Also, little is known about children who simultaneously lost both parents (mother from death, father from suicide). There are some studies which reveal the relatively high risk of these children in terms of psychopathology development. Also, they tend to become intimate partner violence offenders when they reach adulthood. Therefore, the aim of the present study was to assess the prevalence of femicides in Turkey in 2014 and socio-demographic characteristic of these women (age, region, number of children, age of children, by whom and with means of what she is killed, who else was killed by offender, why this women were killed? and so forth). Internet database was used to collect data. "Femicide" and "intimate partner violence" were used as keywords. Two hundred seventy-two women were killed by an intimate partner. All women with related data had children. Sixty-two percent of children was younger than 14 years old. Ninety- six percent of women were killed by someone whom they knew. Furthermore, 48% of them were killed because they intended to get a divorce or break up. Also, 45% of the children was witness to killing of their mother. Lastly, 32% of people who is also killed by murderer is relative of the victim. Result will discussed within the frame of cycle of violence and prevention strategies.



## P5.5.21

### Tool for studying roles of involvement in peer-to-peer bullying - moral psychology perspective

Mariola Paruzel-Czachura<sup>1</sup>, Michal Naczynski<sup>1</sup>, Malgorzata Dobrowolska<sup>2</sup>

<sup>1</sup>University of Silesia, Katowice, Poland

<sup>2</sup>Silesian University of Technology, Gliwice, Poland

**Objectives** The speakers will present a Polish tool for studying roles of involvement in peer-to-peer bullying, together with the results of empirical data concerning the accuracy and reliability of the scale. Involvement in peer-to-peer bullying is understood as taking on a role (Myers, 2003) in peer-to-peer bullying situations (Olweus, 2007, 2012; Wu et al., 2016).

**Method and Results** The tool consists of 5 descriptions of situations of bullying in a school setting, featuring 6 individuals presenting specific roles of involvement in bullying: the bully, the victim, the assistant/supporter, the defender, the outsider, and the passive bystander (Gini, 2005; Jenkins & Nickerson, 2016; Salmivalli, 2010, 2014; Thornberg, 2015; Twemlow et al., 2012; Wu et al., 2016). The research participants are asked to indicate how often they took on each of the roles presented, on a seven-point scale. The situations of peer-to-peer bullying taken into account in the tool are the following: cyberbullying, verbal abuse, physical violence, relational bullying, and bullying through social exclusion (Clarkson, 2016; Sánchez et al., 2016; Olweus, 2007, 2012).

**Conclusion** The original research tool was inspired by work and recommendations of scholars such as Cislak & Wojciszke (2008), Paruzel-Czachura (2016), Gini (2006), and Wojciszke & Baryła (2006). The stories were prepared on the basis of forms of bullying recognised by scholars (Dąbkowski, 2010; Monks & Coyne, 2012; Olweus, 2012), as well as preliminary research.

## P5.5.22

### Attitudes towards peace: An investigation in the light of some sociopolitical variables.

Eda Guler Savas, Derya Hasta  
Ankara University, Ankara, Turkey

The purpose of this study is to determine the relationship between political trust, risk perception of terrorism, social dominance orientation and attitudes toward peace. Aforementioned variables have been investigated according to gender. The data was collected from 348 participants. As measurement tools, Peace Attitude Scale, Political Trust Scale, Terrorism Risk Perception Scale, Social Dominance Orientation Scale and demographic information form were used. Pearson correlation moments coefficient was used to reveal the associations between variables. Hierarchical regression analysis was used to determine the predictive attitudes toward peace, gender, social dominance orientation, political trust and risk perception for terrorism. Correlation analysis indicated that there are significant relationships between social dominance orientation, terrorism risk perception, political trust and attitudes towards peace. The results of the study revealed that support for group-based dominance, opposition to equality and social identity terrorism risk perception variables predict attitudes toward peace. Hierarchical regression analysis revealed that attitudes toward peace, opposition to equality and support for group-based dominance, terrorism risk perception were significantly differentiated by gender. Women's attitudes toward peace and terrorism risk perception scores were found out to be higher than men's. Women's social dominance orientation scores were lower than those of men.

## Session 5.6: Technological scientific topics; technology and changing behaviour (e-coaching, research on the brain)

### P5.6.01

#### Basic and Variable Brain Correlates of Musical Improvising in Musicians

Liudmila Dikaya, Igor Dikiy

*Southern Federal University, Rostov-on-Don, Russia*

The musical improvisation is a perfect example of spontaneous creative activity. At the same time, its brain correlates remains unstudied.

The **objective** of our research was to reveal basic and variable brain correlates of musical improvising in musicians.

**Method.** We studied the bioelectrical activity of the brain cortex in 96 practicing musicians. EEG signals were recorded in a resting state and at performing of non-creative (perceiving and mentally reproducing of given major and minor chord sequences) and creative (mentally improvising) musical activity from 21 scalp electrodes according to the 10-20 System. We used statistical post hoc analysis.

We compared functional cortex organization in musicians during improvising and during other kinds of musical activity to reveal basic brain correlates, on the one hand, and during composing major and minor music to reveal variable brain correlates, on the other.

**Results.** It was shown that the basic brain correlates of musical improvising reflects strong high-frequency functional connections between right anterior and left posterior cortex regions (the creative axis).

The variable brain correlates of major music improvising reflects high activity in left anterior cortex regions and strong short left-hemispheric low-frequency connections ( $p < 0.05$ ). The variable brain correlates of minor music improvising reflects strong right-hemispheric short low-frequency and long high-frequency functional connections ( $p < 0.05$ ).

**Conclusion.** We revealed basic and variable brain correlates of musical improvising in musicians, which are characterized by a specific frequency-spatial organization of bioelectrical cortical activity. The further investigation of the issue includes studying the brain correlates of improvising with various musical genres and styles in musicians.

### P5.6.02

#### Sleep quality and mood in fibromyalgia and systemic lupus erythematosus

Germán Prados<sup>1</sup>, Elena Miró<sup>2,3</sup>, M. Pilar Martínez<sup>2,3</sup>, Ana I. Sánchez<sup>2,3</sup>, Virginia Moraleda<sup>3</sup>, J. Mario Sabio<sup>4</sup>, Óscar Cervilla<sup>3</sup>

<sup>1</sup>Department of Nursing, Health Science Faculty, University of Granada, Granada, Spain

<sup>2</sup>Mind, Brain and Behavior Research Center (CIMCYC), University of Granada, Granada, Spain

<sup>3</sup>Department of Personality, Assessment and Psychological Treatment, Faculty of Psychology, University of Granada, Granada, Spain

<sup>4</sup>Internal Medicine Department, Virgen de las Nieves University Hospital, Granada, Spain

**Introduction:** Several studies have demonstrated that poor sleep is a debilitating factor that negatively impact the clinical picture and the quality of life in patients suffering from fibromyalgia (FM) and patients with systemic lupus erythematosus (SLE). However, sleep has been deeply explored in FM patients using subjective and objective measures. In the case of SLE this domain remained practically unexplored. **Objective:** The main objective of this study was to explore whether there were differences in sleep related-variables between patients suffering from FM and patients with SLE. **Method:** Nineteen SLE women and nineteen FM women participated in the study. All participants were evaluated with actigraphy for a week and they completed several questionnaires of sleep and mood state. **Result:** FM patients had similar sleep quality measured by actigraphy as compared with SLE women. Nevertheless, FM women perceived their sleep substantially worse than SLE patients. Additionally, FM women showed higher scores in anxiety and depression. Bivariate analyses showed that a worse perceived sleep quality was related to higher depression and anxiety in FM women. In SLE women, only depression was significantly associated with poor sleep. **Conclusion:** There is a relevant connexion between subjective sleep quality and

emotional state both in FM women and SLE women. Future research need examine whether a treatment focused on sleep could improve emotional state in these populations. Research project: PSI-2014-58379-P.

### P5.6.03

#### Brain Correlates of Creativity Development in High School Seniors

Igor Dikiy, Liudmila Dikaya

*Southern Federal University, Rostov-on-Don, Russia*

Nowadays the adaptation to life requires a high level of creative abilities. The brain mechanisms regulating the development of creativity have not yet been studied.

So **the objective** of our research was to reveal the brain correlates of creativity development in high school seniors.

**Method.** The participants were 68 high school seniors (15-17 years old) divided into experimental and control groups. Participants of experimental group have been increasing own creativity twice a week for two years with the help of psychological training of creative thinking and EEG alpha feedback training to increase alpha band power for faster insight.

We tested the level of creativity and EEG power in subjects of both groups at the beginning (15 years old) and at the end (17 years old) of research. EEG signals were recorded at a resting state and at creative problem solving from 21 scalp electrodes according to the International 10-20 System. We used statistical post hoc analysis to compare the features of brain cortex organization in participants of experimental and control groups.

**Results.** The distinguishing brain correlates of creativity development are:

- 1) significantly strong alpha power and the lower level of the brain cortical activation in anterior (i.e. frontal) brain regions ( $p < 0.05$ );
- 2) higher original (as opposed to less original) ideas are accompanied by more alpha activity in anteriofrontal and centroparietal brain regions ( $p < 0.05$ );
- 3) significantly higher level of theta power in frontal and central brain cortical regions when solving easy cognitive tasks, independent of its type and character that testifies to the fact of high emotional inclusiveness in the task and actualization of past experience ( $p < 0.05$ );
- 4) high cortical activation in the right temporal area at alpha-1 frequency band in solving difficult divergent nonverbal problems ( $p < 0.05$ ).

**Conclusion.** We revealed the brain correlates of creativity development in high school seniors. Creative thinking can be improved effectively by means of specific interventions. Training of creative thinking is reflected at the level of the brain.

### P5.6.04

#### Neurocognitive Aspect of Patient with Intracranial Tumor

Clemilson Gomes<sup>1,2</sup>, Cloves Amorim<sup>2</sup>, Mariana Kaspchak-Arent<sup>1,3</sup>, Talita Perboni<sup>1,3</sup>, Bruna Almeida<sup>1,3</sup>, Victoria Bonamigo<sup>1,2</sup>, Ricardo Ramina<sup>1</sup>, Samanta Rocha<sup>1,3</sup>

<sup>1</sup>Neurological Institute of Curitiba, Curitiba, Brazil

<sup>2</sup>Pontificia Universidade Católica do Paraná, Curitiba, Brazil

<sup>3</sup>Habilitare Institute, Curitiba, Brazil

Tumors that affect the brain are associated to psychological and cognitive deficits. Tumors in the central nervous system usually are malignant tumors to treat, partly because its location in the brain restricts vigorous therapy. Epidemiologic studies are important for the understanding of events related to the occurrence of such diseases, as indicated by the increasing incidence of gliomas among elderly people. Coorte studies, retrospective, conducted in databases of private hospitals in the south of Brazil. Population: individuals of both genders with surgeries held at the "Instituto de Neurologia de Curitiba" and assessed by the neuropsychology specialists at the hospital. 89 patients reviewed. 53.19% of them being male and 46.49% being female. 6.74% were between 10 and 19 years old, 57.30% between 20 and 49 years old and the remaining 35.94% were between 50 and 90. In comparison with patients with temporal injuries, those with frontal ones presented lower "escore Z" results in verbal and non-verbal learning tests. The histopathologic exams confirmed low grade glioma in 41.38% of patients, high grade glioma in

31.03% of them, meningioma in 13.79%, cavernoma in 6.89% and non-tumoral injuries in 6.89%. The increase in the prevalence of gliomas within the elderly group, as already observed in other studies, is also confirmed in the patients reviewed here. Memory deficits seen in frontal lobe injuries indicate the role of this brain structure in the codification of memory.

## **P5.6.05**

### **The effect of the reverse retrieval-extinction procedure on sugary tea drinkers**

Jian-Ting Liou, Mei-Hua Chen, Jau Rong Su, Ming-Chou Ho

*Chung Shan Medical University, Taichung, Taiwan*

Many studies suggest that excessive intake of sugary tea can cause many health problems, such as obesity, dental care, metabolic syndrome, cardiovascular disease and cancer. We aim to apply a 'reverse' retrieval-extinction (R-E) procedure to reduce drinkers' motivation and behavior. A typical R-E procedure consists of a retrieval phase and an extinction phase. Retrieving a consolidated memory (e.g., tea drinking memory) can return this memory into an active state. During this phase of active state, that may last about 6 hours (a reconsolidation window), this memory is unstable and may be altered. Although many studies suggest typical R-E procedure is effective, recent animal studies have suggested alternative possibility (i.e., a reverse R-E procedure). The typical reconsolidation account predicts that retrieval trials must precede the extinction training to reactivate the original memory and allow the newly-learned extinction to be "implanted" within the reconsolidation window. However, Millan et al. reported that reverse procedure (extinction first and then retrieval) is able to attenuate context-induced reinstatement, conflicting with reconsolidation account.

**Objectives:** We recruited ninety healthy college students with tea drink problems.

**Method:** Through the experiment, participants' explicit and implicit attitudes regarding the sugary tea drink were measured before and immediately after the procedure, and one week after.

**Conclusions:** We hypothesized that drinkers in the R-E procedure would have less preferable explicit and implicit attitudes toward sugary tea drink and the effect may last for one week. We further tested whether the reverse procedure can affect the college students with tea drink problem. We suggested that the reverse procedure can be as effective as typical one.

## **P5.6.06**

### **ADHD and mental distress in online gig economy workers**

Michiel Bosman, Joan Swart

*Open Forest, Walnut CA, USA*

**Objectives:** Since the 2007-2009 Great Recession, formal job markets changed and gave rise to the "gig economy," which, this study illustrates, requires different mental health services.

**Methods:** 184 U.S.-based respondents completed a survey on Amazon's Mechanical Turk, a crowdsourcing Internet-based freelance marketplace. The 149-item questionnaire included demographic questions (e.g. age, gender, education, annual income, mental health status, access to medical insurance, and experience with mental health services), the General Health Questionnaire-12 (GHQ-12), the Adult Self-Report Scale (ASRS), the Big Five Inventory- Short Version (BFI-10), and user views on online self-help therapy programs.

**Results:** The cross-sectional quantitative survey design method confirmed the overrepresentation of adult ADHD in the online gig communities at a level significantly higher than the point prevalence among the general population of around 2.5% per the DMS-5. Furthermore, applying the GHQ-12, 81% of respondents indicated potential clinical levels of psychological distress, possibly characteristic of those under-employed. The BFI-10 showed participants with higher extraversion and neuroticism dimensions have a higher probability to utilize online therapy, putting a premium on online sharing and engagement, while valuing convenience the most.

**Conclusions:** This study shows psychological distress and ADHD symptoms among online gig workers. The study also highlights the need for and feasibility of online mental health services for people whose main source of income is in temporary online jobs.

## P5.6.07

### Utility of a Serious Game against the Stigma in mental health

Adolfo Cangas, Noelia Navarro, José Gallego, David Mullor

*University of Almería, Almería, Spain*

**Objectives:** In this work we will show a Serious Game, called Stigma-Stop, developed to introduce students to what mental disorders are. Specifically, the characters in this video game are people who suffer from different mental disorders (depression, schizophrenia, bipolar disorder and panic disorder with agoraphobia).

**Method:** In this video game we give information about what are mental disorders and ask students some questions about their feelings and beliefs. 169 students between the ages of 14 and 18 took place in this study in an experimental design with control group.

**Results:** The results showed that statistically students changed the stigma on mental health (assessed by the Questionnaire on Student Attitudes towards Schizophrenia) after playing with the video game. Also the average score of its utility and attractiveness was high.

**Conclusion:** Stigma-Stop has shown to be a useful and attractive tool for young people to change the stigma towards mental disorders. The implications of these results and the current development of this project are discussed.

## P5.6.08

### "Exploring the Neural Correlates of Anorexia Nervosa: A Disconnection Model"

Mary Canellopoulou<sup>1</sup>, Konstantinos Koumakis<sup>2</sup>

<sup>1</sup>*Deree-The American College of Greece, Department of Psychology, Athens, Greece*

<sup>2</sup>*Athens Euroclinic, Department of Neurology, Athens, Greece*

Anorexia Nervosa (AN) is a serious and puzzling psychiatric disease with increasingly recognizable clinical as well as neuropsychological signs in the domains of cognition, emotion and behavior. At the absence of consensus with regard to the exact nature of cognitive impairment, studies of the brains of people with AN have revealed differences in the activity patterns of complex brain circuits, which involve cortical and subcortical structures, when compared with healthy controls or patients suffering from other types of eating disorders. The pathophysiology of AN remains unclear however, there is accumulating research data for an underlying rate-limiting dysfunction of the insular cortex which may be a crucial factor implicated in a broad spectrum of functions commonly impaired in AN. In this context, supporting evidence for this hypothesis is critically presented, drawn from neuroscientific studies utilizing various methodologies on clinical features of disease related to taste, reward processing and pain perception. The conceptualization of AN as an insular dysfunction has important neuroscientific as well as therapeutic implications as it necessitates a reformulation of current causal models of neurocircuitry of AN and allows researchers to leverage treatment advances across patients and forms of disease.

## Session 6

### Session 6.1: Life changing events; migration, integration, adaptation

#### P6.1.02

#### **Understanding quality of life, marital satisfaction and coping strategies of breast cancer women**

Azarmidokht Rezaei, Hadis Rezaei, Maryam Khoobyari

*Department of Psychology, Marvdasht Branch, Islamic Azad University,, Marvdasht, Iran*

The purpose of the present study was to explore the relationship of the quality of life and marital satisfaction with coping strategies among women suffering from breast cancer in Shiraz. To this end, a correlational research design was used. The population under study consisted of women with breast cancer diagnosis without any psychiatric and chronic histories. A total number of 200 patients were selected through purposive sampling as the respondents in the research sample. The instruments used in this study were Quality of Life Scale, Marital Satisfaction Questionnaire, and Coping Strategies Inventory. The results showed a significant relationship between the components of the quality of life and coping strategies. Besides, a significant relationship was found between marital satisfaction components and coping strategies. It was also found that the components of the quality of life can be significant predictors of coping strategies. Similarly, marital satisfaction components were found to be significant predictors of coping strategies.

**Keywords:** quality of life, marital satisfaction, coping strategies, breast cancer

#### P6.1.03

#### **Couple personality similarity in assortative mating and the effect on relationship quality**

Yue Yu, Jianxin Zhang

*Institute of Psychology, Chinese Academy of Sciences, Beijing, China*

Assortative mating is a nonrandom mating that individual select their partner depending on one or more characteristics they are similar with each other. It has critical influence for people's life and work. Personality traits play an important role in mental health, interpersonal process as well as close relationship. 'Birds of a feather flock together' and 'Opposites attract' are two distinct hypotheses about personality similarity in assortative mating. And both of them are studied by numerous research.

In addition, the most important indices in relationship quality are relationship satisfaction and quality of marriage. It has been proved that the association between personality and the relationship outcomes, however, when we consider these questions in terms of dyadic perspective, there may be some more complicated pattern between couples personality and relationship outcomes. The meanwhile, there are various measure of personality, such as self-report, peer-report and implicit self-concept personality. Moreover, personality similarity can be calculated by actual similarity, perceived similarity and self-other agreement. Last but not least, there is limited study about the mechanism between personality similarity and relationship outcomes. Generally speaking, our research aim to select married and dating couple and expect to investigate: a) the similarity or complementary between married and dating couple, b) the association between couple personality similarity and relationship outcomes, c) the mechanism between personality similarity and relationship outcomes. Our study provides not only important implication for relationship development, mate choice and success close relationship, but also gives couples practical suggests to establish high quality romantic relationship.



