

FOREWORD

inScience Press is pleased to publish the book entitled *Psychology Applications & Developments V* as part of the Advances in Psychology and Psychological Trends series. These series of books comprise authors' and editors' work to address generalized research, focused in specific sections in the Psychology area.

In this fifth volume, a committed set of authors explore the Psychology field, therefore contributing to reach the frontiers of knowledge. Success depends on the participation of those who wish to find creative solutions and believe in their potential to change the world, altogether, to increase public engagement and cooperation from communities. Part of our mission is to serve society with these initiatives and promote knowledge. Therefore, it is necessary the strengthening of research efforts in all fields and cooperation between the most assorted studies and backgrounds.

In particular, this book explores five major areas within the broad context of Psychology, divided into five sections: Educational Psychology, Cognitive and Experimental Psychology, Legal Psychology, Clinical Psychology and Social Psychology. Each section comprises chapters that have emerged from extended and peer reviewed selected papers originally published in the proceedings of the International Psychological Applications Conference and Trends (InPACT) conference series (<http://www.inpact-psychologyconference.org/>). This conference occurs annually with successful outcomes. Original papers have been selected and its authors were invited to extend them significantly to once again undergo an evaluation process, afterwards the authors of the accepted chapters were requested to make corrections and improve the final submitted chapters. This process has resulted in the final publication of 18 high quality chapters organized into 5 sections. The following sections' small description and chapters' abstracts provide information on this book contents.

Section 1, entitled "Educational Psychology", offers a range of research about teachers and students and the learning process, as well as the behavior from a psycho-educational standpoint.

Chapter 1: *How Learning Style Relates to State and Trait Anxiety Among Japanese Freshmen Transitioning to University*; by Michiko Toyama & Yoshitaka Yamazaki. This study examined how learning style relates to anxiety among university freshmen, controlling for gender, during their academic transition from high school to university. The study applied Kolb's experiential learning theory and Spielberger's paradigm of state and trait anxiety. Participants consisted of 194 freshmen of a Japanese university located near Tokyo. Data were collected in a required course and analyzed using two-way analysis of variance (i.e., learning

style and gender). Results revealed that the four learning styles significantly differed in both state and trait anxiety variables. However, there was an insignificant difference in both anxiety types between male and female students. Additionally, there was no interaction effect of learning style and gender for either type of anxiety. We offer practical implications based on the study findings

Chapter 2: *Test for Creative Thinking-Drawing Production (TCT-DP): A Revised Factorial Structure in an Adult Sample*; by Sara Ibérico Nogueira, Maria Leonor Almeida, & Tiago Souza Lima. This research aims to assess the factorial structure of the Test for Creative Thinking-Drawing Production (TCT-DP, Urban & Jellen, 1996) for a Portuguese adult sample, with 620 workers, revisiting the results obtained by Almeida, Ibérico Nogueira, and Lima (2018). Two studies were performed. In Study 1, an exploratory factor analysis (EFA) assessed the factorial structure of the TCT-DP, with three hundred and two individuals ($N = 302$), most of them women (55.6%), from 18 to 86 years ($M = 41.1$, $SD = 10.7$). In Study 2, a confirmatory factor analyses aimed to replicate the factorial solution identified in Study 1, with three hundred and eighteen individuals ($N = 318$), most of them women (56.6%), from 19 to 70 years ($M = 40.6$, $SD = 10.1$). The two-factor solution (F1- Adaptiveness; F2- Innovativeness) proposed in Study 1 had acceptable to marginal fit indices. As in the study of 2018, two factors emerged and are respectively composed by the same items. Once more, the results highlight the importance of both non-conventional and conventional thinking for the creative process, sustaining our TTT-Two Tracks of Thought model. Some of the items which belong to the Adaptiveness factor, lead us to reflect on the parental features and developmental path.

