InPACT 2015

INTERNATIONAL PSYCHOLOGICAL APPLICATIONS CONFERENCE AND TRENDS

Ljubljana, SLOVENIA
2 to 4 May

Proceedings

Edited by:
Clara Pracana

WIARS
World Institute for Advanced Research and Science

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Portuguese Association of Psychoanalysis and Psychoanalytic Psychotherapy, Portugal

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FOREWORD

Dear Participants,

We are delighted to welcome you to the International Psychological Applications Conference and Trends (InPACT) 2015, taking place in Ljubljana, Slovenia, from 2 to 4 of May.

Psychology, nowadays, offers a large range of scientific fields where it can be applied. The goal of understanding individuals and groups (mental functions and behavioral standpoints), from this academic and practical scientific discipline, is aimed ultimately to benefit society.

This International Conference seeks to provide some answers and explore the several areas within the Psychology field, new developments in studies and proposals for future scientific projects. The goal is to offer a worldwide connection between psychologists, researchers and lecturers, from a wide range of academic fields, interested in exploring and giving their contribution in psychological issues. The conference is a forum that connects and brings together academics, scholars, practitioners and others interested in a field that is fertile in new perspectives, ideas and knowledge. There is an extensive variety of contributors and presenters, which can supplement the view of the human essence and behavior, showing the impact of their different personal, academic and cultural experiences. This is, certainly, one of the reasons there are nationalities and cultures represented, inspiring multi-disciplinary collaborative links, fomenting intellectual encounter and development.

InPACT 2015 received 368 submissions, from 31 different countries, reviewed by a double-blind process. Submissions were prepared to take form of Oral Presentations, Posters, Virtual Presentations and Workshops. 112 submissions were accepted for presentation in the conference (30% acceptance rate). The conference also includes a keynote presentation from Miguel Angel Gonzalez Torres, MD, PhD, working at the Department of Neuroscience in The University of the Basque Country (Spain), the Psychiatry Department in Basurto University Hospital (Bilbao, Spain), and Centro Psicoanalítico de Madrid, Spain, to whom we express our most gratitude.

This volume is composed by the proceedings of the International Psychological Applications Conference and Trends (InPACT 2015), organized by the World Institute for Advanced Research and Science (W.I.A.R.S.) and co-sponsored by the respected partners we reference in the dedicated page. This conference addresses different categories inside Applied Psychology area and papers fit broadly into one of the named themes and sub-themes. To develop the conference program six main broad-ranging categories had been chosen, which also cover different interest areas:

- In **CLINICAL PSYCHOLOGY**: Emotions and related psychological processes; Assessment; Psychotherapy and counseling; Addictive behaviors; Eating disorders; Personality disorders; Quality of life and mental health; Communication within relationships; Services of mental health; and Psychopathology.

- In **EDUCATIONAL PSYCHOLOGY**: Language and cognitive processes; School environment and childhood disorders; Parenting and parenting related processes; Learning and technology; Psychology in schools; Intelligence and creativity; Motivation in classroom; Perspectives on teaching; Assessment and evaluation; and Individual differences in learning.

- In **SOCIAL PSYCHOLOGY**: Cross-cultural dimensions of mental disorders; Employment issues and training; Organizational psychology; Psychology in politics and international issues; Social factors in adolescence and its development; Social anxiety and self-esteem; Immigration and social policy; Self-efficacy and identity development; Parenting and social support; and Addiction and stigmatization.

- In **LEGAL PSYCHOLOGY**: Violence and trauma; Mass-media and aggression; Intra-familial violence; Juvenile delinquency; Aggressive behavior in childhood; Internet offending; Working with crime perpetrators; Forensic psychology; Violent risk assessment; and Law enforcement and stress.

- In **COGNITIVE AND EXPERIMENTAL PSYCHOLOGY**: Perception, memory and attention; Decision making and problem-solving; Concept formation, reasoning and judgment; Language processing; Learning skills and education; Cognitive Neuroscience; Computer analogies and information processing (Artificial Intelligence and computer simulations); Social and cultural factors in the cognitive approach; Experimental methods, research and statistics; and Biopsychology.

- In **PSYCHOANALYSIS AND PSYCHOANALYTICAL PSYCHOTERAPY**: Psychoanalysis and psychology; The unconscious; The Oedipus complex; Psychoanalysis of children; Pathological mourning; Addictive personalities; Borderline organizations; Narcissistic personalities; Anxiety and phobias; Psychosis.

The proceedings contain the results of the research and developments conducted by authors who focused on what they are passionate about: to promote growth in research methods intimately related to Psychology and its applications. It includes an extensive variety of contributors and presenters by sharing their different personal, academic and cultural experiences.

Authors will be invited to publish extended contributions for a book edited by Dr. Clara Pracana, to be published by inScience Press.

We would like to express thanks to all the authors and participants, the members of the academic scientific committee, sponsors and partners and, of course, to the organizing and administration team for making and putting this conference together.

Hoping to continue the collaboration in the future.

Dr. Clara Pracana
Portuguese Association of Psychoanalysis and Psychoanalytic Psychotherapy, Portugal
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KEYNOTE LECTURE

A THIRD WAY AHEAD FOR PSYCHOANALYSIS

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Centro Psicoanalítico de Madrid (Spain)

Abstract

Today, there are two ways of conceiving psychoanalysis, a classical one focused on the search for truth within the internal world of the patient, and a contemporary one perceiving the patient–therapist relationship as the axis of exploration. Rorty's criterion, which divides disciplines into either truth-based or solidarity-based, may be applied to this dichotomy. These conflicting positions come from two different historical periods: the Enlightenment and the contemporary world. They inhabit a sterile environment without theoretical discussion or comparison. Possibly, these elements of truth and solidarity, initially designed as complementary, integrative, and nonconflicting, can be found in the work of some psychoanalysts specifically in Otto Kernberg's proposals. Kernberg makes a creative integration of object relations theory, especially in its Kleinian approach, and ego psychology. In addition, Kernberg's consideration of affects as key elements of the human's internal world reflects a third psychoanalytical "way," exposing the centrality of relational experiences from the earliest stages of life, alongside constitutional drive forces that link us to our biological make-up and determine much of our inner world and behaviour.

Keywords*: Psychoanalysis, Psycho-analytical Psychotherapy, Freud.*

Brief Biography

Miguel Angel Gonzalez Torres, MD, PhD, was born in Bilbao in 1957. Graduated from University of the Basque Country Medical School, he specialized in Psychiatry at Salamanca University, where he also obtained his PhD with a work on Personality and Family Structure of Substance Abusers. Psychoanalytic training at Centro Psicoanalítico de Madrid and now Training Analyst at that Institute. Back in Bilbao, obtained a Professorship at the Department of Neuroscience of the University of the Basque Country and is Head of the Psychiatry Service at Basurto University Hospital in Bilbao. He is also President of OMIE Foundation, dedicated to education and training in psychotherapeutic techniques. Member of the Executive Committee of the International Federation of Psychoanalytic Societies (IFPS) and the Board of the International Society for the Study of Personality Disorders (ISSPD). His clinical and research activities are centered in Psychosis and Personality Disorders.

INTRAOPERATIVE PARALYSIS AND EXISTENTIAL FEAR OF DEATH: IS THERE A LINK?

Michael Wang[1] & Jackie Andrade[2]
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[2]*Plymouth University (UK)*

Introdution

Patient reports of the psychological sequelae of accidental awareness under general anaesthesia (AAGA) are variable in severity and content. Nevertheless traumatised patients commonly describe intra-operative distress, post-operative flashbacks and nightmares around themes of existential death and burial (Wang, 2001). We set out to analyse systematically AAGA reports from the recent UK *NAP5* project in terms of intra-operative experience and subsequent psychological sequelae.

Method

The UK Royal College of Anaesthetists and the Association of Anaesthetists of Great Britain and Ireland audit project *NAP5* (Pandit et al., 2014) collected reports of accidental awareness under general anaesthesia from the whole of the UK and Ireland over a one-year period from all hospital anaesthesia departments . These reports were carefully analysed by an expert panel of anaesthetists, psychologists (including Wang and Andrade) and a patient representative.

Results

NAP5 received 141 reports that were judged as valid by the expert panel. 93% of these were from patients in receipt of a muscle relaxant which is in contrast to a baseline anaesthesia activity survey (Cook et al., 2014) that identified neuro muscular blockade in only 46% of general anaesthetics in the UK and Ireland. Moreover, at least half of these patients experienced intraoperative distress and for the majority of these (67%), distress was caused by neuromuscular blockade and dyspnoea (and not so much by pain).

Some patients feared they were about to die and two patients thought they were already dead as a direct result of the unanticipated experience of intraoperative paralysis. Most (79%) of those with intraoperative distress developed post-operative psychological sequelae such as Post Traumatic Stress Disorder.

Discussion

Fear of death is the most pervasive specific anxiety in children aged 7 to 10 (Slaughter & Griffiths, 2007). Pre-school children commonly report believing that dead relatives and pets “now live underground” perhaps in cemeteries. Nightmare content and themes reported by traumatised awareness patients with explicit recall often involve being buried alive. This raises the possibility that experience of intra-operative paralysis reawakens primitive childhood fears of death involving some form of disembodied consciousness. There was evidence in the *NAP5* reports that having some prior knowledge of muscle relaxants and their effects was protective against psychological sequelae.

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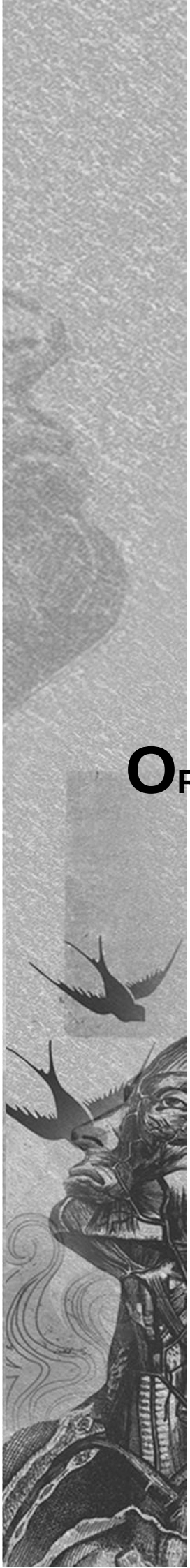

ORAL PRESENTATIONS

NEW DOMAINS OF HEALTH CAPABILITY OF FAMILY CAREGIVERS: AN EXPLORATORY STUDY USING THE GROUNDED THEORY

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Abstract

Background: Increased life expectancy, a declining economic growth, and the management of chronic diseases call for intergenerational solidarity but undermine the physical and psychological health of family caregivers. Their health capability has already been studied through eight domains: physical and psychological functioning, lifestyle value, self-efficacy towards health services, family support, social capital, socio-economic conditions and access to health services. Our aim was to identify new domains. *Methods:* A grounded theory method was applied. Family caregivers of stroke victims living at home were recruited in the Lorraine region (France; n=8) and Luxembourg (n=6). Semi-structured interviews were led face-to-face about their health status, how they currently take care of their health, and what internal resources they need to achieve optimal health. Verbatims were open-coded and grouped to form new domains of health capability. Items reflecting the main idea of the categories were formulated. Throughout the analyses, a control process was applied. Items were validated by consensus with an expert group. *Results:* Seven women and seven men (age 63.6±10.1) participated. Seven new domains emerged: health knowledge, health self-efficacy, health value, life skills, health decision-making, motivation, and attitude towards the future. 76 items were generated: 51 reflected generic abilities while 26 were specific to family caregiving. *Discussion:* Content analysis of these domains is highly instructive. First, it allows guiding the preparation of innovative supports to promote health capability, and second, this list can serve as a basis to elaborate a guide to which clinicians can refer to orient family caregivers according to their needs.

Keywords: *health capability, family caregiving, stroke, qualitative approach, grounded theory.*

1. Introduction

Demographic changes (increased life expectancy), a declining economic growth (increasing social inequalities), and the current way of managing chronic diseases call for intergenerational solidarity but meanwhile, it undermines the health of family caregivers. Indeed, compared to non-caregivers, family caregivers have a higher risk of developing problems with their physical health (Vitaliano, Zhang, & Scanlan, 2003) and to suffer from stress and depression (Pinquart & Sörensen, 2003).

Health capability defines the capacity to achieve one's optimal health (Ruger, 2010b). Adapted from the capability approach (Nussbaum, 2011; Sen, 1992), the health capability paradigm aims to conceptualize a right to health. It is the duty of the society to, on the one hand, create environments which are favorable for the health of the individuals and, on the other hand, to develop personal health-related skills. In this framework, a capable person is able to make informed health choices. Health capability requires a set of capabilities such as having sufficient health-related knowledge, a health-oriented attitude, having social networks to help in the everyday life, or living in a safe environment, and in a country where health care systems are enabling (Ruger, 2010a). Understanding the capacities required to develop health capability is an undeniable interest for the well-being of family caregivers who daily support a relative with chronic disease (Bucki, 2014a).

Based on the correspondences between this paradigm and the content of a national survey led with family caregivers in Luxembourg, eight domains of health capability have previously been studied (Bucki, 2014b): physical health, psychological functioning, lifestyle value, self-efficacy towards health services, family support, social capital, socio-economic conditions and access to health services. A deeper

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knowledge is needed to understand what intrinsically contributes and impedes the health capability of family caregivers. The grounded theory approach helps construct models which gather a theoretical paradigm and the points of view of the concerned persons in a new construct.

The aim of our exploratory study was to identify, using a grounded theory approach, new domains which complement the preliminary 8-domain model of health capability of family caregivers.

2. Methods

2.1. Study design, sample and recruitment

After the aim of the survey has been explained to them, family caregivers were invited to participate to a face-to-face interview at their home:

- In the Lorraine region (France) – All the family caregivers aged 45-80 years and caring for a stroke victim living at home since at least one year were contacted by two local associations: France AVC Lorraine and the Ecole des Parents et Educateurs de Moselle.
- In Luxembourg - Family caregivers who participated, four years before, to a national survey about living two years after a stroke were contacted again. A preliminary verification of deaths having occurred among stroke patients and family caregivers has been made in the Luxembourgish death registry.

2.2. Procedure

Informed consent was obtained from family caregivers willing to participate. Semi-structured interviews were led between February and May 2013 at the home of the participants about their health status, how they currently take care of their health (including what helps/impedes a better agency), and what internal resources they would need to achieve their optimal health. Three different persons trained at qualitative methods led the interviews, so that the bias related to the interviewer's sensitivity was avoided.

2.3. Data analysis

Interviews were recorded and transcribed. The transcripts were analyzed using NVivo 8 in accordance with the grounded theory approach (Glaser & Strauss, 2009).

In a first analysis, verbatims from the transcripts were open-coded and grouped to form categories of health capability. When possible, statements have been classified within the internal dimensions originally formulated in the paradigm. When a statement seemed not to belong to the initial classification of Ruger, a new category was created. In addition, when Ruger's generic classification did not seem to best reflect the diversity of family caregivers' perceptions and experiences, changes have been made. This method allowed developing a stepwise theoretical interpretation grounded in data collected from the participants.

A second analysis was used to refine and adjust the results. According to the criteria of quality of qualitative research, the reliability of the results is partly based on the result comparison between several researchers (Mays & Pope, 1995). Thus, throughout the analyses, a control process was applied where items were validated by consensus with an expert group. Theoretical sampling and reflexivity were used as the central validation procedures in the development of the conceptualization.

3. Results

3.1. Description of the participants

Seven women and seven men (age 63.6±10.1) accepted to participate. They cared for the stroke victims since average 7.3 years (±2.9). Twelve were the partners of the stroke victims, one cared for her mother and another accompanied her daughter. While most were retired, three caregivers were employed at the time of the survey.

Table 1. Characteristics of the participating family caregivers.

	Country	Sex	Age	Relationship	Working	Time since stroke	Last position
A.01	Fr	F	64	Spouse	No	3 years, 6 months	Schoolteacher
A.02	Fr	F	61	Spouse	No	8 years	Housewife
A.03	Fr	M	66	Spouse	No	8 years, 4 months	Laboratory technician
A.04	Fr	F	80	Mother	No	4 years, 9 months	Typist
A.05	Fr	M	79	Partner	No	2 years, 4 months	Director
A.06	Fr	F	65	Spouse	No	9 years	Officer at the Post
A.07	Fr	M	67	Spouse	No	15 years	Paper delivery person
A.08	Fr	M	48	Spouse	Yes	6 years, 2 months	Foreman
A.09	Lux	F	64	Daughter	No	7 years, 8 months	Secretary
A.10	Lux	M	45	Spouse	Yes	7 years, 1 months	Teacher
A.11	Lux	F	70	Spouse	No	7 years, 9 months	Accountant
A.12	Lux	M	64	Spouse	No	7 years, 4 months	Mechanic
A.13	Lux	F	51	Spouse	Yes	7 years, 6 months	Sales assistant
A.14	Lux	M	66	Spouse	No	7 years, 3 months	Airline pilot

3.2. Description of the content of the new domains of health capability

Seven new domains of health capability have emerged: health knowledge, health self-efficacy, health value, life skills, health decision-making, motivation, and attitude towards the future. Of the 76 generated items, 51 reflect generic ability and 26 are specific to family caregiving. The following section details the content of each new domain and illustrates the created sub-categories by selected verbatims.

3.2.1. Health knowledge. Three themes related to health knowledge emerged. The first regrouped the causal relationships between behaviors or lifestyle and health. While several caregivers declared e.g. "*You cannot really influence your health, either you have it, or you do not*" (A.06), others cited a varied range of physical, recreational activities and nutritional behaviours that help maintain their health. Second, the causal attribution of symptoms like pain, sleeping problems and fatigue was mentioned by all the participants. Discourses ranged from "*I don't really know where my pain comes from*" (A.08) to "*anyway I am sometimes a little more tired than normal because [...] I must do eight hours*" (A.05), reflecting that some symptoms directly derive from being a caregiver. Third, the knowledge about the means to acquire health-related information and knowledge were described, comprising the TV, journals or even the Internet.

3.2.2. Self-efficacy and health-related skills. Self-efficacy has been mentioned as a factor of achieving an optimal health status: "*what's important is that I feel capable of having in better health*" (A.10). Other skills comprise the implementation of healthy behaviours "*now I pay attention to what I eat, I am a very good cook*" (A.05), adapting installations in the house in order to be relieved, and the ability to adopt protecting behaviours: "*By car, I was a little… I loved to drive very fast, very... I calmed down [...] telling me I have no right to accident*" (A.01).

3.2.3. Health value. The value of health emerged as an essential part of health capability in two ways. The first was general, as mentioned by A.01: "*I attach great value to health*" or conversely by A.04: "*I am not concerned about my health*". Second, according to some participants, the value placed on health was directly influenced by becoming a caregiver. Either health became more important: "*now I have to take care of her so I am more careful*" (A.03), either less of a priority: "*I should now go to the physio for a problem of sciatica etc. As my husband goes to the hospital every morning, I realise that it passes after*" (A.01).

3.2.4. Life skills. The participants mentioned a set of skills to manage the everyday life. The ability to manage personal situations is put to the test, as shown by the following statements: "*Friends who drifted away after the stroke, I threw them out*" (A.05), "*I feel myself torn between him and the others*" (A.06). The aptitude to call for someone to solve problems or to relieve from the caregiving role was considered as beneficial to maintain their health: "*Given my health, I asked a nurse to come for his personal hygiene*" (A.01) or conversely "*I won't bother anyone*" (A.06). The aptitude to get arrangements from health services was expressed in statements which reflected their capacity to express their needs: "*Sometimes it was necessary to grumble for information*" (A.05) or "*I am the one who asked to place her in a nursing home because it was getting steeper […] and after 10 years, I could not make her stand anymore*" (A.09). The capacity to express their needs and limits to the cared relatives was also cited by

the caregivers as facilitating: "*He knows that on Thursday mornings, don't ask me anything!"* (A.01) and is also well illustrated by the following statement from A.06: "*it was already a habit not to show that I am sick unless I'm lying on the ground*". Finally, three coping strategies have been mentioned in the attempt of coping with the situation: denial, as shown by the following statement "*It's been more than ten years or fifteen years, anyway I always ignored that and that's all, it does not exist*" (A.05). Others related about an acceptance of the situation as "*I say to myself, it is like that, some will experience it earlier, some later, it is like* that" although A.07 stated the contrary: "*I have never accepted my wife's disease*". Finally, some caregivers tried to relativize by reinterpreting their situation positively: "*it is not something that has been proposed to us and we think it could have been worse*" (A.06) or "*other relatives have more important health problems*" (A.13).

3.2.5. Health decision-making. This domain regroups the aptitude to identify health problems and to pursue an efficient prevention or treatment. This pattern has been especially evocated about consulting a doctor: "*I go to see my doctor every three months*" (A.04; A.05) or on the contrary: "*I go to see my doctor when it goes wrong. I don't go for preventive*" (A.13). Other contexts of decision-making were cited, as the prevention of back pain ("*I have serious back problems so I try to go slowly. Gardening, not more than one hour at a time*"; A.06), trying to eat better ("*I eat less, I hardly drink anything*"; A.10), taking medicines in prevention ("*if I stay here, I don't necessarily take my painkiller but if I go to my daughter for example twice a week, I always take it before leaving*"; A.04), and deciding to make activities outside the caregiving role. These activities mainly consist of walks, physical activities and yoga, but it can sometimes also consist of activities like: "*At the moment, I avoid a little bit* [about visiting her mother] *because* [...] *I want to protect myself*" (A.02).

3.2.6. Motivation. Two types of motivation emerged from the analyses: the motivation to maintain health and the motivation to be a caregiver. The types of motivations to maintain health were diverse: material reasons ("*I earn the most money so it is not very romantic, it is, if only for money, very important that I am in very good health*"; A.05), extrinsic motivation ("*my daughters, they say 'don't force mom, stop, we need you to stay healthy'*"; A.06) or the responsibility of being a caregiver ("*in those moments, his presence allows me not letting go. Because I have to react for me and for him*"; A.06). Some caregivers were motivated by the desire to be here for their grandchildren: "*I want to see my grandchildren grow up [...] to often see them, play with them, all that, it motivates me and it gives me strength*" (A.06) and others were just intrinsically motivated "*it has to be your own choice. It's like you don't stop smoking because somebody tells you to. You stop smoking because you want it yourself*" (A.14).

The motivation to be a caregiver was particularly present among French participants with statements like "*I was advised not to visit him every day, but if I don't I just feel guilty*" (A.02). The reasons to care ranged from internal reasons like the "*need to see*" (A.02) the relative or love "*This is all about love. I think if I did not care about my wife, I would have gone*" (A.07) to a perception of the duty to care "*I'm not separated from my wife because I got engaged, I must hold on*" (A.07).

3.2.7. Attitude towards the future. Two types of attitudes towards the future were expressed: perspectives about health, and perspectives about the personal life. Health perspectives were, on the one hand, optimistic. Some caregivers said they felt "*positive*" (A.06) or, as A.10 about reaching his optimal health, "*I think it is still feasible and I'm sure next year will be close*". On the other hand, some caregivers felt concerned about the recurrence of a disease that had already occurred in the past, such as depression or cancer.

Regarding the perspectives about their personal life, some caregivers explained they make efforts to think about the present rather than worrying about the future "*I decided that I won't ever worry about our old days*" (A.01). Whether optimistic or pessimistic about their future life, some caregivers feel that the most important for the future would be that the situation stabilizes: "*that's all I'm asking for, that it won't get worse*" (A.06). Anxiety is present for some respondents, as A.09 who said "*Now it's over, I have enough, hopefully a new tile won't fall on my head* [...] *an anguish of the future*". Finally, some envision the future with projects, but this view is tempered by the constraints associated with the state of the stroke person such as habits to take, lack of time: "*we have projects, but what we need is time*" (A.10).

4. Discussion

This exploratory study completed our preliminary eight-domain model of health capability of family caregivers with new domains. Based on the grounded theory, our qualitative analysis allowed to build seven new domains: health knowledge, health self-efficacy, health value, life skills, health decision-

making, motivation, and attitude towards the future. Together, the completed model contains 15 domains which take in account psychological as well as social and environmental aspects of the health capability of family caregivers.

Our results show the necessity to implement interventions to help family caregivers developing certain aspects of their health capability. For example, developing their knowledge about the causal relationships between the lifestyle or behaviours and health status can influence their decision-making process. The relationships between the different domains of health capability are to be determined.

For this purpose, the next challenge is to operationalize the model of health capability of family caregivers as a questionnaire. The preliminary eight-domain model has already been operationalized by 20 items (HCFC-8 domains) with satisfactory psychometric properties (Bucki, 2014b). The next step will consist of completing the validation of the questionnaire with the items generated by the verbatims stemming from the present study. To date, 76 potentially additional items have been selected (Bucki, 2014b). Among them 51 reflect generic capacities such as the ability to cope with personal situations, health perspectives, knowledge about causal effects between behaviour/lifestyle and health, and motivation to maintain one's health; and 26 refer to aspects directly related to the caregiving condition such as the motivation to care and the ability to seek help to be relieved from the caregiving tasks. Since our sample size was limited and did not reach idea saturation, a second wave of interviews will be led in order to complete and adjust the content of the list. In order to strengthen the conceptualization of health capability of family caregivers, it would be beneficial that this study is made by other research teams from other countries. After a rigorous procedure of item reduction (Goetz et al., 2013), our work will lead to the construction of the first questionnaire assessing health capability of family caregivers.

This questionnaire will have several topical utilities. First, it will guide the preparation of innovative supports to promote health capability, and can also serve as a basis to elaborate a guide to which clinicians can refer to orient family caregivers according to their needs of health capability. Finally, it can be use among other indicators to assess the efficacy of complex health interventions.

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INTEGRATIVE ACCOMPANIMENTS FOR SUBJECTS WITH DISABLING MENTAL DISORDERS: A NEO-EVOLUTIONARY DESIGN OF THE PSYCHOSOCIAL REHABILITATION

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Abstract

In France, for fifteen years, research shown that the contribution of neuropsychology is a major asset when it's devoted to the accompaniment of unadapted people or, to the subjects who present a reduced autonomy. Indeed, these developments have helped to differentiate the cognitive disorders from the psychic disorders and their respective inter-incidence on the adaptation of the user to its living environment. All these theoretical advances helped the community psychiatry in the conceptualization of the accompaniment especially in the field of psychosocial rehabilitation. On this point, we believe that the formalization of an efficient support in psychosocial rehabilitation should build on the new elements of research without refute the heritage that we obtained from the history of clinical psychiatry as the psychoanalysis. To do this, we acted on the following neo-evolutionary fact : in an unadapted situation the humans must find an environment that is suited to their difficulties or, they have to gradually adapt in order to maintain his somatopsychic balance. Referring to this neo-evolutionary approach of the environement adaptation, it now seems essential to simultaneously find both aspects in psychic accompaniment. Consequently, we argue that the accompanying should think about mediatize in a same time a dynamic of compensation (adapting the environment to the subject) and a reconstruction dynamic (adapting the subject to the environment) to maximize its chances of reintegration into the social fabric. In these two aspects, it is possible to combine some reconstructive approaches (cognitive remediation, psychoanalytic work in the long term ...) to compensatory approaches (brief therapies, psychosocial skills training, relaxation ...). During this presentation, we will mediatize a theoretical bedrock related to the emergence of these new integrative accompaniments. Furthermore, we will emphasize that this movement also causes a movement of reconciliation between psychoanalysis and cognitive neuropsychology. Finally, we will justify and illustrate our words by presenting quantitative and qualitative results obtained from the generalization of this work within two mobile teams of psychosocial rehabilitation.

Keywords: *neo-evolutionary psychology, psychosocial rehabilitation, integrative theory, neuropsychology, psychoanalysis.*

1. Introduction

The subject we are going to deal with echoes the clinical results we got from the psychosocial rehabilitation team at the hospital center of Jury Les Metz (France). In the 'rehab' transdisciplinary field, we aim to create a way of working with subjects with serious and disabling mental disorders admitted at the hospital for a long period, who found difficult to reach autonomy in their everyday activities. In order to do so, we had, in the first place, to conceptualize these patients' feasible progressions as well as the support we could bring them. From then on, what could be done of these patients who had fled from any interaction with their environment through a withdrawal in an asylum, behind the walls of a hospital?

1.1. The adaptation of a subject to one's environment: From a theoretical opposition to one's capacity to become integrated

In order to answer that question, we referred to the works of Jakubowicz (2002) for whom "the process which surrounds the constant interaction between human beings and the ongoing world in which they live [acts as] a complex dynamic that links the subject's different actions and various developments, thus allowing the growth of transformation prospects." To enhance that dynamic, we decided to dwell on

the concept of adaptation. For Taché (2003) this concept is updated "via the information treatment and the decision making, to repeatedly act on the inner organization of the subject, thus giving them the possibility to adapt themselves to new situations." Generaly, we can consider that a subject isn't a given object. They become so, when interacting with the environment where, they have been living since they came to being.

Concerning the notion of adaptation, we referred to the neo-evolutionist theories. In those theories, the two main premises meet in the act of integration useful to the understanding of the adaptation process, this one being itself underlying the notion of interactive development of the species. Thus the idea of a gradual adaptation (in its time held by the views of Lamarck, 1809) would meet with the saltationist idea (held by C. Darwin, 1859). Briefly, we can mention that in Darwin's point of view, the environment is crucial in the adaptation process of the species. If one species cannot adapt to their environment, their decent will be the victims of natural selection and will be extinct. From that angle, the adaptation process of the living is consequently central and, it is experienced in a passive way, "being adapted or not". Consequently, the saltationist views see adaptation as a way of being in a world faced with an environment which is either fit or leads to extinction. Concerning the gradual point of view from Lamarck adaptation is not only considered from a passive angle. Actually, it is asserted that any living species can progressively adapt themselves to their environment. Here, adaptation is seen as an active process based on the inborn spontaneous or acquired appearance of new adaptive resources. In short, the Lamarck views assert that the subject is in constant adaptation to their environment, even if this environment undergoes changes. Linking the two views, the recent neo evolutionist theories are based on the following assertion: The living must be adapted to their environment in order to avoid extinction (here, it's Darwin and his idea of a passive adaptation to the environment); but the living can also influence the dynamics of natural selection by actively adapting themselves to the environment. Similarly, these ideas had an impact on the evolutionist clinical psychology.

In the case of subjects suffering from severe and disabling mental disorders leading to an asylum withdrawal at the hospital, this double adaptive process is very complex. Actually, the primary environment of human beings today is society (Frisancho, 1993). And, for example, we know that the lack of social cognitions of these subjects doesn't enable them to adapt themselves correctly to others and by correlation to society. Often, these subjects tend to lose their autonomy, to withdraw into themselves while trying to remain in tune with their own clinical problems, which is already very difficult in itself. So what can be offered to these subjects? Seen from the Darwinian angle, only the environment can be modified and, the only way to support these subjects is to modify their environment (and not the subject.) It is on the basis of these thoughts that long term hospitalization formed itself in a (iatrogen) Darwinian answer to chronic psychosis and its linked (prodroms) (borderline problems, precariousness…). Despite the importance of this unipolar view, this position can nevertheless lead to a negation of the abilities, resources and potential of the subject to adapt to their environment as the Lamarck theories assert it. If only seen from the Lamarck angle, it would only fall on the subject to find in them the ability to adapt them. And all this by looking for personal support for development or, by changing their potential into abilities. Of course, we can notice in our own everyday practice how much our patients have this ability to surprise us by gathering their sometimes hidden resources. The strict application of the Lamarckian ideas can be found, for example, in the movement called 'antipsychiatry' applied for example in certain countries and for that reason its excluded lot. For all that, grasping a subject only under the angle of the 'possible' amounts to denying their' impossible' and to making the field of 'possible' common. In the psychological handicap field, it amounts to neglecting the lacks in the subject while ignoring the sometimes massive symptomatology that can empered the adaptation process to the social environment. In the end, we assert that this conception, arbitrary applied, can be against-productive since it would increase the cleavage between healthy and pathological parts.

As can be understood, these two approaches initiate different levers so as to allow a better adaptation of the subject to their environment. If considered separately, each of these conceptions deny one of the subject's aspects: either their abilities to evolve or their vulnerability confronted to realities. So, bearing this fact in mind, it seemed essential to us to conjugate these two approaches in order to be closer to the adaptive dynamic of the subject to their environment (first themselves, then their families and finally the social network, the territory).

1.2. What support in 'rehab'?… From the opposition of two models of 'rehab' to their integrativity

So, starting from the idea that we had to link the two adaptive approaches to get efficient support, we started thinking more precisely about the support models in psychosocial rehabilitation. As MacLachlan & Mannan, (2014), we think that an interdisciplinary psychosocial work of rehabilitation is preferable. Usually, it's common to consider that there are two models of psychosocial rehabilitation. One

is inspired by an Anglo-Saxon model and the other is rather European. We could call this latter a bio–socio- psychological model. Concerning the Anglo-Saxon rehabilitation model, we could recognize once more the Lamarck evolutionist conceptions. So this model stems from the postulate that the subject can adapt themselves through an increase in their autonomy when developing their ability to manage some actions owing to an active and passive stimulation of their abilities and resources. Indeed, the Anglo-Saxon model of psychosocial rehabilitation is almost completely based on the recovering and developing of know-how through, for example, iterative stimulation or cognitive remediation or training to psychosocial abilities… This care does therefore mainly dwell on the 'cure' system. 'Cure' is meant in the way of dealing with the symptoms a person shows. This term shows the subject in a more passive way in which they benefit from a specific cure aiming at diminishing their disorders. The bio-socio – psychological model of rehabilitation takes its essence in the legacy of the European psychopathology. Its peculiarity is to work on the possible outing of the subject by giving them a role in society. To do so, professionals reflect on and adapt the subject's environment in order to make their adaptation to the social environment easier. This movement, linked to the post-asylum movement of psychiatry (Bonsack and Favrod, 2013) is consequently based on the softening of the subject's psychic's difficulties, their education and ritualization. The French way in psycho-social rehabilitation work is based on the professional fit, adapting the environment and taking in account all factors which would interfere with the performance of its reintegration. This care is directly influenced by the Darwinian views on adaptation since it is mainly the environment which is changed to fit the subject's expectations. Here, if the subject is not cured, he is led towards reinsertion. In this specific case, they no longer are in a model based on the 'cure' system, but on the 'care' system. It means taking care of a thing or a person. In that way, we can assert it fits the Darwinian conception on the psychopathology of evolution.

Though these two models act on the subject's life, they work in different ways. In the Anglo-Saxon psychosocial rehabilitation model, re-adaptation is in the center of the process. It can be defined as 'a field specialized in health care which aims at bettering the function… and/or prevent the damaging of the function, and at providing the highest level of physical, psychological, social and economic autonomy, so as to better life quality at its most and lower the long term needs of health care and the community support to the needs of these persons' (Australian faculty of medicine). The dynamic impulse here is therefore a dynamic of reconstruction. Unfortunately we also know that the subject with a mental handicap can be limited in his recovery by treating his symptoms. This can lead to a vulnerability putting "the cure" into difficulty. On the other hand in the European bio-socio-psychological model we have seen that such accompaniment is massively focused on reintegration in society. According to different authors like Ehmann (2004) we can define it as "the process of developing and exercising interpersonal relationships and social connectedness; a stage that occurs after stabilization when psychosocial strengths have been rebuilt". But targeting only on this issue can mean denial of the subject appetitive potentials.

From then on, we make the hypothesis that if only one of these two accompaniment modalities is chosen, then the subject will rapidly be confronted to certain limits. In the case of an accompaniment purely centered on an European psychosocial rehabilitation model, the reconstruction of patient's competences would be less valued, leaving interest to compensating subject's difficulties by adjusting the environment. In this case the subject can remain unsuitable for society but integrated in an over adapted environment. In the case of accompaniment centered on the Anglo-Saxon approach of psycho-social rehabilitation, this mean using many cognitive reconstructive exercises to enhance subject's autonomy, associated with a therapeutic subjective reconstruction. But the population targeted by this process is sometimes limited and we can wonder if this model is not too elective, outgoing some serious categories such as chronic psychosis. In short even if these models of psycho-social rehabilitation have each key to improve subjects live quality, using exclusively can be limited due to the foundation of the adaptive concepts on which they are based. Here on the limit of the model we find the strength of the other; we therefore support an instauration of an integrative model composing the adjunction and the conjunction of both models of psycho-social rehabilitation.

1.3. From the integrative model of psycho-social rehabilitation toward its personalized accompaniment: A clinical dosing related to subject's difficulties

Regarding to this integrative psycho-social rehabilitation model, the adaptation dynamic is facilitated by a double movement whose neo evolutionist origin was described above. This movement is constituted of compensation and a reconstruction dynamic. As a consequence, this double dynamic then associate the two movements related to psychic accompaniment "the cure" aimed at remission and "the care" aimed at recovery. According to Buckley et al. (2007), "recovery is a process rather than an outcome, focus on the individual and his/her journey toward attaining goals rather than the absence of symptoms". More concretely the accompaniment part centered on the "cure" aims at remission of symptoms. As a consequence it includes all the approaches to major changes in the subjects, like

cognitive remediation therapy, psychoanalytical therapy … but also, includes compensatory approaches (brief therapies, psycho-social skills training, relaxation...). This integrative approach can also be achieved by adjusting the environment and working in deep on improving subject's potentials. In different terms, combining those approaches help the subject into self-restoration in order to be adapted to his environment while getting benefit from environmental adjustment, which helps him to progress. For us, in this way the subject maximize his changes to live in society more easily.

Now, we have to remind the need to distinguish the notion of readaptation from that of reintegration. That keeping in mind, an efficient psycho-social rehabilitation work is constituted of these two entities (Goyet et al., 2013). In reintegration, accompaniment is targeted, as we said before, at adjusting the environment to the subject. This approach consists on offering a maximum of interventions from professionals to compensate his lacks and deficiencies. In this meaning the subject will be less confronted to these deficiencies because professionals supply for his needs and reduce the gap between his capacities and needs. Accompaniment is offered according to the actual degree of autonomy and it does not really pay interest on the potential of evolution of the subject. More precisely it's a compensatory accompaniment that proposed here so costly in terms of mean it consists on adapting his daily life with multiple interventions of different professionals. On the other hand, when it comes to readapt ion accompaniment is different. It stands on two aspects: an affective one by a subjective reconstruction of self where he is brought to work profoundly on his life history to give it another sense than the one he had until now. Psychoanalysis is one of those methods that address this affective aspect, and that we believe, has its entire place in the accompaniment of chronic psychotic subject. Also there is a place for mediation therapies, Rogerian approach, systemic therapies … and secondly can be added a re-adaptation of cognitive functions.

Defining in this way, we can see in an arbitrary way than Darwinian approach of adaptation to the individual has generated an European of psycho-social rehabilitation centered on the compensation dynamic and the “care” accompaniment. And, with fact, it generated working dynamics in rehabilitation majority centered on social reintegration. To the opposite, the Lamarckian approach of adaptation generated an Anglo-Saxon psycho-social rehabilitation concept centered on the dynamic of restoration (reconstruction), the “cure” accompaniment. In the fact it generated a working dynamic centered on subject re-adaptation. It's evident that, practically, reintegration and re-adaptation do not exist in pure form. They are many colorations as they are individuals, but we still consider that there are three major profiles of accompaniment in integrative psycho-social rehabilitation. The first is called psycho-social reintegration; it is constituted of 75% reintegration and 25% re-adaptation. The second is called psycho-social re-adaptation it is constituted of 75% re-adaptation and 25% reintegration. At last psycho-social rehabilitation comprises equivalent readaption and reintegration. Establishing those three profiles seems relevant when it comes to conceptualize an accompaniment for a subject. Coming to the end of our thinking, we have designed a research work to test the supposed efficiency of our thinking; we then are going to present this procedure and the results we have obtained.

2. Methodology

To start, we wish to remind that our work is a “field” clinical research. As a consequence, our methodology is rather empirical where many biases may have occurred than only fundamental research can present. Nevertheless, despite this, it seems to us pertinent to present our results using quantitative and qualitative indicators. First it is important to precise that the integrative psycho-social rehabilitation approach that we defined was put in place in 2014 by a mobile ambulatory team (ERAH) where are followed subjects reintegrated in society. At the same moment we continue our work having created an intra-hospital team (UPAH). Its purpose is to help subjects living in the institution on the long run with severe and invalidating disorders, to be able to take advantage of an efficient rehabilitation accompaniment with the hope to help them leave the institution. Here we present our result after implementing this new working dynamic in a relay house lodging 12 patients. Another three places apartment since (in 2014). with constant personal and material means per patient, we present simple and sequential readmission rates, as well as the rate of acting out, for year 2012 (N = 12), 2013 (N = 12), 2014 (N = 15), we present these results in two summarizing tables. To these quantitative results related to residents' symptoms and degree of autonomy.

3. Results

At first, result analysis show that implementing of an integrative accompaniment dynamic in psycho-social rehabilitation has a significant impact on readmission rate and on the number of acting out. Considering readmission rate we can note a decrease of more than 82% between 2013 and 2014. Besides,

this decrease is also significant between 2012 and 2014 (65%). We can also consider that implementation of this approach had a major impact on readmission rate considering acting out number we can note a decrease of more than 89% between 2013 and 2014. This decrease is also important comparing 2012 and 2014 (86%). So we can think that this approach as also a major impact on acting out rate. Finally, considering the sequential admission rate, results were not found relevant. As for qualitative results, all careers from sanitary and medico-social sectors have noted a progress in the degree of autonomy of all patients. This was notice in daily activities (preparing meals, cleaning their apartment, taking a shower, budget managing …). A symptom improvement was also felt by medical careers and in many patients which also was noticed by the decrease of acting out rate. Also, the whole group of resident benefited of a better life quality investing more in social life, family bonds and non-stigmatizing group's activities. As a sum, all this results lead us to consider that integrative approach in psycho-social rehabilitation generates many benefits to the accompanied subjects.

4. Conclusion

Seeing those first results that we judge encouraging it seems that combining compensatory and reconstructive approaches helps subjects in decreasing their readmission rate and duration. In our sense, even though it is extremely difficult to evaluate the impact of a therapeutic approach, the presented data seem to embrace the idea that adapting the subject to his environment is facilitated when both adaptive approaches are simultaneously considered in accompanying the subject. To conclude we think that complementary neo-evolutionist approaches (Darwinian and Lamarckian) can open ways to more possibility in psycho-social rehabilitation. Besides, we think that this interactivity leads to the conjunction of different approaches in clinical psychology, simultaneously. Putting adaptation dynamic in the center of our thinking, all approaches in clinical psychology (especially cognitive and psychoanalytical approaches) become then facilitators of the psycho-social rehabilitation. Becoming tools leading to well-being, these different approaches leave then their dogma to enter in synergy through transdisciplinary. Through this "reconciliation" it is also a question of bringing together different approaches that have a positive impact on mental health. Today, working in psycho-social rehabilitation show us that cognitive and psycho-affective part of the subject are not separated entities.

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LONELINESS AND ISOLATION AFTER BRAIN INJURY: FACTORS IMPACTING SURVIVOR AND CAREGIVER'S QUALITY OF LIFE AFTER INJURY

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Abstract

Over 50,000 Canadians survive traumatic brain injury every year. After they are released from the hospital, trauma ward, or rehabilitation facility many of these individuals are cared for by their spouse or another family member. During this time, the needs of families are often not met, resulting in changes in the employment status of household members, spousal separation, and changes in co-habitation. Life changes affect their physical and mental health; emphasis on the well-being of the survivor often overshadows the effects on the caregiver. Acquiring a brain injury can impact the mental health and life satisfaction of both a survivor and their caregivers. Changes in leisure activities, employment, and the added burden of caregiving contribute to increased social isolation, depression, and loneliness. This study examined personality characteristics, unmet needs, and risk factors for survivors and caregivers and may help to predict undesirable outcomes. Psychological questionnaires that are reliable and valid were used to measure various aspects of life after brain injury in 344 brain injury survivors and 140 caregivers. Seventy-three percent of survivors presented with moderate to severe depression and suicidal ideation. A large number of caregivers (64%) also presented with depression and these high numbers were significantly related to their levels of leisure satisfaction and overall satisfaction with life. Personality traits, caregiver burden and family, social and romantic loneliness were also examined as risk factors and predictors in these populations. Results from these groups were examined separately and will contribute to the literature on individualized rehabilitation procedures following brain injury. The product of this will be the basis for the development of policies and procedures when discharging patients into the care of their family members or spouse. Support for these individuals should not stop when the formal rehabilitation ceases. The goals of this study focused on the effects of brain injury on the family unit; these factors may be overlooked in our current rehabilitation and follow up procedures.

Keywords: *Traumatic Brain Injury (TBI), brain injury survivors and caregivers, quality of life, loneliness and isolation, personality.*

1. Introduction

Many survivors of a traumatic brain injury (TBI) are cared for by their family members after they are released from the hospital, trauma ward, or rehabilitation facility. The post-injury transition is stressful for both the caregiver and survivor. At home, survivors are greatly affected by both their physical environment and the mental well-being of their caregiver. Although changes associated with the TBI affect the caregiver, the emphasis on the well-being of the survivor often overshadows the effects on the caregiver (Roche, 2009). Roche advocated for the caregiver, indicating they are at risk of becoming a "hidden patient" and often do not receive necessary support. She argued that funding should focus on training and supporting caregivers because well-functioning caregivers allow survivors to be well-cared for and prevents an increased burden on the healthcare system.

1.1. Survivors of Traumatic Brain Injury

The life changes associated with TBI can trigger loneliness and depression, often leading to suicidal ideation. TBI survivors are at increased risk of suicide ideation (28.3%; Tsaousides, Cantor, & Gordon, 2011) and suicide attempts (26.2% lifetime prevalence, with 70% of attempts post-injury; Simpson & Tate, 2005). These mental health problems are long term and can last for months after the initial injury. One year post-injury, Andelic, Sigurdardottir, Schanke, Sandvik, Sveen, and Roe (2010) examined disability as well as physical and mental health of brain injury survivors and almost half presented with poor mental health and 66% indicated at least two problems regarding social interactions.

In addition to mental health problems, TBI also has a negative effect on leisure activities and the balance of time spent engaging in these activities (Beir, Dutil, & Couture, 2009). Although survivors report that they do not return to their pre-injury leisure activities and view these changes negatively (Wise

et al., 2009), there is a positive relation between subjective quality of life and social participation (MacLean, Jarus, Hubley, & Jongbloed, 2014). Winkler, Unsworth, and Sloan (2005) emphasized that time balance is crucial to well-being and overall health. Although survivors spend time volunteering and engaging in social activities, the time spent on these activities did not fill the void of employment. Thus, rehabilitation should focus on both the return to work and the return to productive leisure.

1.2. Caregivers of Traumatic Brain Injury Survivors

Immediately after injury, 51% of relatives of severe TBI patients reported anxiety and 69% reported depression. Family members also perceived an impaired quality of life (Norup, Welling, Qvist, Siert, & Mortensen, 2012). Compared to healthy adults who are not caregivers, the life satisfaction of family caregivers is lower for up to two years after TBI (Livingston et al., 2010). It is also interesting to note that the well-being of brain injury survivors and caregivers may be tied to their perceptions of the severity of the neurobehavioral functioning of the survivor (Lehan, Arango-Lasprilla, Aragón, Quijano, & Goodwin, 2012). When survivors and their caregivers report similar perceptions of the survivor functioning, satisfaction was higher. Treating the rehabilitation process in a family oriented manner could help alleviate unnecessary decreases in life satisfaction by focusing on how survivor functioning is perceived. Having the caregiver and survivor work together in the rehabilitation process and tracking improvements collectively may help align the perceptions of the survivor's functioning.

Dunn and Strain (2001) found that a large number of caregivers did not reduce or cease their leisure activities but approximately 50% of caregivers reported a change in their activities. Those who had higher levels of caregiver burden, co-resided with the elderly family member, or were responsible for assisting the elderly family members in daily living activities were more likely to reduce or cease at least one activity. Those who presented with possible depression, thoughts of having to place their family member into a full time care home, or had chronic health problems themselves were also significantly more likely to reduce or cease at least one activity. These changes are unfortunate because satisfaction with leisure activities is related to general happiness. Results such as these highlights the importance of focusing on the mental and physical health of caregivers as well as survivors.

1.3. Purpose of the Current Study

The purpose of the current study was to identify risk factors associated with various aspects of life satisfaction and mental well-being following brain injury for both survivors and caregivers. Psychological questionnaires that are reliable and valid were used to measure aspects of life after injury. The goal of this research was to inform the creation of stable and supportive social structures for both survivors and their caregivers at all of the stages post injury. Although specific caregivers were not paired with survivors, this study compares these populations and investigates risk factors within each independently.

2. Method

2.1. Participants

In total, 344 TBI survivors (M_{age} = 44.71) and 175 caregivers (M_{age} = 47.15) completed a questionnaire package. Collectively survivors and caregivers reported that 35.6% of the injuries occurred during the previous two years, 44% occurred between two and a half and 10 years, and 20.2% occurred more than 10 years ago. Eighty percent of caregivers were employed prior to the injury compared with 44.4% at the time of the survey. Caregivers were most often a parent (38%) or spouse (46.7%) but 14.7% reported caring for a sibling, friend, or another person. In total, 88% of survivors were employed prior the injury compared with 27.6% at the time of the survey. Most survivors reported being cared for by a family member (spouse [46.8%] or parent [11.1%]) and 11.4% reported being cared for by a sibling, friend or another person. Approximately 20 percent of survivors indicated they did not have or need a caregiver.

2.2. Materials

Two different questionnaire packages were distributed. The survivor questionnaire package included 74 questions and the caregiver package included 87 questions. The survivor questionnaire consisted of a demographics section as well as eight short, valid and reliable psychological questionnaires measuring aspects of well-being and quality of life. All participants completed the Social and Emotional Loneliness Scale For Adults-Short Version (SELSA-S; DiTommaso, Brennan, & Best, 2004); the Patient Health Questionnaire (PHQ-9; Kroenke et al., 2014); the Fear of Social Isolation Scale (FSI; Hayes, Matthes, & Eveland, 2011); the Social Isolation measure (Murberg & Bru, 2001); the Leisure Satisfaction Scale (Coyle, Lesnik-Emas & Kinney 1994); the Ten-Item Personality Inventory (TIPI; Gosling, Rentfrew, & Swann, 2003) and, (7) The Satisfaction with Life Scale (SWLS; Diener, 1985). The survivor

package also included the Blame Attribution Questionnaire (BAQ; Hart, Bogner, Whyte, & Polansky, 2003). The caregiver package included the Service Obstacles Scale (SOS; Kolakowsky-Hayner, Kreutzer, & Miner, 2000) and the Modified Caregiver Strain Index (Wilson, Emslie, Quirk, & Evens, 1999).