#### P6.1.04

### Developmental changes in intellectual ability and adaptive behaviour in persons with intellectual disability

Urška Žerak<sup>1</sup>, Robert Masten<sup>2</sup>

<sup>1</sup>Faculty of Education, University of Ljubljana, Ljubljana, Slovenia

<sup>2</sup>Faculty of Arts, University of Ljubljana, Ljubljana, Slovenia

The aim of the study was a retrospective, longitudinal investigation of changes in intellectual functioning and adaptive behaviour in individuals with intellectual disability who were/are institutionalised. Development of individuals with intellectual disability differs from the development of individuals with typical development, as these individuals frequently demonstrate regressions and fluctuations in development. Their development depends on the type and extent of the intellectual disability, comorbid psychopathology and health conditions. The sample included 31 individuals with moderate (21) and severe (10) intellectual disability aged from 18 to 44 who had been assessed in three different time periods with instruments measuring intellectual ability (Valentine intelligence test for children, Goodenough Draw-a-man test) and adaptive behaviour (Vineland social maturity scale). The results showed significant improvement in the scores on instruments between first and second period (from middle and late childhood/adolescence to early adulthood) and statistically non-significant improvement between second and third testing (early adulthood). Results are indicating congruity with the similar-trajectory hypothesis, which predicts growth of intellectual abilities up to 20, then stability and decline around age 60. Furthermore, results showed medium and high positive correlations between instruments measuring intellectual ability and adaptive behaviour according to previous research, suggesting a link between the intelligence and adaptive behaviour. Limitations and guidelines for future research are discussed.

#### P6.1.06

### "The world that I knew had gone": A grounded theory study on the impact of father loss on women bereaved as adolescents

Inge Nieuwstraten

University College Cork, Cork, Ireland

**OBJECTIVES:** The aim of this study was to investigate the impact of the loss of the father on women bereaved as adolescents, both at the time of the death and subsequently.

**METHOD:** Grounded theory methodology was used and data were collected through the use of in-depth taped interviews. The particular approach used was Charmaz's (2006) constructivist grounded theory. Three volunteer participants ranged in age from 42-53, with a mean age of 48.7 years. The time elapsed from the parent's death until the interview ranged from 31-36 years. The cause of death for all three fathers was cardiovascular disease (all had suffered a MI).

**RESULTS:** The data analysis generated five core categories: A chance to mourn (or a turn to melancholia); Oedipal/Electra issues; A heart connection - psyche and soma; "The terror I would forget his face": accessing the lost parent through memories, objects and places; and What would have been different, had father not died.

Tentative theoretical conceptualisations centred around different factors impacting on how the loss was experienced, including the level of support for the bereaved adolescents; children's involvement in the burial; relationship with the mother; access to sustaining memories of the father; participants' age at bereavement; family-structural factors, such as the presence of a stepfather; psychosocial factors such as economic survival and responsibility for younger siblings; emotional factors, such as preceding losses. Coping mechanisms included idealisation of the father, somatisation, moving away into a new kind of life, through marriage or emigration, and looking towards mother as a role model for survival.

Long term effects included difficulty in remaining in a relationship after the age that mother was bereaved, not feeling free to invest in new attachments, and going into therapy with a male therapist.

**CONCLUSIONS:** Implications for therapists include the importance of facilitating grief work,

including locating the father within the self, a (re)connection with mother and mothering, and reframing and establishing a new identity. Suggestions for future studies include looking at patterns of mourning within families, buffering effects for bereaved adolescents, and investigating the importance of father and/or mother loss for adolescent males.

#### **P6.1.07**

##### **Effect of openness to diversity on well-being: Role of self construals**

Esra Sahin, Derya Gungor

<sup>1</sup>*Yasar University, Izmir, Turkey*

**Introduction:** Due to the increasing rate of migration, cultural change and diversity in societies also increases. Especially for youth living in culturally diverse neighbourhoods, exposure to different cultural messages, values and ideas might be a possible socio-cultural risk factor in self and identity development. Studies focusing on the impact of cultural diversity indicate that openness to diversity and an adaptive and integrated self-construal structure in multicultural environments could function as protective resilience factors.

**Objectives:** Aim of this study is to investigate the role of the interaction between self-construal structure and openness to diversity on well-being of youth living in culturally diverse environments. Openness to cultural diversity is expected to be advantageous in terms of well-being, additionally, youth who are high on autonomous and related self are expected to benefit most from this positive effect of openness to diversity.

**Method:** 790 students from 8 high schools in Izmir, Bornova were given a questionnaire assessing autonomous-related self construals, relational well-being and openness to diversity. Participants were divided into 3 groups based on self construals by conducting a K-means cluster analysis as autonomous, related and autonomous-related groups.

**Results & Conclusion:** Hierarchical regression analyses results showed that openness to diversity positively predicts well-being but the prediction is stronger in students with autonomous-related self compared to students with a highly related self. Results show that in traditionally related environments like Turkey, an integrated self-construal structure is more advantageous and openness to diversity has a stronger positive influence on relational well-being.

#### **P6.1.10**

##### **Guanxi developing, proactive personality and organizational support climate: Three-way interaction effects on stress**

Jingyang Gu, Zhe Xuan, Xiang Yao

*School of Psychological and Cognitive Science, Peking University, Beijing, China*

Guanxi developing is a newly defined proactive behavior in Chinese context. The targets of guanxi developing are those who can bring about benefits and help, which is different from the other proactive socialization behaviors. The current study examines the relationship between guanxi developing and stress. Meanwhile, we take proactive personality and organizational support climate into account exploring the important role of these two variables. A four-wave survey was carried out in a group of hotel chains in China. A sample of 174 new management trainees were enrolled in this study. The participants reported their proactive personality during the newcomer orientation (T1). Three months after newcomers' entry, guanxi developing was reported through online survey link (T2). Another three months later (T3), organizational support climate was rated. Then three months after the third survey (T4), participants reported their working stress.

The results found that guanxi developing positively related to stress. Proactive personality moderated the positively relationship between guanxi developing and stress, such that the relationship was stronger for individuals with low (vs. high) proactive personality. Organizational support climate moderated the two-way interaction effect of guanxi developing and proactive personality on stress, such that the positive relationship between guanxi developing and stress was

the strongest when organizational support climate was low and newcomers were in low level of proactive personality. This article highlights the potential dark side of proactive behavior, which can guide the future practical human resource management.

### P6.1.11

**'Radio Begijnenstraat' is a project on the psychiatric ward of the Antwerp prison coordinated by dramatherapist Katrin Lohmann in which mentally ill offenders portray themselves in a radio show through theatre, Life Writing and depth-interviews.**

Katrin Lohmann

*Psychiatric ward Antwerp prison, zorgteam, Antwerp, Belgium*

**Objectives:** Inspired by the concept of desistance (Maruna) the Good Lives Model (Ward) and Emotion Focused therapy for problem anger (Pascual Leone) the project focuses on identity development for mentally ill offender as a comprehensive conception in storytelling for radio. The basic assumption is that living a crime free life presupposes a reconstruction of self-image to one of a delinquent-free self, and in while doing so being in need of positive regard and empathy. Theoretically I refer to a client-centred background, Emotion-focused therapy, the Good-Life model and the Risk-Need-Responsivity model.

**Methods:** For 'Radio Begijnenstraat' (mentally ill) offenders are stimulated to read, dramatize, write and create fictional work or share personal stories in depth-interviews. Creation, rehearsal and recording is organized in individual and group sessions under professional artistic and creative-therapeutic guidance. We work in and outside the prison, so that everyone stays welcome to collaborate before, during and after detention. The audio material created in both spaces is edited into one podcast and presented in prison and occasionally in communal art spaces. We also broadcast our shows in our monthly programme on a local radio and share the episodes through social media. In this manner we facilitate approachable cultural participation, expression, sharing and contact. We approach our clients as story-tellers and work with their talents, needs and interests. I will offer you the chance to hear divers detained voices - complex and yet recognizable. Practically we will experiment with (dramatherapeutic) writing and performance techniques I find inspiring in working with the population.

**Results:** In radio we deal with self-view and self-consciousness in a special way - we re-listen to ourselves and imagine our voice in the ears of the other, we also recognize ourselves in the stories presented - fictional and non-fictional. The specific use of literature for means of projection and recognition and the act of putting in words what we think and feel contributes to explore identity other than the 'criminal crazy identity' people are attributed with.

**Conclusion:** There is a great therapeutic potential of creative storytelling and narrative work in dramatherapy with mentally ill offenders.

### P6.1.13

**Early Psychosocial Deprivation and Child Development: Physical Characteristics and Epigenetic Statuses of Institutionalized Children**

Oxana Naumova<sup>2</sup>, Veronika Odintsova<sup>1</sup>, Irina Arinzina<sup>1</sup>, Daria Antsiferova<sup>1</sup>, Katya Shabalina<sup>1</sup>, Sergey Rychkov<sup>2</sup>, Rifkat Muhamedrahimov<sup>1</sup>, Elena Grigorenko<sup>1</sup>

<sup>1</sup>*Saint Petersburg State University, Saint Petersburg, Russia*

<sup>2</sup>*Vavilov Institute of General Genetics RAS, Moscow, Russia*

Early social deprivation is detrimental to the cognitive and social development of children and is associated with high risk of cognitive and behavioral impairments in adulthood. Epigenetic mechanisms of gene regulation may provide a causal link between the social adversities and health and developmental outcomes. We investigated whether early social (maternal) deprivation may significantly alter physical development and epigenetic statuses of children at the first stages of their development. Subjects were 50 children, aged 5 to 43 mos, recruited from orphanages and community in Saint-Petersburg, Russia. A set of intergroup comparisons was performed to identify significant differences in the characteristics of physical development (anthropometric

measurements) and epigenetic statuses (genome-wide DNA methylation patterns) in the institutionalized children (IC). There were obtained the tendency to delayed physical development and significantly reduced head circumference (a metric of brain size) in the IC. In turn, in the IC genomes there were found epigenetic alterations in a number of genes—the key regulators of cellular processes, and genes related to the CNS development and function, such as neuron migration and axon guidance. These results support and extend findings on biological mechanisms that may mediate the impact of early social deprivation on health and cognitive development of children, including long-term consequences into adulthood.

## Session 6.2: Open

### P6.2.01

#### **Development of a tool for the assessment of psychological phenomena related to labour: a pilot test.**

Ana Calero-Elvira<sup>1</sup>, Luis Lorenzo-Ruiz<sup>1</sup>, Héctor González-Ordi<sup>2</sup>, Vicente Ponsoda-Gil<sup>1</sup>, Raquel Miguel-Muñoz<sup>4</sup>, Montserrat Montañó-Fidalgo<sup>3</sup>, Rebeca Pardo-Cebrián<sup>1</sup>

<sup>1</sup>*Autónoma University of Madrid, Madrid, Spain*

<sup>2</sup>*Complutense University of Madrid, Madrid, Spain*

<sup>3</sup>*Álava Reyes Center of Psychology, Madrid, Spain*

<sup>4</sup>*University Hospital of Torrejón, Torrejón de Ardoz, Spain*

**Objectives:** In the scientific literature there is a notable lack of instruments for the assessment in Spanish of psychological phenomena related to childbirth and presumably involved in the management of pain and anxiety during labour. The aim of this work is to develop a Spanish psychometric tool that allows assessing psychological phenomena related to childbirth (expectations and experience of childbirth, pain, anxiety, fears, subjective preparation, and satisfaction) and to present the results of a pilot test of the instrument.

**Method:** Thirty women who are following up their pregnancy at the University Hospital of Torrejón (Madrid, Spain) will collaborate in the study. The women will be offered participation in the 12th week of pregnancy and will be asked to participate again in week 13 (temporary stability). The steps for the development of the questionnaire will be: Definition of the constructs that we intend to measure and establishment of objectives; initial proposal of items representing these constructs and definition of the response format; analysis of items for the elaboration of definitive items; study of reliability and validity.

**Results:** The items that will be part of the assessment tool will be presented. The initial data of reliability and validity obtained with this pilot test of the instrument will also be offered.

**Conclusion:** The possible applications of this instrument will be discussed in light of its social character for the service to one of the challenges of the world today.

### P6.2.02

#### **Discrimination towards ethnic minorities: How does it relate to majority group members' outgroup attitudes and support for multiculturalism?**

S.Cigdem Bagci<sup>2</sup>, Elif Celebi<sup>2</sup>, Selin Karakose Çelik<sup>1</sup>

<sup>1</sup>*Sehir University, Istanbul, Turkey*

<sup>2</sup>*Isik University, Istanbul, Turkey*

The aim of the study is understand how the prevalence of ethnic discrimination towards a target minority group would affect outgroup attitudes and support for multiculturalism among majority group members in the unique context of Turkish-Kurdish interethnic relationships in Turkey. Study 1 (N = 356) demonstrated that the extent to which majorities (Turkish) believed there was ethnic discrimination towards minorities (Kurdish) in the Turkish society was associated with positive outgroup attitudes and support for multiculturalism through decreased levels of perceived threat from the outgroup. Study 2 (N = 82) showed that Turkish participants who read bogus news reports about the prevalence of ethnic discrimination towards the Kurdish were more positive towards this ethnic group (higher levels of support for multiculturalism, culture maintenance, and intergroup contact) compared to participants in the neutral condition. Furthermore, participants who were presented with lower levels of discrimination (few companies have been discriminatory against the Kurdish) were more positive towards Kurdish people than participants who were presented with higher levels of discrimination (most companies have been discriminatory against the Kurdish). We discussed the importance of prejudice and discrimination in the formation of intergroup attitudes among ethnic majorities who are also vulnerable to evaluate the prevalence of ethnic discrimination in the society.

### P6.2.03

#### Comparison of the structure of political party perception in Poland, Lithuania and Ukraine

Ana Ivanova<sup>1</sup>, Oleg Gorbaniuk<sup>2,1</sup>, Olena Kuts<sup>3</sup>, Halyna Bevz<sup>4</sup>, Julia Paskevsk<sup>5</sup>, Izabela Piela<sup>2</sup>, Damian Kowalski<sup>1</sup>

<sup>1</sup>*The John Paul II Catholic University of Lublin, Lublin, Poland*

<sup>2</sup>*University of Zielona Góra, Zielona Góra, Poland*

<sup>3</sup>*Ivan Franko National University of Lviv, Lviv, Ukraine*

<sup>4</sup>*National Academy of Educational Sciences of Ukraine, Kyiv, Ukraine*

<sup>5</sup>*Zaporizhzhya National University, Zaporizhzhya, Ukraine*

The purpose of the presentation is to determine cross-cultural universality of political party perception dimensions in post-socialist countries. Party image was conceptualized within a psycho-lexical approach. Exploratory analysis of Polish lexicon describing political party revealed a five-dimensional structure of political party perception: three dimensions were related to personality traits (Strength, Disagreeableness and Integrity), one dimension described worldview (Left wing vs Right wing), and the last dimension included evaluation (Backwardness). As a result, 20-item political party image assessment questionnaire was developed. Confirmatory studies conducted in Poland (N=260), Lithuania (N=300) and Ukraine (N=320) revealed structural and metric equivalence of psychometric instrument. The questionnaire was found to possess good internal consistency and good test-retest reliability. The strongest connection between dimensions of political party perception and political preferences was indicated in Poland and Lithuania. The instrument was found to differentiate political party images. The political party image assessment questionnaire might be used as valid and reliable psychometric instrument in voting behavior studies.

### P6.2.04

#### The Relationship between Mindfulness and Theory of Mind: Moderating Role of Neuropsychological Readiness of Schizophrenia

Gholam Hossein Javanmard

*Payam Noor University, Bonab, Iran*

The present study is a descriptive- correlational research with predictive (regression) method. The aim of the study was to determine the relationship between mindfulness and theory of mind and neuropsychological characteristic of schizophrenia and determine the moderating effect of natural features of schizophrenia in the relation of mindfulness and theory of mind. For this purpose, the sample of 220 university students (110 males and 110 females) was selected by multistage random sampling method from the universities of Bonab. Kentucky Inventory of Mindfulness Skill (KIMS), 78-item Schizophrenia Scale of MMPI-2, and Reading the Mind in the Eyes Test (RMET) were used for data collection. The results indicated that high mindfulness in an individual leads to high theory of mind and low neuropsychological characteristic of schizophrenia. In addition, more neuropsychological characteristic of schizophrenia of individual leads to less theory of mind. According to the results of linear regression analysis, the predictive role of theory of mind and neuropsychological readiness of schizophrenia were confirmed in mindfulness ( $P < 0.01$ ). So that, theory of mind explained 65% of mindfulness variance and neuropsychological characteristic of schizophrenia 14% of mindfulness variance. Moderating regression analysis performance approved the moderating role of neuropsychological characteristic of schizophrenia in relation between theory of mind and mindfulness ( $P < 0.05$ ).

**Keywords:** Mindfulness, Theory of Mind, Neuropsychological characteristic of Schizophrenia, University Students



## P6.2.05

### **Using psychosemantic method for studying perception of motives' dynamics in movies. (On the base of "Rory O'Shea Was Here").**

Olga Mitina<sup>1</sup>, Alexandra Plotnikova<sup>2</sup>

<sup>1</sup>*Lomonosov Moscow State University, Moscow, Russia*

<sup>2</sup>*Branch of Lomonosov State University in Tashkent, Tashkent, Uzbekistan*

The method of revealing moviegoers' perception and understanding during watching the movie is presented. The perception of motivational dynamics mostly is implicit. Direct questions are unproductive if the respondent is not a professional critic. To identify these underlying representations we use the psychosemantic technique of attribution of motives. The researcher makes a list of motivational constructs which pertain to the main characters and the most significant actions committed by them. Respondents are asked to rate the extent to which a particular motivational construct determines a particular action. Then the set of motives-variables can be reduced till a few motives-factors. Each act gets the scores in the reduced space. This way it's possible to determine the extent to which the factor-motive determines this act. Because all actions during the movie are performed in a considered (not by chance) order, it is possible to present the motivational dynamics which implicitly contains in the movie. You can also highlight the actions of the opposite characters and see how the motivational dynamics of these antagonists correlate. We present an example of the analysis of the movie "Rory O'Shea Was Here". 90ss took part in the research. The following motives-factors were identified: overcoming, altruism, conformity, inferiority. The correlations of dynamics of these motives among three characters will be present. The characters interchange the motives' energy during the movie.

## P6.2.06

### **Effective self-regulation of functional state as a professional key differential competence**

Alla S Kuznetsova, Maria A Titova

*Lomonosov Moscow State University, Moscow, Russia*

The longitudinal study, conducted in high and average performance level professionals (50 teachers and 52 grid complex operators), was aimed to analyze the role of effective professional functional state's self-regulation under long-term innovation stress (in teachers) and under the tension of personnel assessment (in operators). The research was based on the Spencers' (1993) conceptual statement that key competences allow to differentiate efficient professionals from professionals with the superior performance; the ability of effective self-regulation of a functional state can be considered as such key competence in teachers' and operators' work. The methods included: the job stress survey (JSS), the coping questionnaire (SACS), the checklist designed to get data about coping means during the working day, the questionnaires that allow to evaluate changes in mental representation of a current functional state. The results revealed: the most effective functional state's self-regulation has been found in groups of high level performance teachers and operators; long-term tense conditions of innovative organizational changes require adaptive coping means that strictly correspond with accepted organizational rules and professional norms; short-time tensed conditions demand rapid targeted means of self-regulation. These results allow to elaborate training programs targeted for both maintaining high level of work performance and development of effective coping behavior.