Chapter 3: *Self-Concept and Anxiety of Slovak Students (Future Leaders)*; by Lenka Ďuricová & Beata Žitniaková Gurgová. The purpose of this study is to examine the self-concept and anxiety of Slovak university students as future leaders. A positive self-concept and emotional stability are considered important characteristics of an effective leader. Our research sample consisted of 199 (mean age=20.04; $SD=1.58$) university students (field of study: management and education). The available and intentional sampling was used. Data were obtained by means of the State-trait anxiety inventory and the Piers-Harris self-concept scale for children and adolescents. The reliability (inner consistency) of the measured variables was acceptable (Cronbach alpha from .56 to .90). Correlation tests and a comparative research study were conducted. Our findings prove negative moderate statistically significant correlation between all self-concept dimensions and state and trait anxiety (from -.26 to -.67; $p<.01$). A strong significant relationship between the total self-concept and state and trait anxiety (-.56; -.68; $p<0.01$) was shown. No differences among students in terms of field of study were found. The limitation of this study is the sample size and the use of self-reported data. This study presents a contribution to the research of relevant personal factors of tomorrow's leaders in education and economics in Slovakia.

Chapter 4: *The Role of Trait Emotional Intelligence in Career Decision-Making Difficulties and (Career Decision) Self-Efficacy*; by Eva Sollarová & Lada Kaliská. The emotional intelligence and career decision-making analysis contributes to research-based knowledge and to career-counselling practice. The study analyzes trait emotional intelligence (further on EI) in the process of career decision-making, i.e. career decision-making difficulties, general self-efficacy and career-decision self-efficacy assessed in a sample of 322 Slovak high school students before second career-choice. The measures: Trait Emotional Intelligence Questionnaire-Short Form (TEIQue-SF; Petrides, 2009), Emotional and Personality Difficulties Scale (EPCD; Saka, Gati, & Kelly, 2008), General Self-Efficacy Scale (GSES; Schwarzer, & Jerusalem, 1993), Career Decision Self-Efficacy Scale-Short Form (CDSE-SF; Betz, Klein, & Taylor, 1996). The statistical analysis: negative relations between global career decision-making difficulties and self-efficacy (general, career-decision), positive relations between self-efficacy (general, career-decision) and trait EI, and negative relations between trait EI and global career decision-making difficulties and their factors. The regression analyses: trait EI was a significant negative predictor of career decision-making difficulties, over and above career-decision self-efficacy. Trait EI is a predictor of more stable, pervasive emotional and personality-related aspects of career decision-making difficulties, above and over studied personality-related and career-related self-efficacy. Trait EI relevance and career decisions self-efficacy in the career-decision process are emphasized with practical implications for diagnostics and intervention within career-counseling.

Chapter 5: *Meaning of Foreigners Among Estonian, Latvian, Lithuanian and Russian University Students*; by Kristi Kõiv, Svetlana Gurieva, Olga Deyneka, Vaiva Zuzeviciute, Anna Liduma, & Sandra Rone. The purpose of this pilot study was to explore Estonian, Latvian, Lithuanian and Russian university students' conceptualizations and perceptions of foreigners. The present study examines similarities and differences between Estonian (N=118), Latvian (N=101), Lithuanian (N=101), and Russian (N=92) university students' understandings about foreigners by self-reported open-ended questionnaire. The applied categorical quantitative analysis of the data was the basis for statistical analysis of results. Results revealed that the meaning of foreigners among university students was conceptualized in society level as an exclusion of people connected with different nationality and language, whereby Russian respondents emphasized more differences in citizenship/nationality and three Baltic states respondents in cultural attitudes and values. Overall acceptance or unacceptance of foreigners tended to depend on the level – foreigners were more accepted in personal level and unaccepted in society level. University students in four study groups generally agree that foreigners have influenced them more positive than negative way, but reasons were different: Lithuanians stress more sympathy and helping behavior; Estonian and Latvian more enlargement of knowledge's with increase of tolerance; and Russian students' opinions were more connected with undirect influence by means of media, art and literature.