2.3. Procedure

All data was collected via an online survey, designed using the Qualtrics system. This format allowed us to distribute the survey worldwide, maximizing the response rate. Both brain injury survivors and caregivers were recruited from a convenience sample obtained through advertisements in online brain injury support group settings as well as through the email network of Brain Injury Canada and their website. Information about the survey was also distributed through a mass email campaign to individuals with access to target groups. After reading general information about the research project, participants indicated whether they are a caregiver or a survivor, which determined which questionnaires would be presented. All participants were informed that participation was voluntary and that they could discontinue at any point during the questionnaire. With the exception of the demographics questionnaire (which was always presented first), the order of the measures appeared was randomized.

3. Results

Descriptive statistics were calculated for all relevant variables and are presented in Table 1. Independent sample t-tests were used to test differences between survivors and caregivers. The Table indicates that the overall satisfaction with life was similar for caregivers and survivors. Both survivors and caregivers used the full range of possible life satisfaction scores; thus, some people were very satisfied with their lives and others were not at all satisfied. In spite of this apparent similarity, it is important to note that Diener and his colleagues (1985) reported that scores ranging from 10 to 14 indicate an overall dissatisfaction with life and indicate that the current life conditions are generally negative. Further, caregivers tended to have higher emotional stability and conscientiousness as well as lower romantic loneliness and leisure satisfaction scores. We also analyzed gender differences to determine whether males and females had different scores on any of the key variables. With the exception of the fact that females had high agreeableness, $t(377) = -3.4$, $p<.0001$, and depression, $t(346) = -2.46$, $p<.016$, scores, there were no other statistically significant differences.

Table 1. Average Caregiver and Survivor Scores on Variables of Interest.

	Caregiver (N = 175)	Brain Injury Survivor (N = 490)	*t*-test (*p* value)
Overall Satisfaction with Life (SWL)	13.38 (SD = 7.12)	14.61 (SD = 7.38)	-1.66 (*p* = .097)
Hours Caring/Being Cared for	6.91 (SD = 3.15)	5.72 (SD = 4.0)	
Personality			
Extraversion	7.93 (SD = 3.21)	7.29 (SD = 3.21)	1.88 (*p* = .06)
Emotional Stability	7.82 (SD = 2.95)	7.06 (SD = 3.18)	2.36 (*p* =.019)
Agreeableness	10.50 (SD = 2.38)	10.12 (SD = 2.40)	1.52 (*p* = .131)
Openness	9.71 (SD = 2.52)	9.30 (SD = 2.72)	1.47 (*p* = .143)
Conscientiousness	10.91 (SD = 2.60)	9.10 (SD = 2.90)	6.17 (*p* = .0001)
Fear of Isolation	16.29 (SD = 4.56)	17.23 (SD = 4.91)	-1.87 (*p* = .063)
Social Isolation	14.11 (SD = 5.21)	14.01 (SD = 5.28)	.17 (*p* = . 865)
Loneliness			
Social	20.23 (SD = 7.58)	19.81 (SD = 7.88)	.51 (*p* = . 610)
Family	17.25 (SD = 8.30)	17.43 (SD = 8.99)	-.192 (*p* = .848)
Romantic	22.84 (SD = 7.68)	19.80 (SD = 9.89)	3.08 (*p* = .002)
Depression	12.39 (SD = 5.26	12.79 (SD = 5.09)	.726 (*p* = .469)
Leisure Satisfaction	11.36 (SD = 4.15)	13.02 (SD = 4.56)	-3.59 (*p* = .0001)
Caregiver Burden	102.32 (SD = 25.25)	N/A	
Service Obstacles	27.01 (SD = 5.26)	N/A	
Blame Attribution	N/A	9.86 (SD = 4.30)	

A hierarchical regression was conducted to determine the factors associated with the overall satisfaction with life of the survivors. The overall model was statistically significant and accounted for 50.8% of the variability, $F_{(13, 206)} = 16.36$, $p = .0001$, multiple $R = .71$, adjusted $R^2 = .48$). Personality variables were entered in the first block and the model was statistically significantly, $F_{inc}{}_{(5,214)} = 9.55$, $p < .0001$. Conscientiousness, $\beta = .16$, $t = 2.26$, $p < .024$, Extraversion, $\beta = .14$, $t = 2.12$, $p < .035$, and Emotional Stability, $\beta = .25$, $t = 3.29$, $p < .001$ were statistically significant predictors of life satisfaction. Situational factors, including loneliness (social, romantic, family), fear of isolation, social isolation, depression, and leisure satisfaction were entered in the second block and the model was statistically significant, R^2 change = .33, $F_{inc}{}_{(7, 207)} = 19.57$, $p < .0001$. Significant predictors were leisure satisfaction, $\beta = .51$, t = 8.22, p < .0001, social loneliness, $\beta = -.15$, t = -2.4, p < .017, romantic loneliness, $\beta = -.12$, $t = -2.33$, p < .021, social isolation, $\beta = .16$, $t = 2.64$, $p < .009$, and depression, $\beta = -.14$, $t = -2.76$,

$p < .006$. Finally, blame attribution was entered in the fourth block and the model was not statistically significant. A second hierarchical regression was conducted to determine which factors predicted the overall satisfaction with life of caregivers. The overall model was statistically significant and accounted for 62.9% of the variability, $F_{(14,92)} = 11.14$, $p = .0001$, multiple $R = .79$, adjusted $R^2 = .57$. Personality variables were entered in the first block and the model was statistically significant, $F_{inc}{}_{(5,101)} = 2.58$, $p < .01$. Emotional stability was statistically significant, $\beta = -.27$, $t = 2.49$, $p < .014$. Situational factors, including loneliness (social, romantic, family), fear of isolation, social isolation, depression, and leisure satisfaction were entered in the third block and the model was statistically significant, R^2 change = .462, $F_{inc}{}_{(7,94)} = 14.59$, $p < .0001$). Significant predictors were leisure satisfaction, $\beta = .58$, $t = 5.98$, $p < .0001$, and fear of isolation, $\beta = .23$, $t = -3.18$, $p < .002$, and romantic loneliness, $\beta = .-.22$, $t = -2.79$, $p < .006$. Finally, service obstacles and caregiver burden were entered in the fourth block and the model was statistically significant, R^2 change = .054, $F_{inc}{}_{(2, 92)} = 6.70$, $p < .002$. Caregiver burden was statistically significant, $\beta = -.35$, $t = -3.60$, $p < .001$.

4. Discussion

Survivors and caregivers have similar levels of satisfaction with life but the predicting factors vary. For survivors, life satisfaction was predicted by higher emotional stability, conscientiousness, and extraversion as well as higher leisure satisfaction, lower depression and lower social and romantic loneliness. For caregivers, life satisfaction was predicted by higher emotional stability, higher leisure satisfaction, as well as higher fear of isolation, lower caregiver burden, and lower romantic loneliness. In adults, personality traits are relatively stable even during major life changes or events. How an individual copes with, or interprets a new life situation can be linked to specific personality traits throughout childhood (Allemand, Steiger, & Hill, 2013). TBI, depending on the specific injury, could influence change in some characteristics that would be otherwise uncommon in a healthy adult. Thus, it is impossible to determine if the personality characteristics of the survivors were affected by their injury.

Although the incidence of moderate to severe depression was similar for survivors and caregivers (73% and 64%, respectively), substantially more survivors presented suicidal ideation (45% *vs.* 25%). Winkler Unsworth, and Sloan (2005) emphasized that balance in time-use is crucial to well-being and overall health. They reported similar rates of unemployment and leisure satisfaction as the current study. Over half of the caregivers and survivors in the present study reported the injury to be an obstacle to visiting, travelling, and attending social events with friends and family. Higher scores on this Social Isolation Measure were related to both leisure satisfaction and total scores on the SELSA-S. Dunn and Strain (2001) found approximately 50% of caregivers of elderly family members reported that their leisure activities changed in their new role. The present research reveals leisure satisfaction was related to satisfaction with life for both survivors and caregivers. The importance of leisure activities should be further explored to examine specifics of these impacts within each group. This is especially important as increasing participation in leisure activities is an attainable goal.

5. Limitation of the Current Study

The snowball effect of this online method reached a large number of participants. For the same reasons it was effective, it was also exclusive. Brain injury survivors recruited online will be higher functioning and able to comprehend and complete the survey independently. The reduced concentration and attention span associated with TBI may have contributed to missing data. Conversely, caregivers found online may be giving care to survivors that require a wider range of care than the survivors who participated which may contribute to differences between the groups. Additionally, caregivers and survivors were not paired, preventing us from linking specific survivors and caregivers. Lehan and colleagues (2012) found life satisfaction in one group did not appear to influence the other; however when both had similar perceptions of the functioning of the survivor, their satisfaction was higher. Pairing survivors with their specific caregivers would have given us an opportunity to examine the possible impact of symptom severity, interactions and perceptions of neurobehavioral functioning.

6. Conclusions

Treating the rehabilitation process in a family oriented manner could help alleviate unnecessary decreases in life satisfaction. This unity will follow through into expectations and understanding of the roles of all involved for both caregivers and survivors. The associations found in this study should be examined more closely in follow-up studies. Thus, post-injury interventions should be developed and tested to increase satisfaction with life in both groups with special attention to individual needs and risk factors.

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INFANTILIZATION, CIVILIZATION, AND CHILD ABUSE

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Abstract

This presentation attempts to present something of a cultural historical context in order to be able to talk about corporal punishment. Or even more generally, it presents the cultural historical background of our feelings and perceptions of child abuse in general. First the infantilization process is discussed, that is the increasing duration of childhood over the centuries. The theories and the research of Norbert Elias as well as Philip Aries will be discussed. Contrary to common representations, it will be made clear that, on the basis of the quantitative analysis of paintings from the 15th to the 20th century, Philip Aries' insights have not been rejected. To the contrary. Elias theory about the civilizing process will be used to explain the process of infantilization, as firstly described by Aries. Finally Elias' understanding of the civilizing process will be used to explain our modern unacceptance of child abuse.

Keywords: *infantilization, history of childhood, child abuse, civilization and affect control.*

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1. The infantilization process

The infantilization process has put the child apart from the adult world, and as a consequence of that process children were considered as developing, as slowly developing into the direction of civilized adulthood. How did this process come into being in the Western world? Well, I think that childhood as a special phase in the lifespan came into being via what Norbert Elias called the civilizing process.

Elias made clear that the historical change of western societies implies increasing, ever longer chains of interdependencies between individuals, necessarily leading to shifts in the direction of a heightened control of the affects, developed in society and learned by the individual, and above all a heightened degree of autonomous affect control. It is mainly the coming into existence of the nation states with centralized state power that put constraints on the direct satisfaction of individual impulses. In particular the following two domains of human emotions were to be repressed: anger leading to violence, and sexuality leading to instable families. These two domains are the difficult ones in the socialization of children, those "barbarians that constantly threaten society from inside" (Frederic le Play, 1871). It is precisely this Eliasian understanding of the civilizing process that creates a distance between children and adults, that is which creates the process of infantilization.

Much of the data that Elias is building on has to do with manners. I present a few examples.

Firstly on "blowing ones nose" (pp. 143-147). In the 13th century Elias quotes the following precept for gentlemen: "When you blow your nose or cough, turn round so that nothing falls on the table. In the 15th century: "It is unseemly to blow your nose into the tablecloth." And then in the 18th century there is a very significant prescription, it sounds "Take good care not to blow your nose with your fingers or on your sleeve like children ". This is something that Elias himself stresses repeatedly: in the 18th century etiquette books very often the warning: "don't behave like children" shows up. The reason is that the civilization process has advanced that far that children's behavior for the first time in history can be indicated as "uncivilized" Actually this is the background of the infantilization process.

There are accounts from the Middle Ages that make clear how violent and destructive knights were permitted to be. I just cite here a description of the behavior of a particular knight that Elias found in the archives he used: "He spends his life in plundering, destroying churches, falling upon pilgrims, oppressing widows and orphans. He takes particular pleasure in mutilating the innocent. In a single monastery, that of the black monks of Sarlat, there are 150 men and women whose hands he has cut off or whose eyes he has put out. And his wife is just as cruel. She helps him with his executions. It even gives her pleasure to torture the poor women. She had their breasts hacked off or their nails torn off so that they were incapable of work." (p. 194). Again Elias makes clear that in the 18th century direct expressions of aggression are considered as "childish". Look at the 1774 edition of Lasalle's book

"Civilité", cited by Elias (p. 203): "Children like to touch clothes and other things that please them with their hands. This urge must be corrected, and they must be taught to touch all they see only with their eyes." Elias comment: '"By now this precept is taken almost for granted. It is highly characteristic of civilized man that he is denied by socially instilled self-control form spontaneously touching what he desires, loves or hates." Well that is far away from the behavior of the Medieval knight and his wife that I just quoted.

Recently Steven Pinker repeated this Eliasian picture as follows: "The decline of violence is a fractal phenomenon, visible at the scale of millennia, centuries, decades, and years. It applies over several orders of magnitude of violence, from genocide to war to rioting to homicide to the treatment of children and animals.

For sexuality we could easily follow the same historical process. The open and visible way, even for children, that sex was an aspect of daily life and was made more and more invisible, behind the curtains, only hidden in the intimacy of the family, is followed very precisely by Elias. And we find the same gradual civilization process.

By now it must be clear that the infantilization process with which I started out is founded in the civilization process as analyzed by Norbert Elias. It is also clear that society and science can only be interested in child development and education, better pedagogy, after the 18th century. And that is of course what happened. From the 19th century on parents as well as scientists were more and more interested in child development, in the socialization process that became necessary after an essential civilizing process had taken place and had separated children and adults.

2. Little barbarians

From a historical point of view, parents have become more and more seriously interested in their children. Meanwhile, however, they have become less in charge. French scholar Frédéric Le Play (1806-1882), who was trained to be a mine engineer, converted to sociology at the age of fifty. He did not share the Enlightenment optimism, the idea of Progress, of his contemporaries and was concerned about the disconsolate lives of the industrial proletariat, which was moving up the social scale. In his view, the family was the key safeguard for stability and moral authority. That was necessary, for as he wrote in L'organisation de la famille (1871), the most perfect societies are also subject to the continuous threat of an internal invasion by little barbarians. Uncivilised intruders whose bad natural instincts ceaselessly re-emerge. He was referring to children. The family was there to discipline them, the hard way if necessary. There are still people who embrace this view. Look, for example, at the figure of the angry two-year old child from Oslo. Or read the publications of aggression researcher Richard Tremblay, who keeps telling that aggression is at its peak between 2 to 4 years of age, after which it will only decline as a result of upbringing and socialisation. This view has lost popularity since Rousseau; people prefer to look at children as affectionate and innocent little beings. And the family has to share its central role with an increasing number of people: nursery staff, teachers and various types of social workers. The immediate satisfaction of its needs that a two-year old looks for must be socialised, the child must learn to postpone the satisfaction of its needs as described by Elias. The child must be educated and not be plagued by unrestrained violence or uninhibited sex as prescribed by his own behaviour. To put it briefly: the civilisation process has forced us to be less tolerant of child abuse.

3. Child abuse

Child abuse has been brought to the attention of scientists mainly by the articles of Silverman (1953) and Wooley and Evans (1955), who were the first to link injuries in very young children with violent behaviour of their parents. This led to the publication in 1962 of the classic article entitled "The battered child syndrome" by paediatrician Henri Kempe. It is remarkable that Kempe's theory was quickly generalised to relationships other than the parent-child relationship: Block & Sinnott (1979) introduced the term "battered elder syndrome", Walker (1988) the term "battered woman syndrome". This literature illustrates the new interest in different types of violence within the family. For a long time, these problems were considered symptoms of social marginality – think of the work of Frederic Le Play who I referred to earlier or of personal deficiencies. However, after Kempe's articles we have moved to interpreting child abuse as something which can be intrinsic to intimate relationships (Baartman, 1992, pp. 26-27). There is a new and different ethical sensibilisation (Vandermeersch, 1991) with respect to relationships between men and women as well as between child-raisers and children. Following Elias, we can define it as a process of progressive civilisation, which further solidifies the taboo on child abuse.

Let us first properly define this concept. "Child abuse is the physical, sexual, emotional mistreatment or neglect of children" (Thefreedictionary.com, n.d.). In the United States, the Centers for

Disease Control and Prevention (CDC) define child maltreatment as any act or series of acts of commission or omission by a parent or other caregiver that results in harm, potential for harm, or threat of harm to a child (Leeb, Paulozzi, Melanson, Simon, & Arias, 2008). Most child abuse occurs in a child's home, with a smaller amount occurring in the organizations, schools or communities the child interacts with. There are four major categories of child abuse: neglect, physical abuse, psychological/emotional abuse, and child sexual abuse. Different jurisdictions have developed their own definitions of what constitutes child abuse for the purposes of removing a child from his/her family and/or prosecuting a criminal charge. According to the *Journal of Child Abuse and Neglect*, child abuse is "any recent act or failure to act on the part of a parent or caretaker which results in death, serious physical or emotional harm, sexual abuse or exploitation, an act or failure to act which presents an imminent risk of serious harm" (Herrenkohl, 2005).

The most emotional and shocking form of child abuse is without any doubt sexual abuse. And precisely with respect to sexual abuse it is clear that the changing and increasingly stricter provisions are subject to a process of civilisation. I will illustrate this with an example.

The sentences for watching and distributing child pornography have been considerably increased in recent decades. The government appears to have intensified the hunt for paedophiles, which systematically are called 'monsters 'or 'predators' by the media. In my own country, the Netherlands, two appalling cases of multiple child abuse have recently been discovered: Benno L., a pool attendant who could not keep his hands to himself and took porn pictures, and Robert M., a nursery leader, who is suspected of having abused 30 to 50 babies and toddlers and has distributed the corresponding porn across the world. It has already become clear that men who wish to work with children will from now on be thoroughly screened. What is the reason for this increased attention for child sexual abuse? To be clear: There are no indications that there are more cases of abuse now than forty years ago. And from a legislative perspective, the inadmissibility of child abuse has always been endorsed.

It is especially the awareness in society of the severity of child abuse that has been raised, as is illustrated by the history of legislation on pornography. Upon the entry into force of this legislation, in my country in 1886, 'children' were not explicitly mentioned. Pictures containing child porn turned up quickly following the invention of photography. At that time, however, pornography was considered a private matter. The law was aimed at preventing the pressing of pictures on other people.

When the working class was reduced to poverty as a result of the industrialisation, the government feared moral decline and launched a moral offensive. In 1911 it prohibited the distribution of material to 'stimulate the sensuality of young people' to persons under eighteen. Legislators, who had initially taken a reserved stance, adopted the view that the government has a duty of care. In the following decades, this moral attitude hardly changed. For a long time, legislators were unaware of child abuse. There was little willingness to report cases of child abuse and it was not talked about outside the confines of the family.

Then the liberal sixties began. Sexual contacts between adults and adolescents were no longer condemned. Child porn was freely available under the counter of sex shops and collectors started to exchange collections through mail-order businesses. The ban on adultery and homosexuality was lifted and in Sweden the production of child porn was legalised in 1969. However, during the second wave of feminism an increasing number of cases of abuse were revealed. The term 'sexual violence' was used for the first time; victims of incest united at roundtable conferences. Following the revelation of numerous cases of incest, something had to be done. Criminal procedures were, however, not arranged for dealing with dangers from within, including abuse within the context of the family, which fell within the scope of youth welfare work. When the media 'discovered' child porn in the early eighties, there was a growing cry for harsher penalties. The worldwide media coverage of the finding of the six-year-old Thea Pumbroek in August 1984 marked a turning point. The girl was found dead of a suspected overdose of cocaine in an Amsterdam Holiday Inn. It appeared that she had been abused for the production of child porn for years.

Not coincidentally, a delegation from the American government visited Sweden, Denmark and the Netherlands, countries which were known for being transit ports for child porn as a result of their liberal legislation. The Americans, recently shocked by a large-scale case of sexual abuse in an American nursery, urged these countries to adopt stricter legislation, which they did six months after the visit. A separate article was dedicated to 'child pornography' and in the following years the sentences depended on the political colour of the successive ministers of Justice: a maximum of three months' imprisonment during the tenure of liberal democrat Korthals Altes (1985) and six years during the tenure of Christian democrat Hirsch Ballin in 1994. It may well be that the fear for paedophilia was taken over from the United States. Mass hysteria had broken out there to such an extent that billboards featuring an innocent Calvin Klein advertisement depicting two boys jumping on the couch in their underwear were removed.

Whereas the invention of the photo and video camera led to changes in the law, in the nineties the advent of the Internet necessitated legislative amendments. Fast connections, USB sticks and file

encrypting increased the availability more than ever. Child porn networks were given an international character because of the Internet. European treaties had to be adopted to extend cross-border investigation rules, as a result of which penalties in the Netherlands became harsher.

For example, the sentence was raised to eight years to allow for the use of monitoring techniques. Earlier, virtual child pornography had been made an offence and the age limit for pornography had been raised from sixteen to eighteen. As of this year, watching child pornography (without possessing it) is prohibited to adapt the law to new techniques such as video streaming.

A moral crusade? It is a fact that the law has to be tuned to technology in order to protect people from sexual abuse. However, extensions of the law must be kept in proportion. Pictures of people who have evidently not yet reached the age of eighteen have become punishable. The use of the term 'evidently' implies that theoretically speaking pictures of women wearing a hair bow may also be qualified as child pornography. The Internet is awashed with such 'teenagers', just search Google for the words 'teen sex'.

4. Concluding

Let me summarize the foregoing: historically childhood is an invention of the western world during a long process of infantilization; infantilization rests on the foundation of the civilizing process. This process is mainly a reduction of violence and public sexuality. These two domains are therefore specifically problematic in reaction to children. The civilizing process includes our ever growing sensibility for child abuse, even in the lighter forms of corporal punishment.

What is it that we as scientists have to offer to the community with respect to prevention of child abuse? In the first place I would honestly state what we can't. That is: we are not able to prevent the worst cases of child abuse. The worst cases of child abuse, leading to death, leading to unimaginable multiple sexual abuse, are committed by deviant individuals, individuals who are rare and biologically and psychologically suffering from complex pathology. It is scientifically nearly impossible to devise diagnostic instruments with which we can detect them and prevent their crimes. We should not be ashamed that we are not able to finally free our society from all child abuse. I am afraid that child abuse will always be among us; it has always been and will always be. But at the other hand: we have to offer a lot: we can offer positive parenting strategies and programs, and we may expect that such stimulation of positive parenting is reducing violence towards children, such as corporal punishment. It is great that the Council of Europe made a strong case against any corporal punishment. But we should realize that the best prevention of negative parenting is not the elimination of it, but the replacement by positive parenting.

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ASSOCIATED FACTORS OF SOCIAL ANXIETY: METACOGNITION AND COPING STRATEGIES

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Abstract

The aim of the current study was to examine the role metacognitions and coping strategies as associated factors of social anxiety and social avoidance. For this aim, 435 nonclinical participants living in Turkey completed Metacognition Questionnaire-30, The Ways of Coping Inventory, Liebowitz Social Anxiety Scale. In order to examine the associated factors of social anxiety and social avoidance (as dependent variables), two separate regression analyses were carried out. Independent variables entered into the equation via two steps. For all analyses, in the first step, 3 different types of coping, i.e. Problem-Focused, Emotion-Focused and Indirect Coping were entered to the regression analyses via stepwise method, in order to control possible effects of different coping styles., After controlling coping styles that were significantly associated with dependent variable, in the second step, 5 types of metacognition, namely; Positive Beliefs about Worry (MCQ-1), Negative Beliefs Concerning Uncontrollability of Thoughts and Danger (MCQ-2), Lack of Cognitive Confidence (MCQ-3), Beliefs about Need to Control Thoughts (MCQ-4) and Cognitive Self-Consciousness (MCQ-5), were again entered via stepwise method. Results of multiple regression analyses revealed that problem focused coping style has a significant effect in the decrement of both social anxiety and social avoidance. On the other hand, emotion focus coping tend to increase both social anxiety and avoidance. After controlling the effects of coping strategies, some of the metacognition categories revealed significant effect. Accordingly, higher levels of Positive Beliefs about Worry and Negative Beliefs Concerning Uncontrollability of Thoughts and Danger tend to increase both social anxiety and avoidance. The findings are consistent with the literature and have important implications in terms emphasizing the role of metacognitions in the development and maintenance of psychological symptoms, and also for generating intervention programs. In addition, protective factor of problem focus and dysfunctional role of emotion focused coping styles should not be underestimated while dealing with social anxiety and avoidance.

Keywords: *metacognition, coping strategies, social anxiety.*

1. Introduction

Social anxiety or social phobia is the one of the most psychological conditions that may lead to severe impairment in the occupational and relational functioning (Kessler, Chiu, Demler, Merikangas & Walters, 2005). This condition includes extreme fear or anxiety about experiencing humiliation and embarrassment in social situation or performances such as social encounters, eating in public and giving a public speech (American Psychiatric Association, 2013).

The role of maladaptive coping styles has been emphasized in the association between social interaction and experiencing anxiety. Accordingly, social situation tend to increase anxiety level because it is perceived as threat; and dysfunctional coping strategies lead to fail to manage the situation effectively (Rapee & Heimberg, 1997). Cognitive perspectives especially underline some maladaptive coping strategies such as hypersensitivity and preoccupation of other people's negative evaluation and negative self-evaluation (Stopa & Clark, 1993). Metacognitive Theory is relatively recent perspective emphasizing the role of meta-beliefs and meta-strategies in the development and maintenance of psychological disorders including social phobia (Wells & Maththews, 1996). According to this model, maladaptive coping strategies such as rumination and focusing on threat are likely to be more responsible for anxiety disorders (Wells, 2000; Wells & Matthews, 1996). Social anxiety from metacognitive perspective is formulated as person having positive beliefs about focusing of threat in order to be prepared for the possible humiliation. However, this rumination about threat leads worry to be increased excessively and uncontrollably. Activation of this two sided cognitive process results in intensification and persistency of

social anxiety, since it leads to person avoid being exposed phobic situations that may provide opportunity to challenge and correct dysfunctional thoughts (Wells, 2009; Wells, Clark, Salkovski, Ludgate, Hackman & Gelder, 1995).

Present study aimed to examine the role of specific metacognitions in social anxiety and social avoidance after controlling the variance accounted for coping strategies. It was hypothesized that after different coping strategies namely, problem-focused, emotion-focused and indirect coping referring to seeking social support are controlled, some metacognition categories will be more significant for social anxiety and social avoidance than others.

2. Method

2.1. Participants

Current study was carried out with 435 nonclinical participants whose ages were between 18 and 35 (*M* = 23, *SD* = 3.11). Participants were selected by convenience sampling method via snowball technique from Ankara and İstanbul. The questionnaires were completed by either mail (53.1%, *N* = 231) or by paper-pencil style (46.9 %, *N* = 204). 56.6% of the participants (*N* = 246) were students and 41.4% of them were employed *(N* = 180). The education level of the participants were differed as high school graduates (6.2%, *N* = 27), university students or university graduates (78.6%, *N* = 342) and post-graduates (15.2%, *N* = 66).

2.2. Materials

Besides the demographic information form in order to collect information about participants' age, gender, employment status, educational level and psychiatric history; following questionnaires were administered:

Metacognition Questionnaire – 30 (MCQ – 30, Wells & Cartwright, 2004) includes 30 items rated on a four-point Likert scale in order to measure metacognitive beliefs and processes. Items are loaded in a five dimensions: 1) Positive Beliefs about Worry, 2) Negative Beliefs Concerning Uncontrollability of Thoughts and Danger, 3) Lack of Cognitive Confidence, 4) Beliefs about Need to Control Thoughts and 5) Cognitive Self-Consciousness. The original version of this questionnaire established good internal consistency with alpha ranging from .72 to .93, converging validity and also test-retest reliability (Wells & Cartwright, 2004). Turkish version of this scale were administered adapted by Yılmaz, Gençöz and Wells (2008) in which it has been exhibited high test-retest reliability (Cronbach's alpha .87), internal consistency (coefficients from .73 to .89) and also good convergent validity.

The Ways of Coping Checklist (TWCI, Folkman & Lazarus, 1980; Siva, 1991) consists 74 items measuring different coping styles in the dealing with stressful situations on a five-point Likert scale. Turkish version of this scale were adapted by Gençöz, Gençöz & Bozo (2006) revealing 3 major factors, namely problem-focused coping, emotion-focused coping and indirect coping (referring to seeking social support) establishing satisfying validity and internal consistency (alphas were between .84 to .90).

Liebowitz Social Anixety Scale (LSAS; Liebowitz, 1987) consists of 24 items assessing the level of experiencing anxiety and avoidance while encountering different social situations and performances. The scale includes 24 items indicating good reliability and validity with subscales social anxiety and social avoidance. The Turkish version of the scale was administered adapted by Soykan, Özgüven, & Gençöz (2003) with high interrater reliability (.96), test-retest reliability (.97), and internal consistency (.98), as well as satisfying validity.

2.3. Analyses

In order to examine the associated factors of social anxiety and social avoidance (as dependent variables), two separate regression analyses were carried out. Independent variables entered into the equation via two steps. For all analyses, in the first step, 3 different types of coping, i.e. Problem-Focused, Emotion-Focused and Indirect Coping were entered to the regression analyses via stepwise method, in order to control possible effects of different coping styles., After controlling coping styles that were significantly associated with dependent variable, in the second step, 5 types of metacognition, namely; Positive Beliefs about Worry (MCQ-1), Negative Beliefs Concerning Uncontrollability of Thoughts and Danger (MCQ-2), Lack of Cognitive Confidence (MCQ-3), Beliefs about Need to Control Thoughts (MCQ-4) and Cognitive Self-Consciousness (MCQ-5), were again entered via stepwise method.

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3. Results

The results of the regression analysis for social anxiety as dependent variable revealed that initially, Problem-Focused Coping entered into the regression equation (β = -.36, *t* (433) = -7.97, *p* < .001, *pr* = -.36) and explained 13% of the variance by itself, F_{change} (1,433) = 63.52, *p* < .001. As the second step, Emotion-Focused Coping entered into the equation (β = .15, *t* (432) = 3.32, *p* ≤ .001, *pr* = .16) and explained variance increased slightly to 15%, F_{change} (1,432) = 11.04, *p* ≤ .001. After controlling for these coping styles, among metacognition categories, Positive Beliefs about Worry (MCQ-1) was significantly associated with the Social Anxiety (β = .18, *t* (431) = 3.99, *p* < .001, *pr* = .19) and the explained the variance increased to 18%, F_{change} (1,431) = 15.94, *p* ≤ .001. Finally, Negative Beliefs Concerning Uncontrollability of Thoughts and Danger (MCQ-2) entered into the regression equation (β = .10, *t* (430) = 2.12, *p* < .05, *pr* = .10) and explained the variance increased slightly to 19% at this final step, F_{change} (1,430) = 4.47, *p* < .05 (see Table 1).

The results of the second regression analysis for social avoidance as dependent variable revealed that first of all, Problem-Focused Coping entered into the regression equation (β = -.33, *t* (433) = -7.27, *p* < .001, *pr* = -.33) and explained 11% of the variance by itself, F_{change} (1,433) = 52.90, *p* < .001. As the second step, Emotion-Focused Coping entered into the equation (β = .17, *t* (432) = 3.84, *p* < .001, *pr* = .18) and explained variance increased slightly to 14%, F_{change} (1,432) = 14.75, *p* < .001. After controlling for these coping styles, among metacognition categories, Positive Beliefs about Worry (MCQ-1) was significantly associated with the Social Avoidance (β = .15, *t* (431) = 3.32, *p* ≤ .001, *pr* = .14) and the explained the variance increased to 16%, F_{change} (1,431) = 11.04, *p* ≤ .001. Finally, Negative Beliefs Concerning Uncontrollability of Thoughts and Danger (MCQ-2) entered into the regression equation (β = .12, *t* (430) = 2.48, *p* < .05, *pr* = .11) and explained the variance increased slightly to 17% at this final step, F_{change} (1,430) = 6.16, *p* < .05 (see Table 2).

In summary, problem focused coping style has a significant effect in the decrement of both social anxiety and social avoidance. On the other hand, emotion focus coping tend to increase both social anxiety and avoidance. After controlling the effects of coping strategies, some of the metacognition categories revealed significant effect. Accordingly, higher levels of Positive Beliefs about Worry and Negative Beliefs Concerning Uncontrollability of Thoughts and Danger tend to increase both social anxiety and avoidance.

Table 1. Associates of Social Anxiety.

	***F*change**	**df**	**β**	***t* (within set)**	***pr***	**R^2**
1) Problem-Focused Coping	63.52***	1,433	-.36	-7.97***	-.36	.13
2) Emotion-Focused Coping	11.04**	1,432	.15	3.32**	.16	.15
3) MCQ-1	15.94***	1,431	.18	3.99***	.19	.18
4) MCQ-2	4.47*	1,430	.10	2.12*	.10	.19

Note * *p* <.05, ** *p* ≤.001, *** *p* < .001; MCQ-1 = positive beliefs about worry, MCQ-2 = negative beliefs concerning uncontrollability of thoughts and danger.

Table 2. Associates of Social Avoidance.

	***F*change**	**df**	**β**	***t* (within set)**	***pr***	**R^2**
1) Problem-Focused Coping	52.90***	1,433	-.33	-7.27***	-.33	.11
2) Emotion-Focused Coping	14.75***	1,432	.17	3.84***	.18	.14
3) MCQ-1	11.04**	1,431	.15	3.32**	.14	.16
4) MCQ-2	6.16*	1,430	.12	2.48*	.11	.17

Note * *p* <.05, ** *p* ≤.001, *** *p* < .001; MCQ-1 = positive beliefs about worry, MCQ-2 = negative beliefs concerning uncontrollability of thoughts and danger.

4. Discussion

The aim of the present study was to investigate associated factors of social anxiety in terms of metacognition and coping style. Firstly, it was hypothesized significant association between coping strategies and social anxiety. Secondly, it was hypothesized that some metacognitions would be more significant than others, after coping strategies were controlled.

As expected, problem-focused coping was found to be negatively correlated with social anxiety and avoidance, while emotion-focused was found to be positively associated with both social anxiety and avoidance. These findings are consistent with the previous studies indicating that avoiding social situations, anticipating safety behaviors to reduce the possible risk of embarrassment and negative self-appraisals considered as major features of social phobia (Clark & Wells, 1995).

After controlling the effects of coping styles, two metacognition domains, namely, Positive Beliefs about Worry and Negative Beliefs Concerning Uncontrollability of Thoughts and Danger were found to be significant in the increment of both social anxiety and avoidance. These findings are consistent with metacognitive model underlining the role metacognitive beliefs such as negative expectancy on social phobia (Clark & Wells, 1995). Furthermore, Dannahy & Stopa (2007) reported more negative self-perceptions, rumination and negative beliefs about uncontrollability of thoughts and danger among students with higher social anxiety.

Current study has important contribution to literature in terms of testing metacognitive theory in Turkish culture. Furthermore, determining specific metacognition categories provides important implication in order to achieve more effective case conceptualization and also treatment procedure. Data based on nonclinical sample living in big cities may have some limitations to generalizing findings.

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THE INFLUENCE OF DANCE ON THE EMOTIONAL INTELLIGENCE OF ADOLESCENTS

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Abstract

It is widely accepted that emotional intelligence constitutes an important aspect of contemporary research and that it influences several domains of an individual's life. There are training programs that aim to develop the trainees' emotional intelligence in order to improve the quality and their satisfaction in their interpersonal relationships, leadership skills or even their psychological welfare, among others. Previous research findings have also indicated that there is a strong relationship between art and emotional intelligence of children, mainly due to the fact that children tend to express their emotions easier when they can do it in non-verbal ways. The focus of the present study is particularly on the art of dance and how it relates to the emotional intelligence of young people. It also examined how dance can improve the life of adolescents. A class of twelve female adolescents took part in this qualitative study, all of whom were attending dance lessons of the same kind. Their age range was 13-15 years old. The inclusion criteria were their age and lack of any previous experience with dance related activities. The main research hypothesis was that dance education and creative movement can increase the emotional intelligence of young adolescents. To that end, several dance activities that are used in education were conducted that urged the participants to explore many aspects of their emotional behaviour. Emotional Intelligence was measured by the Trait Emotional Intelligence Questionnaire (TEIQ), which was administered before the onset and after the end of dance classes. The activities that were used for the collection of data were spread over 4 weeks. Analyses indicated that dance activities improved most of the facets of adolescents' emotional intelligence, and it changed their way of thinking in many areas of life. The results of the specific study are directly applicable in adolescent counselling and the treatment of autism as well. Further studies could place emphasis on the way in which creative movement could be used in school settings and become an integral part of the education of children, particularly in contexts where expressing emotions is necessary but not facilitated.

Keywords: *emotional intelligence, dance, education, counselling.*

1. Introduction

Dance and body movement constitute a spontaneous attitude, a language that helps individuals express emotions, feelings and thoughts. They contribute to the self-awareness and understanding. Dance concerns one's behaviour and attitude towards life, and the need of "express-create-share" within society. On the other hand, creative movement helps individuals feel themselves, know and express their needs and desires effectively. It constitutes an alternative path for body to meet psyche, and find inner balance and peace. Although it is a powerful and immediate means of interpersonal communication, however, it is a forgotten language that cannot be expressed in the strict forms of modern societies. Given that creative dance movement is strongly related to emotional communication, its absence causes lack of emotional expression and development. Previous research has not focused on emotional learning through art extensively, and especially through dance education.

For this reason, the high significance of the present study lies on the researchers' attempt to conduct research in a relatively new field of interest. Despite a rich classical culture in Greece, dance does not really get the recognition it deserves. On the other hand, EI has no place in the education of Greek students. Therefore, the aim of the present study is to combine two fields of low interest within Greek society, and to demonstrate the relationship between them.

The theory of Emotional Intelligence (EI) has been in development since 1990 (Goleman, 1995). Its definition is given in the 11th edition of the American Psychological Association's Thesaurus of Psychological Index Terms and explains it as "the ability to monitor and appraise one's own and others' feelings and emotions, and to use this information to guide thinking and action" (Gallagher, 2007, p. 236).

It has been shown that age and experience are strongly related to one's level of EI (Goleman, 1995). The research conducted in this field has indicated that people differ in how they interpret and manage emotions. Each individual perceives and responds to external stimuli in a particular way, depending on the environment where one grows up. Furthermore, emotional learning and expression can be increased through the appropriate training and practice (Caruso & Salovey, 2004; Detweiler-Bedell & Salovey, 2002). The aforementioned assumptions show that in addition to personal qualities, environmental factors are equally significant for the development of EI.

In addition, emotional learning is related to academic performance; however, little importance is given to emotional knowledge in school settings. According to certain scientists emotions and learning are strongly connected (Goldsworthy, 2000; LeDoux, 1996; Zull, 2002). For instance, the presence of emotion is necessary for memory, reasoning, even for the cognitive domain of learning (Sameroff, Lewis, & Miller, 2000). Normally, teachers tend to focus on the transmission of theoretical knowledge, and forget the real meaning of education. They prevent children from knowing themselves, and from finding their uniqueness. Hence, emotional learning and expression need to be considered equally important in the education of children as the cognitive knowledge is (Goleman, 1995; Jensen, 2001; Lam & Kirby, 2002; Richardson, 2002; Salovey & Sluyter, 1997).

To that end, many attempts have been made to promote the implement of art activities within school curricula due to various educational and social benefits. There is evidence that emotional learning and the active participation in dance activities are two strongly connected fields that need to be explored more. Moreover, other researchers state that emotional intelligence can be fostered by courses in the creative arts in general (Mayer & Cobb, 2000). Unfortunately, art education, especially dance are the most underestimated areas in the education of children, because it is hard to explain why they are really significant, and what they are teaching exactly. This loss of status and support affects the role of expressional movement in the emotional learning of adolescents. However, one would wonder here in which way dance could be applied in school settings. Dance can be an essential component of emotional progress. As it is presented in this research paper, it is not necessary for adolescents to have previous dance experience or to be gifted dancers. The aim is to make them feel familiar with the concept of dance, and interpret the emotional meaning of movement. When a student has the chance to discuss what emotions a video of contemporary dance, or a piece of music convey, he/she is likely to foster emotional perception and understanding (Mayer & Cobb, 2000).

In conjunction with the preceding discussion Rudolph Laban's ideas constitute a fertile ground for the development of a more child-centred educational model related to dance participation, known as modern educational dance or creative dance (Smith-Autard, 2002). His approach focuses on the contribution of dance to one's emotional growth and to the development of the personality (Boone & Cunningham, 2001). The greatest benefit of the educational dance model is the impact of creative movement on the child's emotional intelligence. It is suggested that dance permits the expression of the individual's personality through the experience of creating and expressing. According to Laban's model the discipline of dance may help a child to develop certain personal qualities and creative abilities in addition to the skill in movement (Newlove & Dalby, 2004).

The benefits of dance are obvious in adolescents in and outside classroom settings (Archinard & Scherer, 1995). There is a wide range of movement techniques that can be used in dance education, and that can be adjusted to the special needs of each adolescent depending on one's physical condition and personal preferences. According to relative studies, movement interaction provides the emotional-physical unity of individuals, and can trigger changes in feelings, cognition and physical functioning (Boone & Cunningham, 2001; Chodorow, 1991). Given that adolescence is full of confusing feelings, changes in thoughts and body, dance can be used as a means for personal integration and expression. The structure and the potential of dance as a medium of personal expression make a human being very sensitive, and teach him or her to understand easier any emotion (Boris, 2001; Krumhansl, 2002). In the study of dance the emphasis is given to the individual. It is also observed that dance improves a rare perceptual ability and concentration in a person (Bransford, Brown & Cocking, 2000; Boone & Cunningham, 2001). Therefore, it is obvious that dance can influence a student's academic performance as well.

Therefore, EI and creative dance are of vital importance when discussed in conjunction with children's education. In the present study the main hypothesis is that dance and creative movement are positively related to many facets of adolescents' EI.

2. Method

Participants: A class of twelve female students with an age range 13-15 from a dancing school of Thessaloniki took place in the study. Inclusion criterion: lack of any previous experience in the field of dance.

Materials: A classroom, a CD player to play different kinds of music, a piano and some representative videos of contemporary dance and modern ballet, A4 paper and lead pencils, were used for all the activities. For measuring emotional intelligence quantitatively, the Trait Emotional Intelligence Questionnaire-Full form (TEIQue-Full form) was utilized at the beginning of the research in order to measure the EI of the 12 young adolescents, who participated in the particular research. They filled out the questionnaire twice. Once before having any experience in ballet and once after they were introduced to the creative dance movement training. The activities were selected with special care in order to meet the needs of all the participants. Dance specialists and teachers have used all of them, and thus they are appropriate and safe for young adolescents (e.g. Abigador, 2011; Smith-Autard, 2002; Ruckert, 2007).
The TEIQue is a self-report inventory that covers the sampling domain of trait EI comprehensively. It comprises 153 items, measuring 15 distinct facets, 4 factors, and global trait EI (Petrides, 2009).

3. Results

3.1. Quantitative part

A paired-samples t-test was used to examine whether dance education and practice are able to influence certain facets of EI of young individuals. Twenty pairs of the examined variables in the TEIQue were created and the significant differences between pro and post intervention as suggested by the analysis are summarised in the table that follows. Regarding the reliability of the questionnaire, Dr Petridis provided the reliability analysis and the internal consistencies for the TEIQue subscales and four factors. The results showed that TEIQue variables have adequate internal consistencies, and the global trait EI score a very high alpha. The advantage of TEIQue compared to other questionnaires is that its alphas high even in small samples (Petridis, 2009).

The table displays only those EI subscales that were influenced by dance experience.

Table 1. The influence of dance on the EI subscales.

	Mean Difference	Std. Deviation Difference	Sig. (2-tailed)
Emotional expression	-0.81	0.34	.000
Self-motivation	-.08	.08	.005
Emotion regulation	-.18	.10	.000
Empathy	-.33	.32	.004
Social awareness	-.16	.13	.001
Emotional perception	-1.15	.35	.000
Emotion management	-.10	.11	.009
Optimism	-.003	.003	.007
Adaptability	-.05	.07	.027
Self control	-.06	.05	.001
Emotionality	-.58	.19	.000
Sociability	-.09	.07	.001
Global trait EI	-.19	.06	.000

3.2. Qualitative part

Interpretive phenomenological analysis (IPA) was used for the qualitative analysis of the data. Eight meetings were arranged with the participants, during which there were specific dance techniques co-ordinated by a professional dancer, which were all followed by discussions that focused on emotion related skills observed during the activity. Several themes emerged from the discussions that followed. Each meeting had a different aim which was met through a different dance technique. As an example the "Pool Idling" was an activity that prompts the participants to work on their creativity and imagination. Presenting a dance scene of two bodies during a fight (as described below), was another activity that made participants more aware of their bodily movements associated with a particular emotional state. The table below summarises some examples of clusters that arose from the analysis and were based on the activities in the last stages of the study.

The last meeting was a farewell activity during which participants expressed their thoughts during their engagement with all activities. The students participated in three particular activities in order to use what they had learnt until that time, and to develop them more.

The main activity of the day was the presentation of a dialogue or fight scene between two bodies. It was a demanding exercise that asked the participants to bring together skills and personal qualities for an artistic purpose expressed through dance. Their comments made it clear that they had made considerable progress. They seemed that they were sure for their movements, and able to follow the structure of a fight or dialogue with their body. Their teacher also noticed that they performed movements

with confidence, and they gradually become more expressional while dancing and they were able to perceive and express emotions in a quite understandable way. The examples below indicate some of the comments students made which indicate the impact that the activities had on their performance and emotions.

A. 13 years old: "When I dance I express my soul. There are many techniques and movements, some of them very difficult, but a good performance always leaves you speechless. I like ballet, because it has elegance and magnificence. I believe that there is at least a dance type that fits to everyone… My life would be empty and totally boring without dancing!"

N. 13 years old: "Dance for me, is a form of expression. I dance with the stage and the music. I let the two take me away, I let the two move my body, and I let the emotions flow. For me, dancing is a good thing to do if you love it or not, you will enjoy it if you try! It gives me that chance to be me, to let out my anger and joy and any secrets that I have kept in. Dance constitutes the freedom and the expression of my feelings…"

The aforementioned quotes indicate that dance had a positive impact on the life of these young adolescents. Most of them talked about a way for self-expression. They developed self-confidence, and a more positive view of life. In the following table there is a summary of the main themes that emerged from the systematic analysis of the notes of the experimenter during the 8th meeting and the responses of the participants to the question "what does dance mean to you".

Table 2. Summary of last meeting themes.

Cluster 1: Importance of body talk	
• Support a relationship	'play a role and to support it'
• Communicate emotions	'more expressive while dancing'
• Be creative	'the most creative activity we did'
• Better perception of dance	'the music…in the right direction'
Cluster 2:Parameters for group cohesion	
• Trust	'feel confident'
• Sociability	'become quite sociable'
• Self awareness	'understand…yourself'
• Self expression	'communicate…feelings and thoughts'
• Emotion perception	'perceive thoughts and feelings'
• Willingness to open up	'easier to open up'

To sum up, based on the comments of the students and their progress which was assessed across the meetings, there was a gradual development of emotional perception and expression until the end of the classes.

4. Discussion

As observed in the present research adolescents have difficulty in expressing themselves through words. They prefer to keep their thoughts hidden in spite of exposing themselves. To this end, the dance/movement therapist urges young people to communicate their concerns through their body in order to clarify them and find the strength to cope with them. In addition, dance constitutes a precious tool in the treatment of autism. Physical abilities are required for effective learning, because they allow children to meet the physical demands of everyday life. The biggest issue that special children are called to cope with concerns vision, hearing and neurological problems that affect their physical and motor abilities (Arnold, Yeomans, Simpson, & Solomon, 2009). The range of motion of their body members is normally characterized by difficulty in locomotion, poor coordination skills, sharp or nervous movements, uneven energy expenditure and limited movement repertoires. A major problem in their motor behaviour is that they have no concept of left and right; thus, they have difficulty in finding orientation. Additionally, in most cases autistic children show symptoms of attention deficit hyperactivity disorder, and they develop a distorted body image (Kelso, 2008). They are not completely aware of their total body functional profile, and consequently they cannot manage integration of the body parts. To that end, the use of simple dance moves customized to meet the special needs of autistic children can help them gain a deeper understanding of their body, and develop their motor and coordination skills.

Given that speech and language disabilities are common in children with autistic symptoms, nonverbal techniques such as dance therapy are necessary in order to reach and activate them (Berridge, Dance, Beecham, & Field, 2008; Bull & O' Farrell, 2012). Dance therapy is applied within group settings and promotes group participation and the socialization of children. It creates a pleasant and safe environment where special children can discharge tension and feel comfortable.

Dance and creative movement education can provide opportunities for children with special needs to realize their potential. In addition to the development of physical abilities, it helps them to understand and control these abilities through creative movement, music and artistry. DMT aims to provide the child with a "skills kit" in order to gain a deeper sense of self, develop self-confidence and increase feelings of worth and accomplishment. Through relative activities it teaches the significance of discipline of mind and body; namely children meet the power of emotions and logic in one's life. Above all, dance helps the child to express the stress and the emotional frustration arising from the disability.

Future research could explore how dance education could be incorporated in school counselling. Given that it is a recreational activity that helps personal expression, it would be extremely effective with hyperactive children. On the other hand, it could turn the interest of children with delinquent behaviour into a more creative activity, and prevent them from putting themselves and others at risk.