## P6.2.07

### Subjective Well-Being Of Heads Of Ukrainian Educational Organizations In Terms Of Social Transformations

Olena Bondarchuk

*State Higher Educational Institution University Of Educational Management National Academy of Educational Sciences of Ukraine, Kyiv, Ukraine*

**Objectives.** To find out the levels of subjective well-being of heads of Ukrainian educational organizations.

**Theoretical bases.** Subjective well-being as a cognitive-judgmental process (E. Diener, R. A. Emmons etc.), psychology of management in education (O. Bondarcuk, L. Karamushka, W. Kritsonis etc.), career dynamics (E. Schein, D. Super, J. Holland etc.).

**Method.** The instruments used included *Satisfaction with Life Scale* (SWLS, E. Diener et al) and **Career Anchors Self-Assessment (CASA, E. H. Schein)**. The obtained data were analyzed using ANOVA and cluster analysis (SPSS-21.0). The sample included 482 heads of educational organizations from different regions of Ukraine.

**Results.** The respondents' subjective well-being mean score on the SWLS was 19.6, with a standard deviation of 4.3. It was lower compared to our previous research results (O. Bondarchuk, 2013). The cluster analysis on the **CASA** identified five clusters representing the groups of managers in accordance with their career orientations: stable (40.9 % of the respondents), entrepreneurs (17.9 %), professionals (13.4 %), life styles-oriented (9.6 %), and service-oriented (18.1 %). It should be noted that the service-oriented respondents had higher levels of subjective well-being ( $p < 0.01$ ).

**Conclusion.** The investigation findings can be helpful in increasing Ukrainian educational organization heads' subjective well-being by means of special training courses. This can be effectively done in the system of post-graduate teachers' training.

## P6.2.08

### The role of violence exposure and violence justification in child-to-parent violence

Lourdes Contreras, M. Carmen Cano, Patricia Jiménez García-Escribano

*University of Jaén, Jaén, Spain*

**Objectives:** From the bidirectionality of violence hypothesis it is suggested that child-to-parent violence could be associated to a previous history of violence within the family context. Thus, the purpose of the current study was to analyse if there were differences both in violence exposure in different contexts (school, neighbourhood, home, and TV) and in violence justification, among adolescents with child-to-parent violence behaviours and adolescents without these types of behaviours. Relations between these variables were also explored.

**Method:** A total of 246 of adolescents aged between 12 and 18 (44.7% boys and 55.3% girls), from a high school of Jaén (a province in the south of Spain) participated in this study. The Violence Exposure Scale and the C-VIFIP Scale were used to explore violence exposure and child-to-parent violence. In line with the bidirectionality of violence hypothesis, results showed that juveniles with child-to-parent violence behaviours reported higher levels of violence exposure, and that they are more prone to justify violence when comparing to juveniles without these types of behaviours. Furthermore, significant positive relations among these variables were found.

**Results and Conclusion:** Results are discussed in terms of their implications for the design and implementations of prevention and intervention programmes.

## P6.2.09

### Uniform differential item functioning by age in Slovak version of Eysenck personality questionnaire: pilot study

Michal Kohút, Peter Halama, Peter Žitný

*University of Trnava, Trnava, Slovakia, Slovakia*

**Objectives:** Differential item functioning (DIF) occurs when participants from one group have significantly different probability of endorsing item compared to participants with the same level of measured ability from another group (Clauser & Mazor, 1998). Presence of DIF can be considered as an evidence of bias, which is a threat for fairness of psychological assessment and internal validity of measurement tool (AERA, APA & NCME, 1999). Study focuses on uniform DIF between three age groups of 18-35 (N= 163), 36-50 (N= 173), 50-65 (N= 171) years old in Slovak version of revised Eysenck personality questionnaire (EPQ-R; Eysenck, Eysenck & Barrett, 1985).

**Method:** For DIF analysis, generalized logistic regression method (Magis, Raiche, Beland & Gerard, 2010) with purification and Benjamini-Hochberg adjustment of p-values was used.

**Results:** Six out of 100 items were flagged as differentially functioning. The Extraversion scale has the highest number of flagged items - 3, other scales have 1 DIF item each. All but one of these items show only small or negligible DIF. Item number 1 from Extraversion scale: "Do you have many different hobbies?" shows more severe, medium sized differential functioning. For this item, participants from second group (36-50 years) have significantly lower probability of answer yes than participants from other two groups with same level of extraversion.

**Conclusion:** Despite the presence of few DIF items, it seems that Slovak version of EPQ-R is not substantially biased in term of age groups.

## P6.2.10

### The Effect of Altruism, Personality Traits and General Ecological Behaviour on Driver Behaviours

Özgün Özkan<sup>1,2</sup>, Gülçin Dalkıç<sup>1</sup>, Timo Lajunen<sup>1</sup>

<sup>1</sup>*Middle East Technical University, Ankara, Turkey*

<sup>2</sup>*Ufuk University, Ankara, Turkey*

This study was aimed at investigating the effect of altruism, personality traits and general ecological behaviour on driver behaviours. The data was collected from 247 drivers by using the Turkish version of Driver Behaviour Questionnaire, The Self-Report Altruism Scale, Basic Personality Traits Inventory and General Ecological Behaviour scale. Hierarchical regression analysis was performed based on the given literature to see the prediction of (IVs) altruism, personality traits and ecological behaviour on (DVs) positive driver behaviours and aggressive violations. The results of the study indicated that helping behaviour which is an important component of altruistic behaviour is associated with positive driver behaviours. Also, negative valence was found as negatively associated with positive driver behaviours. Mobility and transportation subscale of General Ecological Behaviour was positively predicted positive driver behaviours, but it was not a significant predictor for the aggressive violations. The study has an importance about enlightening the relationship between personality characteristics and driver behaviours. The results are also important for road safety training, education, and counter measurements. Additively, this study is one of the first study which evaluates driver behavior within the concept of ecological behaviors. Results of the study will be discussed within the framework.

### P6.2.13

#### Implicit and Explicit Achievement Motivation Differentially Predict STEM Criteria

Mehmet Gültas, Yonca Toker

*Middle East Technical University, Ankara, Turkey*

**Objective:** The last 30 years of empirical research on personality has provided support for the notion that personality is made up of an implicit and explicit self and that both systems predict different outcomes. We sought to investigate the differential predictive power of implicit and explicit achievement motivation assessments on predicting Science, Technology, Engineering, and Mathematics (STEM) criteria at the college level.

**Method:** On a sample of 273 STEM majors, implicit motivation was measured with the Conditional Reasoning Test: Relative Motive Strength and explicit motivation was measured with the Work and Family Orientation scale and items from the International Personality Item Pool. STEM-GPA was calculated from transcripts and self-ratings of intentions to further pursue STEM areas were obtained.

**Results:** As expected, the implicit achievement motivation measure predicted objective success as indicated by STEM GPA and explicit achievement motivation scales predicted intentions to further pursue STEM areas. STEM interests had a trend of interacting with implicit achievement motivation in predicting STEM-GPA.

**Conclusion:** Findings contribute to the differential prediction discussed in the literature on explicit and implicit systems of the self and points to the most relevant assessments in education research depending on the outcomes of interest.

### P6.2.15

#### The mediating role of emotional dissonance in the relationship between teacher's emotional labor strategies and occupational well-being

Nasrin Arshadi<sup>1</sup>, Salehe Piryaee<sup>2</sup>

<sup>1</sup>*Shahid Chamran University of Ahvaz, Ahvaz, Iran*

<sup>2</sup>*Alzahra University, Tehran, Iran*

Emotional dissonance resulting from an employee's emotional labor strategies is usually considered to lead to negative employee's outcomes such as reduced occupational well-being. The purpose of this research was to test the effects of emotional labor strategies (surface acting, deep acting and expression of naturally felt emotions) on occupational well-being considering the mediating role of emotional dissonance. The sample of this research consisted of 150 high school teachers in Isfahan who were selected by stratified random sampling method. The instruments which used in this study were Teacher Emotional Labor Strategy Scale (TELSS), emotional exhaustion subscale in Maslach Burnout Inventory (MBI) and occupational well-being scale. Structural equation modeling (SEM) through AMOS-22 was used for data analysis. The results indicated that, emotional labor strategies relates significantly to emotional dissonance, and emotional dissonance relates negatively to occupational well-being. In addition, emotional dissonance mediated the effect of emotional labor strategies on occupational well-being. These findings could be explained by differences in the nature of various emotional labor strategies. Implications for teaching and teacher education are put forward.

### P6.2.17

#### **Difference in attitudes towards people suffering from eating disorders**

Ivana Škarica, Darija Zubic, Mia Flander

*University of Zagreb, Zagreb, Croatia*

The aim of this study was to examine the differences in attitudes towards people suffering from anorexia nervosa and bulimia nervosa. Secondary aim was to examine the main effect of gender on the attitudes towards these disorders and determine the interaction between gender and type of disorder. The study was conducted on a sample of 490 participants. The following instruments were used: Vignette that described person suffering from anorexia nervosa and bulimia nervosa, exact recognition of symptoms of eating disorders, cause attribution, questionnaire about attitudes towards people suffering from anorexia nervosa and bulimia nervosa, and demographic data. The results show statistically significant differences in the scale of immutability, controllability, social distance, social contribution and judgment. Participants perceived people suffering from bulimia nervosa as more socially contributive than people suffering from anorexia nervosa, and they tend to distance themselves less from bulimia patients. Participants also believe anorexia nervosa is more serious and harder to change than bulimia nervosa. The gender differences show that men perceive anorexia and bulimia nervosa in more negative light than women do. They perceive both disorders as easier to control, and they are expressing more judgment towards people suffering from them. In addition, men had higher levels of social distance of affected individuals, and they perceive them as less socially contributive.

### P6.2.18

#### **Adaptation After Errors In An Arithmetic Verification Task: Differences Between High- And Low-Math Anxious Individuals**

María Isabel Núñez-Peña<sup>1,3</sup>, Elisabet Tubau<sup>1,3</sup>, Macarena Suárez-Pellicioni<sup>2</sup>

<sup>1</sup>*University of Barcelona, Barcelona, Spain*

<sup>2</sup>*University of Texas at Austin, Austin, Texas, USA*

<sup>3</sup>*Institute of Neurosciences, Barcelona, Spain*

**Objectives:** Math anxiety is defined as an adverse emotional reaction to math or to the prospect of doing math, and it is a topic of increasing interest because of its negative consequences for math achievement. The aim of this study was to investigate a factor that may contribute to high math-anxious individuals' difficulties in math learning and performance: how they adapt their behavior following errors in an arithmetic task.

**Method:** Twenty high math-anxious (HMA) and 19 low math-anxious (LMA) individuals were presented with a multi-digit addition verification task and were given response feedback. Post-error adjustment measures (response time and accuracy) were analyzed to study differences between groups when faced with errors in an arithmetical task.

**Results:** Both HMA and LMA individuals were slower to respond following an error than following a correct answer. However, post-error accuracy effects emerged only for the HMA group, showing that they were also less accurate after having committed an error than after giving the right answer. Importantly, these differences were observed only when individuals needed to repeat the response given in the previous trial.

**Conclusion:** These results suggest that, for HMA individuals, errors cause a reactive inhibition of the just performed response, facilitating performance if the next problem required the alternative response but hampering it if the response was the same. This HMA's way of adapting their responses to math errors could be a factor contributing to the difficulties they experience when doing math tasks and to the negative impact of anxiety on performance.

## P6.2.19

### Reasons for Simultaneous Polydrug Use among Students in Health Care

Olga Hernández-Serrano<sup>1</sup>, María-Eugenia Gras<sup>2</sup>, Sílvia Font-Mayolas<sup>2</sup>, Montserrat Planes<sup>2</sup>

<sup>1</sup>Quality of Life Research Institute, University of Girona, Girona, Spain

<sup>2</sup>Escola Uniuersitària de la Salut i l'Esport (EUSES), Girona, Spain

**Introduction:** The European Monitoring Centre for Drugs and Drug Addiction has recently introduced the first classification for polydrug users (Type A: alcohol and tobacco consumers; Type B: cannabis plus alcohol and/or tobacco consumers; Type C: cannabis plus alcohol plus tobacco plus at least another kind of illegal drug), yet little is known about the reasons for simultaneous polydrug use (SPU) among the different typologies of polydrug users.

**Objectives:** 1) To describe the reasons expounded by SPU users to consume the second substance among healthcare students; 2) to explore the relationship between the different typologies of SPU users and their reasons for consuming the second substance.

**Method:** A total of 968 students (72.2% female) completed a survey on the frequency of SPU and their reasons for SPU within the previous six months.

**Results:** Results showed that the main reason was *"to increase the effects of the two substances"* followed by *"to increase the effect of the first drug used"*. The argument *"to decrease the effect of the first drug used"* was highly indicated amongst type C users with respect to Type A and/or B, whereas *"to increase the effects of the two substances"* and *"to increase the effect of the first drug used"* were more frequently identified by Type B and C users compared to Type A.

**Conclusion:** Further exploration on the reasons (benefits of SPU) associated with the types of polydrug user may provide important information on the growing trend in polydrug use among future healthcare professionals.

## P6.2.20

### Psychological Distance and Gender of Endorsers in Advertising: Moderating Effect of Self-relevance

Yoko Sugitani<sup>1</sup>, Taku Togawa<sup>2</sup>

<sup>1</sup>Sophia University, Tokyo, Japan

<sup>2</sup>Chiba University of Commerce, Chiba, Japan

The purpose of this study was to investigate how the gender of an endorser in advertising could have an impact on a perceived psychological distance toward the endorser and whether this could affect the product/service focal attributes. According to construal level theory, it is assumed that consumers feel psychologically closer to endorsers of the same gender than those of the opposite gender, and they tend to evaluate the product/service based on lower-level attributes. However, we hypothesize that when consumers recognize that the advertising context is less self-relevant, they do not attend to similarities with the endorsers and feel psychologically distant from them, even if the endorsers are of the same gender as the consumers. In the experiment, the participants were presented with either a high or a low self-relevant advertisement and asked to report psychological distance and focal attributes. The results supported the hypothesis only in the female participant condition. On the high self-relevant condition, female participants felt significantly psychologically closer to the endorser of the same gender compared to the opposite gender. On the low self-relevance condition, they felt more distant from the endorser of the same gender compared to that of the opposite gender. Significant differences were found in the focal attributes depending on the perceived psychological distance. Theoretical implications and future directions are discussed.



## P6.2.21

### "Normality" and Mood States at a Social Comparison

Norihiro Kuroishi<sup>1</sup>, Yoriko Sano<sup>2</sup>

<sup>1</sup>Japan Professional School of Education, Kanagawa, Japan

<sup>2</sup>Kanto Gakuin University, Kanagawa, Japan

**Objectives:** This study explored how social comparisons influence mood states. Previous studies (e.g. Kuroishi & Sano, 2015) showed robust tendency that relative performances at social comparisons influence the affective states. This study examined the effects of social comparisons on the mood states, measured by the Profile of Mood States 2nd Edition (POMS 2) short version. **Method:** Ninety Japanese university students (21 females, 68 males, and 1 other; aged 19-23) participated in this survey. The questionnaire was designed experimentally, and each of them included an imaginary story containing a social comparison situation. The relative performances of the protagonist as compared to surrounding others were manipulated. Each participant was asked to suppose he/she was the protagonist of the story, and to estimate his/her mood states in that situation.

**Results:** Positive moods (Vigor-Activity) were influenced by high or low performances at social comparisons. The higher one performed in a social comparison, the more positive moods he/she reported. On the other hand, negative moods (Anger-Hostility, Confusion-Bewilderment, Depression-Dejection, Fatigue-Inertia, and Tension-Anxiety) were determined by the same level of performances as others. Negative moods were lower when his/her performance was met around the surrounding others.

**Conclusion:** The results indicated two different processes that social comparisons influence mood states. High Performance reflected injunctive norms would foster positive moods, whereas equivalence to others met descriptive norm would undermine negative moods. It was suggested that "normality" cognition might mediate the relationship between social comparisons and negative moods.

## P6.2.22

### Profile of psychiatric symptoms in obese adult patients candidates for bariatric surgery: latent class analysis

Leorides Duarte-Guerra<sup>1</sup>, Marco Aurelio Santo<sup>2</sup>, Francisco Lotufo-Neto<sup>1</sup>, Yuan-Pang Wang<sup>1</sup>

<sup>1</sup>Institute & Department of Psychiatry, University of São Paulo Medical School, São Paulo, Brazil

<sup>2</sup>Departments of Gastroenterology, Clinical Surgery, University of São Paulo Medical School, São Paulo, Brazil

**Background:** The frequency of mental disorders in obese candidates for bariatric surgery is 80%. This study identified psychopathological profiles, in adult bariatric patients by gender.

**Method:** Latent class models were fit in the 393 treatment-seeking obese patients (79.1% women; mean age 43.0 years, mean BMI 47.8 kg/m<sup>2</sup>) recruited from a university-based bariatric center. Trained clinicians ascertained the psychiatric diagnosis of the participants through structured clinical interview for DSM-IV Axis I diagnosis (SCID-I).

**Results:** For both men and women, a 3-class model was the best fit to the lifetime data. Class 1, was labeled Bipolar-Comorbidity, it included 47% men and 33% women; it was characterized by high conditional probability of bipolar disorder (97% men, 100% women), substance use (63% men, 29% women), anxiety (61% men, 74% women) and eating disorders (50% men, 50% women). Class 2, was labeled Anxiety-Depression, include 13% men and 25% women; it was characterized by high conditional probability of anxiety (100% men, 99% women), depression (100% men, 84% women), substance use disorders (12% men) and eating disorders (55% men, 47% women). Class 3 was the oligosymptomatic, where patients have low or no chance of met criteria for psychiatric disorders (40% men, 42% women).

**Conclusion:** The bipolar-comorbidity is the most important psychopathological class. Men and women showed the same symptomatological profile, the differences appear in relation the frequencies. These findings make it possible to introduce new treatments in the pre and post operative period. Follow-up study will be performed for post-surgical reevaluation. Research supported by FAPESP (2012/17498-9 and 2012/17435-7).

### **P6.2.24 Cognitive and Behavioral Differences between Morning-Type and Evening-Type Drivers in China**

Yan Ge, Weina Qu, Yuexin Xiong, Kan Zhang

*Institute of Psychology, CAS, Beijing, China*

Individual differences in morningness-eveningness preference may influence susceptibility and response to sleepiness. These differences could influence driving performance, but the influence of morningness-eveningness preference on driving behavior and accident risk has not been comprehensively studied. This study explored the difference between Morning-type and evening type drivers in cognitive ability and driving behaviors from questionnaire and simulated driving experiments. The results of surveys showed that more dangerous driving behavior, as measured by the Dula Dangerous Driving Index, were all significantly correlated with more eveningness. Moreover, eveningness was more strongly associated with risky driving and negative emotional driving in those who scored high for trait agreeableness.. For cognitive abilities, the results showed that there was a main effect of chronotype on the accuracy and reaction time of visual search, and the accuracy of spatial working memory. More specifically, the evening type persons demonstrated better visual search and spatial working memory ability than morning type persons. For simulated driving behaviors, evening type conducted more speeding and higher speed in the afternoon session than in the morning session.

### **P6.2.25**

### **Factors Related with Psychological Distress in Women with Breast Cancer: Core Beliefs, Rumination and Type C Personality**

Burcu Ebru Aydogdu, Gülay Dirik

*Dokuz Eylul University, Izmir, Turkey*

**Objectives:** Diagnosis of breast cancer may cause psychological distress (anxiety, depression, and stress). Researches revealed that patients' psychological distress is related with shaking of core beliefs, rumination (intrusive and deliberate) and personality. Therefore, the aim of this study is to examine the relationships among challenges to core beliefs, rumination, Type C personality and psychological distress in breast cancer patients.