Chapter 6: *Measuring Personal Attitudes Toward Social Norms - Development of the Descriptive/Injunctive Norm Preference Scale (DINPS)*; by Norihiro Kuroishi & Yoriko Sano. The development of the Descriptive/Injunctive Norm Preference Scale (DINPS), measured individual differences in personal attitudes toward social norms, was reported. Cialdini, Kallgren, and Reno (1991) distinguished social norms into two types. Descriptive norm is what behavior most people engage in a particular situation, which is reflected in perceived typicality. Injunctive norm is what people approve/disapprove. A 90-item pilot scale inquired personal attitudes toward descriptive/injunctive norms was adopted to a research panel consisted of 400 Japanese adults. An exploratory factor analysis extracted 3 factors out of selected 55 items; F1: Apprehension of deviance from descriptive norms, F2: Regard for injunctive norms, and F3: Aversion to injunctive norms. The main study tried to replicate the factor-structure, and to examine the content validity of the scale, with an anew research panel of 400 Japanese adults. A confirmatory factor analysis indicated the goodness of fit to be fair to the 3-factor model. The 3 subscales were highly reliable ($\alpha > .85$), and significantly correlated to the need for uniqueness scale (Snyder & Fromkin, 1977), the F-scale (Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1951), and the individual and social orientedness scale (Ito, 1993) as a priori hypothesized. These results provided some evidence for the validity and usability of the DINPS.

Chapter 7: *Resting State EEG Power Analysis in Filipino Children with Dyslexia*; by Katherine Yared Ko, Roann Munoz Ramos, Stephan Michael Jonas, & Rosalito De Guzman. Dyslexia is a neurodevelopmental disorder characterized by severe and persistent reading difficulties despite normal intellectual functioning and appropriate schooling. To better understand the neural underpinnings of dyslexia, this study investigated the neurophysiological differences between normal readers (NR group, $n = 4$) and readers with dyslexia (DYS group, $n = 5$) by analyzing their brain activity at eyes-closed resting state using mobile electroencephalography (mobile EEG). The results revealed that the DYS group exhibited an overall larger power activation in the theta and beta frequency bands, as well as a dominance of delta, theta, and beta frequencies across all scalp sites. Increased delta and theta activity was found in the left frontal region, whereas significantly stronger beta power was found in the right hemisphere. Moreover, weaker alpha activity was observed in the left frontal and right posterior regions. These findings provide evidence of an atypical and less integrated linguistic network in dyslexia.

Chapter 8: *Parent-Child Strategies and Problem Behaviour in School Environment: The Mediation Effect of Personality and Rules Internalization*; by Ondrej Kalina & Maria Bacikova-Sleskova. This study explores two different parenting strategies of rules setting to test the hypothesis that an autonomy-supportive strategy would relate negatively, whereas controlling strategy would relate positively, to adolescents' problem behaviour. Moreover, mediation analyse was explored to test whether associations among parenting strategies and

adolescents' problem behaviour could be explained by personality domains and internalization of parental rules. A cross-sectional representative dataset from elementary schools was used (N=580, M=12.51 years, SD=0.59, 51.7% of boys). Problem behaviour of adolescent were measured by 21 items scale. Autonomy-supportive and psychological control were explored as two types of parental strategies. Internalization of parenting rules consist from four separate scales (1) identification; (2) introjection; (3) external regulation and (4) rebellion. Personality domains were assessed by Children personality questionnaire. Linear regression models and mediation analyses were used. Higher autonomy-supportive strategy related with less problem behaviour. Higher controlling strategy was related to higher rates of problem behaviour. The association among autonomy-supportive and psychological control strategy and problem behaviour was partially mediated by personality and by rules internalization. The results of this study point to importance of parental strategies in adolescence period as autonomy and controlling ways of setting rules may have opposite effect on problem behaviour.