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THE CONSEQUENCES OF MISCARRIAGE OR LOSING A CHILD: THE CONCLUSIONS FROM THE INTERVIEWS WITH WOMEN

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Abstract

Each year in Poland there are 40 thousand miscarriages and 2 thousand families have to deal with stillbirth of their child (GUS). The phenomenon of miscarriage, and more generally loss of a child during pregnancy is one of the important challenges, which must be faced not only by clinical psychology but also medicine and especially gynecology and obstetrics. Research shows that losing pregnancy leads to very serious psychological consequences (e.g. Barton-Smoczyńska, DeFrain). Among others we can mention: higher risk of PTSD, depression, loss of the sense of meaning in life and even suicidal attempts. This kind of experience touches not only mothers, however they have to deal with most of the health consequences. Increasing focus on the costs of fathers, children and family as a whole is observed. Such traumatic events are very meaningful for the whole family system. In my article I want to present the conclusions from 15 semi-structured interviews conducted with women after the loss of a baby on different stages of pregnancy. The questions comprised in the interview referred to 5 spheres: (1) circumstances of the loss and interactions with the medical staff, (2) social environment reaction (3) physical and mental condition, (4) the influence of the loss on motherhood and (5) ways to deal with the loss. For analysis Interpretative Phenomenological Analysis (IPA) was used to stress the special meaning of experience of the individual. The story of Agnieszka will be set together with the general conclusions from 14 other semi-structured interviews. The conclusions from\this comparison will become a base for presenting the implications for practitioners, who, in their work, have contact with families after the loss. The quotes from the interview will be presented to illustrate personal attitude to the loss experience.

Keywords: *miscarriage, loss, pregnancy, women, interviews.*

1. Introduction

Loss of a child due to miscarriage or stillbirth is definitely a limit situation. It makes one face a difficult, painful and often unexpected experience. It undermines the things that had been taken for granted (Sanders, 2001.) From the psychologists' perspective, the phenomenon is very difficult to research due to the needed delicacy around the topic, and possible painfulness of the questions. Hence, researchers often consider psychological interview an adequate method of investigating this theme (Rinehart & Kiselica, 2010.)

The goal of the research was to investigate what were the psychological, social, and health-related consequences of the loss of a child at different stages of pregnancy for the women who experienced it.. Special stress was put on the reaction of the social surrounding and also how this reaction was perceived by women. In this article a case study will be presented of a woman who had experienced a miscarriage in an 8th week of her first pregnancy. Her story has been analyzed using the Interpretative Phenomenological Analysis, (IPA) as the method focuses on personal, individual experience of a subject. As a background for the analysis the 14 remaining semi-structured interviews have been used, which were also conducted with women who had experienced a loss of a child at different stages of pregnancy. I intend to point out the basic similarities and differences between the story of Agnieszka, and the stories of others.

1.1. Terminology

There are at least a few ways to describe a loss of a child during pregnancy. The definitions may differ according to the health system regulations of a given country (especially regarding the period of pregnancy in which the loss occurs.) In Polish terminology there are two basic kinds: (1) miscarriage - death of an embryo or fetus before the 22 week of gestation, (2) Stillbirth - defined as death of a fetus

before it is entirely outside of the mother's system (Brębowicz, 2012.) Additional term related to pregnancy loss can be Preterm birth, which, according to WHO means birth of a baby between the 22 nd and 37 th week, or before 259 th day of pregnancy. Preterm births belong to the greatest challenges of gynecology and obstetrics.

1.2. Epidemiology

Each year in Poland more than 40 000 women experience miscarriage (which means around 10-15% of pregnancies.) 80% of miscarriages occur before the 14th week of gestation, 20% (around 8000) happen later in the pregnancy, 2000 families experience birth of a stillborn (Bręborowicz, 2012)

1.3. Special kind of loss

Loss of a close family member is counted among the most serious crises one can encounter. According to Social Readjustment Rating Scale (SRRS) by Holmes and Rahe (1967) loss of a close person is considered a major stressor and involves the greatest amount of life-change units (LCU.) It also takes the longest to readjust. It is believed that mourning period, after a loss of a close person, the symptoms of which are similar to depression, can take up to a year. Loss of a child, a special kind of close person loss, may even involve a longer mourning period, taking up to 5 years (Sanders, 2001.) Loss of a child during pregnancy is a yet another thing, and its psychological aftermath is altogether different.

1.4. Medicine development

Diagnostics, prenatal care and obstetrics are nowadays better than ever. Paradoxically, it is the diagnostics, the possibility of an early Ultrasound , and the use of other methods allowing an early confirmation of pregnancy, that may be causing the rise in difficulty dealing with the loss. Especially in the early weeks of pregnancy (Piontelli, 2013.) Among the factors influencing the mechanisms of experiencing the loss is undoubtedly the society's growing awareness of both physiology and sexuality.

Miscarriage is the most common cause of loss of pregnancy, and most of miscarriages occur in the first trimester (up to 12th week.) In the past, before the introduction of very sensitive and accurate pregnancy tests, it wasn't uncommon for a woman not be aware of both the pregnancy and miscarriage. Such situations, although still present, happen much less often nowadays. Standard pregnancy test can show positive results within six days of conception. According to many women's testimonies the experience of seeing the test's positive result was of grave consequence, and spurred a flush of thoughts and psychological processes connected with becoming a parent (Piontelli, 2013.) In case of doubt, a simple laboratory test of the increase of Beta HCG will suffice to confirm the test's result. Additionally, heartbeat confirmation, and ultrasound examination of the fetus's movement available at a very early stage, are among the greatest advances of the contemporary medicine. All this, however, leads to much greater pain should the embryo or the fetus die.

1.5. Psychological aftermath of child loss

Initially, the research into the theme of miscarriage and a loss of a baby in later period of pregnancy only involved women. With time, investigation of the men's experience during that time has emerged as influential in the understanding of the phenomenon.

Basic and most common among women encountering child death is the sense of Loss (Frost et al., 2007,) which, when experienced with high intensity, may lead to increased risk of depression, feeling of a loss of the sense of meaning in life (Neugebauer et al, 1992.) According to Allen and Marks (1993, after DeFrain, Millspaugh & Xie, 1996) it may trigger suicidal thoughts, and 1,8% of women have attempted suicide. Izabela Barton-Smoczyńska's (2007) research argues that 60% of women after miscarriage experienced Acute Stress Reaction (ASD,) and in 40% of cases it has led to the development of PTSD.

Less than 2% of women have attempted suicide as a result of the loss, but no such behaviour was observed among men (Allen & Marks, 1993.) It may be assumed, and it has been hypothesised that it results from increased focus on the needs and emotions of the mother than those of oneself. Additionally, lack of qualitative difference in the experience of loss between the partners was reported (Turton et al.,2006.) Duration of the mourning period, however, was reportedly much shorter among men, than women (Beutel et al., 1996)Men have moreover tried to hide their grief away from their partners, especially by taking up a role of "being busy". Men have primarily experienced the miscarriage and stilbirth as a loss of future hopes (McCarthy,2002, after: Rinehart &Kiselica, 2010.)

2. Method

Interpretative Phenomenological Analysis (IPA) (Smith, Flowers, Larkin, 2009) is a qualitative method used in psychology. In the recent years its use in other areas of humanities, social studies and health studies has been noted. In the method, a researcher, who conducts qualitative inquiry, involves oneself in the study of the meaning given by the study subjects to key experiences of their lives. IPA is often used in Health Psychology, from which it stems. The key goal is acquiring a rich and detailed first person narrative of the experiences and phenomena the study focuses on. There are two basic approaches: (1) overall, in-depth case-study, (2) general account concerning a group or a given social group. In this article a story of one of the women is pitched against the background of 14 other stories. IPA has been used as it concentrates on the narrative, and allows individual perspective.

2.1. Subjects

15 women who had experienced miscarriage or stillbirth at various stages of pregnancy were the subjects of the study. They all had higher education, and each one of them was a mother of a living child. 14 of the women were married to the fathers of the lost children, one marriage split up after the 3rd miscarriage. The interviews were taken between August and December 2013. In the search of the subjects a snowball sampling was used. The case study is a story of Agnieszka, who, at the age of 27, miscarriaged at 8 weeks. She is a physiotherapist, and works in antenatal classes. Soon after her loss she became pregnant again, and she brought it to term. When the interview took place, her son Jacek was 9 months old.

2.2. Procedure

The interviews took place in locations chosen by the interviewee and at their convenience, the details were discussed via telephone. The interview comprised 30 questions grouped in 5 classes: (1) circumstances of the loss and interactions with the medical staff, (2) social environment reaction (partner, family, friends, acquaintances), (3) physical and mental condition, (4) the influence of the loss on motherhood, (5) ways to deal with the loss. Depending on the person, the interview could last anywhere between 25 minutes and 1,5 hours. We were usually alone with the interviewee, in one case the husband was present during 20 minutes (having come home for a short time.) In 3 cases small children were present, 3 women had a possibility of leaving children under someone else's care and taking the interview in a separate room. The interview with Agnieszka took place at her home, and lasted 35 minutes. Her husband was home, taking care of their son.

3. Analysis

"The very experience of waiting". Most of the situations connected with the loss of a pregnancy involves waiting. This waiting may vary in character, duration, and may comprise a few phases. Primarily, it means awaiting the medical assistance. Awaiting registration at the ER, Awaiting doctor's appointment, time needed to fill in the documents at being admitted to the hospital, waiting for the preparation of the OR. In case of miscarriage, the time until removal of the fetus from the body may even take several days . When dealing with stillbirth it may happen that time is needed until birth can be given to a dead child. The time spent at the hospital is often one of the core parts of the narrative. It is also a vital element of the healing process. The majority of the interviewees have somehow related to the question of time when recalling, among others: awaiting the curettage, time the doctors needed to give a full and unambiguous diagnosis, the time spent at the hospital. In most cases the topic of time was mainly related to hospital situations, it was a trying experience, especially, when they were not yet certain whether or not the child could be saved. One of the women described a very painful experience of having to wait for the curettage for several hours on a bench in the corridor outside the OB ward.

In Agnieszka's story the time theme was mentioned in connection to: waiting if spontaneous evacuation will occur, waiting for admittance at the ER, short time needed to "come around" after the loss.

"And in the hospital they gave me these options, that is the curettage, or I don't know what, and, and ... the very experience of waiting, for what is about to happen, and what will come of it, was the most difficult part."

"As I walked into the hospital, I had to go through the ER, and the ER was horrible. The lady, as I told her I was pregnant, and I was bleeding, she started to move a bit faster, but, ... well I had to wait there, I had to queue(...)"

"Massive bleeding". Commonly, Childbirth is understood primarily as a physical phenomenon. Only later as a psychological one. Same thing is true for miscarriage and stillbirth. People, however,

approach their physicality differently. Some have difficulty speaking about their bodies and their processes, they prefer to describe things in a gentler manner. Others have no such inhibitions, they often use medical terminology. Most of the interviewees had no difficulty speaking about their experiences, but often they used softer words, building their narrative rather describing actions and feeling than the physical processes in their bodies.

Twice in her story Agnieszka used the term "massive bleeding," she described her physical sensations in simple, clear sentences, sporadically using medical terminology. The language seems to have resulted from her professional life - the fact that ever since her college times this lingo had been her own. To support that hypothesis, another interviewee may be mentioned, also a physiotherapist, who's language was similarly loaded with medical terminology. Both of these women described in detail, their hospital time, referred to rules and procedures that applied on the wards. They were ready to both criticize or praise the way they were treated by the health-care personnel. Additionally, they both focused on the physical aspect, neglecting the emotional side, and admitted, that in stress situations they rather focus on action, and allow emotions only later. These two interviews took notably shorter than those with other women (ca. 30 minutes) and their main focus was on the hospital time.

"But because I had a fairly massive bleeding, we went to the hospital, and...., and what?"

"There was a very nice midwife at the ward, I could talk to her. I , you know, when stressed, I act like, cause I am focused on acting, and the emotions, and all that, that comes later. Well, Most people work like that.. Mhhhh. ... And this mid-wife, she was ok., but when the doctors came, they all wanted decisions straightaway, and, well, they didn't describe the whole situation well, didn't allow me to weigh my options, they just came and said, It has to be like that, an that's that"

"The hospitals are nowhere near ready for such things". To find out what "things" are we talking about here, we need to look at a larger part of the interview in detail. We learn from it that the hospital protocol and the way of handling the patient who experienced a loss of a child are not clear, inadequate, and sometimes even downright hurting to the patient. Similar belief concerning the shortcomings of the system was present in a few interviews, although the target ' to blame' may have varied: the doctors, the whole personnel, etc. Great majority (12 out of 15) subjects have (explicitly, or in an indirect way) expressed their disappointment at certain point of their stay at the hospital. One of the women described her very positive experience, surprised at the same time, because of the stories she heard from her friends. In a few cases the experiences were described as traumatic (contemptuous remarks from doctors, awaiting curettage in a corridor right next to the OBGYN Operating rooms, staying in the same room, after miscarriage, with pregnant women.)

For Agnieszka, the most painful turned out to be the apparent alternative she was given concerning the evacuation of the dead embryo. She regrets having consented to curettage, knowing from articles she has since read, that it is not always necessary. The same situation and the same grief was voiced by the other physiotherapist.

"And in the hospital they gave me these options, that is the curettage, or I don't know what, and, and ... the very experience of waiting, for what is about to happen, and what will come of it, was the most difficult part. Well, and then in the hospital, and I think the hospitals are nowhere near ready for such things...(...) and the horrible thing is the hospital always opts for the solution easiest for the personnel, not for the woman, they gave me no alternative... I mean, they did, they said [ironically:] Well, we can give you some rectal medication, but then we do the curettage anyway. Well that's awesome... [irony]"

" there were those two lady doctors, one of them younger. The young one said something about this other possibility, but the older one started coercing the younger, that...[change in voice] 'what for? That's how they do it up in the States! What for? The lady will be free to leave the next day! There will be no problem. And this way there's complications.' And they didn't describe the two options, their pros and cons. They just mentioned it and Bam, you decide! Good bye"

"We've been through all this together - from the beginning to the very end" Although the medical aftermath of the loss touches the woman only, the whole experience involves both partners, especially if they had been joyously expecting the child. Most of the interviewees described two phases of the men's reaction to the loss. First - the shock, and inability to act, which soon gave way to the second, active phase, full of activities aimed at supporting the partner in her distress. The majority of women greatly valued the support they got from their husbands and believed the loss has made their relationship stronger. In most cases they claimed it was the man, and not vice-versa who was the support. They described various ways of coping with the problem (sports, work, friends and colleagues.) One of the women described her marriage fell apart after the third miscarriage, which was too much and they could not handle it. One of the women described the situation in which she had to be the strong one, she had to support and comfort her husband after the loss. One of the husbands was reported to having focused rather on the mother safety than the loss of the child.

Agnieszka claimed that her husband's behavior was greatly supportive. She had valued his presence at the hospital, and was angry at the fact that he was asked out of the room. She also voiced some doubt as to whether she was any support to him.

"(...) He was also hoping that it's all gonna be all right. Turns out not all pregnancies end in births we want, so he was really nervous. But he was, at that time, a great support, it.... I also saw, that he preferred to cope with the stress outside, so to speak, I mean it was hard for him to deal with my emotions, and his emotions at home, so, I don't know, he talked to his friends, that's how he dealt with it..."

"M: And.... do you think the loss changed something in your relationship?

A: "Well... , yes. I think, yes, and I think it made it stronger, like really. Cause we've been through all this together - from the beginning to the very end, and because I don't know how much I can say I was a support for my husband in this situation - I doubt that, but he did definitely support me.!!"

4. Discussion

The above analysis of a short interview with Agnieszka shows the complexity of the experience of losing a child in the prenatal period. The emotional load of the narrative is quite heavy, many of which emotions are "still alive." In both these, as well as all the other interviews the hospital period is very crucial. The abundance of difficult emotions leads inevitably to a reflection on how to provide care to women and the whole families who have experienced the loss. The role of the health-care personnel in helping to deal with this difficult situation is difficult to overestimate (DeFrain et al., 1996). Proper care, suppport, and sensitivity throughout the patiet's stay at the hospital may become a Crisis Intervention, lowering the risk of PTSD (Barton-Smoczyńska, 2007). Additionally, the knowledge of the mechanisms and certain patterns in reaction to the loss may help the therapists treat their subjects better (Raphael-Leff, 2013.)

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COGNITIVE AND ADAPTIVE ASSESSMENTS OF PREMATURE INFANTS AT 18 MONTHS: THE IMPORTANCE OF PARENTAL REPORTS

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Abstract

The high risk of adverse neurodevelopmental outcomes of very prematurely born infants in Singapore necessitated the development of a multidisciplinary team at the National University Hospital (NUH) to follow up with this vulnerable population. At 18 months of age, a psychological assessment, consisting of the Bayley Scales of Infant and Toddler Development – Third Edition (Bayley-III) and a structured interview using the Vineland Adaptive Behaviour Scale - 2nd Edition (VABS-II) are routinely administered. Due to cultural differences in the Singapore population and differences in developmental expectations for attaining adaptive milestones, it was queried whether the VABS-II would be a valid instrument. Hence, a comparison of the Bayley-III scores and parental reports (VABS-II) was warranted. A total of 24 toddlers (15 boys and 9 girls) ranging from 17-26 months of age, were assessed. The mean gestational age of all the toddlers was 29+5 weeks, with a mean birth weight of 1, 217 grams. In the Singapore sample, regression analyses revealed that the VABS-II composite scores explained a significant proportion of variance (R^2 = .49) in Bayley-III cognitive scores, $F(1,20) = 19.09$, p = <.001. After controlling for the child's gender, birth weight, and age at assessment, the VABS-II composite scores still explained 52.7% of the variance in the Bayley-III, B = 0.815, p = 0.001. Additionally, Communication subscale scores of the VABS-II accounted more strongly for the variance (R^2 = .56) in Bayley-III cognitive scores, $F(1,20) = 25.46$, p = <.001, as compared to the overall composite scores. Both Daily Living skills, (R^2 = .37), $F(1,20) = 11.48$, p = .003, and Motor skills, (R^2 = .43, $F(1,20) = 15.09$, p = .001, significantly predicted cognitive outcomes of children in the sample. However, Motor skills may not be a reliable predictor of cognitive functioning due to the high number of children with cerebral palsy in the sample. One important implication of the current findings is that medical professionals need to put an increased emphasis on parental reports of adaptive development when evaluating premature infants. The reported properties of the VABS-II confirm the importance and utility of parental reports as part of routine developmental follow-ups of very preterm infants.

Keywords: *premature infants, adaptive functioning, cognitive functioning, Vineland, Bayley-III.*

1. Introduction

Prematurely born infants are at high risk of developing a constellation of developmental issues that are often complex and accompanied by comorbid cognitive or behavioural variations. There is a need for close monitoring of the children's neurodevelopment, especially in their early years. The Early Steps Program (ESP) is a long-term multidisciplinary program developed by a team at the National University Hospital (NUH) to follow up with this vulnerable population who are at high risk of adverse neurodevelopmental outcomes.

In the NUH Early Steps Program, a team of paediatricians, paediatric nurses, psychologists, child speech and language therapists, and occupational therapists sees parents and their children. Assessment of development is performed through a combination of developmental screening, clinical interviews with parents and caregivers, observational assessment of the child, and administration of standardized assessments. The assessment of cognitive and adaptive behaviour development mentioned in this study is part of this process.

At 18 months of age, the children undergo a cognitive assessment using Bayley-III. This is complemented with a parent interview using the Vineland Adaptive Behaviour Scale - 2nd Edition (VABS-II).

Because the children are seen at such a young age, objective assessments are often difficult to do and offer limited insight to the wide breadth of skills that an infant or toddler is developing. As this stage

of care, assessment often relies heavily on parental or caregiver's report of the child's behaviours. Particular attention is given to the consistency from different sources and whether they align with the overall trajectory of the child's development. Of note, cultural variations in the way parents perceive or report their child's skills and behaviours may influence the outcome of an adaptive behaviour assessment (using the VABS-II, for instance). Further, an important point to highlight is the model of care in child caregiving locally. In Singapore, child caregiving is often, but not always, undertaken by family helpers (i.e., maids) and/or extended family members such as grandparents, alongside parents who both hold full-time jobs. This model of care needs to be taken into consideration in the follow-up care of children. It is not uncommon for the family helpers and grandparents or other extended family members to be involved in attending doctor's consults, giving feedback, and even partaking in a formal assessment with the child. They help fill in the gaps in developmental history, in recalling aspects of the child's early development, and in crosschecking the accuracy of the parents' recall of the child's behaviour. Hence, it is anticipated that parent and caregiver report are important in helping clinicians to understand a child's current functioning, particularly for very young children.

Every time a family has an encounter with the team, the interview is conducted in a way that helps the parent or informant remember details of the child's development and the timing of events as accurately as possible. Although caregivers are interviewed using a standardized questionnaire, they are encouraged to share qualitative and descriptive information about what their child is able to do currently. Further probing is done to explore consistency or possible variations in behaviour in different contexts (at home, outdoors, in school, etc.). Parents may be asked to focus on specific events that took place and to describe memories of the child's behaviour and abilities on these occasions. These serve as anchor points for describing milestones and emergence of specific skills. Not surprisingly, in conducting a VABS-II interview, multiple sources of feedback are often obtained from helpers, parents, grandparents, and other caregivers, if present. These provide an avenue of cross-checking and a means of comparing how a child's behaviour may vary as seen through the eyes of different people, at different times, or in different contexts. Oftentimes, the information coming out of this interview culminates into a report rich enough to serve as a valuable reference tool for therapists and interventionists to tailor and guide their ensuing interventions for this child.

Aside from comprehensiveness and accuracy, another important challenge pertains to parents' perceptions and preconceptions about the child's abilities. Very often, parents make meaning of behaviours and skills in a way that is significant to them and for the family. The challenge then, is for the clinician or psychologist to objectively map descriptive information of the child's actual behaviour onto the VABS-II interview, rather than obtaining an account of the parents' perceptions of their child's abilities. Thus, VABS-II is a measure of actual competency and not perceived ability.

The Brazelton philosophy (Brazelton, 2006) guiding the clinicians in the program, is that parents and clinicians are in a collaborative relationship. According to Bowman and colleagues (1994), "*systems of caregiving surrounding the youngest children in the field of health and human services are often focused on the potential for deficits in child and parent functioning. This focus can be counterproductive; leaving families feeling under-valued and un-welcomed, and even perceived within systems of care as unwilling to engage*". In its practical application, the Brazelton philosophy offers clinicians a framework to build better partnerships with families through a strengths-based approach encouraging family involvement, which has been shown to improve child outcomes.

2. Objectives

One of the aims of our study is to use the Bayley-III Cognitive Scale as a cross-checking mechanism to evaluate how accurate parental reports are in indicating a child's current functioning. These would have important ramifications in places or settings that cannot yet utilize a formal cognitive assessment tool, or when the child presents with behavioural or physical difficulties that prevent them from engaging in any form of assessment work.

Due to cultural differences in the Singapore population and differences in developmental expectations for attaining adaptive milestones, it was also queried whether the VABS-II would be a valid instrument. Hence, a comparison of the Bayley-III scores and parental reports (VABS-II) was warranted.

3. Results

A total of 24 toddlers (15 boys and 9 girls) ranging from 17-26 months of age were included in this study. The mean gestational age of all the toddlers was 29+5 weeks, with a mean birth weight of 1, 217 grams. In the Singapore sample, regression analyses revealed that the VABS-II composite scores explained a significant proportion of variance (R^2 = .49) in Bayley-III cognitive scores, $F(1,20) = 19.09$,

p = <.001. After controlling for the child's gender, birth weight, and age at assessment, the VABS-II composite scores still explained 52.7% of the variance in the Bayley-III, B = 0.815, p = 0.001. Additionally, Communication subscale scores of the VABS-II accounted more strongly for the variance (R^2 = .56) in Bayley-III cognitive scores, $F(1,20)$ = 25.46, p = <.001, as compared to the overall composite scores. Both Daily Living skills, (R^2 = .37), $F(1,20)$ = 11.48, p = .003, and Motor skills, (R^2 = .43, $F(1,20)$ = 15.09, p = .001, significantly predicted cognitive outcomes of children in the sample. However, Motor skills may not be a reliable predictor of cognitive functioning due to the high number of children with cerebral palsy in the sample.

4. Discussion

i) One important implication of the current findings is that medical professionals need to put an increased emphasis on parental reports of adaptive development when evaluating premature infants. The reported properties of the VABS-II confirm the importance and utility of parental reports as part of routine developmental follow-ups of very preterm infants.
ii) The strong, reliable relationship between the parental reports and child's cognitive functioning has important ramifications in places or settings that cannot yet utilize a formal cognitive assessment tool, for example, in areas where the demand for psychologist exceeds the available manpower. Additionally, in the case when children present with behavioural or physical difficulties that prevent them from engaging in any form of assessment work, the VABS-II is shown to be a good indicator of cognition.
iii) Understanding adaptive behaviours of these children can assist in developing early intervention strategies with an aim to helping them gain more life skills.
iv) The responsibility for delivering family-centred care in a hospital setting for those working with children born prematurely requires commitment and engagement by all members of the team as well as regular communication to share ideas and provide parental feedback are needed.

Early Step Program caregivers and parents are from Singapore and hence their experiences may not reflect those of parents in other countries. Further, the cultural norms in an Asian country may not generalize well to other countries with different needs and expectations. In contrast, the Brazelton approach (which is American) appears to bode well in Singapore. Clinicians and parents benefit from the collaborative approach and the young children appear to benefit as a result.

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RANDOMIZED CONTROLLED TRIAL OF HABIT REVERSAL TRAINING FOR TREATMENT OF HAIR PULLING IN YOUTH

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Abstract

Trichotillomania (TTM) is a chronic and often disabling illness with a lifetime prevalence up to 2.5%. TTM is associated with significant social, occupational, and familial impairment, and can also cause medical complications. Effective medication treatment for TTM has been difficult to establish. Habit reversal training (HRT) is efficacious for treating TTM in adults. However, few studies have examined the efficacy of HRT in children. This study evaluated the treatment efficacy of HRT compared to treatment as usual (TAU) for children aged 7 to 17 years with a primary diagnosis of TTM. Results indicated that HRT can be an effective treatment for TTM in youth.

Keywords: *trichotillomania, hair pulling, habit reversal training.*

1. Introduction

Trichotillomania (TTM) is a disorder characterized by the chronic compulsion of pulling out one's own hair; it is associated with noticeable hair loss, distress, and impairment. Individuals suffering from TTM often feel a compulsion to engage in a ritual associated with their hair-pulling (e.g., a need to bite the hair or root, tactile stimulation of lips or face with the hair shaft, a need to pull the hair in a particular way, searching for hairs that do not feel right or look right). Trichotillomania is a chronic and often disabling illness with a lifetime prevalence of 0.6-2.5% (Christenson et al., 1991). However, this prevalence rate is probably an underestimate, due to the secretiveness associated with the disorder as well as under-recognition by medical professionals (Tay et al., 2005). The mean age of TTM onset is pre-pubertal, and co-morbid disorders (e.g., obsessive-compulsive disorder, attention-deficit hyperactivity disorder) have been noted in some children (Christenson, 1995).

Trichotillomania can cause significant interference in functioning. Negative health outcomes include skin infections, irritation, bleeding, and eye infections. If hair is orally manipulated or ingested, individuals may experience dental erosion and/or gastrointestinal symptoms including abdominal pain and nausea (Duke, Keeley, Geffken, & Storch, 2010). Negative psychosocial outcomes include functional impairment and diminished quality of life in social, academic/work and family domains, difficulties with concentration, low self-esteem, (Diefenbach, et al., 2005).

Habit reversal training (HRT) is a common treatment for adults with TTM. The overall focus of treatment is to provide patients with tools to help manage and reduce hair-pulling. The treatment begins with identifying and understanding the feelings and reasons associated with the subject's hair pulling. Later sessions involve replacing the hair-pulling with a competing response (Woods, 2001).

There have been very few studies which have examined HRT against treatment as usual (TAU) in children with TTM. This study examined the efficacy of HRT for TTM in a randomized controlled trial of children and adolescents.

2. Method

2.1. Participants

Participants included 40 individuals between the ages of 7-17 years, who met DSM-IV criteria for a primary diagnosis of TTM. Exclusion criteria included bipolar or a thought disorder, autism spectrum disorder, or recent change in psychotropic medication.

2.2. Measures

All clinician-administered measures were administered by a trained independent evaluator (IE) who was not involved treatment or aware of randomization assignment. Numerous precautions to prevent unblinding of the IE were taken, as well as to monitor the integrity of ratings. Measures included:

Anxiety Disorders Interview Schedule for DSM-IV: Child and Parent versions (ADIS-IV-C/P; Silverman & Albano, 1996), a clinician-administered, structured interview that was developed from DSM-IV diagnostic criteria. Diagnoses reflect endorsement of symptoms as well as a severity rating.

Massachusetts General Hospital Hair-pulling Scale (MGHHS; Keuthen et al., 1995) - The 7-item MGHHS assesses the number of hair-pulling urges, the intensity of the urges, the ability of the patients to distract themselves from the urge to pull their hair, the number of hair-pulling incidents, attempts to resist hair-pulling, the ability to resist hair-pulling, and feeling uncomfortable about hair-pulling. Individual items are rated for severity from 0 (no symptoms) to 4 (extreme symptoms). The MGHHS served as the primary outcome measure.

Clinical Global Improvement (CGI; Guy, 1976) - The CGI is a 7-point rating of treatment response anchored by 1 ("very much improved) and 7 ("very much worse"). Youth being rated by the IE as 1 ("very much improved") and 2 ("much improved") will be considered treatment responders.

Trichotillomania Diagnostic Interview (TDI; Rothbaum & Ninan, 1994) – This is clinician-administered semi-structured interview to assess several aspects of the patient's hair-pulling (i.e. building tension to pull, relief from pulling, hair loss, and resistance to impulses).

2.3. Procedures

All participants completed an initial assessment to establish diagnosis and eligibility for the study. A Pre-Treatment assessment was completed one week after initial assessment. Thereafter, patients randomized into the HRT arm participated in eight 50-minute weekly HRT sessions over 8 weeks. One week after the final HRT session, patients completed a Post-treatment assessment. Patients randomized into the TAU arm of the study had 8 weeks of treatment as usual (see below for an explanation), and completed a Post-treatment session at the end of week 9. Finally, all participants completed 1 and 3-month Follow-up assessments.

2.4. Treatment

Habit Reversal Training Condition: All subjects received 8 weekly therapy sessions lasting 50 minutes each based on the protocol outlined by Woods (2001). Each session included a discussion of goals, review of homework and past material, discussion of new information or tasks, therapist-assisted practice, and homework for the coming interval. The overall focus of treatment was to provide patients with tools to manage and reduce hair-pulling. The treatment protocol consisted of: 1) Awareness Training; 2) Competing Response Training; and 3) Social Support. Other issues that were relevant to the participant (anxiety, depression, family issues, school issues, etc.,) were also addressed in treatment as appropriate.

Treatment as Usual Condition: Participants randomized to the TAU condition were instructed to continue receiving their prior interventions as recommended by their providers (e.g. psychotherapy or pharmacological interventions). Treatment changes (e.g. medication increase, starting psychotherapy) were not prohibited and were monitored. Thus, treatment continued as it would in standard practice. Following the 8-week interval, those randomized to TAU were offered 8 sessions of HRT free of cost.

3. Results

Preliminary results are reported here. More detailed results will be reported in the oral presentation and in a subsequent paper. The primary analysis was comparison of TTM severity using MGHHS. Results indicated that compared to the control condition (TAU), participants in the HRT condition improved significantly from Pre-treatment to Post-treatment with respect to hair pulling severity. The improvement in the HRT condition was considered moderate.

4. Discussion

Results of this study show that HRT can be an effective treatment for improving hair pulling in youth. Advantages of HRT include safety, tolerability, and effectiveness. Disadvantages include lack of availability of treatment, lack of expertise among providers, and cost and time commitment required. Strengths of the study include a controlled design, independent evaluation of symptoms, and a structured approach to treatment. Limitations include a relatively small sample size, and use of treatment as control versus an active treatment control group.

Additional issues that need to be addressed in future research include: 1) What characteristics or symptoms predict a good treatment response?; 2) How long do treatment effects last?; 3) What additional steps can improve outcomes for non-responders or partial responders?; and 4) What level of cognitive functioning or age is necessary for positive outcomes with HRT?

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NEUROFEEDBACK: FROM RESEARCH TO CLINICAL PRACTICE

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Abstract

Neurofeedback allows monitoring and changing brain wave patterns, for the purposes of improving health and performance. Using an electronic device that measures and presents the client's brainwave activity, neurofeedback training demonstrates the process of learning how to change physiological activity, leading to changes in behavior and mental state. Research and clinical practice have shown that one can change how the brain functions; and that we can change any organ system if we are provided with appropriate information. On the basis of research and clinical outcomes, for the last three decades neurofeedback has been developed as a training method, and has become a breaking through method. Thus it is timely to consider how neurofeedback can be integrated into counseling and psychotherapy practice and research.
Recent meta-analyses and reviews of outcome research have shown the effectiveness of neurofeedback in reducing symptoms for people with ADHD; autism spectrum disorder; addiction and other conditions; and also enhancing peak performance for the general population. Some even support its designation meeting the criteria for a Level 5 treatment system, using the ISNR and AAPB five-level rating system, for some disorders, like ADHD. In several cases neurofeedback has been shown to reduce the need for psychoactive medications, with the overall success rates of 60% to 80%, and with virtually no side effects. Neurofeedback practitioners use a QEEG method to assess the brain functioning under the conditions of eyes open, eyes closed and task. QEEG assessment- brain mapping- provides reliable, non-invasive, scientifically objective, culture-free, and relatively low-cost evaluation of brain function. QEEG is rapidly becoming essential for accurate clinical diagnosis. Some wave forms have been strongly associated with certain behaviors and form the basis of typologies for diagnosis. For example, High beta is found in many disorders, including obsessive-compulsive disorder, sleep disorders, anxiety, and addiction. In this presentation I will introduce the history of neurofeedback in clinical practice and research support for neurofeedback. I will present case studies demonstrating neurofeedback assessments, interventions, and outcomes.

Keywords: *neurofeedback, QEEG, EEG-Biofeedback, brain.*

1. Introduction

EEG biofeedback, known as neurofeedback, is an operant conditioning procedure in which patients learn to improve the brain's functional activity (Larsen & Sherlin, 2013). Neurofeedback can be defined as the process by which a subject learns to gain control over specific aspects of neural activity, putatively through operant conditioning or volitional control. That is a form of operant conditioning where the change in a physiological parameter is fed back to the participants in real time, so that through their monitoring of feedback and adjusting their mental state, they may learn to regulate it (Gruzelier, Foks, Steffert, Chen, & Ros, 2014).

The techniques of neurofeedback (NF) enable a patient to train him or herself to self-regulate a single measure of brain activity (Coben & Evans, 2011). Neurofeedback training aims to achieve self-control over specific aspects of electrical brain activity through real-time feedback and positive reinforcement and implement these self-regulation skills in daily life (Heinrich et al., 2007). The training program is an active one, in which the individual can restore the regulation of the brain network spontaneously (Johnston et al., 2010).

2. About The History of Neurofeedback

Since 1960, EEG biofeedback, later branded neurofeedback, has been verified to be effective in epilepsy and applied to various fields. In addition, its potential to be used to elucidate the mechanisms underlying psychopathology by evaluating the subjective effect of the modulation of specific brain areas has become apparent (Linden et al., 2012; Moriyama et al., 2012).

In the 1960s Kamiya found that low frequency alpha brain waves were trainable, achieved and maintained. Human ability to control brain wave states via instrumentation was confirmed. Five years later, in Sterman's experiment, cats were trained to increase frequency waves named SMR (sensorimotor rhythm). Sterman showed that these were also trainable, and not only that: the trained cats were seizure resistant! Sterman was discovering a medical application for this new technology (Demos, 2004).

However, Gruzelier (2014) in his review shows that EEG-biofeedback was sidelined by science, and explains – among other reasons, how at that time psychophysiological understanding was at an early stage. From the 1980s, university research on EEG biofeedback was confined to a few centers, notably under the direction of Sterman and Lubar in the USA and Birbaumer in Germany. Over the last decade scientific evaluation and an evidence-base for applications of neurofeedback is growing exponentially.

3. Applications

The widest application of EEG-neurofeedback is in the treatment of clinical disorders. These include: Attention Deficit Hyperactivity Disorder - with the largest clinical evidence base (Arns, de Ridder, Strehl, Breteler, & Coenen, 2009; Moriyama et al. 2012), as well as sufficient evidence supporting neurofeedback treatment in depressive disorders, anxiety disorders (Hammond 2005), autism spectrum disorder (Coben et al., 2010), addiction (Scott et al., 2005), sleep disorders (Arns & Kenemans, 2014) and substance abuse (Moriyama et al. 2012).

While neurofeedback has been applied to a range of clinical conditions, we can also evidence an accumulating research, particularly this millennium, in favour of neurofeedback applications in healthy participants, commonly called the ‘optimal’ or ‘peak performance’ training. This domain of neurofeedback refers to neurofeedback being used to improve performance in normal individuals. Vernon (2005) reviewed existing research and observed that neurofeedback may enhance performance of normal individuals in three areas: sports, cognitive performance, and artistic performance. Thus, A second domain of neurofeedback concerns optimizing functions in non-clinical populations, focusing on improved attention, memory, creativity, perceptual-motor skills etc.

Neurofeedback is also receiving increasing interest as a Brain-Computer-Interfaces (BCI) technique, and is interestingly poised to become one of the techniques of choice for emotional control (Johnston et al, 2010). For example, Cheon et al, (2015) have shown Neurofeedback treatment to improve mood, anxiety, self-esteem, hostility (based on the Hill–Castro checklist, there). Cheon et al, (2015) explain that the exact mechanism underlying its effect on the patients could not be elucidated, but changes not only in mood and anxiety-related symptoms but also in personality and cognition could be the potential mechanism, as Peniston and Kulkosky (1989) found. Peniston and Kulkosky have found personality changes after alpha-theta neurofeedback treatment in patients with substance dependence but not in the control group with conventional treatment.

Neurofeedback, as a breaking through method in the last decade, seems to have various applications for the good of clinical and non-clinical population.

4. The Neurofeedback Setting

There are several components to neurofeedback implementation (Cavazza et al, 2015): the identification of a target brain region; the choice of measurement for this region’s activity; the presentation of the feedback signal to the user (including ‘rewarding’ desirable patterns of brain activity); the experimental paradigm (specifying the number and duration of NF trials, success thresholds); and the user instructions.

Assessment is the first and critical stage in an effective neurofeedback. In the neurofeedback setting the assessment is a multidimensional process. Following a clinical interview ('intake') and psychological testing (e.g., Test of Variables of Attention, TOVA), testing the EEG patterns gives critical information about the client's condition. Using a Quantitive-EEG (QEEG), EEG measurements are taken by the practitioner, at different brain positions. Some wave forms have been strongly associated with certain mental states and form the basis of typologies for diagnosis. For example, too little alpha in the right hemisphere seems to correlate with social withdrawal; High beta is correlated with obsessive-compulsive disorder and with anxiety. According to Hammond (2010), “QEEG provides reliable, non-

invasive, scientifically objective, culture-free, and relatively low-cost evaluation of brain function" (p. 34). Hence, QEEG is rapidly becoming essential for accurate clinical diagnosis.

Based on these assessments, training protocols are matched to the client's needs. As practitioners need to gather information before and throughout the intervention, the author has developed a unique application for neurofeedback practitioners.

The tool for neurofeedback practitioners' uses Microsoft's Access, and allows the practitioner to accommodate neurofeedback practice. This is a state of the art application, specifically designed for the neurofeedback practice needs, following years of experience at this field. The application includes not only management tools (like easy-to-use notes, scheduling, client records) but also sets of questionnaires for the assessment stage, and an application of statistical tools (activity tracking, reports, graphs) that might help to monitor the progress of the client.

5. From vision to practice to vision

Research and clinical practice have shown that one can change how the brain functions; and that we can change any organ system if we are provided with appropriate information. On the basis of research and clinical outcomes, neurofeedback has been developed as a training method, and has become a breaking through method. Thus it seems timely to consider how neurofeedback can be integrated into counseling and psychotherapy practice and research.

Showing the effectiveness in reducing symptoms for people with clinical conditions, having in some cases the potential of reducing the need for psychoactive medications, with virtually no side effects, alongside the potential for "peak performance" for the healthy population, neurofeedback has become a part of a desired vision for achieving better mental states, or as Demos (2004) framed it: "Taking the shame out of mental illness" (p. 7).

Neurofeedback practitioners use a QEEG method to assess the brain functioning. QEEG assessment- brain mapping- provides reliable, non-invasive, scientifically objective, culture-free, and relatively low-cost evaluation of brain functions. As a part of a comprehensive assessment of the client's state, QEEG enables accurate clinical diagnosis. As the FDA declared that the EEG assessment might be the only accurate tool to assess ADHD disorder, it might be that the method of neurofeedback allows the most updated assessment tool for practitioners, and offers training protocols following this assessment. Nevertheless, as a relatively young method, more has to be researched about its implications.

In my presentation I will introduce the history of neurofeedback in clinical practice and research support for neurofeedback. I will present case studies demonstrating neurofeedback assessments, interventions, and outcomes, using different modalities of NF.

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THE RELATION BETWEEN PARENTAL CRITICISM, STRESS AND COMPETENCE, AND QUALITY OF PARENT-CHILD INTERACTION

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Abstract

Background: Sensitive, supportive, and accepting parenting is a necessary component in facilitating optimal development and outcomes of young children. In contrast, parental criticism may undermine the parent-child relationship and child development. Yelland and Daley (2009) reported that high parental expressed emotion (EE), especially high criticism, is associated with a variety of disorders in children, among them depression, anxiety symptoms, conduct disorder and hyperactivity disorder. High critical EE is also associated with higher parental stress (Baker, Heller, & Henker, 2000; Boger et al., 2008). These findings have been revealed in parents of older children, as few studies have examined the relationship between parental criticism and parent-child interaction in early childhood (Boger et al., 2008). A negative correlation between parental criticism and quality of child-parent relationship (McCarty et al., 2004) has been found in children aged 7-17 years. In addition, Kubicek at al., (2013) studied 38 child-parent dyads of 3 years old children with special needs, and a relationship which almost reached statistical significance was revealed between parental criticism and parental sensitivity during interaction. Examining the relationship between parental criticism, parental competence and the quality of parent-child interaction can lead to a deeper understanding of the variables affecting the quality of mother-child dyadic interactions. *Method:* Thirty-one mother-child dyads participated in the current study. The children were 3-6 years old (M = 4.5, SD = 0.83) with no identified developmental, medical or physical problems (e.g., typically developing). The mothers were asked to express their thoughts and feelings about their child for an uninterrupted five minutes. This speech sample was recorded and later analyzed for both content and tone, using the five minutes speech sample (FMSS), which has been adapted for young children (Daly, Sonuga-Barke & Thompson, 2003). The FMSS was originally designed as a brief measure of EE (Magnana et al., 1986). In the current study we operationalized parental criticism by counting the number of critical comments in the FMSS. In addition, mothers completed a demographic questionnaire, the Parenting Stress Index (PSI: Abidin, 1995) and the Parenting Sense of Competence Scale (PSOC: Johnston & Mash, 1989). Finally, a 30-minute parent-child play interaction was video-taped and analyzed using the emotional availability scales (EAS: Biringen, 2000), including six measures of emotional availability: parental sensitivity, parental structuring, parental lack of intrusiveness and parental lack of hostility, child responsiveness and child involvement. *Results and conclusions:* Positive significant correlations emerged between the number of critical comments and parental stress (r =.45 $p < .01$). Likewise, significant, negative correlations were found between the number of critical comments and parental efficacy as measured by the PSOC (r = -.31 $p < .05$). Two domains of parental emotional availability as measure by the EAS were significantly related to critical comments: structuring (r = -.33 $p < .05$) and non-intrusiveness (r = -.39 $p < .05$). Child responsiveness was also found to be negatively related to critical comments (r = -.46 $p < .01$). No correlation was found between demographic characteristics and parental criticism. Our results suggest that parental criticism is an important measure in understanding mothers' perception of parenting and a way to reflect the quality of parent-child interaction. These findings complement previous results (Boger et al., 2008; Kubicek et al., 2013; McCarty et al., 2004) and indicate a possible use of FMSS as a measure to detect difficulties in parental functioning and in parent –child interaction. Further longitudinal research is required in order to determine the direction of the reported effect and investigate causality.

Keywords: *parental criticism, expressed-emotion, emotional-availability, young children, parent-child interaction.*

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PREDICTORS OF LIFE SATISFACTION: THE ROLE OF PERSONALITY, ATTACHMENT, SOCIAL CONNECTEDNESS, AND LONELINESS

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Abstract

When considered across the entire lifespan, life satisfaction is one of the outcome variables related to aging well. Satisfaction with life is related to positive mental health outcomes and people who are satisfied with their lives report lower levels of distress (Wang & Kong, 2014) and higher levels of happiness (Peterson, Park, & Seligman, 2005). The purpose of this research was to determine factors that predicted life satisfaction in university students (M_{age} = 20.60 years, SD = 4.71). Three hundred and eighty-six participants (281 females) completed a series of questionnaires to measure personality factors, attachment, coping styles, loneliness, social connectedness, and life satisfaction. In this sample, over 50% of the participants were satisfied with their lives (M=4.81 on a seven point scale). A hierarchical regression was conducted to predict life satisfaction. The overall model was statistically significant, $F(18, 325) = 13.02$, $p < .001$, and accounted for 41.9% of the variance. Age and gender were entered on the first step and were not statistically significant predictors. Big Five personality factors were entered on the second step and low Neuroticism as well as high Extraversion and Conscientiousness significantly predicted life satisfaction (R^2 Change = .26). The remaining variables were entered in the third step and high social connectedness as well as low family loneliness and low fearful attachment scores made significant contributions to the model (R^2 Change = .15). These results suggest that emotional stability, sociability, self-discipline, strong family ties, and feelings of social connectedness coupled with low levels of fearful attachment predict general satisfaction with life. Overall, these results suggest the quality of personal relationships (i.e., loneliness and connectedness) rather than general coping styles is predictive of well-being in adulthood. However, in spite of these results, it should be noted that there is a large proportion of variance unaccounted for and future researchers should focus on adding to the predictability of the model.

Keywords: *life satisfaction, personality, attachment styles, loneliness, social connectedness.*

1. Introduction

The pursuit of happiness and subjective well-being (SWB) are central themes in the field of positive psychology and have garnered much research attention. Although these terms are often used interchangeably, SWB is conceptualized as having both an affective and a cognitive component (Diener, Suh, Lucas, & Smith, 1999). The affective component includes positive and negative emotional states (Diener et al., 1999; Proctor, Linley & Maltby, 2009) and the cognitive component is a subjective appraisal of global life satisfaction, in which the contributing factors and their importance may vary from one person to the next (Pavot & Diener, 1993; 2008; Schimmack, Diener, & Oishi, 2002). Life satisfaction is a component of SWB and is generally examined from the perspective of dispositional traits (top-down models), situational influences (bottom-up models), or integrated models of both (Diener, Inglehart, & Tay, 2013; Heller, Watson, & Ilies, 2004).

Dispositional traits are commonly examined using the Big Five personality factors, namely Neuroticism, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness, and each of these factors is comprised of six individual facets (Costa & McCrae, 1992). A consistent finding in the literature is that life satisfaction is predicted by low neuroticism (DeNeve & Cooper, 1998) and high extraversion (Diener et al., 1999; Ní Mhaoláin et al., 2012; Pavot & Diener, 2008; Schimmick, Radhakrishnan, Oishi, Dzokoto, & Ahadi, 2002). Individuals who are emotionally stable (i.e., low neuroticism) and extraverted may experience more pleasant interactions and positive affect, which in turn influence their perceptions of life satisfaction (Schimmack, Oishi, Furr, & Funder, 2004). Indeed, in terms of personality facets, a meta-analysis (Steel, Schmidt, & Schultz, 2008) indicated that the best

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predictors of life satisfaction were low depression (a neuroticism facet) and high positive emotions (an extraversion facet); other researchers (Schimmack et al., 2004) found these two facets accounted for 30% of the variance in life satisfaction scores. It is these personality factors and facets that account for the stability of SWB scores over time and across situations (Diener et al., 1999; Proctor et al., 2009).

Bowlby (1969/1982) proposed that attachment is defined by the affectional bond that develops through social interactions and serves to connect a child with the primary caregiver. Attachment theory has been extended to encompass relationships in both childhood and adulthood. For example, Bartholomew and Horowitz (1991) proposed a four category model (one secure, three insecure) based on the perceptions of self and other. A negative view of the self is associated with outcomes that could lead to increased vulnerability to stressors and an inability to cope. Secure individuals had better mental health outcomes (Gittleman, Klein, Smider, & Essex, 1998) and lower loneliness (DiTommaso, Brannen-McNulty, Ross, & Burgess, 2003) whereas individuals with a negative view of self (fearful and preoccupied individuals) reported lower mental health and self-esteem (Gittleman et al., 1998) and greater levels of loneliness (DiTommaso et al., 2003).

Situational factors, such as loneliness (Ní Mhaoláin et al., 2012), feeling connected to family and friends (Proctor et al., 2009; Schimmack, Diener, et al., 2002) and coping skills (MacCann, Lipnevich, Burrus, & Roberts, 2012) are correlated with life satisfaction. Salimi (2011) found that 16% of the variance in life satisfaction was predicted by lower levels of social (friendships) and emotional (family, romantic partners) loneliness. Loneliness may increase vulnerability to life dissatisfaction because it leads to decreases in social connectedness. On the other hand, individuals who are popular and respected have higher life satisfaction (Anderson, Kraus, Galinsky, & Keltner, 2012) because they feel accepted by others and are more likely to engage in shared activities, reinforcing their sense of social acceptance and belongingness. These social connections and social support networks predicted life satisfaction (Mahanta & Aggarwal, 2013; Mellor, Stokes, Firth, Hayashi, & Cummins, 2008). Furthermore, problem-focused coping, with its emphasis on dealing with a stressor, predicted life satisfaction whereas emotion-focused coping was negatively correlated with life satisfaction (MacCann et al., 2012).

2. Purpose of the Current Study

The purpose of this study was to examine predictors of life satisfaction in a single model using both dispositional traits and situational influences as predictors. Personality is seen as a lens through which we filter our experiences (Pavot & Diener, 2008). These dispositional factors may set a range of reaction in global life satisfaction scores, but situational influences may affect the level of life satisfaction experienced within this range (Heller et al., 2004).

3. Methods

3.1. Participants

A total of 386 participants (281 females; M_{age} = 20.60 years, SD = 4.71) was recruited from Introductory Psychology classes at a small Canadian university and received 1 bonus mark for their participation.

3.2. Materials

Neuroticism Extraversion Openness Personality Inventory Revised (NEO PI-R; Costa & McCrae, 1992). The NEO PI-R consists of 240 items rated on a 5-point Likert scale that measure five personality factors (Neuroticism, Extraversion, Openness to Experience, Agreeableness and Conscientiousness). Each factor has 6 sub-traits called facets. According to Costa and McCrae (1992) the internal consistency on the 5 major factors range from α = .86 to .92; on the facets α = .56 to .81. As well, the instrument has good convergent and discriminant validity (Costa & McCrae, 1992).