**Method:** The sample consisted of 201 patients and the age range was between 26 and 65. The participants completed Core Beliefs Inventory, Event Related Rumination Inventory, Type C Questionnaire, and Depression Anxiety Stress Scale. Hierarchical regression analysis was conducted to examine hypotheses.

**Results:** The results revealed that women have mild level of depression, anxiety, and stress. The results of regression analysis revealed that Type C personality was significant predictor of depression and stress. However, deliberate rumination was significant predictor of anxiety. In other words, Type C personality and using more deliberate rumination were associated with psychological distress in women with breast cancer. Focusing on these factors may be helpful for psychological health of breast cancer survivors.

### **P6.2.27**

### **Gender Differences In The Relationship Between Implicit Theories Of Intelligence And Mathematics Achievement**

Jasmina Kodžopeljić, Ilija Milovanović, Jasmina Pekić, Snežana Smederevac

*University of Novi Sad; Faculty of Philosophy; Department of Psychology, Novi Sad, Serbia*

The aim of this study was to explore the role of implicit theories of intelligence in adolescents' mathematics achievement by detecting gender-related patterns between them. Implicit Theories of Intelligence Scale (ITIS, Abd-El-fattah & Yates, 2006) has been applied to the sample of 514 high school students in Serbia (54.7% of girls; average age 16.8 years). Seven items of ITIS operationalize the belief that intelligence is fixed, stable and unchangeable characteristic (entity

theory), while the remaining seven items are related to the belief that intelligence is malleable and also enhanceable through individual efforts (incremental theory). Mathematics achievement is operationalized by the overall grade point average in mathematics. The results indicate differences in the prediction of mathematics achievement of boys and girls according to their implicit theories of intelligence. Although incremental theories of intelligence in both cases show a low correlation with the criterion (boys:  $\beta = -0.14$ ; girls:  $\beta = 0.11$ ), the important finding is that the boys' prominent beliefs about the possibility of developing intelligence are significantly related to their lower achievement in mathematics, while the correlation between these two variables in the group of girls occurs in opposite direction. These findings could be explained by greater tendency of boys to the entity theories of intelligence, which stems from the understanding of hardworking and dedication as typically feminine characteristics.

Keywords: implicit theories of intelligence, mathematics achievement, gender differences

## P6.2.28

### **The study of marital intimacy in pregnant employed and unemployed women of Ardebil.**

Roya Motavalli

*Islamic Azad University, Ardabil, Iran*

Marital intimacy is one of the main factors in original output of marriage, that can be influenced by different life periods such as pregnancy. On the one hand, its influence can be increased in employed women because of additional mental pressure of these women, so the sincerity of couple married in different societies, is different and can be influenced by social and individual factors. This cross-sectional- descriptive study was conducted on 93 pregnant employed and 93 pregnant unemployed women in Ardabil. The data gathering tools involved the informational forme, and the Bagarozzi intimacy questionnaires. The questionnaires were filled by pregnant women individually. There weren't any meaningful differences between total intimacy in pregnant employed and unemployed women. Also, there weren't any meaningful differences between pregnant employed and unemployed mothers in different three trimesters. The total intimacy showed meaningful correlation by evaluating factors in husband educational level and the educational level of pregnant mother ( $P < 0.05$ ) and in average monthly income ( $P < 0.001$ ). 93.5 percent of pregnant unemployed women and 94.6 percent of pregnant employed women have relatively middle level of intimacy. So to increase the intimacy of pregnant employed women and to increase the mental health of these main group of social and by considering the relatively intimacy of pregnant women in our study, strengthening of women via construction and consulting is a main responsibility of governments.

**Key words:** intimacy - employed women- unemployed women- pregnancy.

## P6.2.33

### **The relation between appraisals of mother-adolescent interaction and adolescent emotion regulation by using video-recall procedure**

Yih-Lan Liu, Hui-Tzu Chang

*National Chaio Tung University, Hsinchu, Taiwan*

Mother-adolescent interaction has been found to relate to adolescent emotional development and regulation. Yet, adolescent perception of the interaction with mothers might differ from mothers', and the differential perception might consider as a risk factor for adolescent development. This study used video-recall procedures to examine the subjective appraisals of mother-adolescent interaction and how the cognitive and affective appraisals related to adolescent emotion regulation competence.

120 adolescents and their mothers participated in this study. They were video-taped for 6 mins during discussion. They reviewed the tape and rated their own behaviors and the counterparts' behaviors on 8 cognitive or affective dimensions (e.g. conflictual, comfortable). Adolescents also completed Emotion Regulation Competence Scale.

The 8 dimensions of affective and cognitive ratings on interaction were summarized into warm vs. conflictual factors. The results of regression analysis indicated that adolescent perceptions of their own warm interaction ( $\beta = .384, p < .01$ ) and mothers' warm interaction ( $\beta = .324, p < .05$ )

predicted their emotion regulation competence.

To sum up, adolescent' perception about their interaction with mothers and mothers' interaction with them predicted their emotion regulation, whereas mothers' perceptions regarding their own interaction and adolescent interaction did not. Mother-adolescent warm interaction facilitated adolescent emotion regulation competence.

### **P6.2.35**

#### **The Mediating Role Of Depression And Anxiety On Relation Between Seasonality And Life Satisfaction**

Elvan Kiremitci, Hamit Coskun

*Abant Izzet Baysal University, Bolu, Turkey*

In this study, differences in seasonality, life satisfaction, depression and anxiety of university students as a gender, relation between of seasonality and life satisfaction and mediator role of depression and anxiety in this relation we examined.

The population of this study consists of university students who study in Psychology, Psychological Counseling and Guidance and Mental Disabilities and Special Education Teacher in Abant Izzet Baysal University. The sample of the study consisted; 168 girls and 59 boys are 227 students totally.

In this study, seasonality of university students was measured by Seasonal Pattern Questionary (SPAQ) which was developed by Rosenthal et al (1987) and adapted to Turkish by Noyan et al (2000), life satisfaction was measured by the Satisfaction with Life Scale which was developed by Diener et al (1985) and depression and anxiety symptoms were measured by Depression Scale of Brief Symptom Inventory which was developed by Derogatis (1992) and adapted to Turkish by Şahin and Durak (1994).

In the analysis of the data t test, one way ANOVA, regression analysis and mediator analysis were used. The findings were evaluated at .05 significant levels.

The findings of the study can be summarized; there is not any difference seasonality and depression level of university student on gender, but there is a significantly difference in life satisfaction and anxiety. In additionally, it was seen mediator role of depression and anxiety on relation between seasonality and life satisfaction.

Key Words: Seasonality, life satisfaction, depression, anxiety.

### **P6.2.36**

#### **Motivational regulation strategies in cooperative learning**

Takatoyo Umemoto<sup>1</sup>, Kenshiro Tanaka<sup>2</sup>, Naoya Yada<sup>3</sup>

<sup>1</sup>*Kyushu Women's University, Fukuoka, Japan*

<sup>2</sup>*University of Yamanashi, Yamanashi, Japan*

<sup>3</sup>*Graduate School of Osaka City University, Osaka, Japan*

Within self-regulated learning (e.g., Zimmerman, 2011), motivational regulation strategies play an important role in individuals' academic achievement (Wolters, 2011). This study aimed to clarify the motivational regulation strategies that feature in cooperative learning. Self-report questionnaires gathering qualitative data were administered to 228 undergraduates at three universities in Japan and of these, the data of 200 students who had experienced cooperative learning in high school or university were analyzed. A total of 299 qualitative responses were classified into 19 categories of motivational regulation strategies through the KJ method. The category with the highest number of responses was "mood changing," which was related to motivation enhancement as a result of work cessation and taking a break. The second category was "cause trouble," which entailed motivation enhancement through thinking that one troubles group members if one does not engage in cooperative learning. The third category was "inspired," which entailed motivation enhancement through observing someone who is engrossed in cooperative learning. These results indicated that undergraduate students use various motivational regulation strategies to enhance their own motivation to facilitate cooperative learning. Future research examining the relationship between motivational regulation strategies and cooperative learning is needed.

### P6.2.37

#### The Psychology of Man, Woman and Gender: Attitudes toward Gender Issues

Fatih Özdemir<sup>1,2</sup>

<sup>1</sup>Middle East Technical University, Ankara, Turkey

<sup>2</sup>Uludag University, Bursa, Turkey

The first purpose of the present study was to provide a general outlook on the issues of man, woman and gender, and discuss the perceived gender differences and the actual gender similarities in different contexts. Secondly, the study aimed to understand the attitudes of ordinary individuals toward gender issues with face to face interview technique. Twenty five individuals ( $N_{\text{female}} = 14$ ;  $N_{\text{male}} = 11$ ) participated in the interviews of research and their age range changed from 23 to 35. Participants provided a significant insight about their own man and woman descriptions, ideal man and woman figures and characteristics, perceived gender differences and similarities, perceived advantages and disadvantages of being man or woman, gender issues on family, daily language, career choices and business life contexts, the honor of man and woman, the artificiality of masculinity and femininity concepts, and negative effects of gender system on man and woman. The general outlook and interviews indicated the naturalized and culturalized aspects of artificial gender system, and its negative effects on optimal functioning of individual.

### P6.2.39

#### Are People Truly Compliant to Authoritarian Leader? A Moderated Mediation Effect of Benevolent Leadership on Subordinates' Compliance and Task Performance

Meng-Chun Lin<sup>1</sup>, Wan-Ju Chou<sup>2</sup>, Shu-Tsen Kuo<sup>3</sup>, Bor-Shiuan Cheng<sup>2</sup>

<sup>1</sup>Acer Computer Australia, Sydney, Australia

<sup>2</sup>National Taiwan University, Taipei City, Taiwan

<sup>3</sup>The Ohio State University, Columbus, USA

Authoritarian Leadership (AL) refers to a leader displays "strict discipline" and "dominant control" and demands unquestioned obedience from subordinates. It can be divided into two dimensions, discipline-focused AL and dominance-focused AL. Past research has found that AL results in compliance. However, different focused of AL may have different effects on subordinate's compliance. Furthermore, the relationship between compliance and task performance remains unsolved. Previous research also overlooked the possibilities that compliance may just be a strategy of impression management. That is, showing compliance in front of the leader but disobeying the orders behind the leader's back. To fill the gaps, we aim to examine how discipline-focused AL and dominance-focused AL affect different subordinates' compliance behaviors, either obedience or strategic compliance, differently. We further consider benevolent leadership as a boundary condition and address the interactive effects of two focuses of AL and benevolent leadership on task performance through subordinates' compliance behaviors. Data from 239 supervisor-subordinate dyads in Taiwan revealed that discipline-focused AL was positively related to obedience but not strategic compliance; whereas, dominance-focused AL was negatively related to obedience but positively related to strategic compliance. Additionally, benevolent leadership moderated the relationship between dominance-focused AL and strategic compliance, which further hindered task performance. This study contributes to the literature by examining whether subordinates are consistently being compliant or just strategically faking compliant to different focuses of AL, and integrating a moderated mediation effect of benevolent leadership.

## P6.2.40

### Psychometric Properties of the Turkish Form of Questionnaire of Unwanted Intrusive Thoughts

Müjgan İnözü, Burçin Akin

*Hacettepe University, Ankara, Turkey*

**Objectives:** Unwanted intrusive thought (UIT) is a thought/urge/image/sensation that suddenly pops into a person's mind. Although UITs generally have been studied with Obsessive-Compulsive Disorder (OCD), transdiagnostic model proposed that UITs can be seen in a variety of the disorders as eating, body dysmorphic, and hypochondriasis. The Questionnaire of Unwanted Intrusive Thoughts (QUIT) was developed to evaluate intrusive thoughts in OCD, Eating Disorder, Body Dysmorphic Disorder and Hypochondriasis. The aim of the present study was to adapt the QUIT into Turkish, and to examine its psychometric properties in a non-clinical university sample.

**Method:** The sample was composed of 259 participants. Having any psychiatric illness within the past 6 months was considered as an exclusion criterion, and the final analyses were conducted with 237 participants.

**Results:** QUIT examines the UITs using three different criteria: frequency, discomfort and control or appraisal strategies. Reliability analyses indicated that the internal consistencies were .83, .81 and .85 for obsessions; .90, .90 and .85 for physical appearance; .91, .90 and .89 for diet and physical exercise, and .87, .85 and .87 for health related UITs, respectively.

**Conclusion:** The validity analyses indicated that Turkish version of the QUIT had satisfactory convergent, criterion and divergent values. In all, this study was thought to contribute to the field by adapting a reliable and valid scale that measure different features of the UITs.

## P6.2.41

### Specific learning disorders (SLD): data from an Italian sample

Fiorenzo Ranieri, Manola Andreoli, Alessio Damora, Marta Stoppielli, Luciano Luccherino

*UFSMIA USL Toscana Sudest, Arezzo, Italy*

Recent studies show that approximately 3.2% of Italian children have dyslexia. The present study aims to explore the epidemiological features found in patients of the CAMHS (Child and Adolescent Mental Health Services) of Arezzo (Italy) presenting with Specific Learning Disorders (SLD). It has been examined a sample of 139 children and adolescents, who required an assessment for SLD. There were 93 males (66.9%) and 46 females (33.1%). The mean age was ten and a half years. Each assessment has followed a specific protocol. The final diagnoses were as follows: mixed disorder of scholastic skills F81.3 = 86 (61.9%); specific spelling disorder F81.1 = 12 (8.6%); specific disorder of arithmetical skills F81.2 = 8 (5.8%); specific reading disorder F81.0 = 6 (4.3%); other developmental disorders of scholastic skills F81.8 = 5 (3.6%); absence of SLD or other disorders = 22 (15.8%). Mixed disorder of scholastic skills (F81.3) and specific disorder of arithmetical skills (F81.2) were diagnosed between males and females with the same rates. Specific spelling disorder (F81.1 - M = 10.8%, F = 4.3%) and other developmental disorders of scholastic skills (F81.8 - M = 4.3%, F = 2.2%) were more likely to occur among males. Specific reading disorders (F81.0 - M = 3.2%, F = 6.5%) was more common in females. The subjects diagnosed with SLD were 116 with an average Full-Scale IQ (WISC-IV) of 97.98 (SD 12.36). In half of cases, specific test scores were not sufficient (request for attention + request for immediate action = 49.3%).



## P6.2.42

### The relationship between working memory and academic performance: Meta-analysis of the Taiwanese researches

Chong-shiann Hsu

*Chang Jung Christian University, Tainan, Taiwan*

**Objectives:** This study examined the relationship of working memory and academic performance by a meta-analysis of the studies conducted in Taiwan. Baddeley & Hitch (1974) discussed the differences between working memory and short-term memory, and indicated the importance of working memory for all kinds of human performance. The meta-analyses conducted by Daneman & Merikle (1996) and Friso-van den Bos, van der Ven, Kroesbergen, & van Luit (2013) showed the significant relationship of working memory and academic performance. They included only those studies which were written or published in English.

**Method:** The meta-analysis included the studies which were concerning this issue in Taiwan. Those studies which aimed to the samples with learning disability, emotional disability, mental retardation, or other disability were excluded. We collected 11 journal papers, which included 1764 students. Fix-effect model was used.

**Result:** It was found that the average correlation was .39 (standard error = .024,  $k = 12$ ,  $p < .05$ ). In the studies which measured the retention memory only, the average correlation was .49 (standard error = .034,  $k = 8$ ,  $N = 870$ ,  $p < .05$ ). In the studies which measured the retention and processing of memory, the average correlation was .42 (standard error = .026,  $k = 8$ ,  $N = 1536$ ,  $p < .05$ ). The difference between these correlations was significant.

**Conclusion:** This finding was opposite to Daneman & Merikle (1996). We will add the effect sizes from the dissertations, and expect different outcomes.

## Session 6.3: Organising effective psychological interventions

### P6.3.01

#### **Retrospective assessment of relationships in family and relational satisfaction of adolescents**

Agnieszka Malinowska<sup>1</sup>, Malgorzata Szczesniak<sup>1</sup>, Roman Szalachowski<sup>1</sup>, Sylwia Golab<sup>2</sup>, Joanna Krol<sup>1</sup>, Wojciech Rodzen<sup>1</sup>, Krystian Konieczny<sup>1</sup>, Mateusz Morawski<sup>1</sup>, Agata Hiacynta Swiatek<sup>1</sup>

<sup>1</sup>University of Szczecin, Szczecin, Poland

<sup>2</sup>ZUT, Szczecin, Poland

The aim of this abstract is to illustrate how retrospective assessment of parental attitudes is related to relational satisfaction of adolescents. Former findings demonstrate that parental non-acceptance, rejection, emotional coldness, overly controlling and insecure attachment proved to be associated with lower satisfaction of adolescents (Sheeber et al., 2007; Hinnen, Sanderman, Sprangers, 2009).

The present study was conducted on the group of 585 participants (51% women) whose age ranged from 15 to 19 years. The mean age was  $M=17,28$  ( $SD=0,86$ ). The data was collected with two tools. The Questionnaire of the Retrospective Assessment of Parents Attitudes (Plopa, 2008) measured five parental attitudes (separately for father and mother), regarding: acceptance, demands, autonomy, lack of consequence, and protecting ( $\alpha_{\text{fathers}}=0,776$ ,  $\alpha_{\text{mothers}}=0,833$ ). Family APGAR developed by Smilkstein (1978) was used to evaluate relational satisfaction and family functionality in the following domains: adaptation, partnership, growth, affection, and resolve ( $\alpha=0,828$ ).

A linear regression shows specifically which of correlated factors were input variables of relational satisfaction: mothers' ( $\beta=0.390$ ) and fathers' acceptance ( $\beta=0.188$ ) and fathers' lack of consequence ( $\beta=-0.128$ ). The model was significant ( $F(474,3)=80.15$ ;  $p<0.001$ ) and explained approximately 34% of the variance.

Outcomes confirm that parental acceptance and inconsistent fathers' behavior elicit relational satisfaction of adolescents.

### P6.3.02

#### **How does diagnosis influence a client? A case study of a client diagnosed with Asperger syndrome using positioning theory**

Hatsuho Ayashiro<sup>1</sup>, Mari Hirano<sup>2</sup>

<sup>1</sup>University of Fukui, Fukui, Japan

<sup>2</sup>Tokyo Kasei University, Tokyo, Japan

**Objectives and Method:** Diagnoses of mental disorders can influence people negatively, even though they are useful for therapy. Gergen (1994) suggested that they produce a deficit discourse that makes clients think that they cannot resolve their problems themselves. However, it is unclear how this diagnosis affects clients in practice. We examine this using a case study and Harré & van Langenhove's (1990) positioning theory as the theoretical framework. This theory is used to examine what happens in a therapy from a discursive perspective. The client, a 12-year-old Japanese boy at the first session, went through 97 sessions over four and half years. He was diagnosed with Asperger syndrome (AS) and was having troubles in his relationships. **Results:** Analyzing the data, we found that he was in four positions (a deficit, a patient, an abnormal, and a superior position) and had told three distinctive storylines ("Getting bullied was because of AS," "I haven't known my abnormality," and "I can be normal"). This suggests that he refers to AS as the black box that he could not see but that must have been the cause of his past experiences. From the viewpoint of positioning theory, the client gets the right to tell himself on the condition that he accepts his inability to control his inner mind himself. **Conclusion:** This study reveals how a diagnosis influences a client in practice as suggested by Gergen. We discuss what and how therapists should do in this situation.