Chapter 9: *An Innovative Method for Introduction of Written Language: Experience in Mexico*; by Yulia Solovieva & Luis Quintanar Rojas. Introduction of written language at primary school represents one of the important aspects of school learning. In Mexico, as in many other countries, common methods of teaching are repetition, memorization and reproduction of provided information. This chapter shows an example of implementation of a new method for introduction of written language based on activity theory and concept of guided orientation and comparison of the results with traditional methods. Our method implies fulfilment of joint actions of children guided by teacher. Children learn how to codify and represent oral words of Spanish language with the help of external materialized and perceptive schemes. Specific symbolic means are provided by teacher and used by children. The results of application of the method show correct pronunciation of all known and unknown words, usage of correct space between words in writing, reduced number of orthographic mistakes. After working with the method for one year, children commit less mistakes in reading and writing in comparison with the pupils who learn according to traditional methods. Our proposal may serve as an example of creation of similar method for introductive teaching of written process for other languages and organization of teaching and learning process according to activity theory

Section 2, entitled “Cognitive Experimental Psychology”, delivers chapters concerning, as the title indicates, studies and research in the area of behavior from the point of cognitive aspects.

Chapter 10: *Emotional Reactions to Economic Predictions and their Effects on Reasoning and Logical Thinking*; by Mário B. Ferreira, Jerônimo C. Soro, Karen Gouveia, & Joana Reis. This chapter explores the possibility that emotions evoked by media views about the future of Portuguese economy could affect logical reasoning, particularly in problems related to financial issues, and how this effect may vary depending on the valence of emotion produced by the news. Positive or negative emotions were induced by presenting participants with paragraph excerpts of news media with financial or non-financial content (all positive or all negative). Afterwards, participants judged the logical validity of several syllogisms with neutral, negative financial or negative non-financial content and expressed their confidence in each judgment. Results indicate that negative emotions, evoked either by the priming or by the syllogisms content, lead to better performance but lower confidence. These results are in line with research showing that negative emotions promote deeper, analytical, reasoning and more cautious (less confident) judgments, while positive emotions trigger more superficial and heuristic-based judgments.

Section 3, entitled “Legal Psychology”, explored in this chapter, reports on diverse challenges that ethnic minority young adults experience and how that challenges can negatively affect adolescent brain development.

Chapter 11: *Adolescent Frontal Lobe Brain Development: Disproportionality Effects of Social and Economic Deprivation and Implications for Juvenile Court Case Disposition, Child Welfare Reform, and Education Remediation*; by Michael Lindsey. Neuroscience has documented the substantive growth of frontal lobe gray matter during the adolescent years, similar to the brain growth spurt in early childhood – both precursors of preparation for quantitative and qualitative adaptive learning. Several United States Supreme Court decisions (*Roper v. Simmons*; *Graham v. Florida*; *JDB v. North Carolina*; *Miller v. Alabama*) have affirmed the historical chronological age of ‘majority’ being 18 years old, is inconsistent with what it means to be an adult. Mature cognitive processing is more appropriately characterized by the “Jean Piagetian” formal operations stage, i.e., abstract thinking, logical thinking, decision-making, and long-term planning. Formal operations is now acknowledged to be achieved during a young adult’s mid-20’s years of age. Not yet answered is what are the effects on ethnic minority young adults (mid -20’s), who have social, economic, academic, and/or educational deprivation? This chapter will explore these issues.

Section 4, entitled “Clinical Psychology”, provides reviews and studies within various fields concerning relationship processes in clinical practice. Each chapter is diversified, mainly addressing thematic related to individuals well-being and improvement of quality of life.