Relationship Scales Questionnaire (RSQ; Griffin & Bartholomew, 1994**).** The RSQ consists of 30 items measured on a 5-point Likert Scale. Participants receive a score to represent their level of secure, dismissing, fearful and pre-occupied attachment styles. The measure has demonstrated adequate reliability (Griffin & Bartholomew, 1994).

Revised Ways of Coping Checklist (WCCL; Vitaliano, Russo, Carr, Maiuro, & Becker, 1985**).** The WCCL is a self-report measure with ratings ranging from 0 (*not used*) to 3 (*used a great deal*). The scale contains 42 items measuring problem-focused, seeking social support, and emotion-focused coping styles (Vitaliano et al., 1985).

Satisfaction With Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985**)**. The SWLS is a five-item scale that measures satisfaction using a 7-point Likert-type scale (1 = *strongly disagree*). Moderate correlations between SWLS and other methods of life satisfaction, SWB, and personality characteristics have been reported and the test-retest correlation coefficient is high (Diener et al., 1985).

Social and Emotional Loneliness Scale for Adults-Short Version (SELSA-S; DiTommaso, Brannen, & Best, 2004**).** The SELSA-S is a 15-item scale measuring social, family, and romantic relationships on a 7-point Likert scale (1 = *strongly disagree*). The scale is reliable and valid (DiTommaso et al., 2004).

Social Connectedness and Social Assurance Scales **(**Lee & Robbins, 1995**).** The scales include 16 items (8 measuring social connectedness and 8 measuring social assurance) that use a 6 point Likert scale (1 = strongly agree). The internal and test-retest reliabilities of the scale are high (Lee & Robbins, 1995). For the purposes of this study, only the social connectedness scale was used.

3.3. Procedure

Participants were recruited from Introductory Psychology classes in which students had the option of earning bonus marks toward their final grade by participating in research, or by completing individual projects. For those who chose to participate, group sessions were arranged in which they completed a demographic measure, followed by the remaining measures in random order.

4. Results

A hierarchical regression analysis was conducted to determine if life satisfaction could be predicted by personality factors, attachment style, coping style, loneliness, and social connectedness. The overall model was statistically significant with 41.9% of the variance accounted for ($F_{(18,325)} = 13.02$, $p < .001$, multiple $R = .65$). Age and gender were entered on the first step and were not statistically significant ($F_{(2,341)} = 2.04$, $p = .13$, $R^2 = .01$). Big Five personality factors were entered on the second step and the model was statistically significantly (R^2 change = .26, F_{inc} $_{(5,336)} = 24.05$, $p < .001$). Significant predictors were Neuroticism ($\beta = -.32$, $t = -5.54$, $p < .001$, $sr^2 = .07$), Extraversion ($\beta = .21$, $t = 3.93$, $p < .001$, $sr^2 = .03$), and Conscientiousness ($\beta = .12$, $t = 2.21$, $p = .03$, $sr^2 = .01$). The remaining predictor variables were entered in the third step and the model was statistically significant (R^2 change = .15, F_{inc} $_{(11,325)} = 7.47$, $p < .001$). Significant predictors were a fearful attachment style ($\beta = -.14$, $t = -2.28$, $p = .02$, $sr^2 = .01$), family loneliness ($\beta = -.17$, $t = -3.14$, $p = .002$, $sr^2 = .02$), and social connectedness ($\beta = .23$, $t = 3.84$, $p < .001$, $sr^2 = .03$). The adjusted R^2 value of .39 of the overall model indicates that more than one third of the variability in life satisfaction was predicted by personality, specifically higher extraversion and conscientiousness scores, as well as higher feelings of social connectedness and lower scores on neuroticism, family loneliness and fearful attachment.

A second hierarchical regression was conducted to examine if the prediction of life satisfaction would be enhanced by using the NEO-PI-R facet scores in the model. The overall model was statistically significant with 48.4% of the variance accounted for ($F_{(34,309)} = 8.51$, $p < .001$, multiple $R = .70$, adjusted $R^2 = .43$). Age and gender were entered on the first step and were not statistically significant ($F_{(2,341)} = 2.04$, $p = .13$, $R^2 = .01$). On the second step, only the facet scores that were significantly correlated (ps<.05) with life satisfaction were used in the model and the model was statistically significant (R^2 change = .38, F_{inc} $_{(21,320)} = 9.43$, $p < .001$). Significant predictors were N3 (Low Depression; $\beta = -.34$, $t = -4.87$, $p <.001$, $sr^2 = .05$), E3 (Low Assertiveness; $\beta = -.17$, $t = -2.76$, $p = .006$, $sr^2 = .02$), A3 (Low Altruism; $\beta = -.17$, $t = -2.33$, $p = .02$, $sr^2 = .01$), N5 (High Impulsiveness; $\beta = .13$, $t = 2.19$, $p = .03$, $sr^2 = .01$), C5 (High Self-Discipline; $\beta = .23$, $t = 3.18$, $p = .002$, $sr^2 = .02$), and E6 (High Positive Emotions; $\beta = .15$, $t = 2.48$, $p = .01$, $sr^2 = .01$). The remaining predictors were entered in the third step and the model was statistically significant (R^2 change = .09, F_{inc} $_{(11,309)} = 5.12$, $p < .001$). Significant predictors were low romantic loneliness ($\beta = -.11$, $t = -2.35$, $p = .02$, $sr^2 = .01$), and family loneliness ($\beta = -.12$, $t = -2.23$, $p = .03$, $sr^2 = .01$), as well as high social connectedness ($\beta = .22$, $t = 3.68$, $p < .001$, $sr^2 = .02$).

5. Discussion

The overall goal of this study was to examine life satisfaction using a variety of situational and dispositional factors in a single model. Participants used the full range of the life satisfaction scale (M=4.81 on a seven point scale). Overall, when the Big Five personality factors (Neuroticism, Extraversion, Agreeableness, Openness, Conscientiousness) were entered into the model, the predictors accounted for over 40 percent of the variance. Specifically, high life satisfaction was associated with low neuroticism as well as high extraversion and conscientiousness. These results replicate previous research indicating that the dispositional traits of underlying emotional stability and sociability are important contributors to life satisfaction (Diener et al., 1999; Ní Mhaoláin et al., 2012; Pavot & Diener, 2008). Further, this research also highlights the importance of being conscientious. Above and beyond personality, life satisfaction was predicted by having a low levels of fearful attachment and family loneliness as well as high social connectedness.

In an initial examination of the relations between the facets of neuroticism and extraversion with life satisfaction, our correlational results almost perfectly mirrored those of Schimmack and his colleagues (2004). With the exception of the excitement-seeking facet of extraversion, all correlations were of the same magnitude and direction. In our overall regression model using the personality facets, almost 50 percent of the variance in life satisfaction scores was predicted. Specifically, individuals with higher life satisfaction have lower depression, assertiveness, and altruism as well as higher impulsiveness, self-discipline, and positive emotions. When the facets were used in the regression model, there were some supression effects. Furthermore, low romantic and family loneliness as well as high social connectedness were predictive of higher life satisfaction. These results make intuitive sense because individuals who perceive themselves to be socially connected to others are not as likely to be lonely.

When the personality factors were entered into the model, the effects of fearful attachment were statistically significant but when the more specific facets were used, fearful attachment was no longer a significant predictor. Fearful attachment was significantly correlated ($ps<.004$) with each of the facets that were entered into the model. Individuals with higher fearful attachment scores had lower life satisfaction ($r = -.37$). Furthermore, they had higher depression ($r = .42$) and impulsiveness ($r = .15$), as well as lower assertiveness ($r = -.17$), altruism ($r = -.18$), self-discipline ($r = -.23$), and positive emotions ($r = -0.31$). Thus, the facet scores that were used in the model at least partially define the fearful attachment style. According to Bartholomew and Horowitz's (1991) model of attachment, a fearful attachment style is associated with a negative view of the self coupled with a negative view of others and is associated with outcomes that could lead to increased vulnerability to stressors and an inability to cope.

These results support past research on loneliness (Ní Mhaoláin et al., 2012) and social connectedness (Proctor et al., 2009; Schimmack, Diener et al., 2002). Although life satisfaction was signicantly correlated with support seeking ($r = .14$) and problem-focused coping ($r = .16$) and negatively correlated with emotion-focused coping ($r = -.32$), the coping styles were not predictive of life satisfaction in the regression equation. Thus, these results partially support MacCann et al. (2012); the pattern of correlations was similar but MacCann et al. also reported that problem-focused coping was predictive of life satisfaction. Further, the finding that low fearful attachment scores were predictive of satisfaction with life supports previous research (Sumer & Knight, 2001).

There are important applied implications of this research. SWB is affected by dispositional and situational factors (Heller et al., 2004). Although dispositional factors are more stable across time and situations, situational factors may be more amenable to intervention. To improve satisfaction with life, clinicians should target variables such as the levels of loneliness and social connectedness experienced by individuals. SWB is recognized at national levels as being an important component of quality of life and overall health. For example, Healthy People 2020 (Koh, Piotrowski, Kumanyika, & Fielding, 2011) is an initiative based in the United States. One focus of this initiative is to examine the effects that quality of life has on health and disease. Initiatives such as these highlight the importance of considering the effects that SWB has on a variety of variables, including mental and physical health, work relationships, social functioning, and happiness. In some ways, the outcomes associated with relationships and SWB resonate with the public because they are personally meaningful as well as easy to understand. Change in personal behaviours is more likely to occur when individuals identify with improvements in their quality of life.

6. Conclusions

Satisfaction with life is predicted by dispositional (personality factors and facets) and situational (loneliness and social connectedness) influences. This study adds to the growing body of literature on factors affecting SWB. The importance of studies such as this is highlighted by the fact that life satisfaction surveys are being implemented at national levels to inform government policy (Diener et al., 2013).

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PREVENTING DEPRESSION – INTRODUCTION TO THE DEPRESSION PREVENTION PROGRAMME IN MAŁOPOLSKA REGION

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Abstract

Depression is a mood disorder that severely disrupts individuals' lives, as well as causes various social challenges. The feeling of sadness, helplessness and lack of interest affect patients' functioning in all of its areas, being facilitated by the perception of social stigma. In Poland, depression rates measured by various studies reach 15% of population. Depression constitutes one of the main risk factors of suicide attempts. It is being estimated that by 2020 depression may become the second leading factor contributing to serious medical problems. Also, it is significant that people facing mood disorders often resign from seeking for professional help, not recognising the symptoms or being afraid of social reaction. Therefore, the need to create various prevention and promotion programs in the area of mental health has been highlighted. Such interventions may influence increase in social knowledge about mental health and its disturbances. They also aim at identification of people that are at risk of mental problems. The aim of this paper is to introduce Depression Prevention Programme conducted in Małopolska region in 2014. The programme was developed to prevent the progress of depressive symptoms by the series of preventive counsels. It was aimed at healthy people who observed decrease in various areas of their functioning. 600 persons took part in the programme. The primary results reveal that such type of preventing programmes may be an efficient way to increase people's quality of life and counteract 'depression epidemic'. Future directions for further development of mental health prevention and promotion programmes will be discussed.

Keywords: *depression, prevention, mental health.*

1. Introduction

According to World Health Organization (1992), depression is manifested by three key symptoms that are: persistent sadness/low mood, loss of interest or pleasure and fatigue/low energy. Additionally, there are associated symptoms observed, such as sleep disturbance, low self-confidence or increased appetite. Although depressive symptoms significantly influence people's life in all of its areas, social awareness of the disorder still lacks in information.

Study conducted in 2010 by National Public Health Institute in Poland (2012) revealed that the number of first-time certificates of disability for pension purposes, that were based on mental and behavioral disorders were 2615. In Małopolska region, nearly 7% of joint certificates pertained to mental disorders. Those numbers sets Małopolska on the 7th place among all voivodeships. From national perspective, mental disturbances (including depression) constitute 15% of reasons for disability status issued by Disability Assessment Board regarding people between 15 and 59 years old (Central Statistical Office, 2009). Mood disorders have particular consequences at human's most productive age. Considering the fact that the rate of psychiatric diseases tend to increase, it is assumed that recently the number of people disabled by mental conditions is even higher. Study conducted by the European Depression Association (2012) revealed that even 10% of European employees stay on a sick leave due to depression, and the average length of the absences stands at 36 days. Unipolar affective disorder is responsible for more than 12% of all years lived with disability (YLD). Furthermore, it is the most frequent chronic illness in Europe (WHO, 2004). This tendency is also confirmed by the result of German studies, in according to which people affected by depressive symptoms tend to leave work due to sick leave and disability status (Thielen et al., 2013). Moreover, they are at high risk of being made redundant.

There are various factors related with occupational obstacles affecting people suffering from depression. Primarily, people who have mental disorders experience difficulties at work because of

depressive mood and lack of energy (Boschman et al., 2014). Furthermore, there are various symptoms of depression that affect worker's cognitive functioning, such as attention, memory and decision making deficits (Hammar, Ardal, 2009). The situation is being made more complex as a result of the frequent need to undergo pharmacological and psychotherapeutic treatment. A report from studies governed by Łazarski University in Warsaw (2014) suggests that so-called 'depression epidemy' leads to significant public costs as a result of work-related difficulties experienced by people at productive ages when depression is most often diagnosed. Factors that endanger mental health are e.g. unemployment, poverty, harmful alcohol and drugs consumption and poor interpersonal relationships.

A large number of people suffering from affective disorders' symptoms hesitate to search for professional help. It is due to the fact that they do not recognize their own health status thinking that those symptoms are rather a result of specific, short-term problems that they can deal with. Moreover, various misunderstandings related to mental disorders make them discouraged from revealing their problems in fear of social stigmatization (WFMH, 2014).

Considering high costs generated by work absences and decreased efficiency of people with affective disorders, there is a highlighted need to increase social knowledge about mental health as well as its disturbances. Such educational interventions would be aimed not only at early diagnosis and treatment but also at prevention that would increase people's quality of life and protect against the disease.

2. Preventing depression – introducing Depression Prevention Programme in Małopolska region

2.1. Aims of the programme

The Depression Prevention Programme was aimed at educating inhabitants of Małopolska region about depression – its causes, symptoms and treatment. It was supposed to broaden social knowledge regarding depression and to change social perception of professional psychiatric and psychological help. The second aim of the programme was to conduct educational and preventive counsels for people who experienced various difficulties in order to implement specific health-improving habits and increase their depression resilience.

2.2. Material and Methods

600 people took part in the project. During the promotion actions, including television and radio programmes, people were being educated about symptoms, treatment and causes of depressive symptoms, as well as encouraged to take part in the programme in order to take a look at one's life difficulties and strengths and benefit from practice counsels that may decrease depression risk. It should be highlighted that the chosen form of intervention was psychoeducation. This form is characterized by accessible and not invasive communication about important issues. It was additionally enhanced by self-diagnostic character of the programme.

Educational counsels were conducted in nine places in Małopolska region (Lesser Poland Voivodeship). The project was carried out with financial support from Małopolska Vovoideship. More than 50 consultants were engaged in the project, all of them being psychiatrist, psychologists and/or psychotherapists with work experience. In case of some participants the questionnaires were incomplete or incorrectly filled. Furthermore, only less than a half of the participants decided to benefit from the second counsel. As a result, selected objects' results were included in basic statistical analysis, depending on the questionnaires available.

Following measures were used in the study:

- **The Polish Resiliency Assessment Scale (SPP-25)** - created by Ogińska-Bulik and Juczyński (2008) to identify personality traits that compose resiliency. The scale consists of 25 statements, assessed on a five-point scale. The results are calculated for total score, as well as five specific factors: Persistence and determination in action (SPP1), Openness to new experiences and sense of humour (SPP2), Coping with negative emotions (SPP3), Tolerance of failures and perceiving life as a challenge (SPP4), Optimistic attitude towards life and mobilizing oneself in stressful situations (SPP5). The greater results, the higher resiliency level, both global and domain-specific.
- **Hopelessness Scale HS-20 -** the level of hopelessness was assessed by using the Beck Hopelessness Scale, which is a 20-item, self-administered scale designed to measure the negative expectancies of one's future life. The total score ranges from 0 to 20, and the level of hopelessness increases with increasing scores.
- **Two Questions Test (TQT) -** consists of two general questions that are aimed at assessing person's basic perception of own depressive symptoms' intensity during previous month. The symptoms included feeling of despondence, hopelessness and lack of interest in everyday

activities. This assessment tool has been developed on the base of language adaptation of similar, simple English-language questionnaires Type of assessment scale was modified for 1-10.

- **Appraisal of Life Areas Questionnaire (ALAQ) -** authorial tool designer for obtaining self-assessed quality of life profile. Statements cover 22 life domains (e.g. global self-worth, physical activity, social and close family relations, physical health). The main characteristic of the measure is the ability to capture patient's functioning through positively formulated questions that were not focused on deficit approach.
- **Assessment of Preventive Counsel Questionnaire – version for participants (APCQ-P) –** consists of 10 questions that are aimed to provide feedback related to the quality of counsels. The questions referred to participants feelings of consultants' expertise and the quality of interpersonal contact.
- **Assessment of Preventive Counsel Questionnaire – version for consultants (APCQ-C)** – the tool is analogous to KOPP-U. 10 statements were assessed by consultants after the meeting had been finished.
- **Demographic Questionnaire:** included various questions regarding participants' demographic characteristics (e.g. age, sex, place of living, education, type of work).

Prevency counsels consisted of two stages. The first stage was a primary counsel. During the meeting participants firstly filled the questionnaires measuring resiliency (SPP-25) and hopelessness (HS-20), as well as Demographic Quesionnaire. After that, with consultant's assistance, they assessed their global and domain-related satisfaction using Two Question Test and Appraisal of Life Areas Questionnaire. The results of this part determined further counsel's course. It took a form of a dialogue about life areas in which participants reported difficulties and lack of satisfaction. Consultants provided various psychoeducational information. Depending on the character and level of participant's symptoms the information covered possible factors determining perceived deficits, instructions of possible positive life changes, as well as methods of treatment. Participants were motivated to implement changes in their daily routines and enhanced to share their experiences during second, control meeting.

The second stage of the project took place after two months from the first meeting. All the measures, except Demographic Questionnaire, were filled anew. The efficacy of the firs counsel was discussed with the participant and new aims to increase well-being were jointly formulated. It should be emphasize that one of the most important principle of the programme was to enhance participants' active attitude and to encourage them to introduce their own opinions and ideas.

At both stages, after the consultation had been finished, both participants and consultants filled in Assessment of Preventive Counsel Questionnaires. In order to ensure anonymity of respondents and make results more objective participants did not fill in the questionnaire in consultant's presence.

2.3. Results

Because when the conference proceeding book was composed participants' numeric results had just been obtained, only basic statistics will be introduced in the article. Descriptive statistics were calculated with SPSS vs.20 package. Further statistics will be presented and discussed during the conference.

Table 1. Participants' results – Measurement 1and 2.

	Measurement 1			**Measurement 2**		
Measure	N	Mean	SD	N	Mean	SD
TQT1	523	6,31	2,75	242	4,77	2,46
TQT2	523	5,16	2,96	242	4,15	2,45
TQT_Total	523	11,46	5,02	242	8,92	4,39
ALAQ_Total	524	95,82	23,05	242	106,23	21,36
APCQ-P	438	50,40	8,18	217	49,16	9.14
HS-20_Total	520	8,05	5,16	231	6.90	4,73
SPP1	522	12,97	3,95	231	14,07	3,74
SPP2	522	13,71	3,75	231	14,58	3,72
SPP3	522	11,36	4,29	231	12,87	3,88
SPP4	522	12,58	3,93	231	13,87	3,60
SPP5	522	10,78	4,21	231	12,56	4,18
SPP_Total	522	61,48	17,82	231	67,95	17,12

As it was presented in Table 1, in Two Questions Test that globally assesses person's perceived deficits in life satisfaction and can be connected with the presence of depressive symptoms, participants obtained relatively high results. It can suggest that in numerous cases they experienced various negative feelings, including lack of energy and interest in work and everyday activities. It is in accordance to consultants' experiences that will be presented during the presentation.

Although the significance of differences had not been yet calculated, main results in this matter including the first edition of the programme, conducted in 2013, can be described. As far as areas of functioning assessed by Appraisal of Life Areas are concerned, statistically significant results were obtained in two of them: Coping in difficult situations (3,15-3,64, p=0,015), feeling of control on own's life (3,47-3,82, p=0,45), Psychical well-being (2,99-3,68, p=0,001) and Action will (3,47-3,87, p=0,37).

There is a need to emphasise that there were no areas where decreases in subjective well-being were observed. On the base of presented descriptive results it can be seen that differences between two measurements are also observed in most of measured areas. Although the main aim of the programme was educational one and no control group was included, participants' experiences suggest that at least in certain cases, experienced change was conditioned by modifications implemented in the wake of the first counsel.

3. Summary and discussion

Results obtained during the Depression Prevention Programme indicate a need to arrange further prevention programmes that would help people suffering from various symptoms of mental disturbances. Such interventions would be especially helpful for those who are not aware about diagnostic and treatment possibilities or who experience different difficulties in finding appropriate help. Experiences derived from Depression Prevention Programme revealed that during educational counsels, people have the possibility to analyse their own strengths and weaknesses, as well as to benefit from professional help in primary diagnose and deciding about future actions decreasing depression risk.

It is important to analyse the reasons of why numerous participants did not decide to continue the programme by taking part in the second, control counsel. Obviously, objective factors such as random life events and lack of time probably played an important role. However, it should be noticed that, although the programme was developed for healthy population, there were numerous participants suffering from various severe symptoms that had a corrosive effect on their functioning. Such observation highlights the problem that majority of people still decide to search for professional help when the symptoms are severe and lead to difficulties in everyday functioning. As such people received practical information about mental health service, they could consider The second counsel redundant.

Described programme's results enhance further development of similar initiatives that would be more concentrated on their role in promoting healthy behaviors and preventing mental diseases. Future educational and prevention programmes should also include the third, postponed measurement that would allow to observe possible stability of obtained effects. Although presented programme was mostly aimed at education, future directions in the field should be more methodologically improved, including control group that would be needed to further estimate the real effect of implemented preventive interventions. Furthermore, measures used in evaluation of participants' should be verified and extended with validated and sensitive instruments that would assess depressive symptoms (such as Beck Depression Inventory). Last but not least, it would be significant to implement such educational and preventing strategies in relation to other mental disorders and attempt to assess the specificity of the interventions. Besides various limitations of the programme it can be concluded that such initiatives are highly important in preventing depression.

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PSYCHOPATHOLOGY: THE COGNITIVE ORIENTATION APPROACH

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Abstract

The objective of the paper is to reintroduce into the scene of psychopathology the psychological perspective by describing the cognitive orientation approach to mental disorders. This cognitive-motivational approach emphasizes the role of meanings, beliefs and attitudes in promoting specific behaviors in the normal or abnormal range. A large body of empirical studies showed the predictive power in regard to behaviors of cognitive contents referring to themes identified as relevant for the particular behavior and presented in terms of four belief types (about self, about others and reality, about rules and norms, and about goals and wishes). The paper describes the application of the cognitive orientation approach to paranoia, schizophrenia and depression. The presented studies describe questionnaires based on the cognitive orientation theory that enabled to differentiate between patients with specific diagnoses and healthy controls. The themes that contributed most to the differentiation are presented. These included, for example, non-conformity, perfectionism, extreme distrust of others, and rejection of compromise. A general theoretical approach to psychopathology is outlined.

Keywords: *psychopathology, beliefs, cognitive orientation, paranoia, schizophrenia, depression.*

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1. General introduction: Cognitive orientation in the domain of psychopathology

1.1. Cognitive approaches to psychopathology

Cognitive models explaining psychopathology as due to faulty thinking and irrational beliefs have played an increasingly salient role (Beck, 1976). Their major limitations are the assumption that the cognitive factors are conscious and are not specific to a certain kind of psychopathology.

1.2. The cognitive orientation theory

The cognitive orientation (CO) approach to psychopathology is designed to overcome most of the limitations of the cognitive approaches. The CO is a model designed to describe major processes intervening between input and output and to enable understanding, predicting and changing behavior. It resembles the other cognitive models in assuming that cognitive contents, viz. beliefs, meanings or attitudes guide behavior, but does not share with them the assumptions of rationality, realism, reasonableness, decision making, and voluntary control. Instead, it shows how behavior proceeds from meanings and clustered orientative beliefs. The various phases of progression from input stimulation to behavioral output consist in fact of different kinds of elaboration of meanings. The beliefs as well as the outcome may or may not be rational. At present CO is a basic cognitive-motivational approach, including a theory, a methodology and a large empirical body of data in regard to everyday kinds of behavior, cognitive behaviors, emotions, physical health and psychopathology. Following the presentation of the basic model, the CO approach to psychopathology will be described.

A large body of research demonstrates the predictive power of the CO theory in regard to actually observed behaviors in a variety of domains (Kreitler, 2004, 2013; Kreitler & Kreitler, 1982). In each prediction study the procedure consists in assessing the motivational disposition for the output by means of a CO questionnaire and examining the availability of a behavioral program for implementing the intent. A CO questionnaire assesses the degree to which the participant agrees to beliefs orienting toward the behavior in question. The beliefs differ in form and contents. In form they refer to four types of beliefs, namely, beliefs about goals, about rules and standards (norms), about self, and about others and reality (or general beliefs). In contents they refer to themes which represent meanings underlying the output in question. The themes are identified by means of a standard procedure applied to pretest participants. It consists in interviewing the participants about the meanings of the key terms and then three times in turn about their responses, out of which those that recur in at least 50% of the interviewees are selected for the final questionnaire. Thus, the motivational disposition assessed by the CO questionnaire is not conscious, and is not liable to voluntary manipulations.

The CO theory has also enabled modifications of behavior, such as rigidity, impulsivity, curiosity and eating disorders. The procedure consist in mobilizing sufficient support for the desired course of action by evoking in the subject beliefs orienting toward this course of action (Kreitler, 2004).

1.3. The cognitive orientation approach to psychopathology

The CO model of psychopathology assumes that psychopathological behaviors (or symptoms) are a function of a motivational disposition implemented by a behavioral program, which are manifested in the presence of or due to a specific stimulus or situation that act as a trigger. However, the CO defined motivational disposition is only one set of determining factors within a network that includes also other factors, most probably biological and genetic, as well as familial and cultural. Accordingly, the issue is not whether psychologically-based CO disposition is the cause for a psychopathology but what precisely is its independent contribution to understanding, predicting and changing the symptoms of interest.

Notably, the motivational disposition for each set of psychopathological outputs is specific for that output. Even if there appears to be some overlap in the themes correlated with different outputs, further themes specific for the particular output are likely to be discovered. However, the span between specific and general motivational dispositions in psychopathology may be bridged by a further possibility which adds another paradigm to the scene. This paradigm consists of a general motivational disposition for a certain cluster of symptoms which is complemented by specific clusters orienting toward particular symptoms within that cluster. There is already evidence supporting this paradigm in regard to at least two domains: one domain is eating disorders where the general motivational disposition is complemented by themes supporting bulimia or overeating or anorexia nervosa (Kreitler, 2011); another domain is addictions where the general motivational disposition for addictiveness is complemented by themes representing addictions for example for drugs or alcohol or internet or shopping Kreitler, 2014). It is likely that a similar situation would characterize also the domain of schizophrenia. It should further be mentioned that even when there is a specific motivational disposition for a particular syndrome, such as schizophrenia, it is further complemented by motivational dispositions for specific pathological behaviors such as not taking care of woneself, not working, not taking medications etc.

There are several components that play a role as determinants of psychopathology within the context of the CO theory. The primary and most important determinant is the motivational disposition. There are motivational dispositions orienting toward depression, paranoia, schizophrenia and other syndromes (see **2.**). A motivational disposition orienting toward a particular syndrome may be characterized by nonrealistic or wrong beliefs i.e., so-called irrational beliefs (e.g., "only if one is clean from evil emotions, such as jealousy or anger, one is allowed to wash one's body") that may cluster with other irrational or even some rational beliefs supporting the same output so that the overall result is a motivational disposition to avoid hygienic behavior. Another possibility for psychopathology arises when the beliefs of the four belief types are mostly or even all of them rational and acceptable but the overall direction supported by all of them may be psychopathological, e.g., withdrawing from others (supported by beliefs, such as if your get too close to others one may inadvertently harm them). Thus, one should consider psychopathology based on inadequate beliefs or adequate ones clustered in terms of inadequate processes. Notably, the pathology may originate even earlier, in the stage of identifying the stimulus or situation which may be distorted or unrealistic. Thus, if a person identifies a tree as a threatening person, then all beliefs the individual may have for defensing oneself may be rational and acceptable as well as the clustering processes, while the final outcome of hitting the tree may be inadequate.

Further possibilities for psychopathology that need to be considered include situations when no action is possible because the individual does not have enough beliefs supporting any course of action; or because the clustering process of beliefs culminates in different sets of contrasting motivational dispositions which result in conflicts or obsessive ruminations. Finally, it is appropriate to highlight the role of behavioral programs in psychopathology. The individual may not have learned enough adequate behavioral programs for implementing one's motivational dispositions. Also conflicts between different behavioral programs may arise, that prevent adaptive action. Another possibility would be when a child's motivational disposition that could be quite normal, for example, to get attention, is implemented by a behavioral program that is not considered as quite normal, for example, hitting or biting other children.

2. The cognitive orientation of paranoia

2.1. Objectives

The objectives of this study were to cross validate the results of a previous study in which the motivational disposition for paranoia was studied (Kreitler & Kreitler, 1997). The participants were paranoid patients (n=29) and three control groups (30 schizophrenics, 27 depressives and 64 healthy subjects) who were administered the CO questionnaire of paranoia which included beliefs of four types

(goals, norms, about self and general) referring to 44 themes (e.g., masculinity, strength). Discriminant analyses showed that the four belief types enabled significant discrimination among the four groups and that there is a CO based on themes and conflicts characteristic for paranoia. Since the described study served for the original validation of the CO questionnaire of paranoia it was considered necessary to cross validate it in a new sample with a shorter version of the CO questionnaire.

2.2. Design

The study was based on a two-group posttest-only design. One group included paranoid patients, the other included healthy controls, matched in age, education and cultural background.

2.3. Methods

The number of participants was 40: 20 in each group, with a similar gender distribution (13 men and 7 women). The subjects in the two groups did not differ in age (means paranoids 41.3 yrs and controls 45.5 yrs). The paranoid patients all had a certified diagnosis of paranoia or schizophrenic paranoia and were living in a hostel for psychiatric patients. They were all administered the CO questionnaire of paranoia which included 71 items (32.13% of the original number), selected as those that differentited best between paranoids and normals: 20 beliefs about self, 21 general beliefs, 13 norm beliefs and 17 goal beliefs. The items referred to the following 15 themes: Existence of absolute truth, limited quantity of resoources, need for understanding everything, guarding one's rights, keeping rules and regulations, not changing one's mind, admiring/accepting authority, rejecting authority, upholding masculinity, doing unto others as they do to you, controlling one's emotions, low conrol of one's life and fate, reacting to slights and offenses, no consideration for others, rejecting help from others. The Cronbach's alpha reliability coefficients of the four belief typess ranged from .75 to .88.

2.4. Results

Mean comparisons of the four types of beliefs between the two groups by t-tests yielded all significant results [$p<.01$] showing that the group of paranoid patients scored higher than the controls. A discriminant analysis showed that the scores of the four belief types enabled a correct classification of the subjects in 71.35% of the cases [deviation of 20.35% from the 50% expected by chance).

2.5. Conclusions

The major finding of the study is that a shorter version of the CO questionnaire of paranoia proved to be adequate for differentiating between a group of paranoid patients and normal controls. This finding confirms the validity of the questionnaire. The differentiating themes that characterize the paranoid group in contrast to the controls cluster mainly around the following foci: (a) rigidity (themes of absolute truth, nor changing one's mind; (b) Safeguarding one's status (themes of guarding one's rights, reacting to slights and offenses); (c) Upholding justice (themes of keeping rules and regulations, doing unto others as they do to you); (d) feeling strong (themes upholding masculinity, admiring authority, rejecting authority); (e) control (themes of need to understand everything, control of one's emotions, control of one's life and fate, limited quantity of resources), and (f) distancing oneself from others (themes of no consideration for others, of rejecting help from others). Notably, the set of themes characterizing paranoids includes two kinds of potential conflicts: in regard to authority (admiring authority vs rejecting it) and in regard to one's strength (feeling strong vs low control of one's life and fate). The attempt to resolve these conflicts may be responsible in part for some of the pathological behaviors manifested by paranoid patients, such as defending oneself against others.

3. The cognitive orientation of schizophrenia

3.1. Introduction

The first attempt to study the CO of schizophrenics has been done years ago (Kreitler & Kreitler,1982), actually predating the formulation of the CO theory. Hence it was mandatory to repeat the study of the CO of schizophrenia in a new format, applying the standard methodology.

3.2. Objectives

The goal was to construct a CO of schizophrenia that would enable to characterize schizophrenic patients of different kinds and would constitute a valid tool for the assessment of schizophrenia.

3.3. Design

The design consisted in comparing two groups, one of schizophrenic patients and one of normal controls, matched in age, gender and cultural background.

3.4. Methods

The number of participants was 50: 25 schizophrenics, and 25 healthy controls.. The two groups did not differ in age (mean 38.2 yrs for schizophrenics and 42 for controls) and gender distribution (13 men and 12 women in each group). The schizophrenics were living in a hostel for psychiatric patients and had a certified diagnosis. All participants were administered the CO questionnaire of schizophrenia. It was based on themes identified by the standard procedure (1.2) and included 49-51 items in each belief type, referring to 24 themes: keeping emotional distance from others, distancing oneself from emotions, concealing one's feelings from others, not letting oneself to be convinced by others, avoiding of giving to others, avoiding commitments in relationships, avoiding responsibilities, avoiding harming others, avoiding any form of violence, not considering being consistent, believing that one has a higher mission/purpose in life, striving for extraordinary achievements, believing in an ideal world, believing in the existence of absolute truth, love etc., being pure and good in the highest sense, nurturing one's inner life, doing with very little for oneself, being respected for what one is and not because of one's deeds, living in complete freedom, difficulty in getting orders from others, safeguarding one's energies, looking for deeper underlying meanings, believing the world is a dangerous and threatening place, feeling that one carries death within oneself. The Cronbach's alpha coefficients of the belief types ranged from .73 to .81.

3.5. Results

Mean comparisons between the two groups by t-tests showed that the group of schizophrenic subjects scored significantly higher than the controls on all four belief types and on 20 of the 24 themes ($p<.01$). A discriminant analysis showed that the scores of the four belief types enabled a correct classification of the subjects in 76% of the cases [deviation of 16% from the 50% expected by chance).

3.6. Conclusions

The findings support the conclusion that there exists a CO of schizophrenia. The clearly delineated thematic clusters point toward the following foci as characteristic of schizophrenia: emotional distancing from others (which may also serve as a safeguard against harming others), striving for complete freedom, striving for high achievements, distancing oneself from reality (which is viewed as impure and dangerous) while striving toward an ideal world of absolute truth and love. This set of themes corresponds to former descriptions of the schizophrenic view of life (e.g., Arieti, 1974).

4. The cognitive orientation of depression

4.1. Introduction

The CO of depression was first administered to 100 women immediately after delivery and it predicted significantly the occurrence of postnatal depression assessed a month later (Buzaglo, 2014). It was therefore considered advisable to extend the testing of this new instrument.

4.2. Objectives

The goal was to test the validity of the CO of depression in a sample of patients diagnosed with depression as compared to healthy controls.

4.3. Design

The design consisted in comparing two groups, one of patients diagnosed with depression and one of normal controls, matched in age, gender and cultural background.

4.4. Methods

The number of participants was 34: 17 in the group of depressive patients, living in a hostel for psychiatric patients, and 17 in the healthy control group. The subjects in the two groups did not differ in age (mean 62.2 yrs for the patients and 59 yrs for controls) and gender distribution (11 women and 6 men in each group). All participants were administered the CO questionnaire of depression. It was based on themes defined on the basis of interviews with pretest subjects conducted according to the standard procedure (1.2). The questionnaire included 21-26 items in the different belief types, referring to 19 themes, such as avoidance of harming anyone, avoidance of active initiative, controlling one's emotions. A factor analysis of the responses in the study by Buzaglo (2014) showed that the themes formed four factors (accounting for a total of 61.50% of the variance) labelled as: striving for complete and perfect success as a condition for becoming at all engaged, assuming responsibility for anything that goes wrong, doing what is required and expected rather than desired, striving for complete control over situations. The reliability coefficients of the four belief types were in the range of .75 to .82

4.5. Results

Mean comparisons between the two groups by t-tests showed that the group of patients with depression scored significantly higher than the controls on all four belief types and on 15 of the 19 themes ($p<.01$) . A discriminant analysis showed that the scores of the four belief types enabled a correct classification of the subjects in 71% of the cases [deviation of 21% from the 50% expected by chance].

4.6. Conclusions

The findings provide additional support for the validity of the CO of depression. The thematic clusters highlight the following foci as playing a role in regard to depression: extreme approach toward success, assumption of responsibility, fulfilling expectations of others, and control. These tendencies provide deeper insight into the origin of the cognitive depresso-genic tendencies identified by other investigators, mainly the negative view of themselves and reality (Beck, 1976).

5. General summary and conclusions

The three briefly presented studies should be considered as preliminary. Each of them provides evidence that there exists a CO of the studied particular psychopathological disorders: paranoia, schizophrenia and depression. Some of the themes have been identified in previous studies of psychopathology. However, it is evident that the psychopathological nature of the Cos consists not only in one or another theme but in the set as a whole. In all three studied cases the set of themes expresses tendencies that render it difficult to live a normal satisfactory life.

The COs are basically unique for each disorder. However, they also share some constituent themes. The major recurrent themes are a tendency toward assuming extreme positions, namely, an-all-or-nothing approach; keeping an emotional distance from others, for different reasons, such as harm avoidance or keeping one's freedom; and a very high achievement orientation. If these and other themes prove to recur consistently in further COs of psychopathological disorders, it would justify to examine the hypothesis that they constitute the core of a general possibly phenotypical tendency for psychopathology.

It needs however to be reiterated that the COs are not the causes for psychopathology but merely predispositional tendencies of psychological risk factors that may enhance the probability of developing a psychopathological disorder as part of a network of other factors, when one is exposed to a specific instigating trigger. As such the COs may be considered as risk factors of psychopathogies that may be used in assessment, and as the basis for psychological preventive measures and therapeutic interventions.

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CONTEMPORARY MODES OF SUBJECTIVATION: THE ISSUE OF AESTHETICAL HORIZONS

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Abstract

This study addresses the new modes of subjectivation arising from the contemporary sociocultural organization as means of defense against the experience of boredom. Postmodern personalities are discussed, among which is avatar personality, as well as, spectral personality, and social personalities. These descriptions are the result of therapeutic observations in the psychoanalytic situation in dialogue with the contribution of other disciplines.

Keywords: *postmodernity, subjectivation, psychopathology, psychoanalysis.*

1. Introduction

I met Ricardo when he was 15 years old; he had already been in psychotherapy for 9 years. His previous analyst could not continue the therapeutic process and she sent him to me saying that he had a diagnosis of autism.

I received him for our first encounter at the door of the clinic. He seemed agitated and anxious. He entered abruptly in the house, walking quickly to the different rooms, opening doors of closets, drawers, everything that he could find. While he was moving, he repeated some sounds that he produced with his mouth in a stereotyped way. I accompanied him throughout all the rooms trying to be acquainted with him. He stopped when opening a drawer he found a package of crackers, which he devoured quickly. I pointed out to him the anguish that he seemed to feel for coming to meet a stranger, mainly, after the loss of the old therapist with whom he was accustomed to work. I observed that, after my speech, he cried just with one eye. I commented that the eye cried for the absence of the therapist whom he didn't see anymore.

The sessions continued. Along the time, he was calmer in the analysis room with me. I tried to be attentive to the minimum manifestations of his anguishes. In face of an abrupt appearing of anguish, he was in panic and he screamed hopelessly. The suffering seemed immense and he lacked psychic resources to give any contour or representation to his suffering. He was not able to communicate with words or with toys. He knew some words that seemed to be more important for their sonorities than for their meanings. It was frequent the echolalia, the balance of the body and the laughing without context. He seemed to solve any situation with screams or the voracious ingestion of food.

The connection that he seemed to establish with the analytic situation was through the cookies that he found at the clinic. The different attempts of interpretation of what happened in the sessions were fruitless. Once, I decided to have a cookie with me to give him so he didn't have to catch it in the closet. It was an attempt that I tried in the hope of having access to him. My idea was that, perhaps, he would be able to associate the cookie to me. His reaction was surprising, because as soon as I offered him the cookie, he caught it and swallowed it at once. He looked fixedly at my chest and vomited on me and soon after devoured his own vomits. This situation repeated several times, whenever I tried to give him the cookie. For me it was evident that was impossible for him to support that I existed outside his control. My gesture was felt as an intrusion and with his vomits he turned the food an object without connection with the other human being. In the consulting room there was a bag that was used just by him, with several objects: twine, pencil, papers, cars, plastic soldiers, games and puzzles. He was only interested on the puzzles; they were composed by drawings of characters from infantile histories, cut out in small pieces that needed to be gathered so that the drawn scenes appeared.

Once in a while, he stopped his activity to emit some sounds that he repeated several times and, then, laughed at the sonority he produced. This activity seemed to me, initially, stereotyped. (Safra, 2015)

The time passed, and I tried to base my interventions on the emotional situations that seemed to happen along the sessions and along the psychotherapic process. Sometimes my interventions seemed to produce some significant movement in the sessions, most of the time; however, he in the same stereotyped way of his echolalia repeated my speech.

The setting that I used with him was quite firm. I noticed the need of taking him directly to the consulting room as soon as possible when he arrived for our work. The door of the room was locked to the end of the hour. These procedures had as effect to aid him be more organized and they avoided the appearing of the intense annihilation anxieties.

The years passed and, sometimes, facing his echolalia and the endless repetition of his activities, I felt discouraged and wondered if we would arrive to some place. There were a few progresses in the day-to-day of our work, but I thought they were quite limited.

In a session, although I was feeling discouraged, I tried once again to make an intervention saying something to him. He repeated it, as always, but something, for the first time, caught my attention: he was not only repeating my words, but there was a new melody in the sentence that he said. The melody of his speech was different of mine. It was a melody that I recognized to have heard him use it many times. I was perplexed with what I was observing! I thought: there he is! In the melody.

I hummed the melody that he had used, without using the words of the sentence. He looked at me, for the first time, fixedly in the eyes. He smiled, clapped his hands and he emitted another melody expecting me to repeat it. I did that and, in answer, he jumped happily around the room. He created another melody and I again repeated it. We were communicating! Safra (2015).

I remembered, while we played like that, of the Steve Spielberg's film "Immediate Contacts", where a communication is established between the humans and the aliens through the use of sounds. In fact, we were as two beings of different worlds that met through music. Until that moment, I always heard his repetitions of my speech as echolalia. I had not noticed that in the melody of his voice, it was possible to potentially meet him, and could be the beginning of a communication between us.

Winnicott (1971) says that the human creativity is never destroyed. For him in the origin of the self is the individual's tendency, genetically determined, of staying alive and of linking with objects that appear in the horizon when arrives the moment of reaching them. In adverse conditions, the individual retains some personal traits, even if secretly, at least in the breathing. I had frequently asked myself where would be this boy's primary creativity.

The creativity is understood by Winnicott as the ability of creating the world. The child is ready to find the world of objects and of ideas, and the mother presents the world to the baby. She adapts herself to the baby offering him the experience of omnipotence, so he really finds what he created. Each baby begins with a new creation of the world. What he created was already there.

The whole subject of the constitution of the self and of the subjectivity is centered in the use of the image, the sensorial one that presents the individual's style of being, in creative gesture of the other and of the world.

Ricardo emitted his melody into the endless space. There was not, until then, a human presence that could return it to him, to recognize him as a being and as a singular presence in the world. These are necessary conditions for the posterior appearance of the phenomenon of the communication. The sonority was this boy's peculiar way to subjectively create the object and the world.

Echoing the sonority facilitated the patient to again find his primary creativity; this helped the establishment of the subjective object that would give to the patient the necessary condition of finding the creative gesture.

The baby lives immersed in sounds, temperatures, colors and smells. I have been observing that each person constitutes its self and its personality, through certain sensorial form that was the mainly aspect of the baby's style of being. For some the vision is the fundamental sense; for others, the touch; or the use of the musculature; the sonority; the rhythm and so on. It is through the main sensorial form of certain individual that opens up the constitution of the subjective object and its style of being. Later, in stages of greater maturity, we will have the "I" of the individual anchored in that sensorial aspects that were the constituent elements of his self. The individual can suffer a dispersion of the self, with the experience of panic or of madness, when these elements that are the sensorial anchor of the self are put in failure by situations of the daily life.

The encounter with aesthetic qualities opens several development possibilities for the child. It is here that he or she will begin to surge as a human being and also this experience points the aesthetic form that will present the style of being of the individual, these forms appear as symbols of the self.

In the human encounter, when the aesthetic experience inaugurates the possibility to exist as being in relation to another one, we have the individual's entrance in a capacity of articulation of symbols of the self, they constitute and they present the existence of the person in its singular style of being. They are images of great importance, because they are not representations but presence of being.

This kind of aesthetic experience allows the person to know the world and the other ones in a personal way: the world acquires meaning to him or her. At the moment when the other recognizes the individual, the world can be created and it can come to be known with satisfaction. This is an aspect of extreme importance in some of the called “learning problems”. If the child didn’t create the world, it seems without sense or meaning and appear as excessively other. Not to learn is the only way to preserve a personal and authentic way of being. To learn out of these conditions is living through an experience of submission and intrusion.

The aesthetic forms have their origin in the configurations of the child's body in contact with the mother’s body. This happens by what the mother notices in her baby. This process allows the child to dwell in his body, a body that was bathed with meanings by the affective presence of another human being. By this process, when a baby plays with a part of his body, he meets again the affective-existential experience lived with his mother or her substitute. He can have access to an imaginative repertoire through which the psychic lives in the body.

We live nowadays in a hegemonic technological horizon, which in one hand offers a more comfortable life for human beings; on the other constitute a world´s aesthetical organization strange to the human body’s measure (Horujy, 2010). There is an abundance of different techniques in several areas of human experience. Currently, we observe persons that are constituted not by the aesthetical offered by another human body, but by the aesthetics offered by virtual reality. This means that their subjectivity is organized following the pattern of virtual reality. We can observe nowadays what we can call postmodern personalities.

2. Postmodern personalities and subjective phenomena

2.1. Avatar personality

This mode of subjective organization can be mistaken with the personalities called “as if” or “false self”; however, it differentiates from the two latter by the fact that in the postmodern personalities there is the desire for the complete disappearance of the original personality in which place is what, in the language of the Internet, we call “avatar”. These persons identify themselves with the technology, constituting themselves on the edge of virtual reality. The identification is not with the human, but with the technology and its aesthetics! These persons are like beings without history; they use technological emblems as fetish. It seems that they have created themselves! It is a type of person-mask, in which the mask is a digital system (Safra, 2012)

2.2. Spectra

The mother-technology frequently emerges in the postmodern world. The child is introduced to the world by its mother in such a way that it does not allow detecting the human presence in the environment. In this horizon, the child does not see the human presence. The gestures and the care received do not refer to the human body, but rather to aesthetic measures resulting from the hegemony of the technology. These children develop out of the human world in repudiation to aesthetic settings resulting from the technology. They feel nostalgia for a world that they did not know, unless by the negative aspect and by the knowledge that emerges from their bodies. They have deep knowledge about the human ethos. They are described as ghosts, spectra, since they do not feel to be participants in the human world. For this reason, in a previous study I called these persons “spectra” (Safra, 2000)

It is observed that some of these persons develop a defensive nihilism when they become organized by a profound disbelief in the human world and fall in love with the “nothing”. Currently, there are many young persons who have that kind of experience. They need to find in the psychoanalytic situation another human being that recognizes the ethical failure that they have experienced and with whom they can establish a trust relationship.

2.3. Idolization of instincts

There are persons today who seek anthropological transformations by the idolization of instincts and the animals that represent them. They seek to set up their bodies through surgeries that give them animal or mythical shapes (tattoos, implants of animal ears, horns, etc.). We can observe that in this situation the same perspective of the power of technology is determining this phenomena, because the persons acts as an individuals that by the use of techniques can change their bodies.

These phenomena are often accompanied by criticism or disappointment with the humankind and by a longing for original human experience that they think that they find in the animal world, however, this situation entails deep loneliness, since it removes the person from the company of other human beings.

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3. Final considerations

These are some of the most frequent modes of subjectivation arising from the characteristics of the contemporary world. Today, psychotherapy reveals the fundamental importance of the recognition of how the hegemony of the technology affects the new forms of subjectivation and the new psychopathological pictures. Expanding the understanding of the clinical phenomenon demands the interlocution with the other fields of the human sciences, such as anthropology, theology, and philosophy, so that the clinical researcher can encompass the complexity of the phenomenon that emerges in the psychoanalytic situation at present.

These modalities of suffering can teach us much about the fundamentals of the human condition, so we can be able to deal with the kind of suffering experienced in the contemporary world.

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PROBLEMATIC INTERNET USE AND MARRIAGE: ANALYSIS OF LIFE SATISFACTION AND MARITAL ADJUSTMENT

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Abstract

The present study aimed to investigate if married individuals who relatively use Internet problematically would differ from married individuals who do not use Internet problematically on marital adjustment and life satisfaction variables. This research was a cross-sectional survey study from a convenience sample composed of 153 female and 157 male adult married participants who live, in Turkey. Three-hundred and ten participants in total were married for at least three years. The Satisfaction With Life Scale (SWLS), Marital Life Scale (MLS), Marital Problem Solving Scale (MPSS), and Internet Addiction Test (IAT) were used as standardized assessment instruments to examine the relations of problematic Internet use of the married participants with their life satisfaction and marital adjustment self-reports. Results revealed that the IAT scores of the male participants as compared to female participants, employed participants as compared to unemployed participants, and younger participants as compared to elder participants were higher. The participants were also grouped and compared depending on their IAT scores as problematic and non-problematic Internet users**.** The participants of the former group reported lower life and marital satisfaction in addition to lower marital problem solving skills as compared to the participants of the latter group as expected in the beginning of the study. The findings of this study are especially important to indicate a connection of Internet-use related problems with marital adjustment, life satisfaction, and some demographical variables of the married individuals. Speculating about practical benefits of increased marital adjustment and life satisfaction related to more controlled Internet-use; or low marital adjustment and life satisfaction together with male gender, employed status, and younger age as the possible risk factors of higher Internet-related problems among married individuals is equally plausible due to the methodological limitations of the present study. Thus, future research is required both to support the existence and to understand the possible mechanisms of the suggested associations by the findings of the present study.