### P6.3.04

#### **Effectiveness Of Emotional Induction Through Films In Psychological Research: A Meta-Analysis**

Luz Fernández-Aguilar<sup>1,2</sup>, Jose Miguel LaTorre<sup>1,2</sup>, Beatriz Navarro-Bravo<sup>2,3</sup>, Jorge Javier Ricarte<sup>1,2</sup>

<sup>1</sup>*Instituto de Investigacion en Discapacidades Neurológicas IDINE, Albacete, Castilla La Mancha, Spain*

<sup>2</sup>*Facultad de Medicina, Albacete, Castilla La Mancha, Spain*

<sup>3</sup>*Unidad de Apoyo a la Investigación Clínica, Gerencia de Atención Integrada de Albacete, Fundación del Hospital Nacional de Paraplégicos, Albacete, Castilla La Mancha, Spain*

Mood induction procedures (MIPs) are making a great contribution to our understanding of the relationship between what we feel, what we think and what we do, to our understanding the links between emotion, cognition and behaviour in normal and clinical populations. In this regard, the extensive literature on emotional induction shows that the use of film clips has increased considerably in the last decades. Induction by films consists in watching a brief set of fragments which usually come from commercial films.

Our purpose in the meta-analysis is to know the reason why it is one of the most popular methodologies. We assess when film clips are a good recommendation to elicit emotions in psychology research. Thirty-eight studies, with a total of 5207 participants, were reviewed. On the one hand, we analyze the peculiarities of the film method in the different studies considering 13 variables that may be influencing the effectiveness of the method, such as the number of conditions or if the repetition of film categories was counterbalanced. On the other hand, we consider the dimensional model of emotions and therefore we analyzed the ratings obtained in valence (pleasant/unpleasant) and arousal (high / low) to evaluate the emotional reactions.

The initial results suggest that, indeed, films are a good tool to elicit positive and negative emotion states. Likewise, the first analyzes indicate that age, sex, emotional stimulus category, number of stimuli presented and the type of neutral stimulus used to establish baseline act as moderating variables.

These results could help the scientific community to choose the experimental design that best suits their needs when working with emotional induction through films.

### P6.3.05

#### **How does stress impact on executive performance? The role of gender and emotion regulation ability**

Vera Newman, Belinda Liddell, Steven Most

*University of New South Wales, Sydney, Australia*

**Objectives:** Stress is a pressing psychosocial issue, and can be debilitating for sufferers. Stress interferes with aspects of executive function (EF), however, an understanding of moderators of the relationship between stress and EF is required to further disentangle how stress resilience may develop.

**Method:** The current study used a well-evidenced lab psychological and physical stress task to induce stress. Participants performed a task-switching task prior to and following the stress or control procedure.

**Results:** Whilst those in the stress condition experienced heightened stress via increased heart rate ( $p=.028$ ), elevated cortisol ( $p<.001$ ) and self-report measures ( $p<.001$ ) compared to the control condition, stress did not affect overall performance on the task-switching task ( $p=.47$ ). Moderation analyses revealed that the effect of stress on task performance was dependent on gender and trait reappraisal - a generally adaptive emotion regulation strategy; for females, higher trait reappraisal was associated with worse performance under stress ( $p=.04$ ), however for males, higher trait reappraisal was associated with marginally better performance under stress ( $p=.08$ ).

**Conclusion:** These findings indicate that the relationship between stress and EF may be dependent on individual differences including gender and dominant emotion regulation strategies. Further, they raise possible targets for stress resilience and effective psychological interventions based on the individual.

### **P6.3.06**

#### **Stages of Self-Regulation Development**

Ekaterina Sedova<sup>1</sup>, Tatiana Goryacheva<sup>1,2</sup>

<sup>1</sup>*Pirogov Russian National Research Medical University, Moscow, Russia*

<sup>2</sup>*Moscow State University of Psychology and Education, Moscow, Russia*

Although issues of self-regulation are in the focus of research in various spheres of psychological science, self-regulation development is still in need of further studying.

The current research was based on the three-level self-regulation model (Nikolaeva, 1991), including the level of mental states regulation, the operational level and motivational level.

**Objectives.** The aim of the research was to find out the problems of self-regulation development of students in the age from 7 to 12 years and to introduce intervention methods for eliminating those problems.

**Research sample** consisted of 145 students in the age from 7 to 12 years without mental and severe somatic diseases.

**Methods.** The first level of self-regulation was tested with the Luria's neuropsychological battery of tests, adapted by Semenov (2002), the school results were analyzed when estimating the second level and, finally, the third level was studied with the tests for school motivation by Guinsburg (1996), Louskanova (1996), Markova (1990) and Grebenyuk (2000).

**Results.** The research shown that in the age of 7-8 years the leading self-regulation level was the first one whereas in the age of 11-12 years the results of the activity were determined by the third level. The shifting between these two levels began in the age of 8-9 years.

**Conclusion.** The research results should be considered when designing intervention programs as defects of lower levels prevent from maturing of conscious self-regulation.

### **P6.3.08**

#### **Evaluation of emergence delirium in Polish children. The Pediatric Anesthesia Emergence Delirium Scale**

Marek Sobol<sup>2</sup>, Michal Meisner<sup>1</sup>, Malgorzata Sobol-Kwapinska<sup>1</sup>

<sup>1</sup>*John Paul II Catholic University of Lublin, Lublin, Poland*

<sup>2</sup>*Pediatric Hospital in Bielsko-Biala, Bielsko-Biala, Poland*

The aim of this study was to validate the Pediatric Anesthesia Emergence Delirium Scale (PAED) in Poland. The PAED is used to measure postsurgical delirium in children. Postsurgical delirium occurs when the child wakes up from anesthesia. This condition is described as a mental disorder consisting in hallucinations and disorientation, manifesting themselves in loud crying, concern, involuntary physical activity, and thrashing around in bed. During a fit of agitation, there is high risk that the child may injure the postsurgical wound or do harm to himself/herself or to a medical staff member. Sixty children (aged from 3 to 6), undergoing abdominal surgery, were recruited to test the reliability and validity of the PAED scale. The internal consistency of the PAED was .85, and its reliability was .80. We computed the correlations between PAED scores and age, time to awakening, and temperament traits measured by the EAS Temperament Survey. The results of our study support the reliability and validity of the PAED scale in Poland.

### **P6.3.09**

#### **Oppositions of children with Autism Spectrum Disorder**

Nadja Silva, Thais Vasconcelos, Lídia Moraes, Nicole Ribeiro

*Universidade Federal de Alagoas, Maceió, Brazil*

We discussed therapies for children with autism spectrum disorders (ASD). We propose alternatives to the hegemony of explanations based on neurological deficits because they neglect attention to the dialogic processes of psychological functioning. Here, we assume some theoretical

assumptions: Social origin of psychological processes; Function of language mediation and the recognition that communicative processes are the basis for psychological functioning. These assumptions based a multiple-case study with the objective of investigate the oppositions of children with ASD. This focus is justified because in the opposition situations lies the potential action of the self to differentiate itself in the interlocution. Opposition is surely a positioning of the self in interaction, which reflects History, Will and uses of language. Thus, opposition is an appropriate phenomenon to study the psychological functioning of people with ASD without the need the focus on deficits. Six to twelve years old children took part in this study. The data was videos of the interaction between them and a therapist, during their activities in a therapy section. The results revealed different patterns of language and behavior on the opposition composition for each child. The conclusion was that this diversity reflected the ability of each child to adequate to the characteristics of their interlocution. In this way, this ability could not be considerate a deficit. It presupposes functions of dialogical self.

### P6.3.10

#### **Are there links between attachment styles and early maladaptive schema domains?**

Pelin Bintas-Zörer, Gülay Dirik

*Dokuz Eylül University, Izmir, Turkey*

Objectives: According to schema therapy, psychological problems are based on early maladaptive schemas that originate from early interactions between child and caregiver. Bowlby's attachment theory is the most detailed model that takes the issue of child-caregiver relationship. Accordingly, secure attachment that includes positive mental representations of self and other or insecure attachment styles that include negative mental representations of self and/or other develop based on the quality of this relationship. Attachment styles are thought to be a mediator between early experiences and development of schemas. Therefore, present study aimed to investigate the relationship between attachment styles and early maladaptive schemas. Method: The sample of the study consisted of 557 undergraduates (199 male, 358 female;  $M_{age}=20.69$ ,  $SD=1.79$ ). MANCOVA was conducted to investigate the effect of attachment styles on schema domains after controlling for the effect of depression that activates negative schemas. Results: According to results, individuals with insecure attachment styles differed from individuals with a secure attachment style on Disconnection/Rejection, Impaired Autonomy and Unrelenting Standards schema domains. Conclusion: Results indicated that attachment styles characterized by different mental representations of self and other, associated with early maladaptive schemas. Therefore, it may be beneficial to work on these mental representations related with schemas that lead psychopathology in therapy process.

### P6.3.12

#### **Development of Self-other Consciousness among Children with Autism Spectrum Disorder through Psychodrama Method.**

Maki Nakamura<sup>1</sup>, Sayaka Okajima<sup>2</sup>, Miki Shiroshita<sup>3</sup>, Misaki Furukawa<sup>4</sup>, Ena Outo<sup>5</sup>, Naoko Doi<sup>6</sup>, Ayumi Muta<sup>7</sup>, Kaori Okumura<sup>8</sup>, Rie Takaki<sup>9</sup>

<sup>1</sup>Kagoshima University Master of Clinical Psychology, Kagoshima, Japan

<sup>2</sup>Nagasaki Nihon University Junior&Senior High school, Nagasaki, Japan

<sup>3</sup>Nagasaki Junshin Catholic University Counseling Center, Nagasaki, Japan

<sup>4</sup>Nagasaki City Social Welfare Corp, Nagasaki, Japan

<sup>5</sup>Nagasaki Junshin Catholic University Community Liaison Center, Nagasaki, Japan

<sup>6</sup>Misakae no Sono Mutsumi no Ie, Nagasaki, Japan

<sup>7</sup>Kokorogurumi Counseling Room, Nagasaki, Japan, <sup>8</sup>Shinjiyuen Hospital, Nagasaki, Japan

<sup>9</sup>Tagawa Hospital, Nagasaki, Japan

In this study, we examine development of self-other consciousness among children with Autism Spectrum Disorder (ASD;  $n=5$ ). We practiced the group approach at attached facility of university once a month. The program of the group approach was consisted of games for developing interpersonal relationships between children, psycho-dramatic role playing for sharing emotional

experience. In addition to those games, we conducted self-understanding inquiry (Demon & Hart, 1988) at session 3 and at session 14, then compared the two. We discussed the changes of children's self-other consciousness through self-understanding inquiry and psycho-dramatic role playing. The main results were as follows: (1) as for self-understanding inquiry, increase in clear description relating to themselves were shown; (2) as for psycho-dramatic role playing, deepening of the mutual understanding was showed and both positive comment and positive behavior had increased among the participants. This study showed the advantage of the psychodrama method of psychotherapy in developing of self-other consciousness among children with ASD and importance of multiple perspectives to study the reality of self-other consciousness among them.

### P6.3.13

#### **Well-Being and Affective Commitment among Ambulance Volunteers: A Mediation Model of Job Burnout**

Ilaria Setti<sup>1</sup>, Margherita Zito<sup>2</sup>, Lara Colombo<sup>2</sup>, Claudio Giovanni Cortese<sup>2</sup>, Chiara Ghislieri<sup>2</sup>, Piergiorgio Argentero<sup>1</sup>

<sup>1</sup>University of Pavia, Pavia, Italy

<sup>2</sup>University of Turin, Turin, Italy

**Objective.** Rescue workers are exposed to several psycho-social risks, in particular burnout. The aim of this study is to explore some antecedents and effects of job burnout among ambulance volunteers, according to the Job Demands-Resources model. Role conflict and social support are considered as antecedents of burnout which, in turn, may decrease the levels of affective commitment.

**Method.** 352 Italian ambulance volunteers filled in an anonymous self-report questionnaire investigating: emotional exhaustion and cynicism; role conflict; emotional support by colleagues and supervisors; affective commitment. Descriptive statistics and a structural equation model have been carried out.

**Results.** The estimated structural equation model shows good fit indices:  $\chi^2(67)=104.62$ ;  $p<.05$ ; CFI=.98; TLI=.98; RMSEA=.04; SRMR=.02. Results confirmed the role of social support as protective factor and role conflict as antecedent of job burnout which, in turn, decreases affective commitment. The relationship between role conflict and affective commitment is mediated by burnout which, on the contrary, does not mediate the relationship between social support and affective commitment.

**Conclusion.** In conclusion, social support can be considered a relevant protective factor against burnout. Since affective commitment have positive effects both on a personal and organizational level, it may be useful to increase it by reinforcing social support from supervisors and better defining role expectations among volunteers.

### P6.3.14

#### **The experience of private practice clinical psychologists in Brazil for outlining demands for treatment of Obsessive-Compulsive Disorder**

Gabriela Neves<sup>1</sup>, Paloma Silva<sup>1</sup>, Raphaella Moura<sup>1</sup>, Cristina Varanda<sup>1,2</sup>

<sup>1</sup>Universidade Paulista, Santos/São Paulo, Brazil

<sup>2</sup>Universidade de São Paulo, São Paulo/São Paulo, Brazil

Obsessive-Compulsive Disorder (OCD) is a mental health disorder characterized by the presence of obsessions and compulsions which has a worldwide prevalence of 4%. It has great social impact once it prevents people from dealing with their daily activities and it negatively influences their working life. Psychologists can contribute with both care and treatment, as well as researching the disorder process and how to deal with it. This is a qualitative research whose aim was to describe how private practice clinical psychologists work when treating people with Obsessive-Compulsive Disorder diagnosis in Brazil in order to outline the demands for care and treatment. An electronic form was sent to five professionals who expressed interest in participating. It was found that most psychologists currently working with patients diagnosed with the disorder work with the behavior analysis therapy. Although it is identified earlier, patients only look for therapeutic treatment when there are greater social losses. It was found that people diagnosed with the disorder do not benefit



from treatment offered by public health network in the state of São Paulo in Brazil, although there is no specific public policy devoted to OCD but rather to psychiatric patients in general. More research is suggested in order to provide data for proposing and implementing evidence-based health policies.

### P6.3.15

#### **How to Express Emotions: A Psychoeducational Group Therapy for Migraine Patients**

Pinar Kaya Kurtman, Özlem Bozo

*Middle East Technical University, Ankara, Turkey*

Migraine listed as the third common disease in both males and females around the world by The Global Burden of Disease Survey 2010 (GBD 2010) and it give rise to impairment in various areas of patients' daily lives such as social and work life (Abu Bakar, et al., 2015; Lipton et al., 2007).). It has been shown in the literature that the repression of hostility, social, personal, or sexual frustration triggers migraine attacks (Wolff, 1937) and migraine patients has more tendency to repress their emotions (Kopp, et al., 1995).

This study aimed to examine the effects of emotional expression group therapy on quality of life of migraine patients. The main hypothesis of this study was expressing negative emotions would reduce restriction of migraine patient's daily life routines which was measured with a pre- and posttest by Role-Function Restriction (RFR) sub-scale of Migraine Specific Questionnaire (version 2.1) which is migraine specific quality of life scale.

An eight session psychoeducational group intervention was conducted with nine female migraine patients (age range: 21-42). Pre- post measurements of RFR showed that, there was a significant increase between pre and post-intervention measurements of RFR. Our results indicate that the negative effects of migraine can be decreased by teaching emotional expression to migraine patients and encouraging them to practice it. In conclusion, teaching emotional expression to migraine patients might be a good alternative to expensive and time-consuming treatments.

### P6.3.16

#### **Emotional impact of breast cancer treatment: cross-sectional study on level of anxiety, angry, psychological distress and depression in 2-years perspective**

Dina Di Giacomo<sup>1</sup>, Jessica Ranieri<sup>1</sup>, Eliana Donatucci<sup>1</sup>, Katia Cannita<sup>3</sup>, Corrado Ficorella<sup>3,2</sup>

<sup>1</sup>Dip. Mesva, University of L'Aquila, L'Aquila, Italy/Abruzzo, Italy

<sup>2</sup>Dip. Discab, University of L'Aquila, L'Aquila, Italy/Abruzzo, Italy

<sup>3</sup>S. Salvatore Hospital, L'Aquila, Italy/Abruzzo, Italy

Surgical and pharmacological treatments, after breast cancer diagnosis, have a strong impact on emotional system of woman. Psychological resilience to the impact can do the difference in the recovering phase, and more in the medical outcomes. Some Authors identified the illness perceptions and coping as significant variables in the psychological distress after cancer diagnosis, but all researchers are conducted on old sample (<50 years old patients); few studies are focused on young population evaluating the influence of breast cancer diagnosis during medical treatments. Our investigation wants to evaluate the trend of emotional traits performance in screened younger women in a long period from diagnosis time: we detected data in 24 months (2-years perspective) from diagnosis, involving different patients in 4 phases of medical treatments. By cross-sectional study design, our aim was to analyze the level of depression, anxiety, anger and psychological distress among Italian breast cancer women, over a period of 24 months and their associations at baseline, 6, 12, 18, 24 months.

A test-retest study design was conducted on young patients sample (n° 163, mean age 46 years, sd ±9.2) evaluating their emotional features (variables: anxiety, angry, psychological distress, depression) at the time of diagnosis (T0), 6 months (T1), 12 months (T2), 18 months (T3) and 24 months (T4). The psychological battery was composed of: STAXI, STAI-Y, PDI, BDI-II.

Results showed the different performance in each variable during the medical treatments. Anxiety seemed decrease in time whereas angry tends significantly to improve; like them, also depression (p<0.002) and psychological distress (p<0.001) have been significant. Comparing the period of

evaluations, patients showed higher need of psychological support in order to get effective compliance to medical treatments later (T2 and more T3); apparently, women in T0 seemed more resilient because of emergency just because rather close to diagnosis experience. Our findings highlighted that in young women the breast cancer has strong emotional impact, but the effect of diagnosis is well-defined in late medical path; patients showed an intensive request of psychological support to deal with the progressive clinical protocols, and to be back to own life.

### P6.3.17

#### **Characteristics of the patients derived to a therapeutic community from out-patient centre of drug addiction.**

Eva Bacardí<sup>1</sup>, Fran Calvo<sup>1,2</sup>, Mercè Rived<sup>2</sup>, Xavier Carbonell<sup>2</sup>

<sup>1</sup>CAS Teresa Ferrer, Institut d'Assistència Sanitària, Girona, Spain

<sup>2</sup>FPCEE Blanquerna, Universitat Ramon Llull, Barcelona, Spain

**Introduction:** The derivation to residential centres is one of the most common resources in ambulatory treatment with patients with drug addiction. This paper aims to describe some of the characteristics of the treatment process in the therapeutic community (TC).

#### **Method**

**Context:** The CAS (Attention and Monitoring Centres for Drug Addiction) are ambulatory public centres of direct access. Such centres are composed of multidisciplinary teams comprised of professionals from different fields such as medicine, psychiatry, nursing, psychology and social work who assist users from a biopsychosocial approach.

The healthcare team monitored programs the therapeutic process of every user and suggests the derivation to other resources of the Drug Addiction Network (such as drug detoxification hospital units, dual pathological units and therapeutic communities) until the reinsertion of the patients is fulfilled.

**Sample and procedure:** The social worker of Girona's CAS registered during the year 2016 the data of the total of patients (n=22) who were derived to Therapeutic Community: date of application for admission, hospitalization /admission and discharge, the reason of the discharge, as well as some basic sociodemographical characteristics.

**Results:** The 90.9% (n=22) of the sample were men within the average age of 42.1 (ED=7.8). At the time the analyses were conducted 36.4% (n=8) were still patients and 5% (n=1) had successfully finished the treatment. The patients had an average experience of 1.9 previous hospitalization (Rank=1-3; ED=0.72). The number of previous admissions was related in a direct proportional way to age (p=.042).