Chapter 12: *How Personality and Coping Styles Differ in Optimists and Pessimists*; by Lilly E. Both. Personality and coping styles were examined in relation to optimism and pessimism. The sample consisted of 178 individuals (M age = 23.00; SD = 6.27; range = 19-50 years; 79% women) who completed an online survey. Participants completed the BFI-2 to assess personality, the Ways of Coping Scale to determine coping styles, and the Future Events Scales to measure optimism and pessimism. The results found a moderate negative correlation between optimism and pessimism, suggesting that although these constructs are related, they are still distinct. A series of hierarchical multiple regression analyses were conducted predicting optimism and pessimism. Optimism was predicted by lower scores on negative emotionality (neuroticism), and higher scores on extraversion, agreeableness and conscientiousness. As well, problem-focused coping made a unique contribution. Specific facets that predicted optimism were higher compassion and lower depression scores. Pessimism, on the other hand, was predicted by age (being older), gender (being female), and higher negative emotionality (neuroticism) scores. Also, higher scores on emotion-focused coping contributed to the model. The only facet that predicted pessimism was depression. These results suggest that our perceptions – whether we have a positive or negative bias – are influenced by both dispositional factors (like personality) and situation influences (like coping).

Chapter 13: *Associations between Primary School Children’s Perceptions of Parental Acceptance and Rejection, and their Drawings of a “Person Picking an Apple from a Tree”*; by Or Shalev, Andriani Papadaki, Elias Kourkoutas, & Michal Bat Or. The present study of 644 Greek school-age children (323 boys and 321 girls, ages 10–12) examined and compared associations between perceptions of parental acceptance and rejection, and their unique depictions of a “Person Picking an Apple from a Tree” or “PPAT” drawings. Perception of parental behavior was measured by the “Parental Acceptance-Rejection Questionnaire” (Rohner & Khaleque, 2005). Drawing content was analyzed quantitatively according the Symbolic Content rating system in PPAT drawings (SC-PPAT: Bat Or, Ishai, & Levi, 2014, 2017). We employed K-means cluster analysis and obtained three relatively discrete PPAT scripts. Drawing scripts were found to be associated with children’s perceptions of parental behavior. These associations were found mainly among boys, especially when perceiving their parents as highly aggressive. These results demonstrate how empirical inquiry into PPAT content contributes to identifying implicit relational representations in the drawings. Furthermore, they reinforce the value in examining drawings from a holistic perspective, i.e. not just the individual components, but also the relationship between such components; while focusing on the relational experience of children as expressed through their pictorial PPAT narratives.

Chapter 14: *An Insider's Perspective: The Experience of Parents and Gender Variant Youth with Autism Spectrum Disorder*; by Wallace Wong, Jaime Semchuk, Veronique Nguy, & Melissa Jonnson. While a growing body of research has documented the co-occurrence of autism spectrum disorders (ASD) and gender variance, only a handful of published studies have investigated the perspectives and experiences of gender variant youth with ASD. Current clinical care guidelines for this population have generally been obtained through expert knowledge and fail to consider the perspectives of key stakeholders with an insider perspective such as youth and their caregivers. As such, two semi-structured focus-groups and an individual interview were conducted to explore the experiences and perspectives of four gender variant youth with ASD and three of their parents. Interviews were transcribed and analyzed for themes. This study seeks to increase our understanding of this population, identify avenues for future research, and contribute to improving the quality of clinical services for gender variant youth with ASD.

Section 5, entitled “Social Psychology”, gives a glance on projects from a psycho-social perspective. Themes vary from gender stereotypes, sexual orientation, emigration, well-being, motivational potential as well as health promoting habits.

Chapter 15: *Content of the Father and Mother Stereotypes in Japan: Compared to the Overall Gender Stereotypes*; by Mizuka Ohtaka. Suzuki (2017) reviewed the studies on gender inequality and concluded that gender stereotypes contribute to the persistence of gender discrimination in the workplace and at home. It has also been verified that the content of father (Troilo, 2013) and mother stereotypes (Ganong & Coleman, 1995) differed from the overall gender stereotypes in American society. This study investigated whether the content of the father and mother stereotypes was dissimilar to that of the overall gender stereotypes in Japan. That is, does the content of the father (versus men) and mother (versus women) stereotypes differ from the typically held gender stereotypes? A survey was conducted among undergraduates (N = 266; Men = 106, Women = 160), with a mean age of 19.05 years (SD = 1.02 years). The results imply that the idea that ‘fathers (rather than men) should work outside the home and mothers (rather than women) should keep the house’, is held in Japanese society. In the future, it would be helpful to examine not only explicit stereotypes but also implicit stereotypes about fathers and mothers. Further, it would be useful to study stereotypes held by older and/or less educated adults.