Keywords: *problematic internet use, marital adjustment, life satisfaction.*

1. Introduction

The Internet, as the most effective communication medium of the modern life, attracts individuals all over the world with varying interests in academic, occupational, or personal engagements. This attraction is proposed to potentially cause a type of addiction characterized by clinical features such as preoccupation with the Internet, inability to control its use together with tolerance and withdrawal symptoms (Young, 1998a) which are similar to other addictions of intoxicants and gambling. In spite of the examples of variations in labeling excessive Internet use and related negative consequences such as pathological Internet use (Davis, 2001; Durkee, Kaess, Carli, Parzer, Wasserman, Floderus, et al., 2012), compulsive Internet use (Greenfield, 1999; Muusses, Finkenauer, Kerkhof, & Billedo, 2014), Internet addiction (Ak, Koruklu, & Yılmaz, 2013; Lee, Choi, Shin, Lee, Jung, & Kwon, 2012); the term "problematic Internet use" is comprehensively utilized in this paper to refer to the Internet related difficulties of people.

Besides the complexity in labeling Internet-related problems, this phenomenon of the modern life requires careful research. Because as Beard and Wolf (2001) suggest, there are people who have harmful dependence on the Internet. Expecting increase in prevalence and severity of the Internet-related problems in future will not be a pessimistic estimate due to the amazing improvements in relevant technologies and connected widespread use of the Internet. Fortunately, the negative consequences of the Internet use have begun to be more broadly researched in relation to different variables in recent years. However, relevant accumulated empirical findings seem to be mostly limited to the data retrieved from university students. Research of various samples about Internet-related problems differing in socio-demographical variables will help to question the generalizability of the present findings in the field and to enrich the research questions significant to those samples' features.

Taking into consideration the possible contributions of exploring Internet-related problems in different groups of individuals with research questions peculiar to those samples, the present study was planned to be conducted with married individuals. Both highlighting the place of the Internet use as a possible but an unexplored associate of marital life and inspiring interested researchers to investigate Internet-related problems in different samples with different questions were equally attached importance in the beginning of this study. From this standpoint, examining the relations of Internet-related problems with life satisfaction and marital adjustment were in the focus of this research. Specifically, it was both hypothesized that Internet-related problems of the participants would be negatively correlated to their life satisfaction, marital satisfaction and marital problem solving scales scores and problematic Internet users would score lower on life satisfaction, marital adjustment scales as compared to the non-problematic Internet users.

2. Methods and Materials

2.1. Sample and procedure

The present research used a cross-sectional survey. The instrument set was administered to 310 adult participants who were married for at least 3 years, selected through convenience sampling in Istanbul and Izmir cities, in Turkey. Participation was voluntary and data was collected between January 10 and March 15 of 2013. Participants signed a written informed consent form including the information that participation was voluntary and withdrawal at any time of the study was possible.

The demographic characteristics of the participants of the present study are detailed in Table 1. One hundred and fifty seven participants in the study were males (50.6%) whereas 153 of them were females (49.4%). The mean age of the participants was 40.80 (8.10 Sd – range: 30-64) whereas the mean of marriage history in years was 15.93 (9.43 Sd – range: 3-47). Approximately seven tenth (69.0%) of the sample reported that they were employed whereas 30.3% of them reported that they were not working at the time of the data collection. University graduation (45.2%) was common in the sample followed by high school (30.3%), elementary school (13.5%), and secondary school (9.7%) graduation respectively in frequency of educational status. Only one participant of the sample reported that she was literate.

Table 1. Demographic characteristics of the participants.

Age	responses		M (SD)	range		
females	151		40.00 (7.91)	30 - 59		
males	156		41.57 (8.24)	30 - 64		
total	307		40.80 (8.10)	30 - 64		
Marriage duration	responses		M (SD)	range		
females	152		16.25 (9,32)	3 - 42		
males	156		15.62 (9.56)	3 - 47		
total	308		15.93 (9.43)	3 - 47		
Employment status	Employed		Un-employed	total: n		
females: n (%)	78 (51.0%)		75 (49.0%)	153		
males: n (%)	136 (86.6%)		19 (12.1%)	155		
total: n (%)	214 (69.0 %)		94 (30.3%)	308		
Education	literate	elementary school	secondary school	high school	university	total: n
females: n (%)	1 (0.7%)	22 (14.4%)	11 (7.2%)	51 (33.3%)	66 (43.1%)	151
males: n (%)	0 (0%)	20 (12.7%)	19 (12.1%)	43 (27.4%)	74 (47.1%)	156
total: n (%)	1 (0.3%)	42 (13.5%)	30 (9.7%)	94 (30.3%)	140 (45.2%)	307

2.2. Materials

In addition to the personal information form that consisted of demographics such as age, gender, or employment status and Internet use behaviors such as duration of weekly use or frequency of use, the following measures in relation to the findings that are presented in this paper were used in this study:

Satisfaction With Life Scale (SWLS): SWLS was developed and validated to measure life satisfaction as a cognitive-judgmental process (Diener, Emmons, Laresen, & Griffin, 1985). The scale is composed of 5 items which are scored on a 7-point Likert scale resulting in a score range between 5 (low life satisfaction) and 35 (high life satisfaction). Internal consistency and temporal reliability values of the SWLS in addition to its expected correlations with relevant subjective well-being measures were reported

as support to the favorable psychometric properties of the scale (Diener et al., 1985). Test-retest reliability value of .85 found in the Turkish adaptation study of the SWLS (Köker, 1991) together with the following research exploring psychometric properties of the scale that revealed satisfactory test-retest reliability (.73) and internal reliability (.86) values (Yetim, 1993) supported the reliability of the scale.

Marital Life Scale (MLS): MLS was developed to assess the individuals' satisfaction level in their marital relationships by 10 items on 5-point Likert scale resulting in a score range between 10 (low marital satisfaction) and 50 (high marital satisfaction) by Tezer (1996). Reliability analyses revealed significantly high test-retest reliability (.85) and internal reliability values (.89 and .91) for MLS (Tezer, 1996).

Marital Problem Solving Scale (MPSS): MPSS was developed to assess the problem solving skills of the individuals related their marriage on 9 items which are scored on a 7-point Likert scale (Baugh, Avery, & Sheets-Hawoth, 1982). Increased scores on the scale indicate better problem solving skills of the individuals in their marital life. Internal reliability value of .91 in the Turkish adaptation study (Hünler & Gençöz, 2003) was compatible with that value of .95 reported for the original version of the scale (Baugh et al., 1982).

Internet Addiction Test (IAT): IAT is composed of 20 items to assess the negative consequences of Internet use on a 5-point Likert scale resulting in a score range of 20-100 for the participants (Young, 1998b). In spite of the inconsistent findings in respect to the factor structure of the test, various versions of the test show satisfactory psychometric properties, especially in regard to the internal reliability scores, such as the versions in English (Widyanto & McMurran, 2004), in Chineese (Chang & Law, 2008), in German (Barke, Nyenhuis, & Kröner-Herwig, 2012), or in Turkish (Bayraktar, 2001). Examples of the utilization of the Turkish version of the IAT up today in various research are plenty (Çelik, Atak, & Başal 2012; Durak Batıgün & Kılıç, 2011). Score of 40-69 or 70-100 is suggested to indicate frequent problems or significant problems respectively related to Internet usage (Young, 1998b). Although the literature lacks precise studies to investigate validation of these cut-offs, there are research examples that distinguish Internet users into severity groups according to their IAT cut-off scores (Ghassemzadeh, Shahraray, & Moradi, 2008; Villella, Martinotti, Cassano, LA Torre, & Gliubizzi 2011). A broad category of problematic Internet users with IAT scores of 40 and above was composed in the present study by combining the participants with frequent and significant problems for comparative purposes.

3. Results

Several independent samples t-tests were conducted to compare the IAT scores of the participants on their demographic characteristics including gender, age, employment status and educational level as shown in Table 2. Two groups in each category of age and education variables were composed trying to balance the number of the participants in the groups. According to the results of the analyses, the IAT scores of the male participants were higher as compared to female participants whereas the IAT scores of the employed participants were higher as compared to the unemployed participants. In addition, the participants who were under age 40 scored higher on IAT than the elder participants of the sample. On the other hand, the IAT scores of the university graduate participants did not differ significantly from the less educated participants.

Table 2. Comparison of IAT scores of the participants with respect to their demographic characteristics.

		IAT *M* (*SD*)	*t*
gender	male (*n* = 157)	39.78 (17.46)	(307) = 6.37**
	female (*n* = 152)	29.15 (11.07)	
age	< 40 (*n* = 158)	36.18 (15.79)	(304) = 2.01*
	> 39 (*n* = 148)	32.64 (15.03)	
employment	employed (*n* = 214)	36.62 (16.79)	(305) = 3.76**
	unemployed (*n* = 93)	29.51 (10.75)	
education	< university (*n* = 166)	34.98 (16.12)	(304) = 0.56
	university (*n* = 140)	33.97 (14.88)	

* $p < .05$, ** $p < .001$

In the beginning of the present study, it was hypothesized that problematic Internet use would be associated with lower life satisfaction and marital adjustment. Correlational and independent samples t-test analyses were carried out to test these hypotheses of the study. As can be seen in Table 3, IAT

scores of the participants were negatively and significantly correlated with their SWLS (r = -.33, p < .001), MLS (r = -.23, p < .001), and MPSS (r = -.21, p < .001) scores according to the results of the correlational analyses. In other words, life satisfaction and marital adjustment decreased as the Internet using problems of the participants increased.

Table 3. Correlational analyses between the measures of the study.

variables	1	2	3	4
1 IAT	1.00			
2 SWLS	-0.33*	1.00		
3 MLS	-0.23*	0.64*	1.00	
4 MPSS	-0.21*	0.50*	0.66*	1.00

* p < .001. *Note*- IAT: Internet Addiction Test, SWLS: Satisfaction With Life Scale, MLS: Marital Life Scale, MPSS: Marital Problem Solving Scale

In addition to the above correlational analyses, independent samples t-tests were conducted to compare the scores on life satisfaction and marital adjustment measures of the participants sorted into two groups as problematic and non-problematic Internet users. The cut-off score to determine the problematic Internet users was score of 40 and above on IAT. The groups of problematic and non-problematic Internet users of the sample were composed of 84 and 225 participants respectively. According to the results of the analyses, problematic Internet users scored lower on SWLS, MLS, and MPSS scores as compared to the non-problematic Internet users. Moreover, average time problematically Internet using group devoted for Internet per week was almost as twice as the non-problematically Internet using group. The results of the independent samples t-tests are shown in Table 4.

Table 4. Comparison of problematic and non-problematic Internet users on relevant measures.

variables	non-problematic Internet users (n = 225) M (SD)	problematic Internet users (n = 84) M (SD)	t
Internet using time/week	9.84 (12.61)	18.76 (13.51)	(307) = -5.42**
SWLS	24.92 (6.33)	20.56 (7.03)	(307) = 5.22**
MLS	37.39 (8.18)	33.45 (7.80)	(307) = 3.81**
MPSS	35.88 (8.17)	32.62 (7.90)	(307) = 3.16*

* p < .01, ** p < .001. *Note*- SWLS: Satisfaction With Life Scale, MLS: Marital Life Scale, MPSS: Marital Problem Solving Scale

4. Conclusion

The findings of the present study supported some of the prior research results suggesting associations of increased Internet-related problems with male gender (Ceyhan, 2008), employed status (Ferraro, Caci, D'amico, & Di Bilasi, 2007), and increased time spent on the Internet (Khazaal, Billieux, & Thorens, 2008). Besides the above findings, increased Internet-related problems of the participants were also found to be correlated with their lower life and marital satisfaction in addition to poorer marital problem solving skills as expected in the beginning of the study. Moreover, lower scores on those variables of life satisfaction, marital life and marital problem solving as measured by SWLS, MLS, and MPSS respectively found for the group of participants composed of problematically Internet using individuals as compared to the group of participants composed of non-problematically Internet using individuals measured by IAT was one of the other confirmed hypotheses of the present study.

The findings outlined above supported the suggested idea of the present study proposing the research relevancy of Internet-related problems in marital life. However, literature lacking research about Internet-related problems within the context of marriage to the knowledge of the present study's author, limits the discussion of the present study's findings. Future research is required both to support the existence and to understand the possible mechanisms of the suggested associations by the findings of the present study. In spite of the limitations of the present study including cross-sectional nature of the data, convenience sampling procedure, lack of validation studies supporting the use of IAT cut-offs; this study revealed important implications taking into account the inspiring considerations of the research in the beginning. Internet-related problems were shown to be a relevant variable to be explored in life of the married individuals at one hand; whereas appropriateness of examining those problems in the contexts of various samples with differing features and with new research questions significant for those samples was illustrated in the sample of married individuals on the other hand by the findings of the present study.

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ADDICTION RECOVERY THAT WORKS: CLINICALLY PROVEN WHOLE HEALTH TREATMENT FOR SUBSTANCE ABUSERS AND OTHER ADDICTS

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Abstract

There are few disorders that have a lower recovery rate than addiction. 12-step programs, once the only real treatment option available, have extremely poor recovery rates, on the order of 5-10% at the end of one year. At the same time, mortality rates from complications from addiction and accidental overdose are skyrocketing, particularly in the United Sates. Accidental overdose is now a leading cause of death in the US. In other countries, the drug(s) of choice might be different, but the hope for recovery is equally grim. However, today addicts have hope. By applying the latest research in psychology, neuroscience, medicine, and complementary/whole health practices to addiction recovery, an addiction treatment protocol has been developed that is revolutionizing how addiction is treated. This presentation will show how a variety of treatment practices, when used together on a highly individualized basis, work synergistically to drastically improve treatment outcomes, at least 7-fold better than the best outcomes with 12-step programs. This process in essence rewires the brain, allowing addicts to lead productive, normal lives completely free from drugs and alcohol. Scientific advances in a range of fields including applied psychology, meditation and mindfulness, and neuroscience, among others, have collectively been used to create some of the greatest breakthroughs in addiction treatment since the advent of 12-step programs. These new understandings of how the addict's brain and psyche work have revolutionized our knowledge of addiction recovery, making change possible. We have discovered that addiction isn't the genetic "disease" we once imagined, but is rather a brain disorder, a neuroplastic event in which both the structure and function of the brain are co-opted and changed by addictive behavior. Knowing this, we are able to manipulate the brain in order to create new neural pathways that establish healthy behaviors and the opportunity for lasting recovery. Even the most hopeless individuals can show improvement using this model. This presentation will leave behind the stale discourse on addiction treatment using the disease model and will focus instead on a client-centered, forward-focused addiction recovery model. The conversation will be most appropriate for those who wish to know more about current advances in addiction treatment, applied psychology, and applied neuroscience. It will also appeal to those interested in whole-health treatments for addicts and their families.

Keywords: *addiction recovery, alcoholism, substance abuse, holistic addiction treatment, psychological therapies for addiction.*

1. Introduction

Substance abuse and addiction are a major international problem. In nearly every nation on the planet and among all genders and ages, ethnic and socioeconomic groups, addiction exists at some level. The drugs of choice change in different social groups and nations, though alcohol is almost universally the top drug of choice (NIAAA, 2004/2005). The devastation caused to families is also global. As family members succumb to substance abuse, family dynamics change for the worse. Substance abuse costs societies billions of dollars (NIDA, 2014) and individuals and families untold heartache.

Tragically, addiction is widely known to be resistant to treatment (Dodes & Dodes, 2014; Taite & Scharff, 2014). Although difficult to study because of its anonymous nature and ever-changing membership, 12 step programs like Alcoholics Anonymous (AA) are believed to have abysmal success rates (Dodes & Dodes, 2014) – and were once an addict's best hope of recovery. That has now changed. With breakthroughs in neuroscience and research into complementary and alternative medicine, new evidence-based addiction treatment protocols are available that have changed the landscape of addiction recovery. This paper reviews that new and changing vista.

2. Scope of the Problem

In every nation in the world, addiction is a problem with broad social consequences. By far, alcohol is the most widely abused substance (NIAA, 2004/2005; NIDA, 2014; WHO, 2014). It creates losses of billions of dollars annually (NIDA, 2014) and affects societies from the level of nation to nuclear family (NIAAA, 2004/2005). Countless lives are lost or destroyed because of alcohol. Even in communities in which there are prohibitions against any alcohol use, alcohol abuse remains (WHO, 2014).

Alcohol is not the only substance of abuse. Marijuana is also a popular drug to abuse and is second only to alcohol in its abuse. Though there are those who claim that marijuana has medical uses, and there is evidence to suggest that these claims may be true (Mikuriya, T, 1973; Reynolds, J.R., 1890; Snyder, 1971), marijuana abuse is an ongoing and growing problem (NIDA a, 2014). One concerning issue with regard to marijuana abuse is that users tend to begin smoking the substance at a young age, but evidence suggests that the brain does not stop developing until around the age of 25 (Siegel, 2014). When marijuana is regularly used before the age of 25, proper brain development is arrested and users suffer lifelong problems, from cognitive impairment to impulse control problems to overall apathy and lack of ambition (Siegel, 2014).

Illicit drugs such as heroin, cocaine, methamphetamine, and a host of other substances both natural and man-made, are problems in various nations to varying degrees (UNODC, 2014). While one nation in South America may struggle with populations abusing cocaine, another nation in Asia may struggle with opiate abuse. Drugs of abuse are made popular by accessibility, price and social acceptability. The international War on Drugs has caused immeasurable loss of life and cost billions of dollars (UNODC, 2014) while doing little to curtail access to substances of abuse and has increased crime rates in many areas (UNODC, 2014).

Legal or prescription drugs are also a significant problem in some nations. In the United States, the abuse of prescription painkillers is causing more than ten thousand deaths a year and accidental overdoses from prescription painkillers are outstripping deaths by overdose from cocaine and heroin combined (CDC, 2014). As people have an expectation that their ills can be solved with a pill and medications are increasingly advertised as having a panacea of benefits, individuals are increasingly demanding prescriptions from their doctors, often with devastating results (CDC, 2014).

3. How We Understand Addiction

3.1. Disease Model

For the last half century or more, addiction has widely been understood as a genetic disease, a disorder to which an individual has an inherited predisposition. This disease (Jellinek, 1960) is believed by most to be triggered by circumstance or experiences. A child is abused or neglected. A woman is raped. A man loses a position of prominence. In each of these cases, it is believed that the person who is genetically predisposed to substance abuse will use substances to cope with the emotional and psychological fallout of these situations. On a societal level, whole swaths of the population will succumb to addiction given situations like war and its aftermath, apartheid, genocide (committing atrocities, witnessing atrocities and/or being part of a persecuted community), sex or human trafficking, etc. In layman's terms, drowning your sorrows works for some people, at least in the short term.

However, even with this scientific understanding of addiction, the disease model has not proven useful in clinical settings. First, with more than three dozen genes identified as having "something" to do with addiction, there is no clear genetic understanding of the mechanisms that create addictive behaviors in humans. Second and more troubling, the disease model pathologizes the individual suffering from addiction, turning him from an individual in need of compassion into someone who is sick (Peele, 1989). Look up the definitions of substance abuse, now called substance use disorder (SUD) in the DSM-V and the pathologization of addiction becomes clear (American Psychiatric Association, 2013; American Psychiatric Association, 2000; Peele, 1989). Worse, doctors can often create self-fulfilling prophecies, by telling addicts that addiction is resistant to treatment and subject to relapse (Frankl 2006; Watzlawick, 1984). Even the Big Book of Alcoholics Anonymous, the main text of that organization, emphasizes the medical nature of the disease and its hopelessness for treatment in the section called, *The Doctor's Opinion* (Alcoholics Anonymous, 1976).

Not only has the characterization of addiction as a disease not shown itself to be completely accurate, but it has not helped addiction treatment. In fact, the disease model may keep many people from recovering. Addicts are caught in a vicious cycle of using (Bateson 2002; Bateson & Bateson 1982). So long as the focus of treatment is on the "disease," the addict cannot break free from the maladaptive

pattern of addiction and retrain the brain (Bateson, 1972; Buker, 2003; Grof, 1993). What addicts need is not standard medical treatment for a disease, but a shift in epistemology (Bateson 1972; Buker 2003, Keeney 1983). The impetus for change will likely be pain (Sandoz, 2004); the treatment that alleviates this pain will come from a behavioral and neurological shift, not from medical treatment.

3.2. Behavioral or Neurological Model

Recently, addiction experts and neuroscientists have been changing their view of the nature of addiction. Certainly genetics have something to do with addiction. If our genes did not allow for it, addiction would not exist. However instead of seeing genetics as a driving force behind the development of addiction, researchers and addiction treatment professionals are now seeing addiction as a behavioral disorder that co-opts both the structure and function of the brain (Science Codex, 2013). Literally, by engaging in a behavior over and over again, combined with the biochemical changes substances of abuse make in the brain, the individual loses the ability to make positive, healthy choices. Researchers at McGill University call addiction a "disorder of decision-making" (Science Codex, 2013). The addict misses to the job interview or passes out at the wedding not because s/he wants to, but because the brain is so overcome by addiction that it is the only choice the addict can make. The addict must use because his/her brain is caught in a sort of hamster-wheel or feedback loop that does not allow for different decisions to be made. Asking the addict to stop using unaided is like asking him/her to stop breathing. S/he cannot. The brain will not allow it.

In order to deal with this damage to the decision-making areas of the brain, neuroscientists are suggesting that new behavioral patterns need to be created in the addict's brain (Scharff, 2014; Scharff, 2013; Science Codex, 2013; Taite & Scharff, 2014). As an example, at Cliffside Malibu, an evidence-based, residential addiction treatment and dual diagnosis recovery center, we use evidence-based therapies (Taite & Scharff, 2014) that include intensive one-on-one psychotherapy and a cadre of complementary and alternative medical practices to lay the foundation for this reordering of the brain. The results are a treatment method that at one year is manifold times more effective than 12 step programs (Taite & Scharff, 2014). Now, instead of 5-10% of addicts seeking treatment getting sober, which is what one finds with 12 step programs, a recovery rate of 70% can consistently be reached (Taite & Scharff, 2014).

4. Evidence-Based Addiction Recovery

What we have found in a decade of clinical practice at Cliffside Malibu is that treatment outcomes jump considerably when evidence-based addiction treatment is used with an abstinence goal. Therapies are chosen and used with an understanding of addiction as a behavioral disorder and treatment programming as an opportunity to root out the underlying causes of addiction and support the rewiring of the brain in positive, healthful ways (Taite & Scharff, 2014). This treatment model uses Dr. Prochaska's Stages of Change model, intensive one-on-one psychotherapy, and an individualized schedule of complementary and alternative medicine (CAM) therapies suited to the needs of each individual addict. By focusing on the underlying causes of addiction and using a variety of therapies and activities to get the brain to fire in different ways, we are able to change the structure and function of the brain to create lasting addiction recovery (Scharff, 2013; Scharff, 2014).

4.1. Stages of Change

The Stages of Change model developed by Drs. Prochaska, Norcross, and DiClemente (2007) suggests that change takes place in a predictable pattern and that there are expected issues that come up at each stage of change that can cause relapse. By expecting and looking for these obstacles, relapse can most often be avoided. Prochaska and his team identified six stages of change, though in addiction recovery, since relapse is always possible, we do not use the 6th stage, termination. These stages of change give psychotherapists tools to identify what blocks are keeping an individual from making effective change and provide tools to help prevent relapse. This model is transtheoretical, demanding that psychotherapists borrow therapies and practices from a number of schools of psychological thought. We find that cognitive-behavioral therapy, positive psychology, Ericksonian therapies, dialectical behavioral therapy and sometimes other schools provide suitable interventions at different stages of change. This use of a variety of treatment methods is useful, as it allows each psychotherapist to tailor their treatment program directly to their client(s), both in individual sessions and in groups (Prochaska, Norcross, and DiClemente, 2007).

4.2. Intensive One-on-One Psychotherapy

While this may seem illogical, it is not the substance of abuse that is the problem in addiction. If the substance of abuse was the problem, when the addict was separated from the substance through the detoxification process, the addict should immediately improve. Even after long periods of being separated from substances of abuse, addicts can relapse. This indicates that there are underlying issues that must be dealt with for an addict to attain long-term recovery. More often than not, 12 step programs are not equipped to deal with these underlying issues, which is perhaps why they have such a poor success rate when used on their own (Dodes & Dodes, 2014). Rather, addicts require psychological support to root out and work through the underlying causes of their addiction(s). These are usually trauma, abuse, neglect, or unmet needs early in life, though this list is by no means all-inclusive.

There are many different types of psychotherapy that are useful to addicts, or useful at different times in their recovery (Najavits & Weiss, 2006; Prochaska, DiClemente, & Norcross, 1992). Cognitive behavioral therapy (CBT), dialectical behavioral therapy (DBT), positive psychology and Ericksonian interventions have all shown positive effects on addicts seeking recovery (Scharff, 2014). When used in conjunction with psychiatric and psychological treatment for co-occurring mental disorders along with gauging readiness for change using the Stages of Change, intensive one-on-one psychotherapy has a tremendous positive impact on long-term prospects for treatment success.

Why do these therapies have such encouraging clinical outcomes? We theorize that it is because they are positive, helping the addict believe that s/he can recover. In most addiction treatment centers, where addicts are taught that addiction is a disease, they are told to expect relapse; that it is difficult to recover; that their disease is resistant to treatment and that most people die before they are able to get a grasp on long-term recovery. This is completely debilitating or demoralizing to most addicts and is a disincentive to do the work of recovery. However, if addicts are told that recovery is possible, they come to believe that it is possible. If they are told that relapse is preventable and that any behavior can be changed, they create a self-fulfilling prophecy that these behaviors can be changed, and so they are (Taite & Scharff, 2014). Sometimes, believing you can change is enough to make change possible (Scharff, 2014).

4.3. Complementary and Alternative Medicine (CAM)

No one has the capacity to sit in therapy all day and have it come to good effect. The brain needs to be fired and worked in various ways to make the needed changes to the decision-making centers required for long-term addiction recovery. Therefore in evidence-based treatment programs such as Cliffside Malibu's, a host of CAM treatments are used to complement the work done in psychotherapy. These treatments include mindfulness meditation (Chesia & Serretti, 2014; Kaliman, Alvarez-Lopez, & Cosin-Tomas, 2013; Seppala, Nitschke, & Tudorascu, 2014), acupuncture (Lua & Talib, 2012; Vickers, Cronin, & Maschino, 2012; Yang, Lee, & Sohn, 2008), yoga (Patwardhan & Mutalik, 2014; Posadzki ,Choi, Lee, & Ernst, 2014; Shannanhoff-Khalsa, 2004), and EMDR (Cox & Howard, 2007; Marich, 2009), among others. Each of these therapies has been shown to improve treatment outcomes. They also offer whole health solutions to the addict, helping the addict to create a healthy lifestyle without, in most cases, being dependent on pharmaceuticals to regulate mood or deal with emotions[i]. Unlike using medications like methadone or Suboxone to medically manage addiction, whole health CAM practices give the addict in recovery true freedom. While there is no definitive answer on how these therapies work or why they work, and it is clear that none of them "cures" addiction in isolation, synergistically, they create a compounding effect, allowing the brain to create a new series of decision-making processes (Scharff, 2013). As a result, the addict becomes able to lead a normal, full and active life following quality addiction treatment (Taite & Scharff, 2014).

5. Conclusions

While it is clear that substance abuse and addiction have been a problem perhaps since man first learned to ferment fruits and grains, there has been no good treatment model until the 20th century for those who suffer from addiction. Addiction has been viewed as a moral failing and a disease, but treatment programs based on those theoretical models have largely failed to provide effective long-term results (Dodes & Dodes, 2014; Taite & Scharff, 2014). It has only been with the application of evidence-based treatment, particularly intensive one-on-one psychotherapy combined with complementary therapies (Taite & Scharff, 2014), that addiction recovery has moved from the status of "miracle" to an occurrence that can regularly be worked toward by almost any addict. This is truly a time in which addicts need not suffer. They can hope for and attain lasting, long-term recovery.

[i] There are exceptions for addicts who present with certain psychiatric disorders that require medication to mediate symptoms.

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COMPARATIVE STUDY OF PSYCHOLOGICAL WELL-BEING AND POSTTRAUMATIC GROWTH INDICATORS IN IDP AND NON-IDP CITIZENS OF GEORGIA[i]

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Abstract

Presented research deals with revealing of psychological well-being and posttraumatic growth indicators in research samples. It uses Ryff's six factors model for the concept of psychological well-being and transformational model by Tedeschi and Calhoun for the concept of posttraumatic growth. In August, 2008, Georgian citizens experienced short but intense armed conflict with Russian troops that challenged their national as well as personal identity, regardless were they either directly or indirectly introduced to War Theater. Preliminary observations, multiple case studies and day-by-day experience of working with affected people (IDPs mainly) made obvious the ongoing changes in the perception of one's psychological well-being as well as the experiences of posttraumatic growth (due to thematic constrains, not mentioning here other changes such as shifts in attitudes and values). The main research question is: How do Georgians (Internally Displaced People - IDP and non-IDP citizens) perceive their psychological well-being and experience the posttraumatic growth after armed conflict, 2008? Research was planned as two-step process: preparatory procedures — cross-cultural adaptation and validation of the instruments (850 participant altogether), and main research — 589 participants (250 IDPs and 339 non-IDPs) were sampled based on simple probability sampling procedure; age 25-50, equally distributed by gender. Stressful Life Event Checklist, The Posttraumatic Growth Inventory, and Ryff's Scales of Psychological well-being, with the block of demographics were administered. Preliminary data show that there is no statistically significant difference between IDPs and non-IDPs regarding psychological well-being and posttraumatic growth totals, however, there are significant within group differences: non-IDPs with low social-economic status and IDPS with poor conditions score report significantly less psychological well-being than other subgroups. Finally, the level of psychological well-being can be reliably predicted by socio-economic status and self-perceived health condition.

Keywords: *psychological well-being, posttraumatic growth, IDPs.*

1. Introduction

In August, 2008, Georgian citizens experienced short but intense armed conflict with Russian troops that challenged their national as well as personal identity, regardless were they either directly or indirectly introduced to War Theater. Preliminary observations, multiple case studies and day-by-day experience of working with affected people (IDPs mainly) made obvious the ongoing changes in almost all domains of their functioning and in particular in the perception of one's psychological well-being as well as the experiences of posttraumatic. After the armed conflict thousands of people were forced to flee from their homeland, and then lost their houses and property. In a few months it became possible to some of them to return to their homes but up to 19000 persons were settled in newly constructed settlements provided by the state. These people are known as internally displaced persons (IDPs). Thus, six years ago people who lost everything, found themselves in new places, having very limited resources to start their lives from the very beginning. This experience turned to be traumatic for majority of people, which forced them to search more or less new ways of living, to go through meaning-making process, and find strength and resources inside them to adjust to the new reality in new places. Though the loss they experienced six years ago still remains central in their lives resulting in various conditions and/or symptoms in their everyday life, affecting on their level and quality of functioning, mental health, interpersonal relationships, and self-perception.

[i] Study was accomplished in frame of Senior Fellowship under the Central Asia and Caucasus Research and Training Initiative of the International Higher Education Support Program of the Open Society Foundations (grant issued by the Foundation Open Society Institute, grant number: IN2013-11481)

The major objective of this study is to reveal the psychological well-being and posttraumatic growth indicators in research samples, since being aware of indicators and/or predictors of psychological well-being and posttraumatic growth (among the many others) is crucial and beneficial for those from helping professions (clinicians, psychologists, social workers) working with these people in order to be more effective in planning, conducting and evaluating the work they do. Furthermore, there are no accumulated and published empirical data on posttraumatic growth and psychological well-being in Georgian reality so far. Hence, this study will launch the series of research in the field.

There is a big volume of literature on trauma and posttraumatic experiences in various groups of people and after different kinds of traumatic events, ranging from natural disasters, wars and combat actions, through chronic illness and to dramatic changes in life course such as property loss, firing from one's job, marriage, child birth or death of loved one(s). All these (and huge amount of other) events may be perceived as stressful and traumatic, and cause long list of changes in one's physiological, psychological and/or social functioning. As usual, these are meant to be negative changes. However, the growing body of research shows (e.g. Tedeschi & Calhoun, 2004; Taku, et al., 2007) that there is a possibility of positive impact of negative events. In particular, there are at least some positive changes people report aftermath trauma when straggling with such tragedies as rape, incest, cancer, heart attacks, disasters, combats and being refugee/displaced (Tedeschi & Calhoun, 1996; Powell, et al., 2003). The phenomenon known as posttraumatic growth for nowadays (Tedeschi & Calhoun, 1995). Given that elaboration of traumatic experience affects all domains of one's existence and functioning, and particularly on psychological health condition (Tedeschi & Calhoun, 2004c), it is reasonable to speak of influences and changes in perceptions of one's psychological well-being.

The study uses Ryff's six factors model for the concept of psychological well-being and transformational model by Tedeschi and Calhoun for the concept of posttraumatic growth. Prior to presenting actual work that has been done, the concept definitions and two theoretical frameworks are briefly examined, which is followed by the short presentation of the first step of the study – adaptation of two inventories for Georgian samples, and then major research findings and discussion will be presented.

2. Posttraumatic Growth: Transformational Model

Posttraumatic growth has been established as the most used term which describes the field of study and clinical practice. It represents positive changes experienced as a result of the psychological and cognitive efforts made in order to deal with challenging circumstances. It is a process when individual struggles with the new reality aftermath of trauma. Posttraumatic growth describes the experience of individuals, whose development, at least in some areas, has surpassed what was present before the struggle with crises occurred. The individual has not only survived, but has experienced changes that are viewed as important. This is not simply a return to baseline but an experience of improvement that for some persons in deeply profound (Tedeschi & Calhoun, 2004).

Transformational model, which serves as theoretical framework of the study, states that posttraumatic growth refers to a change in people that goes beyond their ability to resist and not be damaged by highly stressful event. It involves a movement beyond pretrauma levels of adaptation. Hence, it has a quality of transformation or, in other words, a qualitative change in functioning. Growth, however, doesn't occur as direct outcome of trauma and the fact that growth occurred in some extent does not prevent individual from negative experiences. Moreover, this does not signal that the trauma itself stops to be a distressing event. Posttraumatic growth is most likely a consequence of attempts of psychological survival, and it can easily coexist with the residual distress of the trauma.

Three broad categories of perceived benefits have been identified: changes in the perception of self, changes in the experience of relationships with others, and changes in one's general philosophy of life. Subsequently factor analysis yielded five-factor (personal strength, new possibilities, relating to others, appreciation of life, and spiritual change) approach to posttraumatic growth. However, as authors state (Calhoun & Tedeschi, 2006) there can be some alterations beyond this common core that are quite specific to the struggle with particular stressors and in particular culture.[ii]

3. Psychological Well-Being: Multidimensional Model

Ryff (1989, 1995, 2014) suggests the multidimensional construct of psychological well-being that is composed by six distinct components of positive psychological functioning. In combination, these dimensions encompass a breadth of wellness that includes positive evaluations of oneself and one's past life (self-acceptance), a sense of continued growth and development as a person (personal growth), the

[ii] This is the case in Georgian case. Factor analysis revealed three factor solution being the most appropriate. Khechuashvili, L., *Posttraumatic Growth: How does it look like in Georgian Culture.* (In press).

belief that one's life is purposeful and meaningful (purpose in life), the possession of quality relations with others (positive relations with others), the capacity to manage effectively one's life and surrounding world (environmental mastery), and a sense of self-determination (autonomy).

4. Research Objectives

The main research question is: how do Georgians (Internally Displaced People - IDP and non-IDP citizens) perceive their psychological well-being and experience the posttraumatic growth after armed conflict, 2008? Research was planned as two-step process: preparatory procedures — cross-cultural adaptation and validation of the instruments, and the main field work for obtaining empirical data on the variables under the investigation. Hence, research tasks covered in this piece of research are as follows: (1) I step: 1. Preparing final Georgian draft of posttraumatic growth inventory and psychological well-being for further administration; and (2) establishing posttraumatic growth and psychological well-being levels in IDP and none-IDP research participants, and compare two groups.

5. Method

5.1. Participants

For inventory adaptation 850 participant altogether and main research — 589 participants (250 IDP and 339 non-IDP citizens) were sampled based on simple probability sampling procedure; age 25-50, 2/3 female and 1/3 male.

5.2. Measures

Posttraumatic Growth Inventory (PTGI) consists of three major domains such as changes in self-perception, changes in relation to others and changes in overall philosophy of life. These three domains are represented by five factor structure in original PTGI: Relating to others, New possibilities, Personal strength, Spiritual change, and Appreciation of life.

Scales of Psychological Well-Being (SPW) is composed of six dimensions, such as: Autonomy, Environmental Mastery, Personal Growth, Positive Relation with Others, Purpose in Life, and Self-Acceptance.

Demographics. Gender, age, marital status, education, type of education, average monthly income, faith and habits associated with it, general health condition, and place of residence and living conditions of participants were recorded.

6. Results

6.1. Inventory Preparation

Two inventories were translated from English to Georgian, back translated, compared and modified, went through expertise and several modifications and pilots (Beaton, et. al., 2000; Translating and Adapting Tests, 2010), in accordance with agreement with authors of original versions. The process resulted in final Georgian versions of PTGI and SPW with Cronbach's alpha for individual scales as well as totals ranging between .70 and .91 (Khechuashvili, 2014).

6.2. Main Study

Mainly total scores of posttraumatic growth and psychological well-being scales are analyzed since Georgian inventories' factor structure remains under question and needs further exploration[iii]. The results are presented in two sections. First the possible differences in posttraumatic growth and psychological well-being between two samples are examined. Next the attempt to reveal the predictors of psychological well-being and posttraumatic growth is made.

IDP vs Non-IDP. Two samples are homogenous only according mean age, gender and confession (the majority qualifies themselves as orthodox Christians) and differ on the rest of the demographics. Controls are more educated, holding higher positions on workplace, have better socio-economic status, living conditions and self-perceived health condition (p =.000).

There were no significant differences on the subscales and the total score of psychological well-being scales, and the total score and four out of five factors of posttraumatic growth between two groups. IDPs (M=9.54(7.2)) score less on New Possibility factor of posttraumatic growth inventory than non-IDPs (M=13.72(6.53)) (t(588)= -4.282, p=.000, [-6.094 – -2.260]) (Table 1).

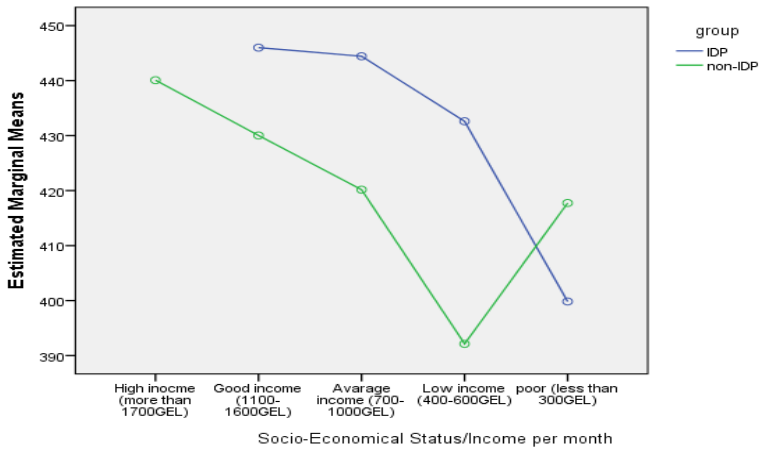
[iii] Khechuashvili, L. (under review) Factorial Structure of the Georgian Version of Posttraumatic Growth Inventory.

Table 1. Descriptives for Posttraumatic Growth and Psychological Well-Being Scales.

Variable	Group	
	IDPs	Non-IDPs
Posttraumatic Growth Inventory	M (SD)	M (SD)
Relation to Others	18.29 (10.14)	16.45 (8.73)
New Possibilities	9.54 (7.19)	13.72 (6.53)
Personal Strength	11.40 (6.97)	12.33 (5.1)
Spiritual Change	5.35 (3.76)	4.65 (3.391)
Appreciation of Life	5.96 (3.5)	5.27 (2.73)
Posttraumatic Growth Total	50.54 (26.21)	52.43 (20.84)
Psychological Well-Being Scales		
Autonomy	57.69 (10.663)	58.26 (10.861)
Environmental Mastery	56.42 (9.722)	54.76 (10.964)
Personal Growth	60.44 (10.353)	62.45 (10.361)
Positive Relation to Others	63.81 (2.327)	61.06 (10.830)
Purpose in Life	62.81 (10.953)	62.92 (9.801)
Self-Acceptance	54.35 (10.004)	55.29 (11.972)
Psychological Well-Being Total	419.33 (53.424)	415.82 (53.077)

A 2 (IDP status) x 2 (income) ANOVA revealed IDP status by income interaction (F(3)=2.791, *p*=.041). Non-IPD people with low income score less on Psychological Well-Being Scales than those with other amount of income (M=417(45), *p*=.017), whilst IDPs with poor condition score less than other subgroups (M=399(61) (Fig. 1). No significant effect status by income on posttraumatic growth is established. Besides, there is no significant effect of living condition by status and health condition by status interaction on both, psychological well-being and posttraumatic growth.

Figure 1. Estimated Means of Psychological Well-Being (Total) in Difference Income[iv] Groups.



Predictors. Multiple hierarchical regression revealed that socio-economic status and self-perceived health condition are reliable predictors for psychological well-being in both groups (see table 2). Two variables (that correlated the most) were entered in equation. However, there are no predictors in the list of variables for posttraumatic growth. The combination of above mentioned variables (socio-economic status and health condition) explained only 8% of variance in posttraumatic growth scores whilst this figure is 20% for psychological well-being.

Table 2. Multiple Regression Model Predicting Psychological Well-Being.

	B	SE B	ß
Step 1			
Constant	516.762	40.069	
Socio-Economic Status/Income	-22.720	9.197	-.33*
Step 2			
Constant	544.854	40.242	
Socio-Economic Status/Income	-18.979	8.958	-.28*
Health Condition	-17.654	7.566	-.30*

Note: R^2= .109 for Step 1, ΔR^2=.09 for Step 2 (*p*<.05) *p<.05

[iv] 1 EURO = 2.19 GEL (GEL – Georgian Lari)

7. Discussion

The data analyzed it this paper is drawn from larger mixed method study of posttraumatic growth and psychological well-being of internally displaced people. Hence, possible explanations for the outcomes can be found in narrative accounts of the very same participants.

Thus, data show that there are no statistically significant differences in psychological well-being between IDP and non-IPD participants, as well as in posttraumatic growth, however two groups respond differently on the items about opening new possibilities aftermath trauma. Taking into account IDPs' everyday life and living conditions this outcome fits into the context. People left without anything and forced to build the life from the beginning don't see much new possibilities around them. They struggle for existence and basically don't care for searching something novel.

However, there are interesting within group differences: data show that non-IDPs report less psychological well-being if their income is low than other groups, even those who earns less than 300 GEL and are qualified as poor. Similar figures are obtained in IDPs just slightly shifted towards lower incomes since there are no people with high income in this group. This suggests to think of psychological well-being as strongly associated with one's socio-economic status regardless a person is IDP or not. Furthermore, it is logical that is good predictor of the level of psychological well-being (alongside the health condition) and explains at about 15% of variance. This outcome corresponds to data obtained in the scope of the nationwide study of the perceptions and correlates of reported overall happiness, which reports that the highest predictive value for well-being and perceived happiness in the evaluation current economic situation of household (Tsuladze, et al. 2013). One of the explanations for strong linkage of well-being and income can be found in the recent history Georgia, the post-soviet country which went under socio-economic and political turmoil, economic downturns and wars during last two decades.

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MATERNAL NEGATIVE AFFECT AND INFANT SLEEP: INVESTIGATING BIDIRECTIONAL RELATIONSHIPS USING STRUCTURAL EQUATION MODELLING

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Abstract

It is well documented that problematic sleep patterns in children are related to maternal negative affect, including stress, depression and anxiety. Surprisingly, it remains unclear whether infant sleep patterns predict maternal negative affect, or vice versa. Case control studies show higher depressive and stress symptoms in mothers of children with poor sleeping patterns. There is also evidence that maternal mental health may predict sleep disturbances in infants. Specifically, studies have shown a strong association between maternal depression and child sleep problems, especially during pregnancy when mothers are often more prone to exhaustion from the pregnancy. The aim of the current paper was to examine the predictive relationship between infant sleep patterns and maternal negative affect over time, in particular, whether the relationship is bidirectional. Four hundred and forty eight mothers and their children from New South Wales, Australia, were interviewed during pregnancy, at infant age eight weeks and infant age 12 months. Maternal negative affect was measured using the Edinburgh Postnatal Depression Scale and the Depression Anxiety Stress Scales. Questions about infant sleep were adapted from the Brief Infant Sleep Questionnaire (BISQ) as well as maternal ratings of infant sleep. Structural equation modeling found significant bidirectional relationships. Specifically, maternal negative affect during pregnancy predicted poorer infant sleep at birth to eight weeks and two to six months. Likewise, poor infant sleep at birth to eight weeks predicted maternal negative affect at eight weeks. The results suggest that the first eight weeks of life is when bidirectional relationships are most salient. Thus, education about infant sleep patterns in the early postnatal period is important, along with early intervention for maternal mood problems and infant sleep difficulties.

Keywords: *anxiety, depression, stress, infant sleep.*

1. Introduction

Sleep disturbance in infancy has been associated with medical, neurodevelopmental, cognitive, and psychiatric conditions (Brescianini. et al., 2011). It is well documented that disrupted sleep patterns in infants are related to maternal negative affect, including stress, depression and anxiety (Armstrong et al., 1998; Armstrong, Van Haeringen, Dadds, & Cash, 1998). Case control studies show higher depressive and stress symptoms in mothers of children with poor sleeping patterns (Hiscock & Wake, 2001; Lozoff, Wolf, & Davis, 1985; Meltzer & Mindell, 2007; Richman, 1981). There is also evidence that maternal mental health may predict sleep disturbances in infants. Specifically, studies have shown a strong association between maternal depression and child sleep problems, especially during pregnancy when mothers are often more prone to exhaustion from the pregnancy (Armstrong, O'donnell, McCallum, & Dadds, 1998). To date, most studies have examined the predictive effects of infant sleep and maternal negative affect independently (Goldberg et al., 2013; Sadeh & Anders, 1993). It remains unclear whether the relationships between infant sleep patterns may in fact be bidirectional when assessed within the same model (Giallo & Vittorino, 2011; Hiscock et al., 2007; Martin et al., 2007). Developmental theorists have emphasized the need for such transactional models of maternal negative affect and infant sleep to allow for assessment of potential bidirectional pathways of influence. It is also notable that few studies have examined the natural development of early infant sleep patterns and disturbances; rather, most have focused on small samples of preschool children or adolescents with clinical sleep problems (Jenkins, Owen, Bax, & Hart, 1984; Kosten, Rounsaville, & Kleber, 1987; Lam, Hiscock, & Wake, 2003; Zuckerman, Stevenson, & Bailey, 1987). Yet infancy is a critical time as it is when healthy sleep patterns are first established and potential disturbances may first begin to emerge. The aim of the current paper

was therefore to (1) prospectively examine the relationship between infant sleep patterns and maternal negative affect through the first year of life when infant sleep patterns are first being established; and, (2) determine whether these relationships are bidirectional.

2. Method

Data were from "Bumps, Babies, and Beyond" (Triple B), a prospective pregnancy cohort study being conducted by the National Drug and Alcohol Research Centre (NDARC) at the University of New South Wales, and the National Drug Research Institute (NDRI) at Curtin University, Western Australia. Participants in the present study were derived from a subsample of 448 women recruited from NSW sites during pregnancy. Women were interviewed during pregnancy (30 weeks), at infant age eight weeks and 12 months.

3. Measures

Maternal negative affect. Mothers completed the Depression and Anxiety Stress Scales (DASS) (Lovibond & Lovibond, 1995) and the Edinburgh Postnatal Depression Scale (EPDS) (Cox, Holden, & Sagovsky, 1987) during pregnancy, at infant age eight weeks, and infant age 12 months. Both scales are reliable and valid (Cox, Chapman, Murray, & Jones, 1996; Crawford & Henry, 2003).

Infant sleep patterns. Mothers were asked to answer questions about their infant's sleep in the first eight weeks of the infant's life, when the infant was 2-6 months and when the infant was 9-12 months. Questions about the frequency and length of daytime and nighttime sleeps were adapted from the Brief Infant Sleep Questionnaire (Sadeh, 2004) which has been validated against actigraph sleep studies as a screening measure for infant sleep (Lomeli et al., 2008; Sadeh, 2008). The length of day and nighttime sleeps was combined to calculate the total amount of sleep infants were having over a 24 hour period.

Maternal sleep perceptions. Mothers were asked to rate on a 10-point likert scale (1= poor/large problem, 10 = excellent/no problem) the quality of their infant's sleep, their own sleep pattern, and the extent to which they perceived their infant's sleep as problematic.

4. Results

Structural equation modelling was used to investigate models of the theorized interrelations between maternal negative affect and infant sleep using AMOS (IBM SPSS Amos, 2012). First, a theoretical model was fitted measuring the extent to which infant sleep predicted maternal negative affect. Second, a model was fitted measuring the extent to which maternal negative affect predicted infant sleep. Finally two bidirectional models were fitted which measured the predictive relationship between maternal negative affect and infant sleep, such that both constructs predicted each other. To do this, we first tested all possible bidirectional relationships (model 3) and then only the short-term (i.e. to the next two consecutive time points) bidirectional relationships (model 4.). In the best fitting model, the influence of maternal years of education and number of biological children at the time of pregnancy were included in the final analysis (model 5). These factors have been known to be associated with maternal stress, depression and anxiety during pregnancy (Britton, 2008; Solem & Christophersen, 2011), and so were important to be accounted for when examining the relationship between maternal negative affect and infant sleep. Table 1 shows the fit indices for all models.