Most of the patients ask for admission due to alcohol and cocaine problems. The 30% of the patients presented a previous dual pathology or concomitant (n=6). No significant differences were found within the rest of clinical and sociodemographical characteristics.

**Conclusion:** In conclusion this paper provides descriptive and interesting emerging data, valuable for the immediate clinical analysis. Therefore, the characteristics of patients derived to residential centres must be studied in order to identify the elements to improve the process of derivation, admission and discharge of the Therapeutic Community.

### P6.3.18

#### **What is the association between obsessive-compulsive disorder and eating disorders?**

Fatma Mahperi Uluyol, Mujgan Inozu

Hacettepe University, Ankara, Turkey

There is longstanding interest in possible relations between obsessive-compulsive disorder (OCD) and eating disorders (EDs). Although, in DSM V, OCD and EDs are categorized into different categories, researchers have still examined potential relations between OCD and EDs. Studies showed that EDs and OCD have similar cognitive, behavioral, and personality characteristics. Each condition has the cognitive feature of repetitive thoughts and preoccupations about a certain feared stimulus. For example, while EDs are characterized with preoccupation with food, body image and weight, OCD is characterized with obsessive preoccupation with symmetry, contamination etc. Compensatory behaviors follow these preoccupations for both EDs and OCD. Patients with ED show

restriction, binge/purge, and compulsive exercise, whereas patients with OCD perform handwashing/checking/other compulsion. For both groups, the purpose of these behaviors is to reduce negative affect. Moreover, evidence for such a link includes substantial diagnostic comorbidity between OCD and EDs. It is a well-known fact that understanding how and why comorbidity occurs is important to develop more targeted treatments programs. Therefore, the aim of the present study was to examine the relationship between severity of OCD and dysfunctional eating attitudes. Two hundred seventy-seven participants completed the demographic information form and a battery of self-report measures of dysfunctional eating attitudes, OCD symptoms, anxiety, stress, and depression. Results indicated that age significantly predicted severity of OCD symptoms. As age increased, OCD symptoms decreased. Furthermore, individuals' stress, anxiety, body shape and weight worry significantly predicted severity of OCD symptoms. The findings of the study support the association between OCD and dysfunctional eating attitudes. Results will be discussed within the frame of a dimensional approach.

### **P6.3.19**

#### **The Effectiveness of the Brief Intervention for the problems related to alcohol use among university servers**

Maira Leon Ferreira, Laís Marcórela Andreoli Sartes, Giane Batista Da Silva, Camilla Gonçalves Brito, Rafaela Toledo Dias, Isabela De Mattos Mendonça Luquini

*Universidade Federal De Juiz De Fora, Juiz De Fora, Brazil*

Brief Intervention (BI) presents characteristics of the Motivational Interview (MI) and it aims to motivate the individual to decrease the use of alcohol and other drugs (Babor et al, 2006). The objective of the study was to evaluate the effectiveness of BI in the university servers for problems related to alcohol consumption. This is a randomized controlled clinical trial, with an experimental design of a quantitative nature. The study has been in progress and has had 660 participants, which was fully approved by the Ethics Committee. After the application of the Alcohol Use Disorder Identification Test (AUDIT), individuals who scored on this test as an use of risk or harmful (8 to 19 points) ( $n = 56$ ) were randomized to two groups. Group 01 ( $n = 30$ ) received feedback on the AUDIT and informative pamphlets related to alcohol use. Group 02 ( $n = 26$ ) received the feedback, pamphlets and BI, which was tested in a single session. There was follow up by telephone after three months for groups 01 and 02. The results showed that both groups had a significant decrease in the pattern of alcohol use in the pre-test / post-test through Student's t-test ( $p = 0.001$ ), and in the number of doses consumed ( $p = 0.001$ ). However, when the interventions were compared, the BI was not superior to the group receiving the feedback and pamphlets ( $p = 0,409$ ). The application of the two interventions in the environment work was viable and both presented positive results, although new research will be necessary.

### **P6.3.20**

#### **The promotion of social inclusion by transparentizing social systems: a new public policy concerning the prison system in Japan**

Yumiko Kamise

*Rissho University, Tokyo, Japan*

This report suggests that "transparentizing social systems" is an important factor that demonstrated social and institutional support required for social inclusion. The Contact Hypothesis has been one of the most long-lasting and successful ideas concerning the reduction of prejudice or stereotypes. To reduce stereotypes or prejudices, some conditions need to be satisfied in contact situations. The provision of social and institutional support has been described as one of the essential conditions to decrease stereotype and prejudice (Brown, 2010; Hodson & Hewstone, 2013). However, it is not fully understood what constitutes productive social and institutional support, and how it changes people's attitudes. So, I focused on a new public policy (Private Finance Initiative on the correctional institution) concerning the prison system in Japan, as one type of the provision of social and institutional support. I expected that the introduction of the new Japanese prison system would make people's attitudes towards prisons change for the better. I conducted 4 questionnaires in 4 areas in neighborhoods that surround 4 prisons in Japan. In the

results, I could conclude that "PFI prisons can make a positive impact on neighboring communities", and "Transparentizing the prison system creates a positive attitude towards the PFI prison. This positive attitude then reduces aversion to the PFI prison and helps change attitudes towards former prisoners."

### P6.3.21

#### The Relation between Facial Feedback Effect and Personality Traits

Satoshi Ono<sup>1</sup>, Sanae Aoki<sup>2</sup>, Yukiko Araki<sup>3</sup>

<sup>1</sup>Graduate School of Comprehensive Human Sciences, University of Tsukuba, Tsukuba, Japan

<sup>2</sup>Faculty of Human Sciences, University of Tsukuba, Tsukuba, Japan

<sup>3</sup>University of Kanazawa, Kanazawa, Japan

**Objectives :** This study examined the relation between the facial feedback effect (FFE) and personality traits. Tomkins (1962) proposed "facial feedback hypothesis" that arousing the physical reactions such as facial expressions have an influence on feelings and the physiological awakening. Although numerous studies have supported facial feedback hypothesis, whether the FFE can occur to all people equally is controversial.

**Method :** In this experiment, university students (N=63) were randomized to two conditions: smile condition (required to move the facial muscles related with smiling), and control condition (required to move the facial muscles unrelated with smiling). In smile condition, participants were assigned to the three groups by degree of their extroversion: high group, middle group, and low group. Emotions and arousal were measured at the three time: Time1 (before the experiment), Time2 (after the stress task), and Time3 (after the facial manipulations).

**Results :** In the smile condition, high group showed that "Happiness" increased significantly from Time2 to Time3 ( $p < .05$ ), whereas low group showed no such as differences. Moreover, high group showed larger "Happiness" compared with low group at Time3 ( $p < .05$ ).

**Conclusion :** The positive changes that might be caused by FFE didn't occur to all people equally. These findings suggested that personality traits should be considered in the future study about FFE.

### P6.3.22

#### Study on Assessment of Interaction between Parents and Adoptive Children in " Parent-Child Cooking " Therapy

Li-Yun Wu

*Dept. of Counseling and Guidance, National University of Tainan, Tainan, Taiwan*

**Objectives:** This study is on the basis of Landreth's filial therapy training model. It attempted to combine two specialized fields: "life application " and "psychotherapy", in the hope of developing 10-week "Parent-Child Cooking" program to promote attachment and parenting skills in adoptive families. The Purpose of this study was to explore the patterns and meanings of interaction between parents and adoptive children in "Parent-Child Cooking" therapy.

**Methods:** Consensual Qualitative Research was adopted. Process analysis on three adoptive families with adoptive children were aged from 7 to 9 years old, via 10 hour (1Hr/week) "Parent-Child Cooking" with video recording. In addition, the program would be facilitated by a counselor. The counselor provide supervision for parents about interaction in " Parent-Child Cooking " 10 hour (1Hr/week).

#### **Results:**

1. Both parents and children showed great interest and willingness to cook.
2. Three interaction patterns in parent-child cooking sessions: (1)Adult-centric: "parent-dominated cooking," with the implicit behaviour of "parents secretly trying to exert control.(2) Semi-child-centric: parents entrusted their children with the tasks of both cooks whilst partially authorized them to make decisions.(3) Child-centric: Children dominated cooking in the child-centric pattern.
3. Following the progress of the "Parent-Child Cooking" program , parents increasingly let children to dominate cooking and focused on the children. Parents conveyed Child-centric interaction pattern, allowed children to lead, fellow child's lead, and reflected children's nonverbal behavior.

4. Parents identified and encouraged children's positive behavior.

#### **Conclusion**

1. "Parent-Child Cooking" therapy can be utilized to assess the patterns of interaction in the adoptive families.
2. Parents put in effort to overcome the children's problems. Moreover, parents could be made aware of and then modify their view to cope with it.
3. "Parent-Child Cooking" program had effects on enhancing the parenting function and attached relationship.

#### **P6.3.23**

#### **Profiles of Neurocognitive Impairments of Patients Diagnosed with Epileptic and Psychogenic Non-epileptic Seizures**

Maria Damianova<sup>1</sup>, Skye Hanekom<sup>1</sup>, David Anderson<sup>2</sup>

<sup>1</sup>Monash South Africa, Johannesburg, South Africa

<sup>2</sup>University of the Witwatersrand (Wits) Donald Gordon Medical Centre, Johannesburg, South Africa

Epileptic and psychogenic non-epileptic seizures (PNES) are both associated with multiple neurocognitive dysfunctions but the differential account of these dysfunctions still remains equivocal. The aim of the study was to explore the profile of the neurocognitive impairments of PNES patients compared to epileptic patients. The total sample of 30 participants included 18 PNES patients and 12 epileptic patients with mixed seizure semiology. The sample consisted of 23 male and seven female participants, aged between 18 and 51 years ( $M = 36.6$ ,  $SD = 14.7$ ). All participants were administered neuropsychological tests tapping memory, attention, reasoning and executive control. There were no significant between-group differences on these measures. However, with reference to normative data for non-clinical populations, the neurocognitive profiles of the two groups displayed common and specific deficiencies. Executive control was impaired in both groups. Verbal working memory and narrative memory capacities were impaired in the epileptic patients, but not in the PNES patients. Visual working memory, retention and recall were impaired in the PNES patients, but not in the epileptic patients. This differential pattern points to a possible hemispheric lateralisation of the neurocognitive impairments in the PNES patients, with a more pronounced right hemisphere broad based involvement. These results highlight the specificity of the neurocognitive dysfunctions associated with PNES.

## Session 6.4: Promoting excellence and stimulating labour market participation

### P6.4.02

#### **Proactive Personality and Career Advancement Prospects: A moderate Mediating Model**

Ting Liu, Qishuo Liu, Xiang Yao

*School of Psychological and Cognitive Science, Beijing/Haidian District, China*

Proactive personality is helpful for employees to get a career success, but the mechanism from employees' proactive personality to career advancement prospects still unclear. Based on the social cognitive theory of career and academic interest, choice, and performance, this research investigated the relationship between proactive personality and career advancement prospects, the career efficacy as a mediation, and the supportive leadership as the moderation. A two-wave survey was carried out in a manufacturing enterprise in China, 260 employees and 50 department managers enrolled this study.

Results showed that: 1) employees' proactive personality positively correlate with career efficacy and career advancement prospects; 2) employees' career efficacy mediates the relationship between proactive personality and career advancement prospects; 3) supportive leadership strength the mediation between proactive personality and career advancement prospects. Specifically, the level of supportive leadership is higher, the mediation between proactive personality and career advancement prospects is stronger, while the weaker conversely. We discuss implications of these findings, limitations, and directions for future research.

### P6.4.03

#### **How and When the Managers Engage to Their Work? The Mediating Role of Psychological Capital and the Moderating Role of Supervisor Support and Work-Based Friendship on the Leader Identity - Work Engagement Relationship**

Yuan-Hsi Liao, Tzu-Ting Lin

*National ChengChi University, Taipei city, Taiwan*

This study focuses on different forms of psychological resources of supervisors: two of them are from leaders themselves (leader identity and psychological capital); others are from workplace social support (supervisor support and work-based friendship) to illustrate how those psychological resources contribute to their work engagement. More specifically, this study investigates how leader identity influences the work engagement of leaders through development of their personal psychological resources: psychological capital. In addition, this study examines how supervisor support and work-based friendship interacts with psychological capital to predict work engagement through the mediating effect of psychological capital. Based on a 2-wave data from 105 supervisors, the result showed that there is direct positive relationship between leader identity and work engagement. However, it showed psychological capital mediates the leader identity and work engagement relationship under certain conditions. Finally, the finding revealed that work-based friendship moderates this mediated relationship but supervisor support did not. This finding suggests that unlike the findings of empirical research on general staff, work-based friendship could be a more useful psychological resource for supervisors, comparing to supervisor support. Our results have implications for organizational support systems on supervisors. The article concludes with a discussion of practical implications and future research suggestions.



#### P6.4.05

### Social distance in Lithuanian psychology and social work students and professionals

Aiste Pranckeviciene<sup>1,2</sup>, Kristina Zardeckaite-Matulaitiene<sup>1</sup>, Rasa Marksaityte<sup>1</sup>, Aukse Endriulaitiene<sup>1</sup>, David D. Hof<sup>3</sup>, Douglas R. Tillman<sup>3</sup>

<sup>1</sup>*Vytautas Magnus University, Kaunas, Lithuania*

<sup>2</sup>*Lithuanian University of Health Sciences, Neuroscience Institute, Kaunas, Lithuania*

<sup>3</sup>*University of Nebraska at Kearney, Kearney, USA*

**Objectives:** This cross-sectional study is aimed to compare desire for social distance from people with mental illness in social work and psychology students and professionals having different professional experience (from the beginning of the professional education to the long term professional practice).

**Method:** 948 respondents (715 students and 233 professionals) participated in anonymous survey. Social distance was measured using Lithuanian Social Distance Scale which was created for this study. Participants also answered questions about familiarity with mental illness. Bias of social desirability was measured using Balanced Inventory of Desirable Responding (BIDR) (Paulhus, 1991).

**Results:** Series of univariate ANCOVA revealed that psychology and social work Master and PhD students reported less social distance from people with mental illness when compared to Bachelor students. Familiarity with mental illness was significantly related to less social distance in students' sample, but not in professionals' sample. In professionals sample strongest desire for social distance was observed in social workers having less than five years of professional practice and most experienced psychologists with more than 10 years of professional practice.

**Conclusions:** Social distance from people with mental illness decreases through the study years, however results of professional psychologists and social workers illustrate different trajectories in social distance through the professional career.

## Session 6.5: Strengthening society's resilience; prevention and early intervention

### P6.5.01

#### Character strengths as protective factors of Internet addiction: Persistence and prudence

Agnieszka Malinowska<sup>1</sup>, Laura Kaliczynska<sup>1</sup>, Roman Szalachowski<sup>1</sup>, Malgorzata Szczesniak<sup>1</sup>, Sylwia Golab<sup>2</sup>, Malgorzata Maria Kulik<sup>1</sup>, Oliwia Awierianow<sup>1</sup>, Aleksandra Standio<sup>1</sup>, Krzysztof Wietrzynski<sup>1</sup>, Mateusz Morawski<sup>1</sup>

<sup>1</sup>University of Szczecin, Szczecin, Poland

<sup>2</sup>ZUT, Szczecin, Poland

The purpose of this report is to illustrate how character strengths are related to the Internet addiction (IA). Literature shows that very little empirical research has explored their role in prevention and addictions (Duckworth et al., 2005; Krentzman, 2013). Self-regulation, which is an exception, correlates negatively with IA (Larose, 2011).

In total, 151 people (70% females) participated in the study, and their age ranged from 16 to 22 years ( $M=17,26$ ,  $SD=1,05$ ). The data was collected with Young's Internet Addiction Test and the International Personality Item Pool Values in Action (IPIP-VIA).

A linear regression shows that out of six character strengths factors correlated with IA (humility, prudence, self-regulation, equity, persistence, integrity, and open-mindedness), two were input variables: persistence ( $-0.283$ ) and prudence ( $-0.235$ ). The model was significant ( $F(94,2)=11.22$ ;  $p<0.001$ ) and explained approximately 20% of the variance.

Our findings contribute to a recent stream of research, indicating that persistence and prudence are negative predictors of IA. In the previous studies IA was negatively correlated with work effort (Capetillo-Ventura, Juarez-Trevillo, 2015). When it comes to prudence, studies show that prudent people use reason rather than emotions to modulate their behavior (Niemic, Wedding, 2013), know what should be done and what should be avoided, are concerned about consequences of their actions, successfully resisting impulses (Peterson, Seligman, 2004).

### P6.5.02

#### Study of Relationship between Social Adaptation with Measuring Help-Seeking Styles and Causal Attribution

Ryouichi Unozaawa, Saki Kosakabe, Aina Isogai, Takuro Nakatsubo

Shukutoku University, 200 Daiganji Chuo-ku Chiba City, Chiba, Japan

**Objectives :** The purpose of this study is to clarify what factors are related to social adaptation.

**Method :** A new scale was created based on the image survey for social adaptation. A questionnaire survey using the new scale, the Locus of Control Scale created by Kamahara et al. (1987), and the Measuring Help-Seeking Styles scale prepared by Nagai (2013) was conducted among 110 college students. Correlation analysis between scales and analysis of variance of Social Adaptation Scale scores in three factors of Measuring Help-Seeking Styles were conducted.

**Results :** The correlation analysis found a negative correlation ( $r = -.391$ ,  $p < .001$ ) between "adaptation to group" in the Social Adaptation Scale and the Locus of Control Scale. On the other hand, no significant difference was observed in the results of the analysis of variance ( $F[2, 70] = 0.01$ , n.s.).

**Conclusion :** This result indicates that those who attribute the cause of the problem to themselves in daily life have difficulty adapting to the group. However, this result does not clarify the causal relationship between causal attribution and adaptation to group. In future study, it will be necessary to clarify the characteristics of individuals in further detail by conducting additional research such as interview survey and to deeply examine the relationship between causal attribution and social adaptation.

### P6.5.03

#### **The impact of the ViSC bullying prevention program on school teachers: Longitudinal data from Austria, Cyprus and Turkey.**

Christoph Burger<sup>1</sup>, Olga Solomontos-Kountouri<sup>2</sup>, Aysun Dogan<sup>3</sup>, Dagmar Strohmeier<sup>1</sup>

<sup>1</sup>*University of Applied Sciences Upper Austria, Linz, Upper Austria, Austria*

<sup>2</sup>*Neapolis University Pafos, Paphos, Cyprus, <sup>3</sup>Ege University, Izmir, Turkey*

The ViSC Social Competence Program is an evidence-based bullying prevention program that has been developed and implemented in Austria as part of the national strategy for violence prevention. It utilizes a cascaded train-the-trainer model where experienced educators (i.e., ViSC multipliers) complete a specialized training module (i.e., ViSC training course) and then perform in-school teacher trainings in the participating schools. The trained teachers then in return train and interact with students in their schools. Initial program implementation takes one school year. So far the ViSC program has also been adopted by schools in various countries and its effects regarding students have been thoroughly evaluated. This study presents large-scale evaluation results regarding the ViSC program's effect on teachers' use of intervention strategies as measured by the Handling Bullying Questionnaire in three culturally diverse countries: Austria (T1: N=333, 76% female), Cyprus (T1: N=212, 77% female) and Turkey (T1: N=217, 75% female). A longitudinal three-wave (pre, post, follow-up) intervention-control group design was used. Results do not only suggest that the ViSC program successfully increases teachers' overall likelihood to intervene but also particularly their likelihood to work supportively with victims. Results indicate that continuous effort in teacher training is necessary to produce sustainable results. Further implications of the results will be discussed in detail.