Chapter 16: *An Implicit Model of Assessment of Attitude to Health of Specialists in an Organization*; by Elena Rodionova, Vladislav Dominiak, Zoya Dudchenko, & German Nikiforov. Attitude to health can be considered as one of the most important factors of efficiency and professional success of employees today, as it is a regulator of human behavior in a challenging and controversial professional

situation. Studies of psychologists (starting with R. La Pierre's phenomenon, 1934) often fix the discrepancy between the declared attitude to health and true attitude and behavior. The imperfection of methods of diagnostics of attitude to health may be one of the reasons for such discrepancy. The authors suggest studying the attitude to health of specialists in an organization not only by traditional survey methods (for example, R.A. Berezovskaya's (2003) attitude-to-health questionnaire, a questionnaire on studying the barriers of health-seeking behavior by Nikiforova, Rodionova, Vodopyanova, & Dudchenko, 2016.), but also by means of an implicit method (based on the priming effect, implicit associative test). The article presents the results of a study conducted by using the implicit methodology for studying attitude to health, which is based on a model of polar values.

Chapter 17: *Road Less Traveled: Motivations and Pathways of Filipino Lesbians and Gays Identifying as Ex-Lesbians and Ex-Gays*; by Nel Jayson Santos, Zyra Evangelista, Aaron Vichard Ang, Sigrid Joyce Dela Paz, & Daniel Jan Duque. This study explores the motivations and the pathways of past self-identifying Filipino lesbians and gays. In this study, the researchers seek to (1) understand the motivations that influenced ex-gays in modifying their sexual orientation and (2) delve more into the different pathways (stages and/or steps) that are involved in the sexual orientation modification of ex-gays specifically in the Philippine context. A semi-structured interview was conducted with 10 self-identified Filipino ex-gays. Inductive thematic analysis was then used to analyze the data and to identify common themes. Four themes emerged as motivations of ex-gays: Identity Dissonance, Spiritual Conviction, Cognitive Reconstruction, and Influential Role Models. Likewise, three themes emerged as common pathways taken by ex-gays: Church Involvement, Accountability/Support Groups, and Adaptation of New Lifestyle. Moreover, the study clarifies the current definition of being an ex-gay, and added an evidence to the existing notion that sexual orientation cannot be fully changed.

Chapter 18: *Resilience, Migration Experience and Emigration Self-Efficacy as Factors Related to Emigration Intentions among University Students in Slovakia*; by Bohuš Hajduch, Oľga Orosová, Jozef Benka, & Marcela Štefaňáková. In Slovakia, there has been an increase in the number of students who aim to move abroad. The main objective of this study was to explore whether factors such as emigration self-efficacy, evaluation of migration experience, frequency of migration experience and resilience are related to the emigration intentions of Slovak university students. We also explored mediational effect of emigration self-efficacy in the relationship between resilience and emigration intentions. The research sample consisted of 474 university students from Slovakia ($M=22.4$, $SD=2.13$) from which 76.8% were women, all participating in the Student Life Cohort Study (SLiCE 2016). We found that all factors have a positive unique effect on emigration intentions. Gender was not significant in relation to the emigration

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intentions. Later, we found that resilience positively predicts emigration intentions both directly and indirectly through emigration self-efficacy, which is a significant mediator of this relationship. These results contribute to a better understanding of the role of migration and personality factors in explaining emigration behaviour among young people in Slovakia.

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