Table 1. Fit indices for models 1-5.

Model	x^2 (df)	CMIN/DF	N	p	RMSEA	RMR	GFI	AGFI	CFI	NFI
Model 1	303.01 (111)	2.73	448	0.00	0.06	1.28	0.93	0.90	0.95	0.93
Model 2	258.34 (108)	2.39	448	0.00	0.06	0.87	0.94	0.91	0.96	0.94
Model 3	233.92 (104)	2.25	448	0.00	0.05	0.81	0.95	0.91	0.97	0.95
Model 4	234.15 (106)	2.21	448	0.00	0.05	0.81	0.95	0.91	0.97	0.95
Model 5	309.72 (141)	2.20	448	0.00	0.05	0.74	0.94	0.91	0.96	0.93

4.1. Model 1: Infant sleep predicting maternal negative affect

Model 1 examined the extent to which infant sleep predicted maternal negative affect. All pathways in this model were non-significant except for the pathway between infant sleep at birth to eight

weeks to maternal negative affect at eight weeks (β = -.216, p=0.001). The fit statistics for model 1 (GFI, NFI, AGFI and CFI >0.9) suggest a reasonable fit, although one that is not considered ideal (RMSEA >0.5, RMR >1). Model 1 was the poorest fitting model of all the models tested.

4.2. Model 2: Maternal negative affect predicting infant sleep

Model 2 examined the extent to which maternal negative affect predicted infant sleep. All pathways in this model were non-significant except for the pathway between maternal negative affect in pregnancy to infant sleep at birth to eight weeks (β = -.237, p=0.002). The fit statistics for the model suggested reasonable fit (GFI, NFI, AGFI and CFI >0.9, RMSEA >0.5, RMR <0.1).

4.3. Model 3: All possible bidirectional relationships

Model 3 examined all possible bidirectional relationships between maternal negative affect and infant sleep across the first year of life. Significant pathways included maternal negative affect during pregnancy to infant sleep at birth to eight weeks (β = -.214, p = 0.004); infant sleep at two to six months (β = -.144, p = 0.036); and infant sleep at birth to eight weeks to maternal negative affect at eight weeks (β = -.193, p 0.002). All other pathways were non-significant. The fit statistics suggested improved fit compared to earlier models (RMR =0.081, RMSEA = 0.053, GFI, NFI, AGFI and CFI >0.9).

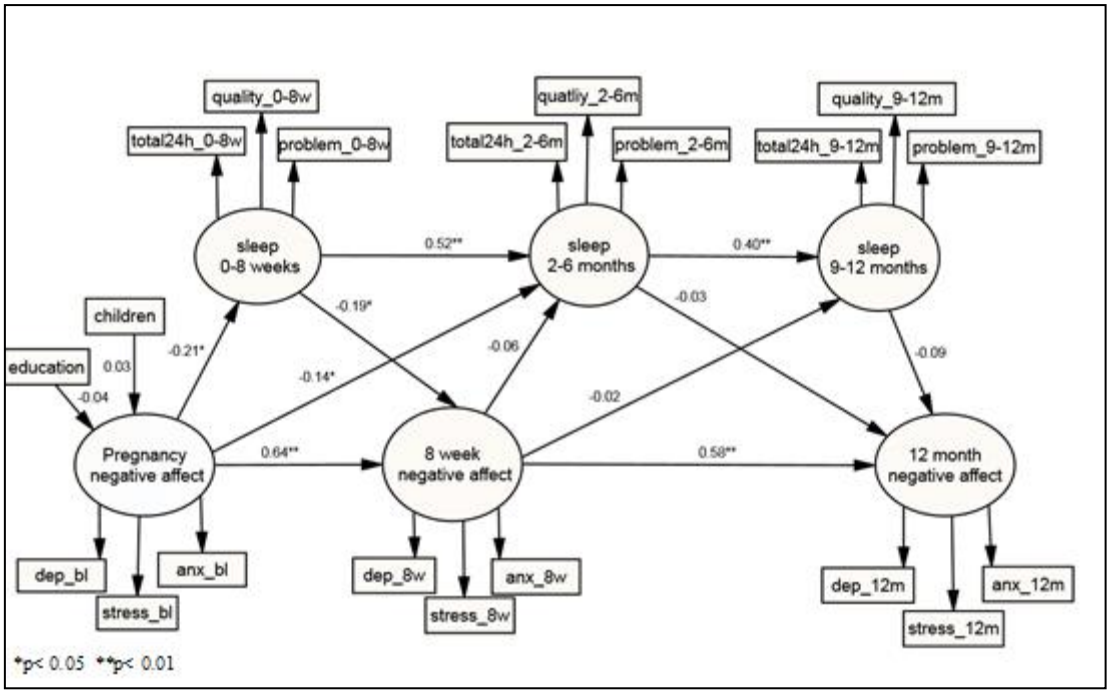
4.4. Model 4: Short term bidirectional relationships

As previous models found the predictive effect of negative affect and sleep did not continue through the first year of life, model 4 measured the short term bidirectional relationships only. That is, it excluded the paths of pregnancy negative affect to sleep at nine to 12 months, and infant sleep at birth to eight weeks to negative affect at 12 months. This model was the best fitting model (RMSEA = 0.052, RMR = 0.81, GFI, NFI, AGFI and CFI >0.9) although it was very similar to model 3 (full bidirectional). In this model significant pathways included that of maternal negative affect in pregnancy to infant sleep at birth to eight weeks (β = -.215, p = 0.004); infant sleep at two to six months (β = -0.141, p = 0.039); and infant sleep at birth to eight weeks to negative affect at eight weeks (β = 0.191m p = 0.002).

4.5. Model 5: Short term bidirectional relationships controlling for potential confounders

Model 5 replicated model 4, controlling for potential confounding factors. Maternal years of education and number of biological children at the time of pregnancy were included in the analysis. As Figure 1 shows, these confounders were not significantly related to maternal negative affect in pregnancy, and when controlling for these variables, all significant pathways remained from the previous model.

Figure 1. Regression weights for model 5: Bidirectional model with control for potential confounders.



5. Discussion

The results of the current study indicate that the relationship between maternal negative affect and infant sleep is bidirectional, such that both maternal negative affect and infant sleep patterns may influence one another through the first year of infancy. It was notable that these relationships remained significant even after accounting for maternal education and number of biological children at the time of pregnancy. Model 1 was the poorest fitting model, despite being based on substantial literature showing that infant sleep is predictive of maternal negative affect (Armstrong et al., 1998; Hiscock & Wake, 2001; Lozoff et al., 1985; Sinai & Tikotzky, 2012; Symon et al., 2012). The final model (model 5) re-fit model 4, controlling for the influence of maternal education and other children on maternal negative affect in pregnancy. Results were similar to model 4, and all significant pathways remained significant. Specifically, maternal negative affect in pregnancy predicted infant sleep at birth to eight weeks and two to six months, and infant sleep at birth to eight weeks predicted maternal negative affect at eight weeks.

Taken together, the results highlight the importance of assessing transactional models (Goldberg et al., 2013; Sadeh & Anders, 1993), which allow examination of infant sleep and maternal mental health in the context of one another (Armstrong et al., 1998). The current results also show the importance of the antenatal and early postnatal period for the wellbeing of the mother and the child. Specifically, we found the strongest predictor of maternal negative affect in the first year of the infant's life was prior negative affect. This is consistent with previous research, which indicates that poor maternal mental health during pregnancy is indicative of poorer mental health postnatally (Armstrong et al., 1998). Furthermore, despite the fact that infant sleep patterns were somewhat changeable over time, the strongest predictor of sleep at 12 months was earlier reported sleep patterns. This is consistent with past research emphasizing the importance of the early postnatal period for the development of the child, as well as the wellbeing and health of mothers (Dawson, Ashman, & Carver, 2000; Gale, O'Callaghan, Godfrey, Law, & Martyn, 2004; Murgatroyd & Spengler, 2011). These results suggest that early education and preventative intervention may be of benefit where maternal mental health or infant sleep problems are detected.

Although this study used a large sample with infant sleep and maternal negative effect measured at multiple time points across the first year of life, there are some limitations. First, infant sleep and maternal negative affect were measured using maternal self-report rather than medical or biological measurement techniques and thus may have been subjected to social bias in responding. The BISQ from which the questions were derived, has been validated against biological methods including actigraph studies, and has been shown to be a valid and accurate measure of infant sleep (Sadeh, 2004). Further, the DASS and EPDS have been shown to be psychometrically valid and reliable tools for the assessment and diagnosis of depression, anxiety and stress and are frequently used in clinical and research settings for this purpose (Cox et al., 1996; Crawford & Henry, 2003; Lovibond & Lovibond, 1995). Second, the current sample was drawn from New South Wales, and was also an advantaged sample, comprised of families from predominantly middle to high socio-economic background. Replication in other geographical areas and socio-demographic groups is recommended to determine the generalizability of the findings.

The results of the current study clearly show evidence of bidirectional relations between maternal negative affect and infant sleep measured in a prospective pregnancy cohort from birth through until the first year of life. The results highlight the need for both constructs to be considered in the context of one another when assessing infant sleep problems and/or maternal mental health. The results further support the importance of screening and early intervention for maternal mental health during pregnancy, as well as potential intervention for infant sleep problems in the early postnatal period. Indeed, the first eight weeks of life appear to be a period of heightened risk for the wellbeing of mothers and infants as demonstrated by the strength of the bidirectional relationships at this time. Education with mothers and families at this time may be helpful to both create realistic expectations about the challenges of the transition post-birth and to normalise the natural variability in infant sleep patterns in the first year of life.

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MCMI-III IDENTIFIED "PATHOLOGICALLY DISABLING" PROFILES ON MMPI-2 WITH "SEVERE PERSONALITY DISORDERS" IN CHRONIC PAIN PATIENTS

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Abstract

Introduction: This archival study looked into the use of the Millon Clinical Multiaxial Inventory (MCMI-III) utility with Minnesota Multiphasic Personality Inventory (MMPI-2) for further differential diagnostic assessment of non-cancer patients suffering from chronic pain syndrome (CPS). In the recent years, the MMPI-2 use in diagnostic assessment of patients with CPS has differentiated three distinct patterns: "Conversion V", "Neurotic triad" and "pathologically disabling" profiles (Gatchel, 1997; Turk et al., 2002, Gatchel et al., 2006). The "disabling" MMPI-2 profile has 4 or more of MMPI-2 clinical scales elevated with TS>65. This pattern has been recognized to be closely related to personality disorders, especially, borderline (Gatchel et al., 2006). The MCMI-III whose main reputation is the ability to differentiate the clinical syndromes from the personality disorders, has not been used in assessment of patient's with CPS, except by Manchikanti in 2002 who reportedly did not find significant differences between Pain and non-pain patient's on the MCMI-III profiles. Manchikanti and colleagues argued for no diagnostic utility for the use of MCMI-III with pain patients. Present study however, hypothesized stronger incremental validity for complimentary use of the MCMI-III with MMPI-2. *Design and Objectives:* The MCMI-III and MMPI-2 were administered to every referral that had multiple scales significantly elevated on Millon Behavioral Medicine Diagnostic (MBMD) and Pain Patient Profile (P-3) which were used as a part of the initial screening battery. The main goal of adding the MCMI-III to the assessment battery was to further differentiate the "pathologically disabling" MMPI-2 profiles from the others. *Method:* The original sample was cleaned up for this study by excluding the protocols of the Ss. who had only taken the P-3 and MBMD. The invalid MCMI-III and /or MMPI-2 profiles were also excluded. MCMI-III profiles then, were divided into three groups of "Low, Moderate, and Elevated", based upon the patient's Base Rate scores on the severe personality disorders scales. *Findings:* While the present archival study (N=275) with 108 males and 167 females, 57% Caucasian, 23% Hispanic, 9% African American, 3% Asian American and 7% others, affirmed the earlier research findings on the MMPI-2, it also showed the MCMI's ability to differentiate those patterns into more specific personality disorder groups. The MMPI-2 Basic Scales of "2, 6, 7, 8, &0" and the Restructured Clinical scale of RC1, showed relatively the highest correlations with three severe personality disorders of Schizotypal (S), Borderline (C) and Paranoid (P) types on MCMI-III (***p<.001). Other significant findings and implications for treatment planning, functional restoration, disability factors, and med/ legal recommendations are discussed below. The shortcomings, critiques and recommendations for future research are also reviewed in the limitations and future directions section.

Keywords: *assessment, chronic pain, personality disorders.*

1. Introduction

This archival study looked into the complimentary use of the MCMI-III with MMPI-2 for more diagnostic specificity and increased incremental validity in differential diagnostic assessment of CPS. Research in different areas of pain assessment, in recent years, has leaded us to new understandings of chronic pain and fibromyalgia syndrome (CPS). Neurochemistry and endocrinology of acute pain and chronic pain appear to be totally different, not only throughout the peripheral and autonomic nervous systems but also in the central nervous system, chronic pain changing the neurochemistry of the central

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nervous system as it becomes chronic (Mailis-Gagnon et al., 2003; Nijis et al., 2009). Not every acute injury and pain, however, becomes a CPS. This has raised interesting biopsychosocial questions.

There seems to be significant differences between localized acute pain and generalized chronic pain/fibromyalgia syndrome neuro-physiologically (Nijis,J & Van Hoodenhove, 2009) and psychologically/psychometrically (Gatchel, 1997; Turk et al., 2002, Gatchel et al., 2006). In the process of pain becoming chronic and generalized, recent research indicates central pain pathways getting over-sensitized. Functional MRI studies on patients with CPS also, have shown altered somatosensory –evoked responses in specific forebrain areas (Mailis-Cagnon et al., 2003). Gatchel and his colleagues have found personality disorders most likely borderline personality disorder associated with CPS based on the MMPI-2 patterns. It is obvious that the individual personality plays significant roles not only in psychosocial defense mechanisms in coping with stress and pain but perhaps in regulating the neurochemistry of the central nervous system (CNS) and consequently the peripheral nervous system (PNS) and autonomic nervous system (ANS). Therefore many questions are raised about contribution of the personality traits and disorders positively and negatively to the development of CPS and temporary and permanent disabilities as results of CPS.

This study has hypothesized that identifying more specific personality traits and disorders may open up not only better understanding of the CPS, but may contribute to more evidenced base clinical and med/legal recommendations and development of different treatment modalities and strategies for management , treatment of cps and functional restoration of the individuals suffering from CPS. Gachel and others have already identified three distinct patterns on the MMPI-2 profiles of pain patients as: a) The Classic "conversion V" (MMPI-2 Scales 1&3>2, all three with T-Scores >65). b) The "Neurotic Triad" pattern in which the MMPI-2 scale 2 is significantly more elevated than the Scale1 and 3. c) The "pathologically disabling" pattern which is the main focus of this study. This pattern on the MMPI-2 of the CPS patients has four or more clinical scales elevated.

2. Design and Objectives

The main objectives of this study were to look into the complimentary relationship between the MCMI-III and MMPI-2 in identification of the three patterns of "conversion V", the 'neurotic Triad" and the "pathologically disabling" profiles. It will specifically look into the constructive ability of hat of MCMI's severe personality disorders in defining the significance of the MMPI-2 Patterns on this population. It was hypothesized that because of the promising construct validity of the MCMI-III, this test may be able to break down the MMPI-2 patterns into more specific personality traits or disorders. The study's special interest was in the ability of the MCMI-III to detail further the 'pathologically disabling" pattern on the MMPI-2.

3. Method

3.1. Subjects

This was an archival study of a relatively homogenous group of industrially injured patients with objective medical evidence of orthopedic injuries who had developed CPS (N=275), with 108 males and 167 females, 57% Caucasian American, 23% Hispanic American , 9% African American, 3% Asian American, and 7% others. All Ss had medical evidence of orthopedic industrial injuries that had gone through exhaustive medical examinations and treatments, including but not limited to pain, anti-inflammatory, neuromuscular relaxant, sleep and anxiety medications, physical therapy, epidural injections and acupuncture. Many of these patients had, also, gone through one or more orthopedic surgeries and fusions, now seeking psychological services for behavioral management of CPS with symptoms of depression, anxiety, headaches, and insomnia, secondary to the injury and CPS.

3.2. Instruments

One of the instruments used in this study was the Minnesota Multiphasic Personality Inventory (MMPI-2) (Hathaway et al., 1989) which is a well-known psychometric test with 567 True-False items for personality assessment. MMPI-2 has the best reputation for differential diagnosis and assessment of malingering. MMPI-2 has been used clinically and forensically for multiple purposes including pain assessment (Hathaway et al, 1989; Gatchel, 1997).

Millon Clinical Multiaxial Inventory (MCMI-III) (1997) consists of 175 multiple choice, true-false items. It was used for its complimentary incremental validity purpose with MMPI-2 in this study. MCMI-III is a clinical and personality test. It is a base rate based instrument, constructed in early 1980s by Theodore Millon, for a special purpose of differentiating clinical syndromes from personality disorders

or traits (Millon et al., 1997). In this study it was included in the battery for the purpose of ruling out pre-morbid personality traits/disorders, chronicity and co-morbidity of severe mental illness/disorders.

3.3. Procedures

These patients were all involved in the initial screening including clinical interview, mental status examination, medical records review and administration of an screening package that also included the Pain-patient-Profile (P-3) (Tolison et al., 1995) and Millon Behavioral Medicine Diagnostic (MBMD) (Millon et al., 2001). When the two profiles of the MBMD and P-3 were positive significantly for wide spread symptoms of psychopathology, the subject then was further assessed with administration of the MCMI-III and MMPI-2 to rule out premorbid or comorbid mental and/or personality disorders.

For this study the excluded protocols were those cases that did not need or have MMPI-2 and MCMI-III administered as a part of their assessment battery. The protocols with invalid MMPI-2 and/or MCMI-III profiles were also excluded. The remaining protocols were selected for this study. Three Variables were created for MCMI-III severe personality disorders scales of "S", "C", & "P" as: a) "Low" group with base rate score (BR) of 0-74; b) "Moderate" group with BR of 75-84; and c) "Elevated" group with BR of 85+. The Analyses included: a) Correlating the overall S, C, and P grouped scores with the MMPI-2 basic clinical scales, 1-0; b) ANOVAs were run for the S, C, and P groups across all of the basic clinical scales of the MMPI-2; and c) Finally, graphically evaluated the MMPI-2 basic clinical scales as well as the Restructured Clinical Scales (RC) and PSY-5 Scales across the MCMI-III groups. The PSY-5 Scales were eventually excluded because of insignificant low scores across all items.

4. Findings

Total of 185 subjects (n=185) showed significant elevations (T-Scores > 65) on MMPI-2 scales 3,2,1, RC1, 8, &7 with respective Means and Standard Deviations of 76.53/15.69, 74.87/14.64, 73.35/13.77, 72.69/14.51, 68.67/16.39, & 67.46/15.39. There were no significant gender differences in the order of the severity. Both men and women's significant scores from the most severe to the least were on the scales 3, 1, 2, RC1, 8, & 7 of the MMPI-2.

Correlation analysis between the MMPI-2 basic clinical and MCMI-III severe personality disorders scales of Schizotypal (S), Borderline (C), and Paranoid (P) indicated strongest correlations between the Scales 2 (D), 6 (Pa), 8 (Sc) & 0 (Si) on the MMPI-2 with all three severe personality disorders scales of S, C, and P on the MCMI-III (***p<.001). There were also strong correlations between the scale 4 (Pd) of the MMPI-2 and the scale C of the MCMI-III (***p<.001). The scales S and C of the MCMI-III also correlated strongly with the scale 7(Pt) of the MMPI-2 (***p<.0001). The scale 9 (Ma) of the MMPI-2 also correlated strongly with the C scale of the MCMI-III (***p<.0001). It should be noted that correlations .30 or below were not included in this analysis despite significant levels at **p<.01 and *p<.05.

In putting the strongest correlations above in order, the Borderline personality disorder scale (C) correlated with six of the MMPI-2 scales respectively from high to low with scales 8, 7, 6, 2, 4, & 0. The schizotypal personality disorder scale (S) correlated with 5 of the MMPI-2 scales of 0, 9, 7, 6, & 2. The Paranoid personality disorder scale (P) only correlated with 4 of the MMPI-2 scales of 0, 6, 8, & 2. The MCMI's Borderline scale (C) had the highest correlation of .100 with the scale 8 (Sc), the psychotic triad of the MMPI-2. Both Schizotypal (S) and Paranoid (P) scales of the MCMI's highest correlations of .074 and .080 were with the scale 0 (Si) of the MMPI-2. RC1 of the MMPI-2 correlated highly and consistently with all three severity groups of Schizotypal (S), Borderline (C) and Paranoid (P). Other findings included the followings: MCMI-III "Low" group tended toward the MMPI-2 "Conversion V". The "Moderate" and "Elevated" group scores were not significantly different.

5. Conclusions

Overall findings on the MMPI-2 were consistent with the earlier findings (Gatchel, 1997; Gatchel et al., 2006) in terms of the "conversion V", the "neurotic triad" and the "pathologically disabling" profile patterns with this CPS patient population. Gatchel's overall association of the "pathologically disabling" pattern with personality disorders was also confirmed with this patient population. The study showed that the MCMI-III is a good compliment to the MMPI-2 in the pain assessments in terms of specifying the personality contribution to the CPS. Especially, the MCMI's severe personality disorders scales of Schizotypal (S) and Borderline (C) showed promising differential diagnostic value, complimenting the MMPI-2.

Not too many authors have yet investigated this potential of the MCMI-III with pain population. In this study although with relatively small sample, the MCMI-III's promising constructive validity is

showing itself in terms of differentiating the long-term/pre-existing personality disorders and traits from the clinical syndrome

6. Discussion

One of the most interesting finding was a strong association of the MMPI-2's scale 0 (Si) - social introversion and scale 6 (PA) - paranoia with all three personality disorder scales on the MCMI-III. These associations may deserve more clinical and industrial /organizational investigations and research. It is highly probable that the workers' compensation system's unwritten policy/ subculture in California - secretly videotaping the patients' social recreational activities to prove that they are malingering , may be a significant contributing factor to a significant number of these patient's social withdrawal and suspiciousness and development of the CPS.

These preliminary findings following more studies, may have great implications to these patients' differential diagnosis, individualized treatment planning, ruling out exaggeration/malingering and the choice of treatment approaches and modalities (Gatchel, 2004; Argun, 2013). These findings may be also helpful in the med/legal evaluations of industrial or personal injuries, disability ratings, ruling out pre-existing personality disorders and apportionment.

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7. Limitations and Future Directions of this Study

Limited sample size clearly precluded more complex statistical modeling and analysis as well the generalizability of the results. Future studies should: Increase the overall sample size; Look into the correlations and correspondence between the MMPI-2 and MCMI_III's clinical scales as well; Include longitudinal data including types of interventions, treatment outcomes, work/disability status over time and medication dependency issues; include additional demographic variables, such as medical, psychiatric and substance abuse history in order to further drill down the profile patterns. Using larger samples with longitudinal data may also, help in exploring the predictive validity of the MMP-2 and MCMI-III in CPS patients.

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THE ACADEMIC PERFORMANCE OF THIRD AND FOURTH YEAR COLLEGE STUDENTS OF WORLD CITI COLLEGES WITH ABSENTEE PARENTS

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Abstract

The study focused on the assessment of the absentee parents' aspects affecting the academic performance of the third and fourth year students at the World Citi Colleges Quezon City campus. It aims to determine which among the absentee parents aspects would give a great effect on the academic performance of the students. The main sources of data came primarily from the response of 76 students with absentee parents who are in the third and fourth year levels. The researchers utilized the descriptive survey method wherein the data needed for the study were gathered by administering the survey questionnaires to the students in three consecutive days and retrieving back the survey questionnaire forms same day of the administration. Sample was taken purposively. Assessment and determination of the absentee parents' aspects affecting the academic performance of the students include the following independent variables: Emotional, Financial, Physiological and Social. The study reveals that on the Emotional Aspects, the students considered to be of priority the communication with parents that enables the students to obtain motivation and guidance for better class performance. On the Financial aspect, the students appreciate the timely arrival of their allowance from their parents as this makes the difference between attending their classes regularly and being absent. On the Physiological aspect, the students considered the item on appropriate living conditions at home that enable them to finish their homework and to study their lesson. Utilizing online social networks give them immediate feedback when communicating with friends regarding class activities was considered to be of priority by the students in terms of social aspect. Based on the findings, the researchers drew the following conclusion: that there exists significant difference on the aspects pertaining to absentee parents affecting the academic performance of the students. The Physiological and Social aspects have the highest negative correlation to academic performance followed by Emotional aspect. The financial aspect has no significant effect on the students' academic performance.

Keywords: *emotional aspect, financial aspect, physiological aspect, social aspect, academic performance.*

1. Introduction

Nowadays, the academic performances of students are based on the interplay of several factors which are interrelated/interdependent to each other. Due to the ever evolving dynamics affecting the socioeconomic status of our society, one very important factor that might have a relevant impact on our country's students is the absentee parents. Economic opportunities abroad and lack of employment in our country are the precipitating factors that increase the number of parents to leave their families. This somehow becomes beneficial or detrimental to the condition of families, particularly, the children who were left behind and who are still pursuing their formal education.

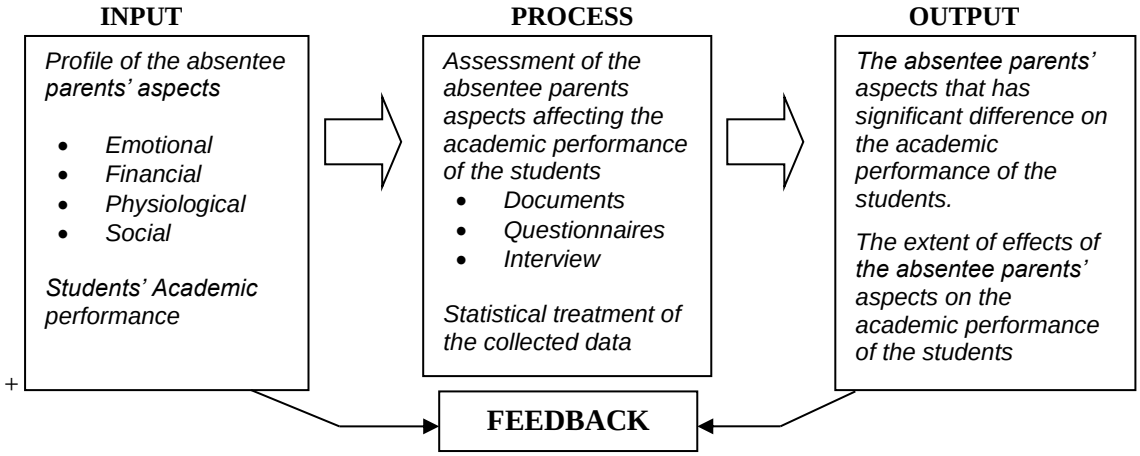
As a prelude to a deeper investigation of the above situation it is significant to state the following facts from earlier studies that child learning process is influenced by several factors. These factors may include the presence of parents at home and their proper relationship with their children, and the learning-conducive atmosphere of the school and community. The harmonious and nurturing relationships of parents to their children are very important to their school performance. Practically any teacher will attest that their most successful students come from a home where the parents provide structure, support and guidance. They will tell you from their own experiences that students who have parents that are present

and showing care about their education are usually more successful than students whose parents are not with them

In our country today, a lot of students attend schools without parents in their midst due to a number of circumstances The two most common reasons why this is happening are due to parents needed to work abroad to seek higher pay to enable them to support their families as in the case of millions of Overseas Filipino Workers (OFW), and parents from provinces who can afford, send their college-aged children to universities in big cities where they believe their children could get better quality education than in their localities. Are these something that are contributory to the decreasing quality of college graduates in our country as evidenced by their lower proficiency in their fields of work and being less competitive globally? It would really be beneficial if the outcome of the study would shed some light on these circumstances. It is in this regard that this study is conducted to determine the effects of the absentee parents' aspects to the academic performance of the students.

2. Design

Figure 1. Paradigm of Research Design.



The researchers used the descriptive survey method. This study employed a quantitative, non-experimental research design in which data collected are recorded and statistically analyzed.

The sample was taken by the researchers subjectively using the purposive non-probability sampling.

3. Objectives

Since, there are already numerous studies done on effects of parental or non-parental involvement to academic performance of preschool, and children in the primary and secondary education, the researchers decided to embark on this study which involves students in the tertiary level. The researchers have found interest in this field of study because of the pervasiveness in our country's society of absentee parents in the life of our college students. In a microcosm, the researchers would like to determine the impact of this condition to World Citi Colleges' 3rd and 4th year students with absentee parents.

Specifically the study shall:

1. Determine the absentee parents' aspects affecting the academic performance of students in terms of: emotional, financial, physiological, and social;
2. Find the difference between absentee parents' aspects affecting the academic performance of the students;
3. Determine the extent of the effects of the absentee parents' aspects in the academic performance of the students.

4. Methods

4.1. Respondents of the Study

The respondents of the study were the seventy six (76) third and fourth year level students of World Citi Colleges with absentee parents.

4.2. Research Instrument

Survey questionnaires were used in the data collection.

Part 1 refers to the demographic profile of the respondents.

Part 2 refers to the study proper which determines the aspects of absentee parents that affect the performance of the students.

Interview to the students was used to validate the responses on the survey questionnaires.

4.3. Statistical Treatment

The researchers used the following statistical tools for the interpretation and analysis of data gathered in the survey:

1. Percentage. The statistical tool used to describe the profile of the respondents in the study.
2. Weighted Mean. This is used to describe the absentee parents' aspects affecting the academic performance of the students.
3. Analysis of Variance (ANOVA). This is used to test significant difference of the means of the assessment of the respondents on the absentee parents' aspects affecting the academic performance of the students
4. Pearson's Product Moment Correlation Coefficient. This is used to measure the linear relationship between the absentee parents' aspects affecting the academic performance of the students hat are measured on interval of the ratio scales

5. Discussion

This study was undertaken to assess the absentee parents' aspects affecting the academic performance of the students.

5.1. Absentee Parents' aspects affecting the academic performance of the students

5.1.1 Emotional. The emotional issue, " Communication with my parents enables me to obtain motivation and guidance for better class performance", ranks the highest among the responses as indicated by the weighted mean of 4.22 with a verbal interpretation of "Frequently". This means that parental involvement through constant communication plays a big roie in a student's class performance. On the other hand, the issue "Feeling safe and secured gives me peace of mind to actively participate in class" ranks the lowest among the issues on emotional aspects. Growing up in homes without parents may adversely affect the emotional health of a student and this may lower his or her performance in school. However, the respondents in the study are utilizing coping mechanisms to alleviate emotional problems that arise from absent parents during their schooling years.

5.1.2. Financial. The financial issue, "Timely remittance of allowance permits me to attend classes regularly" hasthe highest ranking with 4.07 weighted mean and verbal interpretation of "Frequently". The sufficiency of the amount of their allowance ranks second indicated by the weighted mean of 4.05. This indicated that the students are getting the right amount of money and is arriving on time.The isue, "Financial advice enables me to manage my expenses like buying books, gadgets, and other requirements", got the lowest rank with a weighted mean of 3.76 with a verbal interpretation of "Occasionally". According to the respondents, they are aware of the importance of having money on hand and proper financial management in relation to school performance. Seeking financial advice is not much of a priority for them as they may not be dealing with complicated expenditures and other financial transactions that necessitates in-depth financial acumen.

5.1.3. Physiological. The physiological issuesin relation to their academic performance are least dealt with. This is evidenced by the consistent answers of " Occasionally " to the different issues of their physiological status. "Appropriate living conditions at home enable me to finish my homework and to study my lessons", has the highest weighted mean of 3.97 among the issues on physiological aspects with a verbal interpretation of "Occasionally".

5.1.4. Social. The social issue, "Utilizing online social networks give me immediate feedback when communicating with friends regarding class activities" ranked highest. This is evidenced by the wudespread use of internet technology among students. Whereas, the least ranked issues is "Joining academic activities like clubs and organizations keep me updated with exam schedules and seminars relevant to my college program".

Among the four aspects on absentee parents, emotional aspects got the highest rank. This means that the emotional issues are the first consideration of the students affectings their academic performance. This is followed by financial issues,third consideration is physiological issues and the last consideration is the social issues.

5.2. Significant difference among the absentee Parents' aspects affecting the academic performance of the students

Table 1. Computed t in the Absentee Parents Aspects affecting the Academic Performance of the Students.

Absentee Parents Aspect	*t- Value*	*t- Critical*	*Verbal Interpretation*	*Significance*
Emotional & Financial	1.17	1.664	Accepted	Not Significant
Emotional & Physiological	2.35	1.664	Rejected	Significant
Emotional & Social	2.32	1.664	Rejected	Significant
Financial & Physiological	1.14	1.664	Accepted	Not Significant
Financial & Social	1.17	1.664	Accepted	Not Significant
Physiological & Social	0.031	1.664	Accepted	Not Significant

Table 1 shows that there exists significant difference in the effect on the academic performance of the students between emotional and physiological aspects and in emotional and social aspects.

With an absent parents the students always long for the constant communication with their parents. This makes them feel better so as they can perform better in class. On the other hand, the students considered the opposite side in terms of the physiological aspect. They tend to not control their diet for there is nobody to watch and control them. They also tend not to clean their environment. Comparing the two aspects the positive point is on the constant communication with parents and the negative point is on not having a proper diet and untidy environment.

According to Meyer (2009), research increasingly supports the important link between nutrition and learning potential. Healthy eating is essential for students to achieve their full academic potential.

Regarding the difference betwen emotional and social issues, the positive side is the constant communication with parents and the negative side is on keeping a daily home to school routine like avoiding non-school sanctioned organizations (fraternities and street gangs) that prevents them from missing classes.

5.3. Extent of effect of the absentee Parents' aspects on the academic performance of the students

Table 2. Computed r in the Extent of Effects of the Absentee Parents Aspect on the Academic Performance of the Students.

Absentee Parents Aspect	***R***	r^2	*Verbal Interpretation*
Emotional	-0.143	0.0204	Very Low Correlation
Financial	-0.037	0.00137	No Correlation
Physiological	-0.274	0.0751	Low Correlation
Social	-0.209	0.0437	Low Correlation

All of the absentee parents aspect have negative correlation with the academic performance of the students. It is in the physiological aspectsthat has the greatest extent of negatively correlation. This means the more the students eat leading to not having a proper diet the more lower grade the students have. Second greatest extent is on social aspects. This means the more the studentsjoin the fraternity and street gangs the more lower the grade the students have. The study indicated that the physiological aspect is the one giving the greatest negative effect on the academic performance of the students

6. Conclusion

Based on the findings, the researchers drew the following conclusions:

1. The absentee parents' aspect that affects the academic performance of the students is the emotional aspect.

2. The significant difference on the effect of the academic performance of the studentsbetween two absentee parents' aspects is on emotional and physiological aspects and on emotional and social aspect.

More of the significant difference lies on the emotional and physiological aspects.

3. Negative correlation exists in all of the absentee parents' aspects on the academic performance of the students. The greatest extent of negative correlation lies on the physiological and social aspect.

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DEVELOPING CREATIVE AND MEANING POTENTIAL IN EFL WRITING THROUGH PROBLEM-BASED INSTRUCTION

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Abstract

This paper puts forward a problem-based approach to developing creative and meaning potential in EFL (English as a Foreign Language) writing against error correction and other means of creative disempowerment. The reported study was based on a sample of 72 students' compositions from two co-educational secondary schools in Hong Kong. The students (12–13 years of age) were instructed to write a happier ending for a Christmas story about 'imperfect gifts', with comprehensible input from their reading lessons. To prepare the students for resolving the problem arising out of the initial situations in the story, the author (as teacher-educator providing school-based support for practicing teachers) engaged the two classes in an information-gap activity which required them to complete a couple's diaries by reading out the complementary texts (either the husband's or the wife's diary) in pairs. The students were then guided to brainstorm possible solutions to the problem through content and structural scaffolding before writing their own sequels in dairy form. The content analysis shows that the EFL learners were able to deploy their cognitive and creative resources in problem-solving processes, despite their inadequacy in grammatical competence. The paper concludes that problem-based instruction possesses the potential to enhance EFL learners' intrinsic motivation to write and to cultivate creativity, as problems can unleash curiosity, inquiry and thinking in useful ways.

Keywords: *learner motivation, creativity, meaning, problem-based instruction, EFL writing.*

1. Introduction

This paper is motivated by an awareness of teachers' predominant attention to linguistic 'correctness' in EFL (English as a foreign language) writing instruction in Hong Kong (Lee, 2008a, 2008b), and of the anxiety in teaching and learning writing in English (Tsui, 1996). With the knowledge that their teachers are principally concerned with accuracy rather than creativity, EFL learners simply adhere to textual conventions through memorisation and reproduction. Repetition or resemblance of ideas inevitably demoralizes EFL learners' sense of ownership and motivation to write because their textual products are similarly received as everyone else's. Consequently, the experience of EFL writing – as process and product – lacks purpose, meaning and creativity. Writing is also perceived as "an anxiety-generating activity" (Tsui, 1996, p. 100) by struggling learners, who lack linguistic resources and genuine interest in writing. On the receiving end, the causes of learner anxiety and disinterest in writing are related to their teachers' over emphasis on grammatical accuracy, irrelevant composition topics, and an unsupportive environment for writing (Tsui, 1996). On the delivery end, teachers also share a measure of anxiety in their writing classrooms in association with 'stress', 'nightmares' and 'frustrations' (Tsui, 1996, p. 99). It is not difficult to imagine that EFL writing has been set up in a vicious circle: learners do not appreciate writing; they are bad in writing; they evade writing.

To address such issues of interlanguage writing development (Ellis, 1997), it is imperative for teachers to bring innovations to EFL instruction (Lee & Wong, 2014), and to carefully design, plan, sequence and support learning to minimise anxiety in the writing process (Tsui, 1996). To inculcate a favorable attitude towards writing, teachers should create a genuine writing environment for learners through creative empowerment. Learners should be provided with opportunities to take ownership of textual consumption and production, which may be achieved through problem-based instruction (Bettlestone, 1998; Tan, Chye & Teo, 2009; Tan, Teo & Chye, 2009; Treffinger, 1996; Tsui, 1996). Problem-solving processes have positive effects on learners' engagement in reading and writing tasks, which require them to use the given information in new situations (from reception to production). Problems presented in initial situations can usefully provide a creative gap for writers to fill. In other words, problem-based learning possesses the potential to enhance EFL learners' intrinsic motivation to

write and to cultivate creativity, as problems can unlock curiosity, inquiry and thinking. Problems, as a reservoir of creativity, allow for EFL learners to take ownership of writing, and harness different aspects of thinking. Problem-solving skills are evident in cognitive processes when the writers are able to identify or create tensions for their own purposes, and to come up with solutions to resolve the conflicts in the making. To this end, problems-as-prompts should be designed to trigger and anchor learning through meaning-making perspectives, to which the methodology turns.

2. Method

2.1. Context and purpose

This paper draws on experience of the author (as teacher-educator) who collaborated with two practicing teachers of English as a form of support for implementing the ongoing curriculum reform in Hong Kong. These classroom practitioners were receptive to pedagogical interventions for professional learning. They were keen to explore the practical applications of problem-based writing instruction in an EFL context. In the course of collaborative instructional planning, the following pedagogical issue emerged as a matter of professional interest: how to develop creative and meaning potential in EFL writing through problem-based instruction?

2.2. Participants, instruments and procedure

The study was based on a sample of 72 compositions from two EFL classrooms in Hong Kong, with 39 from School A and 33 from School B, where Chinese was the designated language of instruction for subjects other than English. The target students (12–13 years of age) had received at least six years of formal English instruction prior to the secondary stage. Both target groups were suitably motivated in their respective EFL school contexts. The participants in both settings were similarly placed in terms of academic standing, Christian values and character development, with an emphasis on actualizing potential and living the fullness of life (School A), and nurturing sincerity and justice for facing future challenges (School B).

Facilitated by co-teaching in each setting, the students were instructed to write a happier ending for a bittersweet Christmas story about 'imperfect gifts', with comprehensible input from a reading passage on which the subsequent task of writing a Boxing-day diary was based. To prepare the students for resolving the problem arising out of the initial situations in the story, the two classes were engaged in an information-gap activity which required them to complete a couple's diaries written on Christmas Eve by reading out the complementary texts (either Jim-the-husband's or Della-the-wife's diary) to each other in pairs. As each student only had part of a Christmas diary, it was purposeful for them to fill each other in on the missing words. The essence of the completed diaries was summarized in a table for consolidation. The students were then guided to brainstorm possible solutions to redeeming the 'imperfect gifts', through content and structural scaffolding with the aid of a writing plan (see Appendix). The compositions were completed in the students' own time as take-home assignments, and were subsequently collected for content analysis with a focus on problem-solving processes. The solutions were coded and categorized under 'trade-off and labour' (pragmatism), 'benevolence and reward' (humanism), 'enchantment and fortune' (fantasy), as well as 'love and hope' (romanticism).

3. Results

The EFL learners' ability to identify, evaluate and solve problems is evident in all the diaries, despite their inadequacy in grammatical competence. In compliance with task requirements, all the compositions resort to happier endings through means-ends analysis and evaluation. In addition to evidence of Christian ethos in connection with the schools' religious background, ethical humanism – a distinctive feature of Chinese culture with its emphasis on a rational and humanistic outlook on life dating back to Confucius's times – is alive in problem-solving processes.

Table 1. Writing samples across schools (A and B) and genders (Jim and Della).

Problem-solving	**Writing Sample**	
	Jim-the-husband's diary	**Della-the-wife's diary**
Trade-off and labour	Della decided to sell the gold chain and buy another gift for me. I agreed. We **sold** the **chain** and got twenty dollars. Della and I have come to a tie shop. Those **ties** were suitable for me. (B1) I saw a notice on the wall, that said, 'A Bakery Need a Man'. I was very grateful to see that. I went to the shop and said to the boss, 'Please agree me to do this **job**.' (A17)	We went to the watch shop and want to **sold** the **chain**. […] After that, we went to the hair goods shop to **sold** the **hair clip**. […] Then we went to a high-grade restaurant together. It was a wonderful **meal** in my life. (B24) I went to 'Sophie's Hair Goods'. I asked Sophie, 'Can you **hire** me?' (A31)
Benevolence and reward	After three hours of sitting on the cold ground, a 100 dollars paper drop from a hand of a man into my broken bowl. I was so happy that someone would give what a great amount of **money** to be. After that, I rush back to the shop and asked for my pocket watch. […] Soon I was in a hair dress up shop. I found a nice long black fake hair just right for Della. (B10) I saw a man fell a purse on the floor. I thought I can get this purse's money to get back my pocket watch. But **I didn't do it because I know I shouldn't do it**. So I get back the man the purse. […] he gave one hundred dollars to thank me. (A3)	The shop-owner is an old and **nice man**. He said, 'Today is the next day of Christmas. Let this pocket watch be the Christmas present for you.' (B15) Santa Claus was robbed. The thieves stole his bag, his wallet, and I saw a man running towards them, he was Jim! We helped the police catch the robbers and saved Santa Claus. […] the chief executive came to meet us, he gave us a prize called **'Good Citizen'** and three hundred dollars! […] We went hand-in-hand to the watch shop and bought back Jim's pocket watch. (B32)
Enchantment and fortune	Suddenly, a **fairy** appeared in front of me. She said, Are you sad?' I said, 'Yes, I sad of my pocket watch.' The fairy said, 'Is it important to you?' 'Yes, it is,' I said. The fairy asked, 'If you have it again, do you treasure it?' I said firmly, 'Sure!' Then she gave me a watch. It is my pocket watch. (A13) I walked to a big department store. A salesperson said 'Let's join the **lucky draw**.' I said, 'OK.' After a while, he said, 'You have won, you can get twenty dollars.' […] Then I went to the watch shop and bought the pocket watch. (A6)	I went home on a dark street. Suddenly, a strong wind blowed. A **cash** appeared on the street. Oh! It was ten dollars. I had enough money to get back the watch. (A23) I went home sadly and I found something special happened suddenly, I saw our old, small stocking was full of presents. The **presents** was a Christmas card from Santa Claus, some candy canes and Christmas cookies, and Jim's precious gold watch! […] We heard the laugh, 'Ho, ho, ho…!' (B16)
Love and hope	Life is difficult without money. But I am thankful that I have a **loving** and helpful wife. I want to get back my pocket watch. Shall we steal it from the watch shop? Shall we work hard to earn twenty dollars to buy it? […] I know there is a **way out**. (A6) […] life is beautiful with a **loving** wife but I still wanted to give Della a perfect gift! I wanted to make her happy and delighted. (B12)	I believe that life is full of **hope** and I know that one day I can get back Jim's pocket watch. 'My God, I am thankful that I have a kind and **loving** husband, Jim. Feeling hopeful, I did three part-time and earn twelve dollars.' (A23) We walked along the street which was full of laughter, **hope**, and also **love**! We have the perfect gifts now! (B15)

4. Discussion

This paper has focused primarily on the illustrative qualities of the diaries through meaning-making lenses (the 'whats' of meaning) rather than on textual strategies (the 'hows' of meaning); the latter would deserve another engagement in its own right. Admittedly, it would have been possible to achieve a fuller description and analysis of the texts under investigation (e.g., problem-solving strategies and differing levels of creativity). All things considered, the findings have useful implications for developing creative and meaning potential in EFL writing through problem-based instruction.

4.1. Writers as makers of meaning

Textual ownership and creativity are affected by the specific social and historical contexts in which they occur. Students in Chinese culture are often perceived as "passive, imitative memorisers" (Pennycock, 1996, p. 220); but the writing data of this reported study through problem-based instruction suggest otherwise. The *realisation* of EFL learners' creative potential in textual production hinges on teachers' *recognition* of the language users as constructive makers of meaning in the first place (Bunch & Willett, 2013; Kress, 1994).

4.2. Reading-writing integration

To nurture creativity, teachers should garner the benefits of reading-writing integration by embedding 'writing to mean' in 'reading for meaning' (Byrnes, 2013; Hyland, 2007). Reading comprehension lessons with comprehensible input may act as the spur to creative opportunities through meaningful textual engagements. This is, in part, to encourage EFL learners to use their prior knowledge (from reading sources) as a base for new ideas (for writing development).

4.3. Problems as a reservoir of creativity

Problem-based instruction is hopeful to stimulate curiosity, inquiry and thinking in conducive ways. Problems, as a reservoir of creativity, allow for EFL learners to take ownership of an imaginable situation in self-actualizing ways. Problem-solving tasks also carry a value expressive function as writers place themselves directly in the initial situations through the personal analogy. This follows that problems should be designed to provide the impetus for creativity through meaning-making practices.

4.4. Content and structural scaffolding

The provision of resource support and scaffolding (models and discussion of texts through explicit instruction) can facilitate EFL learners to gain control over the demands of writing. Models should be treated "as part of a wider repertoire of resources that students can draw on and adapt, as appropriate, to support their meaning making" (Paltridge, 2006, p. 103). The facility of content and structural scaffolding can make writing more accessible, explicit and achievable for many struggling learners, for whom "the 'hows' of language need to be brought to the fore" (Cope & Kalantzis, 1993, p. 8). To turn 'a resource for access' into 'a resource for creativity' (Cope & Kalantzis, 1993, p. 19), "this awareness of regularity and structure is not only facilitating, but also reassuring" (Hyland, 2007, p. 152).

5. Conclusion

This reported study concludes that problem-based instruction possesses the potential to enhance EFL learners' intrinsic motivation to write and to cultivate creativity, as problems can unleash curiosity, inquiry and thinking in useful ways. In keeping with the concern to look beyond error correction in writing, the analysis of the denouements to the initial situations highlights the EFL learners' cognitive skills in proceeding from the original state to the goal state. Studies conveying the uniqueness of the Hong Kong pedagogical context for teachers of English may well present potential benefits and impact for teacher-learners elsewhere. That said, the way that creativity is understood in different national educational contexts needs to be alluded to their cultural and historical specificities (Pennycook, 1996). It may be worthwhile, then, to generate a better understanding of EFL learners' creative potential in problem-solving processes through comparative perspectives – that is, in part, a response to the enabling and constraining effects of genre pedagogy on textual ownership and creativity.

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Appendix

A writing plan

'*Della's hair will grow'*; unfortunately, *'Jim's pocket watch will not return'…*

Will you help Jim to get back his pocket watch?
Can you write a happier ending for the story?

Before you write a Boxing-day diary with a happier ending, make notes on the plan below:

1. Setting (when and where?) and people (who?)

    a. What was Jim's problem <u>on Christmas Eve</u>?
    b. What did Della and Jim decide to do <u>after Christmas Day</u>?
    c. How did they feel about the idea?

2. Plot (what happened?)

    a. Where did Della and Jim go – the <u>hair goods shop</u> or the <u>watch shop</u>?
    b. What did they do there?
    c. Did they get their <u>perfect gifts</u> in the end?

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SCHOOL BULLYING FROM THE RUSSIAN TEACHERS' POINT OF VIEW

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Abstract

While there is a large amount of bullying studies in other countries, the topic of school bullying is very underinvestigated in Russia. Although about 33% of students participate in bullying situations (Enikolopov, 2010), the phenomenon of bullying is often perceived as implicit and normative among adults and children without any explicit activities in developing studies and prevention programs. Based on the assumptions of D. Olweus, C. Salmivalli, E. Roland, R. M. Kowalski, S. P. Limber about bullying, we developed an inventory addressed to the school staff to make attitudes toward bullying clear among teachers before developing programs of bullying prevention and intervention. The asked questions were about respondents' understanding of bullying situation, its indicators, reasons, and impacts; also they were asked about the role, capabilities, and personal successful and unsuccessful experience of responding on bullying situations of the teachers themselves. 104 school staff members and 19 students in educational psychology answered the questions. Content-analysis was used to find out the main patterns and attitudes toward bullying. Respondents have enough knowledge about different forms of bullying; they describe reasons and impacts of bullying in detail; but there is a large discrepancy between respondents' knowledge and real experience on bullying. A large amount of named possible types of response goes together with a small amount of checked types. School staff's position towards bullying may be described as active observation (knowledge without action). The results are of high importance for school prevention programs development.