### P6.5.04

#### **Confrontation with 'I-as-betrayed' from different time distances. A linguistic analysis of narratives based on the Thematic Apperception Test**

Malgorzata Sobol-Kwapinska, Michal Meisner, Aneta Przepiorka

*John Paul II Catholic University of Lublin, Lublin, Poland*

The aim of this study was to compare stories based on Card 3F from the Thematic Apperception Test (TAT) on the experience of betrayal - a hurtful experience of violation of the confidence in the other person. Betrayal can have serious negative consequences for the victim's mental health. In the process of dealing with such a difficult experience it is important to confront the emotional and cognitive aspects of the harm suffered in this situation. We postulated that the stories about hurt feelings would have a different character depending on the time distance from which these experiences are described. The participants in the study were 200 women, aged from 20 to 60. They were divided into three groups: (1) the first group described the situation of harm stating that the situation was happening in the present; (2) the second group described the same situation with the information that it had happened two weeks before; (3) the third group described the same situation with information it had happened five years before. We applied the Linguistic Inquiry and Word Count system to obtain quantitative information regarding the linguistic and semantic contents of the narratives. In the narratives written from the perspective of the present there were significantly more negations, positive emotions, and expressions relating to the future and sexuality than in narratives written from the perspective of two weeks and five years. In the "present" narratives, however, there were significantly fewer expressions relating to space. One of the contexts in which these results were interpreted was the Construal Level Theory.

## P6.5.05

### **Adjustment to pediatric chronic disease: Psychologic well-being and anxiety in cystic fibrosis.**

Selene Valero-Moreno, Inmaculada Montoya-Castilla, M<sup>a</sup> Antonia Pérez-Marín, Vicente Prado-Gascó

*Universitat Valencia, Valencia, Valencia, Spain*

Cystic fibrosis (CF) is considered one of the most frequent rare diseases in the society, which has no cure. Suffering a chronic disease in adolescence implies a rupture of the vital schemes. These patients must use strategies to fit the diagnosis, treatment and evolution of the disease. The aim of this investigation is to identify the impact of CF on the psychological well-being of patients. Participants were 20 adolescents with CF, from Clinical Hospital of Valencia. After signing the informed consent, questionnaires were filled in a single testing session. The variables analyzed were: anxiety (Scale of Anxiety of Hamilton) and psychological well-being (Scale of Psychological Well-being for adolescents of Casullo and Castro).

Among the results, we emphasize that a) 35% of patients need to improve their psychological wellness in regard to: control of situations (35%), projects of life (50%), significant relations (25%) and acceptance of themselves (10%); b) no significant statistical differences were found between boys and girls; c) life projects are directly related to the age; d) 15% of adolescents with CF shows anxious symptoms; e) these symptoms are not related with psychological well-being, possibly due to the small sample size.

It is necessary to continue to investigate the risk factors and adjustment in these patients, to develop and implement intervention programs, which increase the psychological well-being of patients and decrease the anxious symptoms.

## P6.5.06

### **Health promoting voices from the South: Is there anybody out there?**

Charles Viljoen

*North West University, Potchefstroom, South Africa*

Health promotion finds itself in an increasing complex world. As an international movement it has gained acceptance as one of the most powerful approaches to promote health, empower individuals, groups, communities and societies in the effort to satisfy needs and realize potential. As the global configuration of nations - and accompanying dynamics - become more complex and interrelated, an urgent need develops to cope with the uncertainties and ambiguities pertaining to issues like community building, prevention and social innovation. Although the health promotion agenda was set within the countries of the North, major innovative research and developments also took place in the countries of the South. The growing global complexity in the reconfiguration of nations presupposes an urgent and in-depth unpacking of the uncertainties and ambiguities beyond control as well as the helplessness that calls for community building and social innovation. The focus of this presentation is to collate research from South Africa, as well as in Botswana, focussing on health and health promotion in and through schools. Projects were done from a holistic, ecosystemic and salutogenic approach investigating the role of teachers, parents, students and vulnerable children (Aids affected) and their perceptions of health and health promotion. Results emerging from the various projects include: schools and communities are functioning between the two poles of either being dysfunctional/toxic and healthy; the concept of health and health promotion should be broadened to include sources of strengths (fortigenesis) as well; a better understanding of the growth, strengths, prevention, protection and enhancement of the individual, school and community should be a central focus; the medical model is still the basic point of departure in health promotion; the pathogenic view of society and salutogenesis can be viewed as two opposing positions on the illness/wellness continuum; health literacy should be developed by all stakeholders as a critical empowerment strategy to increase people's control over their health.

## P6.5.08

### **How the coping mechanisms of young Irish males are influenced by the presence or absence of alcohol: An Interpretative Phenomenological Analysis**

Daniel O'Callaghan, Inge Nieuwstraten

*University College Cork, Cork Ireland*

Objective: Men predominate in the death rate of both suicide and alcohol. There is evidence for a link between alcohol consumption and suicide in Ireland. The 18-24 male age group is most susceptible to suicidal behaviour. In terms of vulnerability, there may be a link between suicidality and a lack of effective coping mechanisms when faced with psychological distress. The study examines the coping mechanisms of young men, both drinkers and non-drinkers.

Method: Data were collected through semi-structured interviews with eight male participants (aged 19-24, four drinkers/non-drinkers), and analysed using Interpretative Phenomenological Analysis.

Results: Three main themes were identified, allowing for comparison between drinkers/non-drinkers: social identity, the 'sobriety guard', and the (brief) escape. Alcohol impacted on coping in identity, expression, accessibility, control, and 'dealing with' versus coping. Drinkers exhibited a conflict between own and societal ideals. Non-drinkers evidenced a more problem-focused approach to coping and greater internal locus of control.

Conclusion: Promotion of non-drinkers as adopters of a feasible lifestyle and not as an isolated minority group is encouraged. Health initiatives might highlight non-alcohol related stress-diminishing interventions, such as physical exercise.

## P6.5.09

### **Social Representations Of Chronic Kidney Disease For Patients Who Perform Hemodialysis**

Andréa Bousfield, Larissa Koelzer, Beatriz Coltro

*Federal University of Santa Catarina, Florianópolis/Santa Catarina, Brazil*

The objective of this research was to verify the social representations of chronic kidney disease for patients who perform hemodialysis. Twenty-five people participated, 12 women and 13 men. Selection criteria of participants were: age greater than 18 years, dialysis for at least six months, clinical stability, ability to answer the interview and accept to participate. As a criterion for exclusion, the history of renal transplantation was used. For textual data analysis it was performed a lexical analysis and a descendent hierarchical classification with IRAMUTEQ software. The social representations allow the apprehension of the processes and mechanisms through which individuals build their knowledge about the disease and assist in the understanding of coping strategies for chronic condition. Therefore, the research relevance sits in the possibility of improving the comprehension of chronic kidney disease social representations. It can be concluded that there is a predominantly negative significance of chronic kidney disease, which is very attached to the meaning of the treatment, since hemodialysis is considered an arduous treatment.

## P6.5.10

### **"Emotional literacy - developing socio-emotional competence in kindergartens and schools"**

Mia Flander, Suzana Jurac, Dina Koren, Vesna Hercigonja Novkovic

*Clinic Kocijan Hercigonja, Zagreb, Croatia*

The project "Emotional literacy - developing socio-emotional competence in kindergartens and schools" was developed on the basis of insight into the growing increase in violence, anxiety, depression, emotional inadequate responses and poor academic performance of children of primary school age and younger.

It is based on the education of teachers, educators and professional services of kindergartens and schools on the subject of emotional literacy as a prerequisite for their networking, capacity increase and development of competencies for working with children.

Emotional literacy is the ability of people to control aspects of their life associated with emotions, to recognize their own and others' emotional states, to take control over their own emotional impulses, to motivate themselves, to easily recognize the emotional states of other people and respond to their emotions and to establish appropriate relations with others.

The goal of this training, organized through lectures, workshops, public performances and written material, is to sensitize users and the general public about the importance of emotional education of children, about the importance of their own emotional literacy in work with children. The project includes four elementary schools (N = 12 members of professional services, N = 124 teachers and professors) and 4 kindergartens (N = 8 members of professional services, N = 240 educators). The teachers and professional services covered by the project activities have proven to be a change in the form of a decrease in the number of children with behavioral disorders in the classroom environment, less poor grades, stress and violence in schools, and greater satisfaction of students, parents and school staff, better success, greater satisfaction with the quality of education institutes.

### **P6.5.11**

#### **Online psychosocial and neuropsychiatric care program for patients with Parkinson's disease and their relatives**

Jennifer Reijnders<sup>1</sup>, Isis Groeneweg<sup>2</sup>, Henk Kruithof<sup>2</sup>, Daphne van Hoeken<sup>2</sup>, Odile Van den Heuvel<sup>3</sup>, Saskia Van Es<sup>2</sup>

<sup>1</sup>Open University, Heerlen, The Netherlands

<sup>2</sup>Parnassia Group, The Hague, The Netherlands, <sup>3</sup>VU medical center, Amsterdam, The Netherlands

Patients with Parkinson's disease often experience, besides the typical motor symptoms, neuropsychiatric symptoms such as depressive or anxiety symptoms, cognitive impairment, psychotic symptoms and impulse control disorders. These neuropsychiatric symptoms have a huge impact on both the patient and his/her family and can cause reduced quality of life. Initiatives from the Parkinson Vereniging and ParkinsonNet has led to multidisciplinary networks of care specialists and recommendations for treatment. Nevertheless, the neuropsychiatric and psychosocial care still requires improvement.

Our goal is to develop an E-health program for psychosocial and neuropsychiatric problems characterized by a unique collaboration between health care specialists (Parnassia Group), Parkinson experts (VU medical Center), experts on online education and positive psychology (Open University) and experts by experience (Parkinson Vereniging).

In 2017 the project group will start with the development of several online modules in cooperation with a business partner with expertise on E-health interventions. Different research projects will be initiated in which the effectiveness and usability of the modules will be examined. Possible outcome measures are knowledge level, self-efficacy, empowerment, emotional, psychological and social wellbeing, quality of life and cost-effectiveness. The outline for the E-health program and the accompanying research projects will be presented at the congress.

### **P6.5.12**

#### **Direct and Indirect Effects of Familial and Peer Correlates of U.S. Latino Youth Prosocial Behaviors**

Gustavo Carlo, Cara Streit

University of Missouri, Columbia, USA

Objectives: Researchers have not examined the interplay of family conflict, parenting, and peer processes in predicting prosocial behaviors (i.e., actions intended to benefit others; Eisenberg, 2000), particularly in U.S. Latino samples. Based on moral socialization and ecocultural-stress theories (Carlo et al., 2009; Hoffman, 2000), family conflict may lead youth to associate with deviant peers, which may negatively affect their experiences of parental and peer support and mitigate prosocial behaviors.



**Method:** Participants were 307 (54% girls,  $M$  age = 15.50) Latino adolescents and parents. Parents completed a measure of family conflict. Youth completed measures of parental support, peer support, familism values, deviant peer affiliation, and prosocial behaviors.

**Results:** Path analysis yielded supportive evidence that as youth experience higher levels of family conflict they are driven towards deviant peers, and this affiliation may engender less support from parents and peers and also deter prosocial behaviors. We also found that, for adolescents born outside the United States, family conflict and parental support significantly predicted prosocial behaviors. For youth born inside the U.S., deviant peer affiliation and peer support significantly predicted prosocial behaviors.

**Conclusion:** These findings highlight the need for theories to consider the roles of social relationships and nativity in protecting Latino youth from high levels of family conflict.

### P6.5.13

#### Development of a Scale for Learning from Incidents

Naoko Hasegawa

*Central Research Institute of Electric Power Industry, Yokosuka, Kanagawa, Japan*

**Objectives:** It is important for workers to learn from incidents to enhance their safety and to strengthen their resilience against disasters that have occurred in the past. However, some kinds of incidents persist in industrial work sites. Although there are several cases to learn from, it is not easy to learn from these because most of them are indirect experiences, which people have not encountered by themselves. If people do not find any relevance from the cases to their own jobs or experiences, they may not be motivated to learn. Thus, it is supposed that awareness of similarities between direct and indirect experiences has an important role in learning from incidents. The purpose of this study was to clarify components of individual learning from incidents and to develop a scale to evaluate it based on the assumption mentioned above and on the experiential learning model (Kolb, 1984).

**Method:** In Study 1, items were developed based on 4 steps of experiential learning (Kolb, 1984) and awareness of similarities (Ikeda and Furukawa, 2006). The scale was then completed by 1122 workers. In Study 2, a total of 858 workers completed the same scale.

**Results:** In study 1, results of factor analysis identified the following two factors: effort to find similarities between incidents and one's own work, and active utilization of lessons. The scale's reliability was supported by good split-half reliability ( $r = .888$ ) and good internal consistency ( $\alpha = .776 \sim .927$ ). Results of correlation analysis showed the scale had good convergent and discriminant validity. In Study 2, test-retest reliability and predictive validity were examined. The results demonstrated moderate test-retest reliability ( $r = .543 \sim .558$ ) and predictive validity for safety behavior after one month ( $\beta = .192 \sim .298$ ).

**Conclusion:** The scale with adequate validity and reliability was developed. The results of the analysis for the scale's validity would be contributed to clarify characteristics of individual learning from incidents.

### P6.5.14

#### Resilient@work: wear ebo for a more positive outlook on life!

Michaela Schok<sup>1</sup>, Rushil Jain<sup>1,2</sup>, Martine de Ruiter<sup>1</sup>, Panote Siriaraya<sup>2,3</sup>, Pieter Desmet<sup>2,3</sup>

<sup>1</sup>Mindset, Houten, The Netherlands

<sup>2</sup>TU Delft, Delft, The Netherlands, <sup>3</sup>Delft Institute for Positive Design, Delft, The Netherlands

**Objective:** People with stressful occupations are at risk of health problems. Additional stressful life events like for example parenthood or taking care of family may increase this risk further. Strengthening resilience, being able to adapt to changing circumstances or stressful/traumatic life events (Bonanno et al, 2012; Masten, 2014), is expected to prevent sick-leave, burnout and chronic stress symptoms. People become more resourceful and resilient in stressful circumstances through positive emotions (Tugade & Fredrickson, 2004). Therefore, a wearable was developed to increase awareness of positive emotions.

**Method:** A wearable device, named ebo was developed in cooperation with potential users such as the Dutch National Police and social workers working with traumatized professionals (Jain, 2016).

Ebo registers positive moments during the day by pushing a bracelet, and is connected with an app which registers time, location and intensity of the positive emotions. The app is designed to function as a journal of positive emotions recorded by the user. An experiential prototype was tested with 8 participants for a duration of 5 days per participant.

**Results:** Final user tests showed mostly positive effects of ebo. Participants became more aware of their positive moments by registering them and experienced happiness by reflecting on their registered moments. Ebo promoted positive emotions and reduced the effects of negative emotions in participants, which can be attributed to the reflection on personal positive moments at the end of the day.

**Conclusion:** Preliminary results suggested that ebo seems to support a more positive and optimistic outlook on life.

## P6.5.15

### Mediates emotional regulation between negative affect and internalized problems?

Jonathan Aime Paredes-Garcia, Laura Hernández-Guzmán

*Universidad Nacional Autónoma de México, Ciudad de México, Mexico*

The purpose of the present study was to test if emotion regulation (ER) mediates between negative affect (NA) and internalizing problems (IP).

From a transdiagnostic perspective, it has been proposed that deficient ER of negative affect accounts for internalizing problems, i.e. anxiety and depression. However, there is little research exploring if emotion regulation mediates between AN and PI.

A total of 1128 Mexican adolescents (582 girls and 446 boys), ages 13 to 18 years old ( $M = 15.37$ ,  $DS = 1.59$ ) voluntarily and anonymously completed the Positive and Negative Affect Schedule for Children C (PANAS=C;  $\alpha = .90$ ), the Emotion Regulation Questionnaire (ERQ;  $\alpha = .69$ ) and the Youth Self-Report (YSR;  $\alpha = .89$ ).

Mediation was tested using structural equation modeling, with the Lavaan statistical package for R. Because our sample was not normally distributed, the maximum likelihood method with robust standard errors was used. Observed data matched the values expected by theory,  $X^2(369) = 762.21$ ,  $p < .001$ ;  $\chi^2/df = 2.06$ ; RMSEA = .032, 90% CI [.029 - .035]; CFI = .91; SRMR = .041. Emotional regulation mediates between negative affect and internalizing problems. Results are useful to the development of transdiagnostic treatments promoting ER skills in adolescents

## P6.5.16

### Japanese Teacher's Guidance Styles for Student's Problem Behavior at Junior High School

Akiko Obokata

*Shiraume Gakuen University, Tokyo, Japan*

This study examined how Japanese junior high school teachers prevent students' juvenile delinquency at early stages. In Japan, mild delinquencies such as smoking, drinking, and shoplifting account for more than 70% of juvenile delinquency. This study focused on mild problem behaviors and examined how teachers respond to students' problem behavior in school life.

Interviews were conducted to 14 chief teachers in student guidance in 14 schools in Tokyo. First, it clarified that teachers tried to respond student's problem behavior as an organization. When it occurred, they reported to the chief teacher in student guidance immediately. They had meetings once a week on students' life style, especially on problem behavior, in order to share students' information and use it for future guidance. They also had interschool meetings to share students' information outside school. Second, when students showed problem behavior, teachers guided them on the spot. If teachers deemed it necessary to inform their parents however light the problem was, they called and asked them to cooperate with the school guidance. Third, student guidance had a strong relationship to schools' club activities. When students showed problems, teachers decide to permit or inhibit them from club activities based on their judgment of what is better for the students' future. This study suggests that Japanese teachers give student guidance even on small problems on daily basis, and it prevents problems from getting more serious.

### **P6.5.17**

#### **Childhood Traumas in Relation to Personality Traits**

Onur Can Çabuk, Tülin Gençöz

*Middle East Technical University, Ankara, Turkey*

People who have experienced traumatic events in childhood are more likely to have a personality disorder (e.g., Gladstone, Parker, Wilhelm, Mitchell, & Austin, 1999; Herman, Perry, & Van der Kolk, 1989). Most research was conducted with female victims of sexual abuse, while pathological MMPI profiles were also observed in men particularly with sexual abuse history (Roys & Timms, 1995). However, recent studies revealed that other types of trauma were also associated with personality features in adulthood (e.g., Bierer et al., 2003; Berkowitz, 2004). Hence, in this study, different types of childhood trauma were also examined. This study aimed to investigate the associations of different types of childhood trauma with personality traits, which were extraversion (E), conscientiousness (C), agreeableness (A), neuroticism (N), openness to experience (O), and negative valence (NV). Data was collected from 413 adults between the ages of 18 and 61. After controlling for the variance accounted for by age and gender, results of the hierarchical regression analyses revealed that higher levels of emotional abuse were associated with lower E and O, and higher N and NV. In addition, higher levels of emotional neglect were associated with lower C and A, and higher N. These findings stressed the remarkable role of the caregivers' attitudes and their reactions to the emotional needs of children, particularly in childhood, which is a critical period for the formation of personality.