Keywords: *school bullying, bullying situations, teachers, class management, response on bullying.*

1. Introduction

There is a large deficiency of data about school bullying in Russia now. Although at least about 33% of students participate in bullying situations as bullies or victims (Enikolopov, 2010), this topic is not in the list of the discussible school problems. Bullying phenomenology is often taken as implicit and bullying behavior is perceived as normative among not only teachers but also students, so we have no sustainable knowledge about school bullying in Russian culture (Bochaver & Khlomov, 2013; Bochaver, 2014). The reason for this is that there is no explicit activity to develop studies and prevention programs among psychologists. The problem of school bullying is predominantly examined as a problem of the relationships in the dyad "bully-victim", so the stand-alone psychological and educational attempts of bullying cessation are basically focused on the improvement of the victim's social skills and stemming of the bully's aggressive behavior (Kravtsova, 2005; Petrosyantz, 2010). Consideration of bullying as a social psychological process of statuses adjustment that indicates a high level of social exertion and uncertainty takes place very rarely and is mainly represented in studies of bullying not at school but in the military (Achitaeva, 2010; Bannikov, 2000; Belanovsky & Marzeeva, 1991). Despite the multiple studies of bullying dynamics and developed bullying prevention programs in Europe and USA, at this moment investigation of bullying in Russia is only at its infancy. This project presents an attempt to study the Russian teachers' conceptualization of bullying process, its reasons and effects, and at the same time to enter the subject of bullying into the space of discussion and to encourage school employees to think over it from the perspective of their professional role in its dynamics. We based this project on the theoretical framework of bullying phenomenon by D. Olweus (1993, 1999) and by C. Salmivalli (2010) and on the empirical data about teachers' position towards bullying by E. Roland (2012), K. Buaraphan (2011), B.Kochenderfer-Ladd & M.E.Pelletier (2008), T. Hazler et al. (2001), C. Lee (2006), R. M. Maunder et al. (2010), and M. Boulton (1997).

The majority of various bullying studies is dedicated to the children's role in bullying dynamics, so the teachers' potential in bullying prevention/escalation is underexplored now. Conducting this

research, we based it on the conceptualization of bullying as an interaction between bullies, victims, and bystanders (Olweus, 1993; Salmivalli, 2010), and this triadic construction is inbuilt in the questions of the developed inquiry. Studies on teachers' position towards bullying usually focus on the topics of definition and recognition of bullying by teachers, and of their response on bullying situations.

Bullying is a psychological construct integrated in educational practice, and there is an important problem related to the implicit definitions of bullying in texts and instructions that are unclear for the specialists. Understanding of bullying by teachers makes a basis for further bullying prevention and cessation, so it is a very important task to make this understanding clear, consistent, and conventional inside the psychological and educational community (Lee, 2006). While recognizing bullying teachers (and also students) most often identify it through physical violence. Teachers put verbal threatening, beating, kicking, and coercion first, and disregard and laughter at somebody's failure last in ranging the indicators of bullying (Hazler et al., 2001; Boulton, 1997). The large study of bullying representations by teachers and students has shown that the indirect forms of bullying are significantly more rarely perceived as bullying and as serious situations than the direct forms (Maunder et al., 2010). The tendency to focus predominantly on verbal and physical aggression leads to the indirect bullying (disregard, foreclosure, rumors) becoming appreciated as normative and not serious behavioral patterns among students. Furthermore students are more likely to get involved in these forms of relationships and less likely to give support to a victim, and teachers more rarely discover it and react to it. Verbal aggression and social exclusion that are not observed by adults may be far less likely identified as dangerous and requiring attention of the specialists (Mishna, 2006).

Social context and history makes a contribution to the ways people conceptualize bullying. Only in the last few decades the ideas of learning through collaboration began to develop, the hierarchical relationships 'teacher-student' became less necessary, and the specialists found out the negative psychological influence of bullying. The antecedent concept of bullying as a normative stage of growing up in society is still widely spread and is manifested in the myths about school bullying: e.g. bullying is a part of growing up; teachers notice and stop bullying easily; bullying takes place when a child is above average; one child becomes a victim of bullying everywhere, whereas the other one never meets this threat, etc. The common tendency of these and similar myths includes amnestying bullies, blaming victims and supporting the bystanders' non-intervention, and some teachers participate in spreading these myths and supporting this kind of relationships (Kutuzova, 2007).

Teachers' work organization plays an important role in bullying existence. The quality of school management and teachers collaboration is strongly related to the level of agreement in the school community. The low level of school organization enhances the likelihood of bullying, whereas the high level promotes the bullying resistance. Effective class management (defined through the individual work with each student, competence in teaching and organization, competence in control, competence in intervention and actions inside the situation) reduces mobbing in the class and at the same time influences the class social structure positively (Rouland, 2012).

B. Kochenderfer-Ladd and M. E. Pelletier (2008) demonstrated a link between the teacher's beliefs and his or her type of responding to bullying. Teachers with assertive beliefs towards bullying tend to advocate child's assertive behavior, give advices and involve parents in collaboration. Teachers with normative beliefs are less likely to support victims and involve parents. Teachers with avoidant beliefs are more likely to separate students (bullies and victims) in the class space and to support finding new friends for victims (Kochenderfer-Ladd, 2008).

Based on this knowledge we planned the empirical study of Russian teachers' attitudes towards bullying.

2. Objectives

The main objective of this project was to investigate the conceptualization of bullying by school staff and at the same time to encourage the participants to take a more aware and reflexive position towards bullying, to make this implicit topic the subject of thinking. This is why their answers sometimes do not reflect their actual activity, but are provoked by our questions and reflect their work in their 'zone of proximal development' better.

Three key questions raised in this study are:

- How does the school staff describe bullying?
- How do they explain bullying, its reasons and effects?
- How do they respond to bullying?

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3. Methods

A special inquiry form was developed to answer the key questions. The questions about bullying description and recognition, about its reasons in personalities of students, teachers, and in class in a whole, about effects of bullying on students, on teachers, and also on educational process and class atmosphere were asked.

The sample included 123 respondents: 104 school staff members (57 teachers, 21 psychologists, 8 social care teachers, 4 administrators, 6 preschool teachers etc.) and 19 students in educational psychology. Students had no professional experience, so they could not reflect their actual working attitudes and habits, but they were recipients of educational process in psychological and educational areas, so they could pass the ideas of bullying treatment dominating among their professors. That's why their answers are also important.

After data collecting 2 judges classified the answers using content-analysis. 4970 units of analysis were processed.

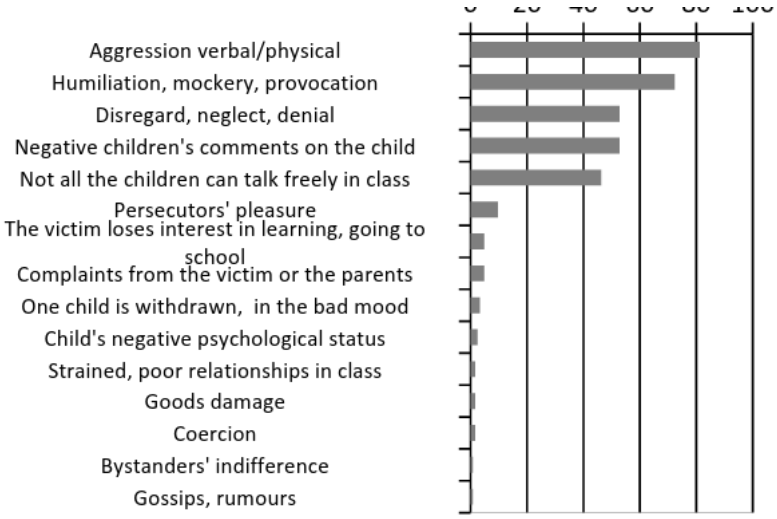
4. Results

The results below show the answers to the key questions about description and explanation of bullying by the respondents and their understanding of responding on bullying situations.

4.1. Description of bullying

Figure 1 shows the ranged criteria of children's behavior that indicate to the respondents that bullying takes place. Often physical and verbal aggression was mentioned together or without differentiation ("aggression"), so the box is titled "aggression verbal/physical". We can see that the description of bullying by the respondents is well-differentiated, nuanced, and even includes the indirect forms (disregard and neglect, rumours). Also it includes the descriptions of all groups of participants (bullies, victims, and bystanders).

Figure 1. Indicators of bullying (% of respondents mentioning each indicator).



4.2. Reasons and effects of bullying

In distribution of the reasons of bullying appearing and maintained among the bullies, the victims, the bystanders, and the whole class, we can see the wide list of explanatory constructs. The question about the teachers' reasons of bullying maintaining was not asked to avoid stigmatizing them and provoking negative attitude to the inquiry. Below the main reasons are listed.

- *Reasons, class*: xenophobia (39% of the respondents mentioned), domination of bullying style in communication (31%), incompetent teachers (18%), lack of cohesion (17%), and fuzziness of psychological borders (12%).
- *Reasons, victims*: otherness (52%), self-distrust (37%), lack of response towards aggression (21%), maladaptive behavior (21%), aggressive behavior (18%), low social status (15%), negative traits and behavioral patterns (e.g. snitching) (15%), and self-neglect (12%).

- *Reasons, bullies*: authority purchase (47%), self-distrust (44%), habitual behavior in family (40%), disregard by relatives and the lack of active social relations (28%), over-aggression (17%).
- *Reasons, bystanders*: fear of denial and of the bullies (73%), deficiency of belief in possible changes made by themselves (15%), perception bullying as norm (11%).

The respondents listed many negative points for all the offered categories describing the effects of bullying. The respondents write about such consequences for *victims* as suicide ideation and attempts (50%), depression, psychological and physical suffering (42%), social withdrawal (38%), psychological trauma (38%), decrease in self-esteem (33%), aggression (26%), and studying cessation (26%).

Bullying influences *bullies* through the habitual aggressive behavior development (51%), negative social identification (37%), administrative punishment (32%), and disharmonious personal development (e.g. cruelty or indifference) (29%).

For *bystanders* of bullying situations respondents list such central outcomes as psychological trauma (28%), loss of the belief in justice (27%), and habitual indifference (24%).

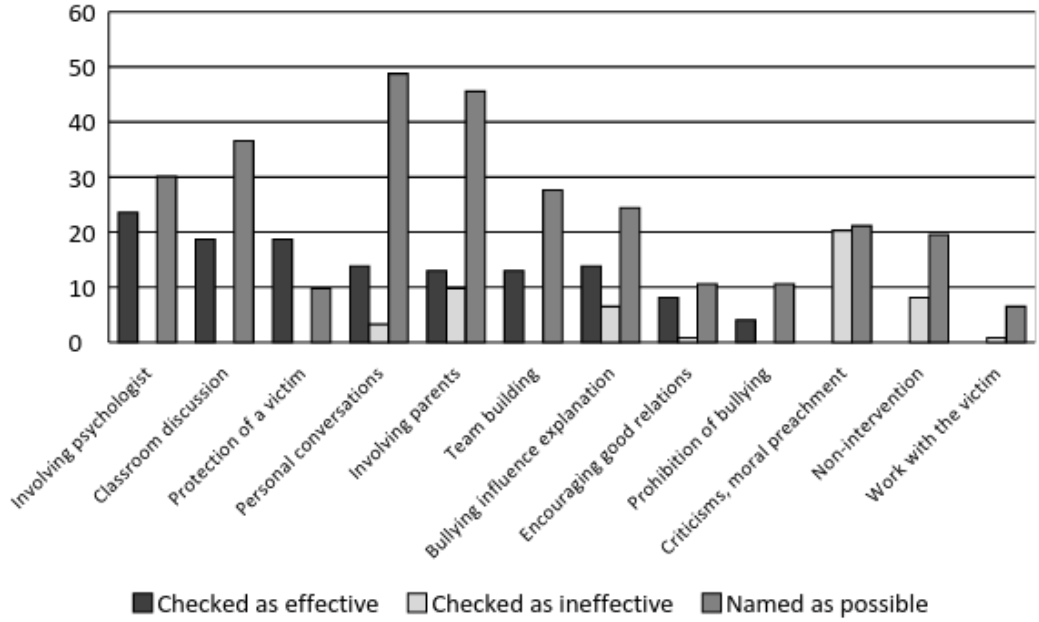
Bullying affects *teachers* provoking nervous strain (26%), problems with discipline in class (25%), downgrading among students (18%), decrease in self-esteem (17%), and at the same time it gives them an opportunity for professional advancement (18%).

For the *whole class* bullying provides poor relations and disunity (61%), insecure atmosphere (36%), problems with studying (14%), and distrust for a teacher (10%). For *academic activity* bullying promotes loss in academic progress (53%), devaluation of studying (38%), and studying cessation (13%).

4.3. Responding on bullying

Figure 2 shows the spectrum of ways of responding on bullying situations reported by the respondents. A large discrepancy between presumptive and probe-tested ways of responding to bullying is detected. A multitude of presumptive ways of behavior goes together with poor list of the ways that were probed by them.

Figure 2. Presumptive and probe-tested ways of responding on bullying.



5. Discussion

Our results show that respondents are well-informed in phenomenology of bullying, their description includes both direct and indirect forms. Also they have realistic cause-and-effect representation of bullying, described dominantly as two dyads: «xenophobia in class - otherness of victim» and «bully's need of authority – bystanders' fear of denial». Bullying influence is described as hard and multidimensional.

Responding on bullying contains a large discrepancy between respondents' knowledge and real experience. A big amount of named presumptive types of response goes together with a small amount of probe-tested types. School staff's position towards bullying may be described as *active observation*,

because they represent bullying in details, understand its reasons and effects, can imagine many ways of response, but their *real attempts to react on bullying are rare and poor*.

The next steps should include (1) making the reasons of their non-responding clear, (2) developing a consistent system of bullying prevention and staff training, and (3) introducing prevention program in schools.

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CSCL IN NON-TECHNOLOGICAL ENVIRONMENTS: EVALUATION OF A WIKI SYSTEM WITH INTEGRATED SELF- AND PEER ASSESSMENT

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Abstract

Computer-supported collaborative learning (CSCL) is already a central element of online learning environments, but is also gaining increasing importance in traditional classroom settings where course work is carried out in groups. For these situations social interaction, sharing and construction of knowledge among the group members are important elements of the learning process. The use of computers and the internet facilitates such group work by allowing asynchronous as well as synchronous contributions to a common learning object independent of student's working time and location. One way to foster CSCL is the employment of Wiki systems, e.g. for collaboratively working on a writing assignment. We developed an enhanced Wiki system with self- and peer assessment, visualizations, and functionalities for continuous teacher feedback. First evaluations of this 'co-writing Wiki' with computer science students showed its usefulness for collaborative course work. However, results from studies with tech-savvy participants, who are typically familiar with the benefits as well as drawbacks of such tools, are often limited regarding the generalizability to other populations. Thus, we introduced the Wiki in a non-technological environment and evaluated it with respect to usability, usefulness, and motivational components. Thirty psychology students used the co-writing Wiki to work collaboratively on a short paper. Besides providing an interface for generating and changing a document, the co-writing Wiki offers tools for formative assessment activities (integrated self-, peer-, and group assessment activities) as well as monitoring the progress of the group's collaboration. The evaluation of the tool is based on log-data (activity tracking) as well as questionnaire data gathered at before and after working with the Wiki. Additionally, the instructor evaluated the co-writing Wiki concerning its usefulness for CSCL activities in academic settings. Despite technical problems and consequently low system usability scores, participants perceived the offered functionalities as helpful to keep a good overview on the current status of their paper and the contributions of their group members. The integrated self-assessment tool helped them to get aware of their strengths and weaknesses. In addition, students showed a high intrinsic motivation while working with the co-Writing Wiki, which did not change over the course of the study. From the instructor's perspective, the co-writing Wiki allowed to effectively monitor the progress of the groups and enabled formative feedback by the instructor. Summarizing, the results indicate that using Wikis for CSCL is a promising way to also support students with no technological background.

Keywords: *computer-supported collaborative learning, self-, peer and group assessment, wiki systems.*

1. Introduction

Social interaction is a crucial part of successful learning, as it fosters cognitive development and knowledge construction of the learner (Vygotsky, 1978). Collaborative (or cooperative) learning in traditional classroom settings occurs face-to-face and synchronously, i.e. students need to be at the same time in the same place. Generally, cooperation results in higher individual achievement, improvement of critical and meta-cognitive thinking, and higher intrinsic motivation (Clark & Mayer, 2011). With the continuous enhancement of information and communication technologies on the one hand and the growing number of distance-learning offers on the other hand, the need but also potential of technology enhanced learning (TEL) is a central part in today's education. In order to embed group work and social interaction in these online learning environments, computer supported collaborative learning (CSCL) tools are efficient means to support students' learning and collaborative work. CSCL allows

asynchronous as well as synchronous contributions to a common learning object independent of time or location (Stahl, Koschmann, & Suthers, 2006). Examples for social software that can be applied for TEL are blogs, chats, online conferences, social networks, and wikis (Clark & Mayer, 2011).

Wikis support online-collaboration by promoting sharing and collaborative creation of content via a website. Basic functions are adding, editing, deleting, commenting, and interacting with peers by receiving and giving feedback. Thus, students learn to not only read and write, but also to be an editor, reviewer, and collaborator (Cubric, 2007). Integrated self- and peer assessments can improve learners' meta-cognitive skills, self-awareness, and self-reflection, as well as lead to better contributions of each group member (Topping et al., 2000). Other advantages are the possibility to directly track individual efforts and learning progress (Boston, 2002), see iterations of the text (instead of only the last version), to always have access to the text, and to interact and discuss content based on peer reviews (Storch, 2005). Nevertheless, low motivation, non-participation or social loafing are common problems in collaborative assignments (Hadjerrouit, 2012; Arnold, Ducate & Kost, 2012; Clark & Mayer, 2011). Brodahl, Hadjerrouit, and Hansen (2011), who investigated students' experience when using either Google Docs or Etherpad for a collaborative writing assignment, found that only 50% of their students were motivated to use the tool and that only 27% evaluated the tool to be effective to use in group work. For a successful use of wikis, Arnold et al. (2012) point to the importance of clear tasks and teacher intervention and Wu Vassileva, Sun, & Fang (2014) showed that increasing user awareness of a document's history (e.g. by highlighting paper revisions) and giving authorship information leads to higher task awareness, and higher intrinsic and extrinsic motivation.

AL-Smadi, Höfler, and Gütl (2011) developed a wiki with enhanced functionalities to overcome some of the mentioned drawbacks, such as low motivation and consequently low participation, little task awareness, and insufficient teacher support. Central features are the integration of self-, peer-, and group-assessments, the possibility to specify assessment categories for feedback and grading, and tools for visualizing the paper revisions and contributions of each group member. An evaluation of the co-writing Wiki with computer science students (Wesiak, AL-Smadi & Gütl, 2013) showed the usefulness of such a tool for collaborative writing assignments. Results from questionnaire and log data indicated that students viewed the different assessment forms positively but used them only if mandatory. Furthermore, results revealed positive correlations between time spent with the system and number of self-assessments and between intrinsic motivation and interest in the contribution progress. Reasons for participating changed over the course of study: students' initially higher intrinsic motivation slightly decreased during the course, whereas their extrinsic motivation increased.

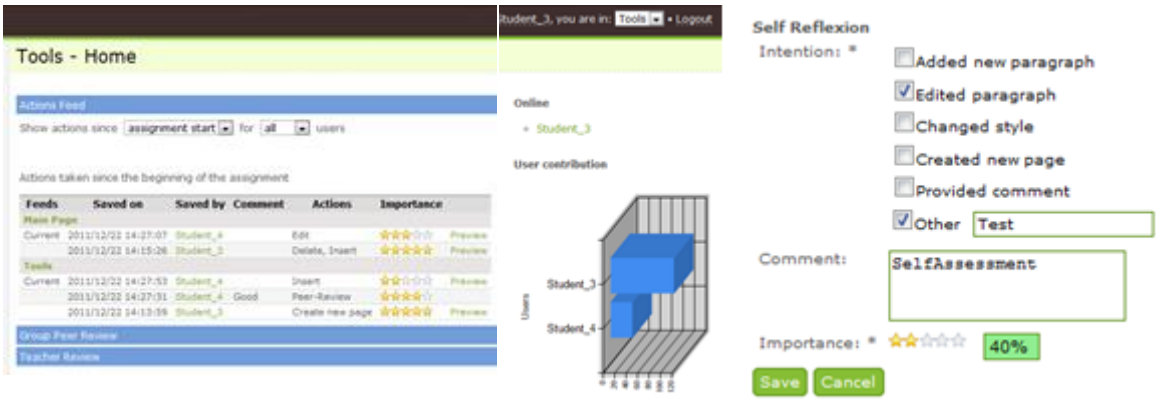
Previous studies showed that wikis are valuable tools for facilitating collaborative work in distant learning environments, but they are also gaining increasing importance in traditional classroom settings when the course (home) work includes group assignments. With their enhanced co-writing Wiki, AL-Smadi et al. (2011; see also Wesiak et al., 2011) tried to meet challenges like low motivation and participation rates. First results were promising. However, evaluations with tech-savvy participants, who are typically familiar with social learning tools, their benefits and drawbacks, are often limited regarding the generalizability to other populations. In addition, most studies attend very closely to the need of and benefit for students, but neglect the consequences for the instructor. Administrating student accounts, authoring the group management and grading process, and providing continuous online feedback can imply a lot of extra effort for a teacher. Thus, with this follow-up study we wanted to answer the following research questions: (i) Do students without technical background or pre-knowledge in working with wikis perceive the enhanced co-writing Wiki as useful and helpful tool for handling group assignments? (ii) Do the benefits of using the co-writing Wiki outweigh the effort for the instructor?

2. Methods

Co-writing Wiki. AL-Smadi et al. (2011) developed an enhanced wiki to increase the motivation to participate and to maintain social and task awareness. The co-writing Wiki provides the following (additional) features: (a) an actions feed that lists all actions taken by group members during a collaborative process, (b) a contribution chart showing how much each group member contributed to an assignment, (c) motivation charts with integrated assessment overviews depicting the individual contributions over the course of the group work, (d) an assignment graph showing the structure of a document, (e) a revision player showing the history of a document, (f) self- and peer-assessment functions with star-ratings and open comments, (g) a rubric based group- and instructor-assessment with flexible categories assigned by the instructor, and (g) a grading page with peer-scores, teacher-scores, and weighting possibilities. Figure 1 shows examples of the actions feed, contribution graph, and self-assessment. Taken together the co-writing Wiki aims at supporting learners by receiving continuous feedback from peers and instructors, improving self-awareness and self-reflection by means of

self-assessments and evaluation of peers, motivating them by visualizing who did what and thus allowing comparisons with peers. This should also facilitate teachers' work in that they can easily monitor the collaboration process and contributions by individual students. The rubric- based assessment aims at fostering an objective grading process where the teacher determines assessment categories and weights.

Figure 1. Example features of the co-writing Wiki: (a) actions feed, (b) contribution graph, (c) self-assessment.



(a) *(b)* *(c)*

Participants, Instruments, and procedure. Thirty psychology students (25 female, M = 22.0 years old, SD = 2.7) participated in the study as part of a seminar teaching students how to conduct, analyze, and report empirical studies. Except for three students, they reported to have not worked with Wikis before. Using a mixed-methods approach for assessing students' attitudes towards CSCL with Wikis, we applied online questionnaires (self-report data) and tracked students' activities while working with the Wiki (log-data). Participants completed a pre-questionnaire with demographic questions and three subscales of the Motivated Strategies for Learning Questionnaire (MSLQ by Pintrich, Smith, Garcia, & McKeachie, 1991), namely the task value, intrinsic and extrinsic goal orientation scales. Then, a teaching assistant introduced the students to the Co-writing Wiki and their tasks. Grouped into teams of three or four members, they had to prepare the methods and results section of a short paper based on relevant literature and a fictitious data set. The time frame was two weeks for a first draft, which was commented by the teacher. Thereafter, students had to finish and submit the final version and perform two group assessments (provide feedback to the work of other teams via the Wiki's group-assessment function) within a week. Students had always access to the Wiki and could use the functions as often and long as they wished. The Wiki tracked interaction data and manual entries in the form of self-, peer-, and group-assessments. Finally, students were asked to provide feedback on their learning experience in terms of usability (System Usability Scale SUS by Brooke, 1996) and usefulness (10 items asking how supportive and motivating students perceived different features of the Wiki plus 7 items concerning the group assessment). Students' motivation was re-assessed via the MSLQ scales. Finally, the teacher and student assistant received a questionnaire to evaluate the usability and usefulness of the co-writing Wiki from a teachers' perspective (SUS and 21 rating items concerning the usefulness for CSCL activities in academic settings). All questionnaire items were either in open answer format or with 5-pt agreement scales as response options.

3. Results and Discussion

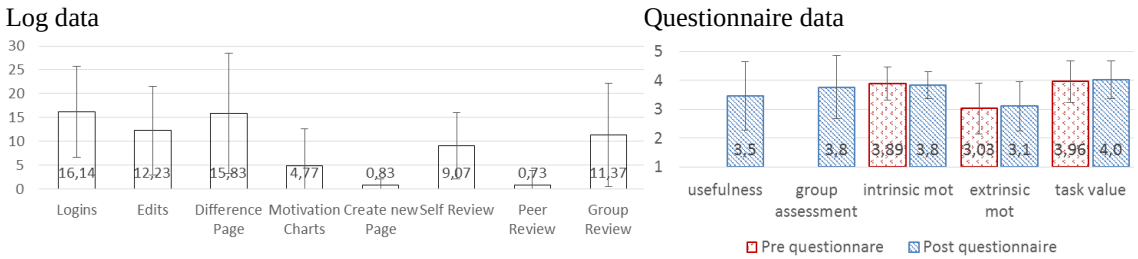
Results are based on log and pre-questionnaire data from 30 participants and post-questionnaire data from 23 participants. Students working behavior varied greatly, ranging from 3 to 35 logins and 31 min to 14 hours spent with the co-writing Wiki. The mean time for editing texts was 71.8 min (SD = 78.6). Figure 2 (left) shows how often students used Wiki's different functions. Most often, they checked the difference page, which depicts differences between paper revisions by means of color codes. This was followed by editing the paper and starting group assessments. The options to provide a peer-review for members of their own group or to create a new page was almost never used (both $M < 1$) but students did perform self-assessments. They also stated that self-reviews helped them in finding the strengths and weaknesses of their work (M = 3.3, SD = 1.2).

Usability and usefulness. With an average SUS score of 37.39 (SD = 14.47) out of a maximum of 100, usability of the system was rated rather low. Reasons seem to be for the main part technical problems (e.g. low speed, unstable internet connection, automatic logouts) as the used version of the Wiki

was a prototype and 81% reported such problems. Students evaluated the usefulness of the Wiki's task awareness functions (e.g. actions feed, colored difference tool, contribution graphs for own team) positively (M = 3.47, SD = 0.82) with 9 out of 10 items reaching a median of 4. Only the overview on the progress of other groups was not perceived as helpful (M = 2.5, SD = 1.2), which might be due to usability problems, as some students reported display problems for this graph. Interestingly, students who spent more time editing the paper gave higher usefulness ratings (Pearson r = .52, p = .011), whereas we found no relationship between overall working time and usefulness. Thus, active usage of the system including contributions to the group task seems to be related to a better evaluation of the Wiki's functions. With respect to the group assessment function used for reviewing the work of other groups, most students faced technical problems (M = 4.2, SD = 0.94), but still perceived this feature positively (M = 3.7, SD = 0.58) for both receiving and giving feedback.

Motivation. The administration of the MSLQ before and after students used the Wiki allowed to investigate whether and how motivated students were and if this changed over the course of the study (Figure 2, right). A two-by-two ANOVA with motivation type (intrinsic vs. extrinsic) and time (pre vs. post usage) as main factors revealed no effect of time (M_{pre}= 3.47, M_{post}= 3.48), but students' intrinsic motivations was significantly higher than their extrinsic motivation at both times, $F(1,22)$ = 14.49, p=.001, η_p^2=.397; M_{intr}= 3.87, M_{extr}= 3.08. With respect to task value, the students rated the importance of and interest in the course on average with 3.99 (SD = 0.45). Again, this did not change over time.

Figure 2. Left: Mean number of interactions with Wiki-functions; Right: Mean usefulness and motivation ratingS.



Instructors' perspective. The teacher (a psychologist and co-author of this paper) used the Wiki for reading the papers, giving feedback, monitoring the progress of single groups and students, as well as grading. Her assistant (a psychology student) handled the group management and supported the students during their work with the Wiki. Both had basic computer science knowledge. Results from the SUS yielded ratings of 60 (teacher) and 57.5 (assistant) points, i.e. from the instructors' view the Wiki's usability is higher than from the students' perspective. We assessed usefulness via 20 items concerning the helpfulness of the various functions for the teacher. Mean ratings were 3.74 (SD = 1.3) and 3.47 (SD = 0.51) for the teacher and assistant respectively. Across both, the grading support and actions feed (7 and 4 items, both $M \geq 4.38$) were perceived positively, the contribution overviews neutral (5 items, M = 3.1, SD = 0.57), and the revision player as not that supportive (4 items, M = 2.5, SD = 0.53). The teacher also strongly agreed that the Wiki would support students in their group work (1 item). Overall, the feedback from instructors indicates the need for improved technical solutions (higher speed, less bugs) but also the potential to support students in their group work (especially via peer and group assessments) as well as teachers in monitoring students' progress, enabling formative feedback, and grading the assignments.

4. Conclusions

This study investigated the acceptance and usefulness of an online tool for collaborative writing assignments in a non-technological context. Both students and teachers were from the field of psychology and students were mostly unexperienced with Wiki-tools. Due to technological problems with the employed prototype, student ratings and teacher comments pointed to a rather low usability of the tool. Still the usefulness of the enhanced functions was perceived positively from both sides. The results received from ratings and open comments indicate that especially the integrated group assessment function and tools to monitor the progress of the assignment (e.g. colored difference page) supported the learning process. Compared to the evaluation with computer science students (Wesiak et al., 2013), usability ratings are similar, but psychology students rated the usefulness of the tool higher. In contrast to previous studies that employed wikis in an educational context (e.g. Brodahl et al., 2011; Hadjerrouit, 2012; Arnold et al.2012) participants of this study reported high intrinsic motivation before and after working with the wiki. Open comments indicated that they appreciated especially functions to get an

overview about the latest revisions and the current status of the paper, to track the contributions of others, to receive feedback from peers and to get an overview on other groups' work. Summarized, students like those types of information that are usually not available when doing group work face-to-face or asynchronously using email to send new versions of a joint document. Besides the positive comments regarding the group assessments, students used the peer-review option very rarely and ratings of the self-review were neutral. However, we believe that these forms of assessments are valuable instruments for fostering meta-cognitive skills. Thus, for future applications more time needs to be spent on introducing these functions to the students, including some initial training. With respect to the instructor's perspective, this first evaluation points to a facilitation of work in terms of efficiency (easy to monitor students' work and to give on the spot and timely feedback) and quality (use of assessment rubrics, automatic calculation of grades). In conclusion, the study showed the usefulness of the build-in functions of the co-writing Wiki in a non-technological environment for both students and teachers. Considering the growing amount of distance learning offers, tools for online cooperation gain increasing importance. Thus, systems, such as the co-writing Wiki are a good option to facilitate student work and foster their learning process through collaboration without increasing the workload of teachers.

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COLLABORATIVE DECISION MAKING (CDM) ON COMPLEX, MAJOR PROJECTS: SOME FACILITATION TECHNIQUES

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Abstract

Major infrastructure projects can be enormously complex and very expensive. Tapping into the differing intellectual and experiential insights of engineers in a collaborative decision making forum and driving the decision making on a fast tracked consensus basis can be a real challenge to those vested in facilitating such a process. Shrinking violets don't survive! There are established methodologies for assisting in this respect and there are various techniques for supporting these collaborative decision making methodologies. Many of these methodologies are misrepresented, misinterpreted, or simply not understood. Psychologists with their skill base can help.

Keywords: *collaborative decision making, structured methodologies.*

1. Introduction

Dr. David Stevens is generally regarded as one of the world's leading workshop facilitators, particularly in value management, value engineering, risk management, partnering, project alliancing and strategic planning, and other collaborative decision making paradigms (www.profstevens.com). The framework and theoretical basis for his workshop facilitation techniques are derived from his specialisation as a registered Organisational Psychologist within the Australian Psychological Society. He was an Adjunct Professor at the College of Engineering at the University of Western Sydney for 11 years. He has worked on major projects worldwide having carried out well over 1000 workshops including hospitals, airports, railways, highways, retail and commercial buildings. Clients include London Underground, British Rail, Mass Transit Railway Corporation and Kowloon Canton Railway Corporation, Hong Kong; and Taiwan High Speed Rail Corporation. Hospital clients include major and teaching hospitals in the UK, Hong Kong, New Zealand and Australia. Other clients include Departments of Defense, Australian State and Local Government Departments, most divisions of the Hong Kong Government and several UK Government Departments.

Dr. Stevens has been cited in Barons and Marquis international Who's Who on numerous occasions for his work in group problem solving and participatory decision making, as well as the IBC Cambridge's 2000 outstanding scientists of the 20th Century. He is listed in the Asia Top 500 Leaders for the year 2000. His qualifications include three Masters Degrees (Engineering, Science, Arts) and a PhD in Organisational Psychology.

2. Parsons Brinckerhoff

Parsons Brinckerhoff has a rich and proud history that extends more than 125 years. It is rich in the significance of the work clients entrust to us and historic for the contributions our clients have made developing the infrastructures of their communities. We are privileged to be a part of this process and our clients' successes, and in some small way a participant in their history.

Parsons Brinckerhoff is a global consulting firm assisting public and private clients to plan, develop, design, construct, operate and maintain hundreds of critical infrastructure projects around the world. We know very well that the projects our clients entrust to us significantly impact the lives of those who live and work in their communities because we live and work in those same communities. It is this fact that motivates the Parsons Brinckerhoff professionals who partner with our clients to design solutions to a broad range of technical, logistical and managerial challenges.

3. Methodologies Psychologists Can Contribute To

Major infrastructure projects can be enormously complex and very expensive. Tapping into the differing intellectual and experiential insights of engineers in a collaborative decision making forum and driving the decision making on a fast tracked consensus basis can be a real challenge to those vested in facilitating such a process. Shrinking violets don't survive!

There are established methodologies for assisting in this respect and there are various techniques for supporting these collaborative decision making methodologies. Many of these methodologies are misrepresented, misinterpreted, or simply not understood.

Value management and value engineering are by far the most powerful methodologies to attain high levels of accountability in the delivery of projects; but the terminology for these is frequently misused. Dr Stevens will present evidence on the efficacy of value management and why this methodology needs to be reinvigorated in the post GFC marketplace. He will juxtapose the cogent advantages of value management/value engineering against the less-than-convincing reports of value-for-money (VfM) of alliances. Dr Stevens will talk about the efficacy that psychologists can add to these debates.

4. Some Techniques Developed by This Psychologist within Parsons Brinckerhoff

Dr. Stevens will initially describe several supporting techniques he has developed over several decades to address the facilitation process. The CDM methodologies will provide a conceptual framework within which to describe some techniques. The success of the techniques will be demonstrated by reference to "successfully facilitated workshops" carried out on a global basis for such projects as the increasing of the Panama Canal capacity and saving a multi-billion dollar rail project in Hong Kong.

He will elaborate upon the "Link Thinking Hierarchy" (LTH) which he developed as a refinement of F.A.S.T/ (functional analysis systems technique) diagrams, developed many years ago to assist in the deconstruction of complex projects to allow creative and expeditious alternatives in design. The LTH has been successfully applied to assist in the facilitation of a vast range of workshops from strategic planning to human resource planning; from marketing planning to philosophical debate (possibly proving the existence of God!). He will refer to his text *Strategic Thinking: Success Secrets of Big Business*, McGraw Hill, 1997 for a demonstration of the cogency of the techniques. This text is one of the definitive texts in terms of value management and value engineering, and other of the CDM methodologies.

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THE ROLE OF LEADERSHIP IDEOLOGY IN BRINGING ABOUT SOCIOECONOMIC INEQUALITY: THE CASE OF ISRAELI KIBBUTZ COMMUNITIES

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Abstract

Wilkinson and colleagues showed that for affluent societies and communities, socioeconomic inequality brings their members adverse outcomes: Socioeconomic Inequality >> lowered levels of social capital >> lowered levels of health, wellbeing, and higher levels of morbidity and mortality. Why do some affluent societies adopt socioeconomic inequality and some do not? I suggest governmental/leadership ideology as the major factor. I test this proposal with data from Israeli kibbutz communities. Kibbutzim are affluent communities. Almost all kibbutzim were until the early 1990s' with a very strong emphasis on equality called *qualitative equality*, meaning "to each according to one's needs; from each according to one's abilities." But now most kibbutzim are transformed. A major transformation was adopted in the remuneration system (and thus enacting economic inequality): a structure of differential salary arrangement that is according to position rather than equal remuneration according to need as it was before. Transformed kibbutzim are called "differential" and the ones which stay communal -- "traditional". There remains the question: What and who were responsible for the transformation of kibbutz communal communities to become "differential"? This study tests whether responsibility for the transformation lies with their leadership and their ideologies. This study is a secondary analysis of data from research of members (about 800) from 32 kibbutzim, both "traditional" and "differential". The two groups of kibbutzim were about similar in their level of economic prosperity prior to the transformation by the "differentials". We used a questionnaire to gage attitudes towards equality and solidarity and towards the structural change that kibbutzim adopted. The original study supported the model suggest by Wilkinson and colleagues but left open the question: how did community leadership contributed to the structural transformation. Finding: In "differential" kibbutzim, local leaders supported the differential salaries more than other members; while in "traditional" kibbutzim leadership supported traditional principles more than other members. In "differential" kibbutzim opposing "qualitative equality" was stronger the higher the managerial level of respondents. So was also the case with other ideological principles of the traditional kibbutz. In "traditional" kibbutzim the differences between leaders and other members were in the opposite direction. Leadership in "traditional" kibbutzim was more supportive of traditional kibbutz ideology. I conclude that leadership and its ideology have a major role in determining degree of socioeconomic inequality in their societies. I discuss lessons for the theory of inequality in society and lessons for kibbutz society.

Keywords: *socioeconomic inequality; leadership role; Israeli kibbutz; kibbutz transformation.*

1. Theoretical background

Wilkinson (eg. 1992, 2006), Marmot (eg. 1999) and others have presented findings since the early 1990s' to show that for affluent communities and prosperous societies intra-community socioeconomic inequality brings about adverse outcomes to their members according to the following causal flow model: Socioeconomic Inequality >> lowered levels of social capital (both socio-psychological and physical) >> lowered levels of health, wellbeing, and higher levels of morbidity and mortality.

However, this model initiated criticism of several kinds – one of the central criticisms pointed to deficiency in explanation of the "going upstream" kind. It was argued that one should look "upstream" for more sociological structural aspects of society if we wish to explain the cause of social inequality. This

view does not see socioeconomic inequality as the "beginning of the casual chain". Instead it sees "the beginning" in structural and ideological aspects of society (such as the ideology of neoliberalism, or the result of social class structures) that lead to socioeconomic inequality. But, what determines those structures? Why do some affluent societies adopt socioeconomic inequality and some do not; what are the reasons for it? Who or what is responsible for this inequality.

One possible explanation is – level of wealth and prosperity in society or community: In less prosperous societies (from among the group of affluent societies) equality is more adhered to because it helps mobilize the whole community/society to achieve higher levels of affluence. While in the more prosperous societies even their poorer segments enjoy a good enough standard of material life and society does not need to care for them. Hence, society lets the richer members get much wealthier – leaving behind its poorer members.

Checking international data does not lend support to the proposed negative relationship between level of prosperity and level of socioeconomic equality. This is also illustrated by changes in levels of Gini Coefficients on several dozen industrial nations between the years 1945-2005. Some of the countries became wealthier during those decades but their Gini Coefficients went down, for others it went up. Similar was the case for societies that became less affluent.

I suggest governmental/leadership ideology as the major factor to influence level of socioeconomic inequality in societies at the upper scale of affluence. If we put governmental /leadership ideologies on a bi-polar scale between a welfare/social democratic pole on the one side and a neoliberal ideology on the opposite pole – we should expect to have more socioeconomic equality closer to the pole of welfare state ideology and less socioeconomic equality the stronger expression is given to neoliberal ideology by government or leadership.

These differences in ideology should, of course, be demonstrated also in expressions of social capital, both in its socio-psychological dimension and in its physical dimension. This is illustrated in level of investment in education as a share of GNP by Israeli governments from both ideologies (welfare state and neoliberal) over the years 1990-2010 – higher levels of investment in education during the rule of labor and lower level of investment during the rule of neoliberal partied.

In the current study these ideas are tested with data from Israeli kibbutz communities.

2. Kibbutz background

Kibbutz communities are affluent communities. Almost all kibbutzim were until the early 1990s' very communal and with a very strong emphasis on almost complete equality in the socioeconomic sense. They adhered mostly to the kind of equality called *qualitative equality* which means "to each according to one's needs; from each according to one's abilities." This changed in the direction of adopting equality of the "equity" kind during the past few decades (for reasons and in ways that will be explained in my talk). Nowadays most kibbutz communities are transformed to become much more similar to communities around them. They demonstrate major inequalities in the socioeconomic sense. A major transformation was adopted in the remuneration system (and thus enacting economic inequality): Kibbutzim adopted a structure of differential salary arrangement that is according to position rather than equal remuneration according to need as it was before. I call the transformed kibbutzim "differential" and the ones which stayed communal -- "traditional".

3. Translation of the general theoretical research question into the kibbutz setting

However, there still remained the question I posed earlier: What and who were responsible for the transformation of kibbutz communal communities from operating according to principles of qualitative equality, cooperation, and solidarity to adopt the principles of neoliberalism of egocentrism, competition, and almost sole dependence on material considerations.

As analyzed earlier, I suggest that responsibility for the transformation of kibbutz communities of the "differential" mode, to operate according to neoliberal principles lies with their leadership and the ideologies held by them. In fact, community leaders and their ideologies were responsible for both the transformation of kibbutzim into the "differential" type but also for the decision by other kibbutzim to remain communal. The role of leadership/government of kibbutzim to transform the kibbutz equality structure is doubly interesting because Kibbutzim are communities where (in comparison to other societies) the rank and file – members at large – has a much stronger say about their lives and structural changes in their communities.

4. Current study

This study is a secondary analysis of data from research (Leviatan & Adar, 2007) based on samples from 32 kibbutzim – eight kibbutzim from the "traditional" type and 24 that transformed (during six years prior to data collection – 2005) into "differential" salary arrangement – altogether about 800 individuals. The two groups of kibbutzim were about similar in their level of economic prosperity prior to the transformation decision by the "differentials". The basic instrument of the study was a questionnaire that focused on attitudes towards equality and solidarity and towards the structural change that kibbutzim adopted. It also included data to designate individuals from different levels of leadership in their kibbutzim.

The original study supported, in general, the model suggest by Wilkinson and colleagues: Level of socioeconomic inequality in kibbutz communities was found to be negatively related to social capital in both its dimensions (psychosocial and physical) which in turn was found to relate positively to wellbeing of members, and to their mental and physical health.

4.1. Summary of findings of current study

Findings of the current focused study: In "differential" kibbutzim, local leaders supported the change into differential salaries more than the rank and file members; while the opposite was true in "traditional" kibbutzim – leadership supported traditional principles more than the rank and file membership in same kibbutzim. In "differential" kibbutzim opposing "qualitative equality" (to each according to needs, from each according to abilities) was stronger the higher the managerial level of respondents. So was also the case with other ideological principles of the traditional kibbutz – such as 'comprehensive mutual responsibility'. In "traditional" kibbutzim the differences between leaders and rank and file membership were in the opposite direction. Major differences were also found between leaders of "traditional" kibbutzim and leaders of "differential" kibbutzim -- so that leadership in "traditional" kibbutzim was more supportive of traditional kibbutz ideology.

To illustrate: respondents were asked to indicate how desirable it would be for them to have "qualitative equality" in their hypothetical "best place to live". A vast majority (75.1%) of the top office holders in "traditional" kibbutzim claimed to wish it in that "dream place" against 36.4% of the top office holders in "differential kibbutzim". Among the rank and file memberships the difference was much smaller—69.2% vs. 48.7%. Rank and file members in traditional kibbutzim support qualitative equality less than their leaders while rank and file members in differential kibbutzim support it more than their leaders. Thus it seems that each of the two leaderships leads in opposite ideological directions in its respective communities.

5. Conclusion

Thus, it is fair to conclude that leadership and its ideology had a major role in determining degree of socioeconomic inequality in their societies – leaders and their ideology in kibbutz communities were causing/contributing to the move into differential salary arrangement. True. The findings do not allow a clear casual inference as the study does not have a longitudinal design. However, the findings enable us to make reasonable speculations because general research literature on leadership generally sees leaders as influencing their organization and not the other way around.

An additional question that gets its answer in the study is "Why the support of local leaders for differential salary arrangements?" The answer seems to be too simple and to an extent – shameful: personal greediness. The study shows that individuals in higher positions gain more materially and economically from the transformation into differential salary arrangement. But note: had a traditional kibbutz transformed into differential arrangement – its higher ranking officers would have also gained more economically. Yet, they opposed a transformation more than their rank and file members.

I summarize with lessons to draw for the theory of inequality in society and lessons for kibbutz society.

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PRISMA-RA: A SET OF TOOLS FOR WORK RELATED STRESS RISK ASSESSMENT

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Abstract

The most accurate approach to the assessment of work-related stress consists in the integration among objective measures of working conditions and information coming from workers. The normative background in Italy for work health and safety (Legislative Decree 81/2008, Ministry of Labour) requires public and private employers to assess, inter alia, work-related stress of their workers according to the content of the European Framework Agreement on Work-Related Stress (2004). It is therefore needed an integrated approach, appropriately combining subjective and objective measures. One of the most widely used European models for work-related stress evaluation is the HSE approach (2007), based on the idea of standards for managing work-related stress in terms of organizational states and emphasizing the involvement and the perception of workers. This research presents the application of a self-report questionnaire, which is part of PRISMA-RA (PRISMA tools for work related stress Risk Assessment), a set of tools able to evaluate work related stress risk using both objective and subjective viewpoints. PRISMA-RA allows to analyse convergence of variables measured both subjectively and objectively so as to obtain a stronger reliability with respect to the investigated phenomena. The questionnaire presented in this paper is one of the subjective tools of PRISMA-RA. We discuss its psychometric characteristics (internal consistency, by means of Cronbach's alpha, and stability, by means of the test-retest Pearson correlation) measured on a sample of workers in the public and private sector (N = 943). The results analysis confirms the psychometric reliability of the instrument.

Keywords: *assessments tools, psychometric properties, work-related stress risk, objective and subjective measurements.*

1. Background

The topic of work related stress has become subject of particular interest in recent years and it has been extensively researched. Since in current organizations work of people is mostly at the cognitive level, it is more and more relevant for a full understanding of work related stress to evaluate both the work environment and the individual's perception.

The European legislation on health and safety at work, Directive 89/391/EEC has been a driving factor of this interest (European Agency for Safety and Health at Work, 1989). In accordance with this European Directive, the employer has precise obligations, such as to periodically assess risks and to protect safety and health of workers. Hence, employers have an obligation to manage work-related stress, considered a risk for workers. In Italy, the normative reference is the Legislative Decree 81/2008 (Ministry of Labour, 2008).

The British Government's Health and Safety Executive (HSE) has defined work related stress as **"**the adverse reaction people have to excessive pressures or other types of demand placed on them at work**"** (HSE, 2012a). Therefore, stress in the workplace can be regarded as the result of the process of adaptation of the individual to her work environment. By definition, stress is a condition, not an illness.

There is a wide literature identifying sources of stress in the workplace (for example: McGrath, 1976; Cooper, 1986; Cox et al., 2000; Edwards & Van Harrison, 1993; Hacker, 1991; Karasek & Theorell, 1990).

Cooper (1986) identifies five sources of work stress:

- intrinsic to the job,
- related to the organizational role,
- related to career development,

- regarding the relationships in the workplace,
- relating to the structure and organizational climate.

According to the HSE model there are six factors that can lead to work related stress if they are not managed properly (HSE, 2012b):

- demands,
- control,
- support,
- relationships,
- role,
- change.

Many approaches to work-related stress risk assessment suggest the integration between a phase where objective data are collected and analysed, and a phase where results of data collection and analysis are discussed and compared with information coming from the workers.

This research presents the application of a self-report questionnaire, which is part of PRISMA-RA (PRISMA tools for work related stress Risk Assessment), a set of tools for the evaluation of work related stress risk using both objective and subjective viewpoints. Its extensions to work-related techno-stress assessment is discussed in (Corradini and Nardelli 2014).

The self-report questionnaire, whose description and preliminary validation are in (Carosi et al., 2010; Corradini, 2013; Corradini and Lambertucci, 2010, 2012), is a methodological tool for the qualitative and perceptive evaluation of work related stress risk. It follows the approach described in the European Framework Agreement on Work-Related Stress (2004) and contains 90 items investigating the various work related risk factors. These 90 items are structured in 12 homogeneous areas, defined in accordance with the international scientific literature on stress and with european and italian normative requirements concerning safety at work. Moreover, we have taken into consideration also some of the most widely known tools (for example: OSI: Cooper, Loan, and Williams, 1988; JCQ: Karasek et al., 1998; ERI-Q: Siegrist et al. 2004; MOHQ: Avallone and Paplomatas, 2005).

Our questionnaire can be used for work-related risk stress assessment both in public organizations and in private companies. Its main application is for the assessment of risk stress for office workers, independently from their roles and functions.

2. Methods

2.1. Sample and procedure

In this section we give a detailed presentation of the self-report questionnaire, one of the subjective tools of PRISMA-RA. We discuss here two aspects of instrument reliability: consistency (studied by means of Cronbach's Alpha) and stability (analysed by means of test-retest Pearson correlation).

The self-report questionnaire was completed by 943 workers in the 25-60 age range. The sample was made up of 599 male and 335 female. The percentage age of the sample was as following: 21-25 years old= 3.1%; 26-30 years old = 14.1%; 31-35 years old = 16.3%; 36-40 years old = 13.5 %; 41-45 years old = 18.6%; 46-50 years old = 15.7%; 51-55 years old = 9.5%; 56-60 years = 9.1%. Workers were recruited from public and private sector located in different geographical areas of Italy (North, Centre, and South).

A retest was performed after two weeks on a random sub-sample of 60 Workers. The results analysis confirms the psychometric stability of the instrument.

2.2. The questionnaire and procedure of scoring according HSE approach

We grouped the 12 homogeneous areas of our self-report questionnaire in 6 clusters, by similarity of content with the 6 areas of the HSE approach (HSE, 2007). We then studied the internal consistency (that is to which degree items are measuring the same underlying construct) of all items assigned to each cluster.