### **P6.5.18**

#### **Gender related differences in sexual harassment perception among Lithuanian workers**

Monika Ceponyte, Kristina Zardeckaite-Matulaitiene

*Vytautas Magnus University, Kaunas, Lithuania*

It is known that sexual harassment is a form of sex discrimination which often occurs in work environment, however employees often experience difficulties in identifying this phenomenon. Therefore it is important to understand environmental and situational factors related to the perception of sexual harassment. 239 workers (75 males, 164 females) participated in the study (18-76 years old). 14 self-report vignettes were created based on Bursik (1992) and consultations with Office of the Equal Opportunities Ombudsperson to measure participants' perception of sexual harassment. Sexual harassment experience in the last 12 months was measured by Sexual Experiences Questionnaire (Fitzgerald et al., 1995) and BIDR (Paulhus, 1991) was used to measure social desirability. The results showed that men tend to evaluate quid pro quo and hostile environment situations as less severe than women, they also showed lower results in perception of verbal and nonverbal sexual harassment situations. Study results also showed significant gender differences in perception of sexual harassment related to victim's gender and gender distribution in participant's work environment. Study results revealed that those participants who have greater experience of gender harassment also evaluate quid pro quo situations as more severe than those who had less such experience. The results imply that the perception of sexual harassment is related not only to worker's gender, but also to work environment factors.

## P6.5.20

### Psychosocial characteristics of marijuana users with regard to the severity of problem use of marijuana and alcohol

Renata Glavak Tkalic, Ines Sucic, Anja Wertag

*Institute of Social Sciences Ivo Pilar, Zagreb, Croatia*

The aim of this research was to compare psychosocial characteristics of marijuana users with regard to the severity of problem use of marijuana and alcohol. Data were collected among subsample of last year marijuana users (N=390), drawn from the large representative sample of Croatian citizens (N=4992), aged 15 to 64 years. The measures used were Severity of Dependence Questionnaire (SDS) - marijuana and alcohol versions, short versions of Marijuana Motives Questionnaire, International Personality Item Pool, Sensation Seeking Scale, and specific dimensions from Brief Cope. Cut-off point of 3 on SDS was used as an indicator of marijuana and alcohol problem use. Marijuana users with problem marijuana use had more prominent conformity, coping, and expansion motives for marijuana use, as well as higher disinhibition, and used behavioral disengagement more as a coping mechanism than marijuana users without problem marijuana and alcohol use. Marijuana users with problem alcohol use had more prominent coping motives for marijuana use, lower result on emotional stability and intellect scales, and used emotional and instrumental social support more as coping mechanisms than marijuana users without problem marijuana and alcohol use. Results of this study can be used in planning universal and selective preventive interventions.

## P6.5.21

### Beyond Psychological: The Reverberating impact of mistrust on educational outcomes

Brettjet Cody

*United Arab Emirates University, Al Ain, Abu Dhabi, United Arab Emirates*

**Objective:** The complex history of maltreatment and injustice faced by Black Americans may have led to the development of a mistrust for White Americans and institutions. This psychological phenomenon is known as cultural mistrust. Cultural mistrust can negatively impact mental health factors as well as academic attitudes and outcomes for Black American students. This study sought to investigate the impact of cultural mistrust on academic self-concept in a population of Black American undergraduate students.

**Method:** This research surveyed levels of cultural mistrust, perceptions of student professor interaction, academic self concept, and captured demographic information from 133 Black American students.

**Results:** Results of this study show that faculty approachability and caring attitude mediate the effect of cultural mistrust in interpersonal relationships on academic self-concept. Thus, being mistrustful in interpersonal relationships negatively influences academic self-concept a key factor related to academic achievement.

**Conclusion:** Findings support the need to facilitate and encourage positive student-faculty interactions with Black American university students in an effort to build trust. Further, this study demonstrates the impact that deeply engrained psychological constructs can have on large scale societal factors such as education. Implications for cross cultural exchanges, specifically in educational and mental health settings, are discussed.

## P6.5.22

### **The Relations Between Brainstorming Performance, Life Satisfaction, Emotion Regulation and Subjective Well-Being in University Students**

Bilgesu Hasçuhadar, Hamit Coşkun

*Social Science, Bolu, Turkey*

In this study, we examined relations among emotion regulation, life satisfaction, subjective well-being and brainstorming in university students. The population of this study consists of university students who study in Psychology, Psychological Counseling and Guidance, Mental Disabilities and Special Education Teacher, and History in Abant İzzet Baysal University. The sample of the study consisted; 187 girls and 58 boys are 245 students totally ( $X=20.10$ ,  $ss=1.56$ ). In this study, subjective well-being of university students was measured by the Subjective Well-Being Scale which was developed by Dost (2004) and emotion regulation were measured by Emotion Regulation Questionnaire which was developed by Gross and John (2003) and adapted to Turkish by Yurtsever (2008). Brainstorming was measured via the task of finding new dispositions for a specific object. The findings of the study pointed that there is relation between brainstorming performance and life satisfaction. In addition, there is significant relation between constructive emotion regulation strategies and brainstorming. Finally, there is relation between brainstorming and subjective well-being. The plausible results from findings of this study might contribute to the future researchs.

## Session 6.6: Technological scientific topics; technology and changing behaviour (e-coaching, research on the brain)

### P6.6.01

#### **Hippocampus and Amygdala: An Insight-related Network involved in Cognitive Restructuring using Metaphor in a Micro-counseling Scenario**

Wencai Zhang<sup>1</sup>, Fei Yu<sup>1,2</sup>, Jing Luo<sup>3</sup>, Jianxin Zhang<sup>1</sup>

<sup>1</sup>CAS Key Laboratory of Mental Health, Institute of Psychology, Chinese Academy of Sciences, Beijing, China

<sup>2</sup>Department of Psychology, University of Chinese Academy of Sciences, Beijing, China

<sup>3</sup>Beijing Key Laboratory of Learning and Cognition, Department of Psychology, Capital Normal University, Beijing, China

**Objectives :** The neural mechanisms of metaphor comprehension in the context of cognitive therapy are still unknown. The aim of this study was to determine whether understanding metaphorical solutions using cognitive restructuring for mental distress problems would produce a salient insightful mental experience, and activate a neural network similar to that seen for insight.

**Method :** Twenty-two healthy university students were recruited, and 75 micro-counseling scenarios were presented. Each scenario included a preceding a mental distress problem, and subsequent metaphorical restructuring, literal restructuring, or problem-restatement solutions.

**Results :** It was found that, compared to using literal solutions for cognitive restructuring or problem restatement, metaphorical solutions using cognitive restructuring activated a general network that is associated with basic metaphor language processing, i.e., the left inferior frontal gyrus, middle and superior temporal gyri, and a specific network that is associated with insightful problem solving or novelty detection, i.e., the bilateral hippocampus, amygdala, and fusiform gyrus.

**Conclusion:** This evidence indicates that the use of metaphor is important for cognitive therapy, and that the use of metaphorical solutions for mental distress problems reliably produces a salient cognitive restructuring similar to insight.

### P6.6.02

#### **Features of Functional Organization of Creator's Brain Cortex at Different Stages of Artistic Creative Process**

Liudmila Dikaya, Igor Dikiy

Southern Federal University, Rostov-on-Don, Russia

Such kinds of artistic professional activity as art, design, and music differ by a highly creative component. Meanwhile, the dynamics of brain activity at different stages of artistic creative process in individuals is not studied nowadays.

**The objective** of our research is to study the features of functional organization of artist's brain cortex at various stages of artistic creative process.

**Method.** Sixty artists aged 18-29 took part in the research (30 females and 30 males).

We used the mono-typing technique to model the creative artistic process.

EEG signals were recorded in a resting state, and at three stages of artistic creative process (preparation, insight and verification) from 21 electrodes set on the scalp according to the International 10-20 System.

For statistical analysis, we used 3-way ANOVA and post hoc analysis.

**Results.** We revealed a high EEG synchronization in low-frequency bands and a low synchronization in the high-frequency bands at preparation stage. The insight stage is characterized by long functional connections in participants ( $p < 0.05$ ). Moreover, in low-frequency bands reflecting a functional state of the central nervous system a strong interhemispheric interaction is revealed in artist's cortex right before insight. In addition, in high-frequency bands relative to the cognitive activity an intrahemispheric interaction between anterior and posterior brain cortical regions is revealed. Whereas strong coherence is revealed in the artists during the verification stage in high frequency bands.



**Conclusion.** Features of functional organization of creator's brain cortex at different stages of artistic creative process were studied. The obtained results showed the need for creation the model of the dynamic of brain organization of the creative process.

### P6.6.03

#### **Development of a system of electronic register of the clinical symptoms in chronic pain conditions**

Ana I. Sánchez<sup>1,2</sup>, Elena Miró<sup>1,2</sup>, M. Pilar Martínez<sup>1,2</sup>, Germán Prados<sup>3</sup>, Jose Luis Garrido<sup>4</sup>, Kawtar Benghazi<sup>4</sup>

<sup>1</sup>*Mind, Brain and Behavior Research Center (CIMCYC), University of Granada, Granada, Spain*

<sup>2</sup>*Department of Personality, Assessment and Psychological Treatment, Faculty of Psychology, University of Granada, Granada, Spain*

<sup>3</sup>*Department of Nursing Health Science Faculty, University of Granada, Granada, Spain*

<sup>4</sup>*Department of Software Engineering, University of Granada, Granada, Granada, Spain*

**Introduction:** Traditional evaluation self-registers of paper and pencil present different limitations (e.g., to forget to complete it, visibility for others, etc.). It has have been developed some electronic records of symptoms but limited to investigation contexts and centered on one or two variables. **Objective:** The aim of this work is to design an electronic diary versatile and compatible with smartphones for the evaluation of the main symptoms present in chronic pain syndromes as fibromyalgia several times a day (sleep alteration, fatigue, sleepiness, pain, emotional distress, and deterioration in daily functioning). **Method:** We present a clinical diary consisting of a web platform compatible con Smartphones (<http://diarioclinico.everywaretech.es>) developed with Hypertext Markup Language version 5 (HTML5), Javascript and Cascading Style Sheets (CSS) technologies and using Yii system, a high-performance PHP framework for developing Web 2.0 applications. The web application includes two areas of work: the management backend for therapists and the frontend for patients. **Results and conclusions:** We show the structure and characteristics of the clinical diary and several examples of the data that it could be obtained. This electronic diary has a great potential improving our clinical assessment in chronic conditions as fibromyalgia. The device improve the adherence of the patients to the register system, is efficient and allows a more precise analysis of the information. In addition, the electronic diary is a useful complement for the development of on-line therapy. **Research projects:** PSI-2014-58379-P.

### P6.6.04

#### **Immersive leisure activities and interpersonal effects: A study comparing video games and fiction reading**

Jose Sepulveda, Peter Totterdell, Chantelle Wood

*University of Sheffield, Sheffield, UK*

#### **Objectives**

The experience of playing video games has grown to be so rich and complex that some authors consider video games as a new art form, comparable to that of reading fiction or watching movies, in terms of the mental stimulation of interacting with others that they involve. In this context, the present study aimed to compare the influence that reading books of fiction and playing video games have over interpersonal variables. The main hypothesis was that both playing video games and reading fiction are positively associated with interpersonal variables.

#### **Method**

The study consisted of an online questionnaire answered by 373 participants (176 males, 197 females: Mage = 25.18 years, SDage = 8.81) that measured cognitive theory of mind (through a False Belief Test), affective theory of mind (through the Reading the Mind in the Eyes Test) and empathy (through the Interpersonal Reactivity Index) as dependent variables, and the average weekly hours of fiction read and video games played as independent variables.

#### **Results**

Multiple regression analysis showed that reading fiction predicted two subscales of empathy, but not cognitive nor affective theory of mind, while playing video games did not predict any of the

dependent variables. The analyses controlled for the participants' age, gender and current mood.

#### Conclusions

A possible explanation for the results comes from the use of weekly hours as the measure of reading fiction and playing video games because it does not differentiate their content or quality. In this regard, previous literature suggest that a better elicitor of empathetic exercise is high quality literature portraying social interactions. A complementary explanation comes from the fact that the study did not considered individual differences such as imagery ability, need for cognition and transportation into the narrative as mediator and moderators, which may have helped explain the different effects of narratives presented in different media. Other limitations of this study were its correlational scope and sampling method.

### P6.6.05

#### Quality of life in epilepsy patients with VNS

Victoria Bonamigo<sup>1,2</sup>, Mariana Kaspchak-Arent<sup>1,2</sup>, Talita Perboni<sup>1,2</sup>, Bruno Takeshita<sup>1</sup>, Bruna Almeida<sup>1,2</sup>, Clemilson Gomes<sup>1,2</sup>, Murilo Meneses<sup>1</sup>, Pedro Kowacs<sup>1</sup>, Samanta da Rocha<sup>1,2</sup>

<sup>1</sup>Neurological Institute of Curitiba (INC), Curitiba, Brazil

<sup>2</sup>Habilitare Institute, Curitiba, Brazil

According to the World Health Organization (WHO), three million people are affected by epilepsy in Brazil. From these patients, 30% are diagnosed as refractory epilepsy. Besides the traditional ablative surgery, vagus nerve stimulation (VNS) – approved by FDA since 1997 as a therapy to reduce crisis frequency – is also an option. In Brazil, approximately 700 stimulators have been implanted, although there is limited scientific information about their impact on patients. In this research, 17 patients who had the VNS implanted and monitored at Neurological Institute of Curitiba (INC) were assessed (representing 2.4% of the country's sampling). A questionnaire formed by 19 items was elaborated, encompassing emotional aspects; crisis and treatment concerns; reasoning, concentration and memory difficulties and other daily life's activities. The form is named QOLIE-19 VNS and is currently on validation process. The result of the statistics' interpretation showed that VNS was positive to emotional aspects, social limitation, concerns with getting hurt during crisis and reasoning/memory difficulties. The research showed VNS was neutral on concentration difficulties, drug influence during leisure, concerns with crisis frequency, medicine's long-term effects and driving capacity. There was no reduction on any function investigated in the research's sampling. With high accuracy, this research puts in evidence the discussion about the impact of this therapy on patients' quality of life.

### P6.6.06

#### Developing a Smartphone Application for Subthreshold Depression

Kazuki Hirao, Yoshiaki Ishihara, Masaru Tanigawa, Kana Takahashi, Shotaro Ohno, Aimi Inoue, Koki Takada

Kibi International University, Takahashi, Okayama, Japan

**Objective:** Young adults suffering from subthreshold depression (StD) mainly face issues with regard to their self-confidence. This study aims to develop a smartphone application (app) designed to improve self-confidence in young adults suffering from StD.

**Method:** The development of a motion picture reproducing (subliminal priming with supraliminal reward stimulation (SPSRS)) app to improve self-confidence in young adults suffering from StD is based on previous evidence from subliminal studies. For identifying the words that can be used in the app to improve such self-confidence, self-reported questionnaires were administered to 154 young adults (StD group (n = 82) and healthy control (HC) group (n = 72)). The data was analyzed using a computerized text analysis method that categorized the words based on the frequency of their appearance. Thereafter, the app was programmed to display the top five words that appeared most frequently.

**Results:** Among the young adults, 290 words were identified of which the following appeared most frequently in both groups: "can," "let's try," "good luck," "able," and "don't worry."

**Conclusion:** The implication of the findings is that this SPSRS app can be an effective intervention method for enhancing the self-confidence of individuals suffering from StD.

## P6.6.07

### Psychologists' opinions on their use of internet related technology in the context of counselling or therapy, Flanders, 2017

Marc Roelands<sup>1,2</sup>

<sup>1</sup>Vrije Universiteit Brussel (VUB), Brussels, Belgium

<sup>2</sup>OVUM bvba, Brussels, Belgium

**Objectives:** Mental health related internet applications are becoming increasingly popular among software developers and the general population. They are referred to as e-Health and mobile health. Our study aims to present the opinions of psychologists in Flanders who use it in their clinical work.

**Method:** January 2017, 62 of the 906 Dutch-speaking members of the Belgian Federation of Psychologists with a private practice indicated that they use internet in their clinical practice; 51 could be contacted by e-mail of whom 19 filled in our internet questionnaire.

**Results:** Among users, all but three used it as a substitute for a face-to-face encounter. They perceived as most important positive consequences: accessibility over time and place, time efficiency for the client and utility for follow-up purposes. Almost no negative consequences were mentioned. About three in four had a positive or rather positive attitude towards the use of mobile "apps" in the context of counselling or psychotherapy.

**Conclusion:** Currently only a very limited number of psychologists in Dutch-speaking Belgium include internet related technology into their therapeutical practice and users rather agree about the positive consequences. Research in an international comparative context is needed on the contribution of mental health related internet applications to clinical practice and on the ethical implications related to their use. At the conference we will add the findings of the ongoing comparative study in a sample of non-users.

## P6.6.08

### ERP correlates for recognition of social situations in patients with schizophrenia and schizophrenia spectrum disorders

Elena Mnatsakanian<sup>1,2</sup>, Yulia Zaytseva<sup>2</sup>, Isaac Gurovich<sup>2</sup>

<sup>1</sup>Institute of Higher Nervous Activity & Neurophysiology RAS, Moscow, Russia

<sup>2</sup>Moscow Research Institute of Psychiatry, Moscow, Russia

**Objectives:** We aimed at studying brain electrical activity underlying social cognition in patients with first episode schizophrenia and schizophrenia spectrum disorders.

**Methods:** Patients (total of 23, 15 male) and healthy controls (total of 55, 28 male) had to evaluate the kind of interaction between the subjects on the photograph: neutral, negative or positive. The stimuli were monochrome photographs of pairs of humans or animals. 128-channel EEG was recorded with 500 Hz digitization rate. The evoked activity (ERP) and behavioral parameters were analyzed for the categories: HN (human negative), HO (human neutral), HP (human positive), AN (animal negative), AO (animal neutral), AP (animal positive).

**Results:** Performance scores were lower and RTs were longer for neutral situations compared to emotional in both groups. Patients showed slower task performance ( $p < 0.01$ ), although their performance was lower ( $p < 0.02$ ) than in controls only in HN and AP. ERP differences between patients and controls were in P100, N150 and P250 components. For the ERP latencies longer than 420 ms, the differences were in the left posterior regions in negative situations, and in the right hemisphere in positive situations. In the anterior brain regions, the differences were mostly observed in the right hemisphere.

**Conclusions:** There were sustained patterns of control-patient ERP differences seen in all categories. However, these differences were dependent on the stimulus kind and emotional valence.

## P6.6.09

### How often do you...? A study of Sexting and Selfie prevalence among adolescents.

Valentina Manna<sup>1,2</sup>, Valentina Boursier<sup>2</sup>

<sup>1</sup>Association for Social Promotion "Roots In Action", Acerra (NA), Italy

<sup>2</sup>Department of Humanities – University of Naples Federico II, Naples, Italy

*Selfie* and *Sexting* are new viral consensual practices widespread among teens via smartphones and social media (Pascoe, 2011), representing risky opportunities for the youngest (Livingstone, 2008). However, no clear data about their prevalence and features are available.

We aimed to develop and validate two reliable measures for Selfie and Sexting frequency, also providing preliminary results about their distribution among adolescents and analyzing differences due to gender and age. We administered a Sexting Frequency Scale (7 items) and a Selfie Frequency Scale (19 items) to 1355 Italian adolescents (M=16y). For each one, we conducted EFA and CFA by MPlus, also testing a second-order model. Measures of reliability were given by Cronbach's  $\alpha$ . One-way ANOVAs were used to analyze gender/age differences.

The psychometric properties of the scales are satisfactory ( $\alpha=.884; .880$ ) with a two-factors structure for Sexting and three-factors for Selfie, revealing that they differ depending on medium, contents and recipients involved. The 2nd order models were fully satisfactory (RMSEA=.09;.06 CFI=.94;.91 TLI=.90;.90 SRMR=.047;.057).

42.9% of participants have sexted, prevalently via messages; only 23 participants have never done a selfie. Sexting is more spread among males, while selfie among females, but selfie with sexual contents. Sexting increases depending on age, while selfie is equally common among young and late adolescents.

Implications for preventive interventions differentiated by gender and age are discussed.