Our questionnaire allows to characterize a subjective profile of the worker with respect to the 6 HSE areas identified by HSE as the key ones for managing work-related stress in an organization. According to HSE, their poor management is related to poor health and well-being conditions, a lower productivity and higher number of sick leaves.

These 6 areas are (HSE 2007):

- **Demands**: including issues such as workload, work patterns and the work environment
- **Control**: the worker's perception of her influence in how their work is done
- **Support**: referring to the encouragement, sponsorship and resources made available to the worker by her organisation, colleagues, and managers

- **Relationships**: relative to conflict avoidance and to dealing with unacceptable behaviour
- **Role**: the worker understanding of their role within the organisation and whether the organisation ensures they do not have conflicting roles
- **Change**: referring to how organisational change is managed and communicated in the organisation

Table 1 shows how our 12 homogenous areas have been grouped into the 6 clusters corresponding to the 6 HSE areas and how many of the 90 items are present in each cluster:

Table 1. Matching between HSE areas and our questionnaire areas.

HSE Management Standards areas	*Our Areas*	*Total number of items*
DEMANDS	*WORKLOAD* *WORK ORGANIZATION* *WORK ENVIRONMENT*	*19*
CONTROL	*WORKER'S AUTONOMY*	*9*
SUPPORT	*ENCOURAGEMENT* *SUPPORT* *RESOURCES*	*20*
RELATIONSHIP	*CONFLICT AVOIDANCE* *HANDLING DIFFICULT SITUATIONS*	*18*
ROLE	*ROLE* *RESPONSIBILITY*	*12*
CHANGE	*CHANGE MANAGEMENT AND COMMUNICATION*	*12*

2.3. Statistical analysis

Means, standard deviations and Cronbach's alpha coefficients were calculated for each of the 6 clusters corresponding to the 6 HSE areas. Test-retest reliabilities for each item have been assessed using Pearson's correlation coefficients. Basic statistical analysis has been carried out with version 19.0 of the SPSS statistical software, where significance has been assumed at $p<0.05$.

2.4. Reliability, stability and consistency

We estimated the coefficients of internal consistencies (Cronbach's alpha) and the coefficients of stability (test-retest Pearson correlation).

Values for Cronbach's alpha relating to the PRISMA questionnaire is shown in Table 2: all values are between 0.65 and 0.90.

The "support" area has the highest internal consistency ($\alpha = 0.90$) whereas the "relationships" area is the one with the lowest internal consistency ($\alpha = 0.65$).

Table 2. Internal Consistency: values of alpha Coefficients.

HSE Management Standards areas	*Our Areas*	*alpha*
DEMANDS	*WORKLOAD* *WORK ORGANIZATION* *WORK ENVIRONMENT*	*.80*
CONTROL	*WORKER'S AUTONOMY*	*.85*
SUPPORT	*ENCOURAGEMENT* *SUPPORT* *RESOURCES*	*.90*
RELATIONSHIP	*CONFLICT AVOIDANCE* *HANDLING DIFFICULT SITUATIONS*	*.65*
ROLE	*ROLE* *RESPONSIBILITY*	*.84*
CHANGE	*CHANGE MANAGEMENT AND COMMUNICATION*	*.85*

As a second evaluation of reliability, we used the test-retest reliability procedure to assess the consistency of measurements executed at two different times (range 30 days) on a sub-sample of 60 workers recruited from four randomly-selected institutions.

The high correlation between these measurements shows a high test-retest stability of our 6 clusters: Pearson's correlation coefficients ranges from 0.85 to 0.94 ($p<0.001$).

3. Conclusions

In this paper we described the psychometric characteristics of one of the subjective tools of PRISMA-RA, an integrated set of tools for work related stress Risk Assessment.

We discussed its internal consistency (Cronbach's alpha) and stability (test-retest Pearson correlation) measured on a sample of workers in the public and private sector (N = 943).

The presented results confirm its psychometric reliability.

Our questionnaire can be used for work-related risk stress assessment both in public organizations and in private companies. Its main application is for the assessment of risk stress for office workers, independently from their roles and functions.

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EXPERIENCING AUTHENTICITY AT WORK: THE MODERATING EFFECT OF PERSONALITY ON THE RELATION BETWEEN ORGANIZATIONAL CLIMATE AND WORKPLACE AUTHENTICITY

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Abstract

Authenticity, being true to oneself and acting in congruence with one's values and beliefs, is a basic human strength, and is instrumental to understanding well-being. While *dispositional* authenticity was found to be associated with positive affect and subjective well-being, others have demonstrated that individuals assumed different levels of authenticity when they took up different social roles, suggesting that *state* authenticity can be an alternative mechanism. This study examined the underlying mechanisms behind expressing and experiencing authenticity at work, so as to identify antecedents that could enhance employee well-being and job satisfaction. We hypothesize that state authenticity at work will be predicted by psychological safety climate (organizational climate where employees feel safe to speak up without being embarrassed or rejected). Yet, the relation will be moderated by one's personality, e.g., the effect of psychological safety climate on authenticity at work will be stronger for those who are high on personal dispositions (such as responsibility and veraciousness), and weaker for those who are high on interpersonal dispositions (such as face, harmony, and defensiveness). Employees are expected to experience higher subjective well-being and job satisfaction as a result of being authentic at work. Survey results provided support to the hypotheses. Psychological safety climate enhanced employees' authenticity state at work, which in turn improved well-being and job satisfaction. In addition, the moderation effect of personality on the relation between psychological safety climate and workplace authenticity was partially supported. In conclusion, we found that employees become more authentic at work in an organizational climate where they feel safe to express themselves, leading to a higher job satisfaction and well-being. The current study contributes to the understanding of underlying mechanisms behind experiencing authenticity at work among employees in Hong Kong. Our findings are expected to provide insights and to raise organizations' awareness of creating an open and trustful culture in order to enhance job satisfaction of employees through encouraging them to "be themselves".

Keywords: *authenticity, authenticity at work, job satisfaction, personality, psychological safety climate.*

1. Introduction

"To thine own self be true", a line extracted from *Hamlet*, the last piece of paternal advice from Polonius to his son Laertes who is in a hurry to get on a boat to Paris, and perhaps also historically the earliest advice from Shakespeare on living a proper life.

Authenticity- being true to oneself, is an important construct to study because it has meaningful implications. From individual's life satisfaction such as subjective well-being (Ménard & Brunet, 2011), to job performance measured by customer satisfaction (Grandey, Fisk, Mattila, Jansen, & Sideman, 2005), the relationship between dispositional authenticity and its outcomes has long been established. However, consistent to what social psychologists proposed, people report that their personality varies across different social roles. Not surprisingly, psychologists start to differentiate between dispositional and situational authenticity.

As a person goes to work every day for at least 1/3 of his lifetime, it is important to find out factors leading to job satisfaction. Workplace authenticity is thus studied in this paper. As Ménard and Brunet (2011) suggested, there is a growing need to promote authenticity within organizations. The implications can be as meaningful as that of dispositional authenticity. Not only can it be positively related to individual's subjective well-being and job satisfaction (Van den Bosch & Taris, 2014), but also can it be further associated with the overall organizational effectiveness and productivity when employees are satisfied and committed.

However, authenticity at work is a rather new concept. In fact, a psychometrically valid measure of the construct has just been developed and published recently (Van den Bosch & Taris, 2014). In view of this, the purpose of this paper serves to understand more about authenticity in the workplace domain, specifically the underlying mechanism associated with employees' authenticity at work.

1.1. Organizational Climate and Workplace Authenticity

Human exists in contexts, environmental factors should thus be taken into account when studying human behaviors. Likewise, organizational climate could serve as a crucial factor as to whether employees exhibit certain job-related behaviors (Baer & Frese, 2003). *Psychological safety climate* was chosen for this study as it is proposed to be highly related to whether the organizational environment fosters an expression of authenticity at work. According to Baer and Frese's (2003), psychological safety climate refers to 'formal and informal organizational practices and procedures guiding and supporting open and trustful interactions within the work environment'. In another word, an organizational climate in which employees would feel safe to speak up without being embarrassed or rejected. In a study done to investigate the relationship between employees' learning behaviors and team psychological safety, it was found that learning behaviors such as admitting errors, seeking feedback, and asking for help, were found in team reported higher psychological safety (Edmondson, 1999). Thus, in some environments where mutual respect is embraced and interpersonal threat is sufficiently low, employees were expected to speak up more and feeling more comfortable being themselves. Thus, it is hypothesized that a psychological safety climate should facilitate and encourage employees' authenticity at work because it provides an environment that fosters openness and mutual respect, which alleviates the concerns about receiving embarrassing or discomforting feedbacks from others while expressing one's true opinions and emotions in the organization.

1.2. Personality and Authenticity

Research regarding the personality-performance (on-the-job) relation has been robust over the past few decades. Meanwhile, as Motowidlo, Borman, and Schmit (1997) elaborated, personality measures are more successful in predicting the contextual rather than technical component of job performance. As authenticity at work can be regarded as a kind of contextual performance, it is therefore proposed that personality measures are related to workplace authenticity.

In particular, personality measures can be categorized into two domains, namely the interpersonal and the personal domain (Campbell, 1990; Campbell, McCloy, Oppler, & Sager, 1993; Kwong & Cheung, 2003). The interpersonal domain captures personality traits that predispose individual's behaviors in dealing with face-to-face interactions, whereas the personal domain includes traits that are more related to the inner virtues of individuals. It is hypothesized that the relationship between psychological safety climate and workplace authenticity is moderated by personality variables.

2. Objectives

Through investigating the effect of environmental factor (*Psychological Safety Climate*) and dispositional factors (*Interpersonal* and *Personal Dispositions*) on workplace authenticity, it would provide powerful insights on how to enhance people's authenticity at work, hence promoting individual's psychological well-being and organizational effectiveness.

3. Methods

Participants were recruited from different organizations with different occupations. Since authenticity at work will be measured, only participants who have worked at the organization for not less than 3 months were included so as to ensure that there is thorough interaction with colleagues within their workplace. A set of questionnaires was collected from the participants in the format of an online survey. The survey included self-evaluated workplace authenticity, psychological safety climate, dispositions, well-being, and job satisfaction measures.

3.1. Results

Survey results provided support to the hypotheses. Psychological safety climate enhanced employees' authenticity state at work, which in turn improved well-being and job satisfaction. In addition, the moderation effect of personality on the relation between psychological safety climate and workplace authenticity was partially supported.

4. Conclusions

In conclusion, we found that employees become more authentic at work in an organizational climate where they feel safe to express themselves, leading to a higher job satisfaction and well-being. The current study contributes to the understanding of underlying mechanisms behind experiencing authenticity at work among employees in Hong Kong. Our findings are expected to provide insights and to raise organizations' awareness of creating an open and trustful culture in order to enhance job satisfaction of employees through encouraging them to "be themselves".

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DOES SUPERVISORY SUPPORT EASE PAINS OF EMOTIONAL LABOR? – MODERATING ROLE OF PERCEIVED SUPERVISOR'S EMOTIONAL LABOR

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Abstract

The effects of supervisory and organizational factors on buffering the negative impact of surface acting on employees have been gaining considerable attention in organizational research. Given that supervisors build most frequent and significant contacts with employees inside the organization and that employees in the service industry are particularly sensitive to emotional expressions, this ongoing study investigates the links between employees' surface acting and job satisfaction, burnout as well as whether these relations will be moderated by two supervisor characteristics: perceived supervisory support and perceived supervisory emotional display. With a targeted sample size of 250, we have been recruiting employees from a wide variety of customer service professions to complete a survey which is designed to measure the aforementioned variables. Our major hypotheses are that employees' surface acting predicts job satisfaction and burnout level, and that perceived supervisor support interacts with perceived supervisory emotional labor to moderate the surface acting—outcome links. Preliminary findings have provided some support to the hypothesized model. Specifically, supervisors who are perceived to be high in surface acting are also regarded as fake and pseudo, hence the moderating effect of their support on the detrimental impact of employees' surface acting is attenuated, resulting in lower job satisfaction and higher burnout; whereas perceived high supervisor's deep acting, as associated with genuine and authenticity, enhances the moderating effect of supervisory support, leading to higher job satisfaction and lower burnout. This study extends the existing findings by examining effects of perceived supervisory emotional labor for service industry employees to cope with surface acting. Our findings also provide insight to organizations about the importance of developing leaders' emotional regulation skills to better support their subordinates.

Keywords: *emotional labor, supervisory support, burnout, job satisfaction.*

1. Introduction

After being brought up by Hochschild in 1983, emotional labor has received high attention in the research field due to its significant impact on the employees' well-being. Especially in today' economy, where 8 out of 10 employees are in service industrial (Fitzsimmons & Fitzsimmons, 2001), they involve in intense interaction with clients and customers all the time and are supposed to express certain emotions required by the organization during the interaction. For example, following the customer-oriented trend, organizations are endorsing the "serve with a smile" policy so that workers are supposed to express happy and warm feelings when providing services. However, projecting such feelings may need effort when they are not genuinely felt. This management of emotion state to display certain feelings can be identified as emotional labor (Hochschild, 2003).

Past studies have proved that emotional labor has several negative consequences such as low job satisfaction and high burnout possibility. Researchers are trying to explore both the employees' individual factors and organizational variables that could help reduce the negative impact of emotional labor. Since the concept of emotional labor is mainly a product of organizational display rules, the organizational factors are more of the focus in the recent studies. Job requirements like frequency and intensity of emotional display, job conditions such as autonomy, and also social and organizational support are all reported to be able to attenuate the negative effects of emotional labor (Abraham 1998; Duke, Goodman, Treadway, & Breland, 2009; Johnson & Spector, 2007; Morris & Feldman, 1996, 1997). Supervisors contact most frequently and directly with workers in the organization and are supposed to act as a model for their direct report. Therefore, they are believed to be the most important role inside the organization to

exert influence on employees (Wilk, & Moynihan, 2005). However, the role of the supervisors' behaviors in the relationship between employees' emotional labor and its negative consequences hasn't been much studied before. This study mainly aims to explore the effect of supervisor's support and emotional display on the relationship between service providers' emotional labor and its negative consequences.

The research in emotional labor literature has mainly focused on "people work" in customer service industry. The emotion labor of employees inside the organization has not yet been fully detected. The fact is that emotional regulation is actually very common for internal incumbents, especially for managers and leaders. They need to frequently regulate their emotions to influence their followers' mood (Humphrey, Pollack, & Hawver, 2008), since the followers' affect has been proved to affect the job performance (Collins, Lawrence, Troth, & Jordan, 2013). For instance, aligning with the call for "management of people" (Delery, & Shaw, 2001), supervisors are supposed to be positive and supportive to their direct report. Therefore, there are certain display rules for them too. In fact, the frequency and intensity for supervisors to perform emotional lab in their daily job have been tested to be no less than the service providers do (Brotheridge & Grandey, 2002; Humphrey et al., 2008).

Despite a large number of studies linking emotional labor and its negative impact for laborer, research on how emotional labor would influence the receiver is still in its infancy. Recent studies examined the effects of employees' self reported emotional labor on customers' affect, their evaluation of the service quality and even future loyalty (Groth, Hennig-Thurau, & Walsh, 2009; Hennig-Thurau, Groth, Paul, & Gremler, 2006; Van Dijk, Smith, & Cooper, 2011). However, some researchers argue that the influences of emotional labor on the customers are not determined by the emotional level reported by service providers per se, but by the perceptions from the customers (Groth et al., 2009; Van Dijk et al., 2011). Following the employee-customer framework, supervisor and member relationship is also a social interaction process (Meindl, 1995) so that the emotional labor of the supervisor should also influence of its members in certain ways. Similarly, the impact of emotional labor is also not solely depended on the strategies leaders choose to express their support through surface or deep acting, but also by the perception and attribution of followers (Calder, 1977; Dasborough & Ashkanasy, 2002; Diefendorff & Gosserand, 2003; Humphrey et al, 2008). Present study extends literature of emotional labor by investigating how this perceived emotional labor of supervisors could interact with supervisor support in moderating the negative impact of service industry employees' surface acting level. We are concentrating on the service industry because people working in service industry are required to pay attention to customers needs so that they usually have higher emotion sensitivity (Zapf, Vogt, Seifert, Mertini, & Isic, 1999), thus making them more subject to their supervisors emotional display. In addition, leaders in service industry may feel more responsibility and pressure to express support and positive feeling to elicit right emotions from workers in order to please customers. Hence, their emotional labor level would be higher.

2. Method

2.1. Participants and procedure

The study will collect data through an on-line survey platform. Employees from a wide variety of service professions who have regular contact with their direct supervisor are allowed to complete the survey. The target number of participants is 250.

2.2. Measures

The survey starts with demographic data of the participants which include age, gender, supervisor gender, years of service in current job, education level and salary level. Participants are also asked to report upon their emotional labor level, burnout level and job satisfaction. Participants will also report upon their perceived supervisor support and how they perceive their supervisors' use of surface and deep acting using the scales described below.

Surface acting. Items measuring employee's surface acting are adopted from Diefendorff's study (2005). It combines Grandey's (2003) 5 items of Emotional Regulation Scale and two items from Kruml and Geddes (2000). Items will be rated on a 7-point Liker scale (1 "never" to 7 "always") about the frequency of occurrence. Sample questions for surface acting is like "I just pretend to have the emotions I need to display for my job".

Burnout. To assess employees' burnout level, the Maslach Burnout Inventory (Maslach & Johnson, 1981) was administrated. The MBI consists 22 items that measures three burnout dimensions: emotional exhaustion (example: "I feel emotionally drained from my work."), depersonalization (example: "I feel I treat some clients as if they were impersonal 'objects'.") and personal accomplishment (example: "I feel very energetic."). Items are rated on a 7-point Liker scale (1 "strongly disagree" to 7 "strongly agree") about the extent of agreement.

Job satisfaction. We measure the job satisfaction using the three items from the Job Content Survey. A sample statement is "Generally speaking, I am satisfied with this job". Items are also rated on a 7-point agreement scale.

Supervisor support. Supervisor support is measured using the shortened version from Greenhaus, Parasuraman and Wormley (1990) and we adapt the items in the same way as Wilk and Moynihan. A sample item is "My supervisor gives me helpful feedback about my performance". All items are rated on a 7-point agreement scale.

Perceived emotional labor. A modified version of Grandey's 8-item emotion regulation scale is used to measure the perceived emotional labor of supervisors. We adapt the scale in the same way as Brotheidge and Lee, Frisk and Friesen and others, asking participant to rate on a 7-point Liker scale (1 "never" to 7 "always") about how frequently they believe their supervisor "just pretend to have the emotions he/she needs to display for his/her job" (surface acting) and "try to actually experience the emotions he/she must show" (deep acting).

3. Conclusion

The study is to explore the role of supervisor's characteristics in buffering the consequences of surface acting. We will say that perceived supervisory support and perceived supervisor's emotional albor will interact together to moderat the negative impact of surface acting on employees well-being. Supervisors who are perceived to be high in surface acting are also regarded as fake and pseudo, hence the moderating effect of their support on the detrimental impact of employees' surface acting is attenuated, resulting in lower job satisfaction and higher burnout; whereas perceived high supervisor's deep acting, as associated with genuine and authenticity, enhances the moderating effect of supervisory support, leading to higher job satisfaction and lower burnout.

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DESCRIPTION OF MENTAL REPRESENTATIONS OF ATTACHMENT AMONG TEACHERS WITH AND WITHOUT VICTIMIZATION EXPERIENCES

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Abstract

The focus of this study was on the description of mental representations of attachment among teachers with and without workplace victimizations experiences, taking into consideration the measurement of self-reported frequency of victimization in school context. Frequent and rare workplace victimization was reported by 21% (n=52) and 52% (n=128) of teachers, respectively; and nonvictimization by 27% (n=66) of teachers (M=43.2; SD=8.4). Research question was evoked: What are the descriptive characteristics of mental representations of attachment measured by the Adult Attachment Projective (AAP) among teachers with and without workplace victimization experiences. To evaluate the internal representations of attachment, the AAP (George & West, 2012) was used in the modified way - subjects were asked to write a story about what is happening in the alone and dyadic pictures. A quantitative content analysis was conducted to analyze responses to the set of four stimuli drawings and to investigate differences between three study groups' teachers' descriptions. Statistically significant differences were found in the mental representation and defensive processes categories of victimized and non-victimized groups: (1) teachers with rare and frequent workplace victimization experiences showed more characteristics of insecure attachment (insecure base, asynchrony in relationships or no relationships, distress about authoritarian power, incapacity to act, and overwhelming by unprotected experiences); (2) teachers without workplace victimization experiences revealed more characteristics of secure attachment (secure base, safe haven, maintenance and need of physical proximity, connectedness and synchrony of mutual relationships); and (3) the pattern of defensive processes in relation to frightening and threatened attachment events was predominant for teachers with frequent workplace victimization experiences. The results of this pilot study suggested that insecure attachment may play a role in the teacher-targeted workplace victimization behavior.

Keywords: *adult attachment projective, attachment, teachers, workplace victimization.*

1. Introduction

The definitions if school (Smith, 2011) and workplace (Coyne, 2011) bullying are comparable, emphasizing persistent and repeated negative actions which are intended to intimidate or hurt another person in a weaker position. Olweus (1999) characterizes bullying as a subset of aggressive behavior, involving repetition and imbalance of power.

A systematic review results Moayed et al. (2006) showed associations between organizational problems and workplace bullying and between a victim's personality and workplace bullying. Victimization at workplace among adults has been associated with negative outcomes including individual psychological and physical negative effects, unconstructive coping and problem-solving styles, and negative organizational outcomes (Coyne, 2011) and with history of bullying at school (Smith et al., 2003). Schäfer et al. (2004) have revealed that victimization in school has long term associations with several aspects of functioning (including insecure fearful attachment style) in adult life among teachers and students. The other study with regards to attachment style and bullying behavior among adults is done in forensic context (Ireland & Power, 2004) showing that offenders who bully others and/or are victimized themselves can be distinguished by their insecure (avoidant) attachment styles from pure bullies and those not-involved in bullying in prison. Thus, few previous researches on adult attachment and workplace bullying have concentrated to adult attachment styles, whereby there is a plenty of evidence (review: Hansen et al., 2012) that parent-child relationships characterized by insecure attachments (e.g. anxious/resistant attachment and avoidant) styles are predictive of school bullying victimization.

Adult attachment style is a social-cognitive model of personality and adult attachment status is a generalized representation of attachment experiences. Adults with organized attachment status use a range of strategies to manage feelings of need, closeness, and intimacy, to assuage attachment distress, and to maintain psychological closeness to attachment figures. Developmental representational measures of adult attachment assess attachment status (e.g. the Adult Attachment Projective Picture System; AAP) - patterns of thinking and the effects of childhood attachment experiences, and the attachment style approach asks individuals to report generically on their feelings about self and attachment figures (George & West, 2011; Shemmings, 2004).

There is a growing interest in the area of research on adult attachment status among clinical samples with overwhelming case studies – for example among patient with intellectual disabilities (Gallichan & George, 2014) and among inpatients diagnosed with depression and a sample of healthy individuals (Fizke, Buchheim, & Juen, 2013). Kissgen et al. (2009) have examined the distribution of the attachment representation in mothers of children with attention deficit hyperactivity disorder (ADHD) and reveled that adult insecure (unresolved) attachment representations increased and secure attachment status decreased with the degree of severity of children's ADHD symptoms.

This remains, however, an under-researched area to examine the descriptions of the attachment representation among teachers with and without workplace victimization experiences, but a tentative link have been followed between the experience of victimization in later life and early formed attachment styles. This paper aims to describe mental representations of attachment among teachers with and without workplace victimization experiences by means of a quantitative content analysis.

Research question was evoked: What are the descriptive characteristics of mental representations of attachment measured by the AAP among teachers without workplace victimization experiences and with (rare and frequent) workplace victimization experiences.

2. Method

2.1. Sample design and size

Survey estimates are derived from a stratified, multi-stage cluster sample: in the first stage randomly selected four schools were selected from all separate districts from Estonia representing basic schools and gymnasiums in rural and urban areas; in the second stage of sampling all teachers from in each school were selected; and during stage three teachers with and without workplace victimization experiences was identified.

Whole sample consisted of 246 teachers: 209 females (85%) and 37 males (15%). The mean age of the subjects in this year was 43.2 years (SD=8.4) with youngest subject was 23 years old and the oldest was 67 years old. The average number of years in the teaching profession for the participants was 13.4 years (SD=5.4).

2.2. Instruments

A self-reported instrument for the measurement of prevalence of different types of bullying of teachers by adults (other teachers, administration parents and maininance staff) in school context was developed (Kõiv, 2011) consisting of 15 items which described acts harming or hurting the target person. Participants indicated how often they had been bullied at work on a weekly basis using a 3-point scale (never, often, very often) after a definition of bullying by following the pattern established by Olweus (1999). A person was considered a victim when they reported being bullied in more then one ways "often" or "very often" and classified accordingly as "person with rare victimization experiences" or "person with frequent victimization experiences". The third type of classification of persons was "persons without victimization experiences" when they self-reported being bullied "never" across all 15 questionnaire items in the school context.

The Adult Attachment Projective Picture System (AAP, George & West, 2001; George & West, 2012) was used for adults' story responses to ambiguous pictures of hypothetical attachment situations to evaluate characteristics of mental representations of attachment. The subjects were asked to write a story about what is happening in the picture, what led up to the scene, what the characters are thinking and feeling, and what might happen next. The drawings portray children or adults alone (alone pictures) or in attachment-caregiving dyads (dyadic pictures) and the four drawings (two alone and two dyadic) in the AAP stimuli battery set were used in order: (1) *bench* (a figure seated on a bench); (2) *bed* (an older person sitting on a bed facing a young person with outstretched arms in the bed); (3) *ambulance* (an older female standing next to a seated young person in front of what could be a window, viewing two people outside handle a person on a gurney next to an ambulance); and (4) *corner* (a young person in a corner with arms slightly raised and face averted) (George & West, 2012).

A quantitative content analysis was used to analyze the categories of the attachment at the mental representational level by comparing responses of teachers without and with (rare and frequent) workplace victimization experience using a slightly modified version of the AAP. Chi-square was used to test for the differences between the three victimization groups responses categories calculated by percentages.

3. Results

Within whole sample (n=246), 66 (27%) of respondents were classified as teachers without workplace bullying experiences and 180 (73%) of respondents have classified as with teachers with workplace victimization experiences: 128 of them (52%) with rare and 52 (21%) with frequent workplace victimization experiences. Statistically significant differences, as measured by chi-square testing were found in the descriptions of mental representation categories between victimized and non-victimized groups.

Teachers without workplace victimization experiences were significantly more likely than teachers with rare and frequent victimization experiences to offer the category "ability of attachment figure to help, support, watch over child" (accordingly: χ^2=10.1, p<0.00; χ^2=9.8, p<0.00), "reciprocal attachment figure-child maintenance of physical proximity" (accordingly: χ^2=7.7, p<0.01; χ^2=7.1, p<0.01), "child's need for physical proximity" (accordingly: χ^2=5.0, p<0.05; χ^2=7.1, p<0.01), "ability of an attachment figure to comfort, care, and protect child" (accordingly: χ^2=6.8, p<0.05; χ^2=6.2, p<0.05), "child's wish to be in a relationship and interact with attachment figure for some reason" (accordingly: χ^2=6.9, p<0.01; χ^2=8.9, p<0.01), "mutually satisfying, reciprocal interactions (accordingly: χ^2=29.7, p<0.00; χ^2=29.7, p<0.00), and "child's constructive steps to change a stressful or difficult situation (accordingly: χ^2=24.0, p<0.00; χ^2=27.2, p<0.00).

Teachers with rare and frequent victimization experiences were more likely than teachers without victimization experiences to suggest the category "rejection of attachment figure for care" (accordingly: χ^2=5.5, p<0.05; χ^2=5.3, p<0.05), "child is passive, alone, feels aloneness" (accordingly: χ^2=14.1, p<0.00; χ^2=4.0, p<0.05), "character as sick child without attachment figures' behavior of providing sensitive care" (accordingly: χ^2=4.6, p<0.05; χ^2=5.1, p<0.05), "child's unconstructive steps to change a stressful or difficult situation" (accordingly: χ^2=17.0, p<0.00; χ^2=14.4, p<0.00), "child's distress about breaking rules of authority and punishment" (accordingly: χ^2=5.9, p<0.05; χ^2=4.9, p<0.05), "child is unprotected and victim of bullying of peers" (accordingly: χ^2=7.7, p<0.01; χ^2=7.1, p<0.01), and "detailed descriptions of the picture" (accordingly: χ^2=7.9, p<0.01; χ^2=7.2, p<0.01).

Additionally, it was found that differences between teachers with frequent workplace bullying experience and teachers with rare and no victimization experiences revealed among three categories: "rejection and isolation of child by peers" the category " (accordingly: χ^2=9.2, p<0.01; χ^2=4.2, p<0.05), "child is frightened and depressed" (accordingly: χ^2=9.0, p<0.01; χ^2=5.5, p<0.05), and "child feels helplessness, isolation and abandoned" (accordingly: χ^2=12.5, p<0.00; χ^2=7.8, p<0.01) with dominant categories among fist mentioned subjects' responses (Table 1).

Table 1. Frequencies of key categories of descriptions of attachment representations and corresponding characteristics of attachment behavior.

Characteristic of attachment behavior	Categories of attachment pattern description	Teachers without victimization experiences *f*=286	Teachers with rare victimization experiences *f* =371	Teachers with frequent victimization experiences *f* =249
Secure base	The ability of attachment figure to help, support, watch over child	4.5%	0%	0%
Physical proximity	Reciprocal maintenance of physical proximity	3.8%	0%	0%
Need for proximity	Child's need for physical proximity	13.3%	7.7%	6.0%
Safe haven	Ability of an attachment figure to comfort, care, and protect child	4.1%	0%	0%
Connectedness	Child's wish to be in a relationship and interact with attachment figure for some reason	4.2%	0.8%	0%
Synchrony in relationships	Mutually satisfying, reciprocal interactions	9.1%	0.3%	0%
Capacity to act	Child's constructive steps to change a stressful or difficult situation	11.9%	2.7%	0.8%
Need for secure base	Child's need for help and support of	9.1%	7.0%	6.4%

	child			
Need for safe haven	Child's need for comfort, care, love, fondness and protection of child	3.5%	2.9%	2.0%
Insecure base	Rejection of attachment figure for care	2.1%	7.2%	7.6%
No relationships	Child is passive, alone, feels aloneness	2.8%	10.8%	5.6%
Asynchrony in relationships	Character as sick child without attachment figures' behavior of providing sensitive care	0%	2.2%	2.8%
Incapacity to act	Child's unconstructive steps to change a stressful or difficult situation	0%	6.5%	5.8%
Distress about authoritarian power	Child's distress about breaking rules of authority and punishment	4.2%	9.4%	8.4%
Overwhelming by unprotected experiences	Child is unprotected and victim of bullying of peers	0%	4.8%	6.1%
Description of picture	Detailed descriptions of the picture	0.3%	3.7%	4.0%
Interactive failure	Attachment figure responding to the situation but not to the child's attachment need	3.8%	2.8%	2.4%
Withdrawn behavior	Child's withdrawal, withhold behavior, frustration, anger	6.9%	7.0%	7.4%
Negative emotional arousal	Child is sad, dejected, resentful	8.4%	12.1%	6.4%
Peer rejection of child	Rejection and isolation of child by peers	4.5%	6.5%	12.9%
Overwhelming by frightening	Child is frightened, depressed	3.5%	5.1%	10.4%
Overwhelming by threatening experiences	Child feels helplessness, isolation and abandoned	0%	0.5%	4.8%

4. Conclusions

This paper presents the results of a pilot study conducted to examine differences in the descriptive characteristics of mental representations of attachment between teachers with and without workplace victimization experiences. A quantitative content analysis was used in this study to examine content of mental representations of attachment among three groups: nonvictimized teachers, teachers with rare and frequent experiences of being bullied.

Results of the study showed three tendencies. Firstly, the content of mental representations of attachment of teachers without workplace bullying experiences reflected more frequent descriptions of characteristics of secure attachment in the area of availability and supportiveness of attachment figures (secure base, safe heaven, physical proximity and need for physical proximity), in the descriptions of rewarding reciprocal relationships (connectedness and synchrony), and in the area of children's perspective to perceive themselves as worthy of support to have a capacity to act. Second, the prevalent descriptions of mental representations of teachers with rare and frequent workplace bullying experiences consisted characteristics of insecure attachment in the characteristics of rejection of attachment figure (insecure base), in the descriptions of unrewarding and punishing relationships (asynchrony or no relationships, authoritarian power), and in the area of children's perspective to perceive themselves as unworthy of support (unprotected) to have a capacity to act. Additionally, it was revealed that teachers with frequent workplace bullying experiences were overwhelmed with defensive strategies with regard to attachment involving segregated systems (overwhelmed by frightening and threatening experiences of care) with children's perspective to perceive themselves as rejected by peers.

Revealed tendencies of this study were parallel with results of clinical attachment status studies (Kissgen et al., 2009): the prevalence of description of characteristics of insecure attachment representations tended to increase with the degree of frequency of teachers' workplace victimization experiences - it was highest among group of teachers with frequent victimization experiences, expressed less strongly in the group of teachers with rare victimization experiences, and was lowest prevalence among teachers without victimization experiences.

Schäfer et al., (2004) stated that childhood attachment styles can be predictive of teachers' and university students' involvement in the retrospective victimization at school; this study indicated that teachers' attachment status can be contribute as a risk factor to the development of workplace victimization of teachers. There is a need for more research to address these findings, potentially among other occupation participants, as one of the identified limitations of this study was and the need to use

other measures (e. g. the Adult Attachment Interview) for identifying attachment status of adults. Also, this study was limited to the assessment of secure-insecure attachment descriptions rather than the often-used four attachment adult attachment status classifications. In spite of these limitations, the study describe the preliminary work to use the AAP stimulus drawings among teachers with and without workplace bullying experience to discriminate differences in their attachment representations related to responses to the story writing task.

Results from this preliminary study may suggested that insecure attachment in the area of expectations of self, other people and relationships as characteristics of mental representations of attachment may play an important role in workplace victimization of teachers; and that attachment status measurement tools may be useful when planning new research among teachers and other professional groups.

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PROACTIVE COPING AND ADAPTATION TO A NEW WORKPLACE[i]

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Abstract

The main goal of the study was to investigate the role of proactive coping in adaptation to a new workplace. The study was conducted among individuals who are especially vulnerable for negative effects during adaptation process, namely organizational newcomers. The sample consisted of the new workers (n=56) who voluntary agreed to participate in the study. The relationship between personal traits, social factors, and proactive coping in a new workplace, has been examined in relation to adaptation outcomes (work orientation and job satisfaction). The regression analysis showed significant relation between proactive coping and adaptation factors (job satisfaction and work orientation). In follow, mediation analysis indicated this kind of coping as mediating the relation between both, task efficacy and emotional costs, and job satisfaction. The social support was assumed in the study as an important environmental factor during adaptation process. The results demonstrated direct and moderation effect of received social support on proactive coping and its relation with work orientation.

Keywords: *proactive coping, work adaptation, organizational newcomers.*

1. Introduction

The need of understanding how people adapt to a new workplace seems to be crucial in the organizational socialization approach. Adaptability is generally defined as ability to change to fit into new circumstances. The evidence of adaptability involves mostly dispositional source of how employees adapt to changes in their work environment (Fugate & Kinicki, 2008). Recent research however indicates the importance of personal initiative and proactivity in understanding employee's behaviors (Seibert et al., 2001). In this conception, adaptable individuals tend to prepare in advance of specific or known threats or changes rather than waiting for a specific change or demand to occur (Aspinwall & Taylor, 1997). They also proactively create and realize opportunities. This conceptualization of adaptability based on active adaptation and proactivity at work (Ashford & Taylor, 1990). Previous research has shown that proactivity positively influences job performance and job satisfaction (Seibert et al., 2001). Proactive adaptability at work describes employees' behaviors. Proactively engaging one's work environment is thought to enhance adaptability at work as it increases perceptions of control (Aspinwall & Taylor, 1997).

Proactive coping (PC) refers to a specific form of problem-focused coping in which people collect information about difficulties and through own behavior try to avoid stressful outcomes (Aspinwall & Taylor, 1997). Thus, proactive individuals are likely to use appropriate problem-focused coping behaviors to deal not only with occurring, but also with potential future stressors. Foregoing aspects shows proactive coping as more effective than standard problem-focused coping. Thus, proactive coping might play a crucial role in adaptation process, reducing the negative aspects of occupational reintegration, and in fact might lead to positive reemployment outcomes, that is employment status, job satisfaction, and intention to turn-over.

2. Objective

The purpose of the study was to identify factors which foster work adaptation success. The target group of interest was organizational newcomers, particularly those who were previously unemployed. Whereas previous research has identified specific predictors, we go beyond that and want to show that they are effective because they are related to proactive coping (PC). Therefore, the main goal of this study was to investigate the role of PC for adaptation to a new workplace. The present study focuses on

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understanding how reemployed individuals cope with this specific situation. It has been hypothesized that PC improves positive work adaptation outcomes.

3. Study design

3.1. Participants and procedure

The sample comprised the 56 organizational newcomers who have voluntary agreed to participate in the study. 54% of the sample were male subjects what reflects the real workforce population. The mean age was 29 years (SD=5.85; range = 20-42). Before getting actual job the respondents were mostly employed in another organization (61.7%). 29.8% of the sample was previously unemployed and the average length of unemployment was 5 months. Only ~10% of participants have been classified as school-leavers.

3.2. Measures

The measures consisted of several psychometric scales referred to coping, personal and social resources, adaptation stress, adaptation outcomes and demographics:

SCALES USED IN THE SURVEY	
1.	Proactive Coping Inventory (PCI; Greenglass, E., Schwarzer, R., Taubert, S., 1999)
2.	General Self-Efficacy Scale (GSE; Jerusalem, M., Schwarzer, R., 1981)
3.	Adapting Self-Efficacy*
4.	Emotional Costs (Chudzicka-Czupała, A., 2010)
5.	Job satisfaction scale*
6.	Work orientation scale*
7.	Social support Scale (Ślebarska,K., 2010)
6.	Personal/demographic data

*scales developed for this study.

4. Results

Table 1 presents the correlation matrix of PC, emotional costs, GSE, adaptation outcomes, social support and demographic variables (age, and gender).

Table 1. Correlation between personal traits, social factors, and adaptation outcomes.

	1	2	3	4	5	6
1. PC						
2. Emotional costs	-,291*					
3. GSE	,624**	-,395**				
4. Adaptation efficacy	,358**	-,460**	,522**			
5. Job satisfaction	,436**	-,675**	,302*	,364**		
6. Work orientation	,113	-,538**	,287*	,398**	,378**	
7. Age	-,134	-,332*	,051	-,004	,179	,379**
8. Gender[a]	,118	-,168	-,009	-,114	,171	-,048

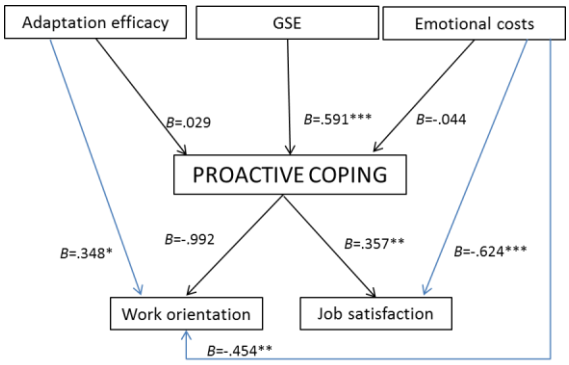
Notes: [a] Spearman correlation. * $p < .05$, ** $p < .01$. ; Gender: 1 = male, 2 = female.

PC were negatively related to emotional costs experienced in the new workplace, and positively associated with GSE, adaptation efficacy, and job satisfaction. Higher level of negative emotions experienced by organizational new-comers was further correlated with lower tendency to proactive coping as well as lower level of efficacy beliefs and poorer adaptation outcomes (job satisfaction and work orientation). The results indicate that the older workers experienced higher emotional costs in the new workplace. In accordance, age was positively related to work orientation. The adaptation outcomes were positively associated with PC, efficacy beliefs, and negatively correlated with emotional costs.

Figure 1 presents the regressions analysis used to test the relation between analyzed variables. As can be seen, during the first period of employment higher level of GSE was positively related one's

tendency to use PC. That indicates GSE as a significant factor in enhancing PC among organizational newcomers. PC had positive impact on one of job satisfaction, considered as one of the adaptation outcomes. In addition, task efficacy was positively associated with work orientation. Emotional costs were negatively related to both, work orientation and job satisfaction.

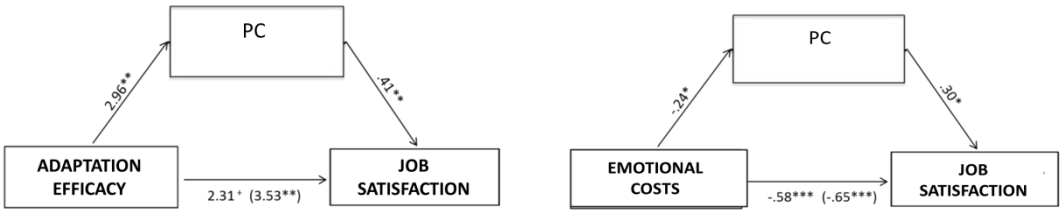
Figure1. The relations between analyzed variables.



*p < 0.05; **p < 0.01; ***p < 0.001

In order to test a mediating effect of PC, the Sobel test (Preacher, Hayes, 2004) was used. When adaptation efficacy and PC were entered as predictors of job satisfaction (R^2 =.239, F (2,52) = 7,87, p <0,001), the beta for task efficacy changed from 0.364 to 0.392, t = 1.082, p < 0.07, and the beta for PC was 0.35, p < 0.01. The Sobel test (Preacher, Hayes, 2004) showed Z = 1.841, p < 0.06. Figure 2 illustrates the direct and indirect effects of analyzed variables. The same calculation was made for emotional costs and PC as predictors of job satisfaction (R^2 =.518, F (2,52) = 26,85, p <0,05); the beta for emotional costs fell from -0.675 to -0.599, t = 5.833, p <0,001, and the beta for PC was 0.262, p < 0.05. The Sobel test showed Z=-1.58. The same calculation was applied to other analyzed variables, however the effect was not significant. Thus, PC partially mediated the effect of task efficacy and emotional costs on adaptation outcome: job satisfaction.

Figure 2. Mediated and direct effect of PC on job satisfaction ($^{*}p < 0.05$; $^{**}p < 0.01$; $^{***}p < 0.001$).



Finally, the moderation effect of social support on the relation between PC and work orientation was examined. In accordance to non-significant relation between focal variables, the moderation effect of social support adequacy received by the organizational newcomers was then tested by the hierarchical regression technique in which the interaction term, consisting of the product of PC and social support adequacy deviation scores, was entered at the second step of the regression, following the entry of the first order variables at step 1. The inclusion of the interaction term did significantly add to the prediction of problem solving (ΔR^2 = 0.07, p < 0.05), indicating the presence of a moderation effect, that is, the influence of PC on work orientation: Orientation at work varied significantly according to the social support adequacy received by the respondents (see Figure 3).

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Figure 3. Moderation effect of emotional support adequacy on the relation between PC and work orientation.

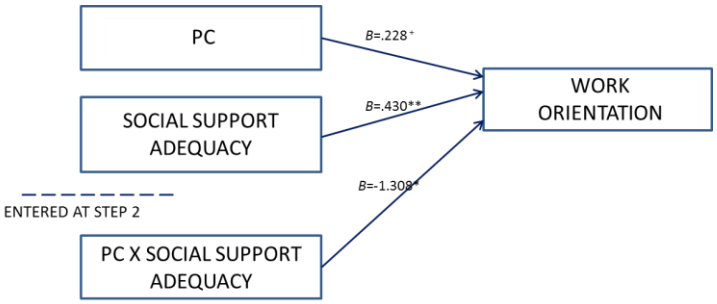
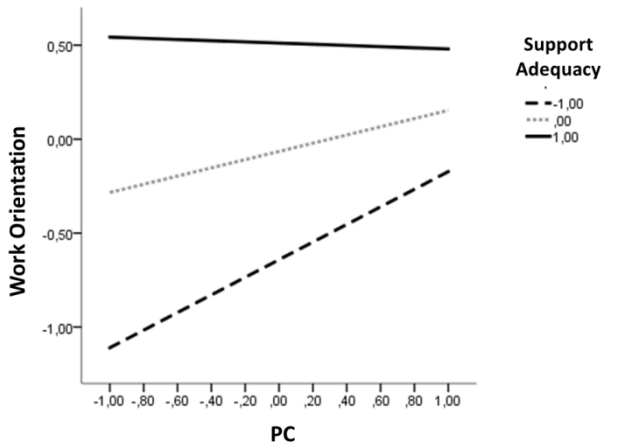


Figure 4 depicts the respective interaction pattern. Adequacy of social support seems to have complex effect on PC. As can be seen, if orientation at work is low, support inadequacy increases PC. In opposite, receiving more adequate support decreases PC even if a person is better oriented in his/her new workplace.

Figure 4. Centered regression plot of support adequacy as a moderator of the relationship between PC and work orientation.



5. Discussion

The present study investigated the PC as a predictor of adaptation outcomes among organizational newcomers. The mediation effect of PC in the relation between psychosocial factors (GSE, task efficacy and emotional costs) and adaptation outcomes (work orientation and job satisfaction) has been also analyzed. The regression analysis indicated positive association between GSE and PC. In follow, PC was positive related to job satisfaction. The next step was to examine the possible mediation effect of PC. The results showed PC as a mediator between both, adaptation efficacy and emotional costs, and job satisfaction. The regression analysis has shown no significant association between PC and work orientation. The moderation analysis has however shown negative impact of PC on one's orientation in the new workplace, when the focal relationship was moderating by social support adequacy.

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DYNAMIC CAREER ATTITUDES AMONG MASTER STUDENTS: SOCIAL DISPARITIES IN EMPLOYMENT CAPABILITIES

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Abstract

Background: The preparation of students' future career trajectories is a dynamic process in relation with social and educational determinants, but their interactions must be further investigated. Our objective is to analyze the associations between generic employment capabilities, career attitudes and other related factors among postgraduate students. *Method:* All master's students recorded in the Centre for Documentation and Information on Higher Education from Luxembourg database were contacted by letter to participate in an online questionnaire. The online questionnaire (French and English) with five scales was scored: 1) Dynamic Career Attitudes (DCA- 13 items); 2) Employability Soft-Skills (ESS-14); 3) Search for Work Self-Efficacy (SWSES - 12 items); 4) Quality of Life domain Autonomy (QLA- 4 items); and 5) Socio-demographical characteristics. The data were analyzed using bivariate tests, correlations and multiple linear regression models. *Results:* Of the 481 volunteers (26.4 years; SD=5.5) a majority were women, Luxembourgish, unemployed, and had less than or equal to six months of job experiences. Higher the ESS, SWSES and QLA scores, higher was the DCA score. Nationality, being unemployed, having less than six months of job experiences and being in the first year of master were associated with lower Dynamic Career Attitudes score. *Conclusion:* Covering the whole period of the master's degree, internship activities and proactive workshops may be developed to improve generic employment capabilities and quality of autonomy. The Dynamic Career Attitudes scale appears an appropriate instrument to evaluate the efficacy of the university career services programme.

Keywords: *career attitudes, postgraduates, employability soft-skills, job search.*

1. Introduction

With an increasingly wide gap between students' abilities and the skills required by the labour market together with more heterogeneous career paths (Fugate, Kinicki, & Ashforth, 2004) pushed new graduates generations to be amenable to continuous upgrading with wide-ranging skills in their promotion of career development. As career behavior and career attitudes have been observed as important triggers in the preparation of individuals' future professional trajectories (Ng et al, 2005), empirical evidence has shown that many students during their studies postpone the adoption of an active career orientation, and were not utilizing their abilities acquired until after the university period (Savickas, 2005). If most employers regard a university degree as a minimal guarantee for employment, the possession of a predetermined and static set of generic skills through academic preparation may only be sufficient to gain first job, the further ability and initiatives of individuals in deploying their curriculum by embracing an active career approach (Briscoe et al. 2006) may be a guarantee for their sustainable employability and future professional life.

Focusing on the generic capabilities for employment, a study of the same authors among undergraduates (Karavdic et al. 2014), has shown that employability soft-skills (i.e. personal attributes and key skills that enhance an individual's interactions, job performance and career prospects) were closely related to dynamic career attitude domains such as adaptability, optimism, planning and career-related knowledge, that were identified as important to secure a suitable position thought in the job market (Rottinghaus et al. 2005; De Vos et al. 2009). Another major finding showed that the dynamic career attitudes positively impacted the job search process such as status and acquisition of main techniques for a job application and indirectly increases perception of search for work self-efficacy

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(Karavdic et al. 2014). As higher education level has been valorized by policies within the Bologna Process and European governments as an enhancing factor of the sustainable employability of young academic people, one of the key elements of employment capabilities may be connected to educational achievement (Bachelor vs. Master). Indeed even if master students have the same chances to find employment as their Bachelor colleagues, their employment activity may be more focused on their educational field and level (Schomburg and Teichler, 2011). In line with our previous findings among bachelor students, the objective of present study was to analyze the associations of generic capabilities for employment, quality of life of autonomy, and other cofounding socio-demographic factors on dynamic career attitudes level among Master students.

2. Method

2.1. Participants & Data Collection

All postgraduate/master students registered in 2012 and 2013 at the Centre for Documentation and Information on Higher Education (CEDIES), which independently of their social economic status obtained a financial aid from the government of Luxembourg, were invited by mail to the survey. Data collection was realized via information flyer containing instructions about the aims of the study and a link to the survey. The participants could directly access the anonymous online questionnaire with a choice of language (French or English).

2.2. Measurement Instrument

2.3.1. Dynamic Career Attitudes (Dependent Variable) were composed by 13 scored items (1=strongly disagree to 5=strongly agree) (Karavdic et al, 2014) (Cronbach's alpha 0.802).

2.3.2. Employability Soft-Skills-short scale (ESS-short -14 items) (1=not capable at all; 5=perfectly capable) is a adapted version of the ESS – 32 items (Karavdic et al, 2014). We realized a factor analysis to find a factorial structure with 4 dimensions exploring key skills and personal qualities such as: self- management, team working, problem solving and knowledge of working practices. (α =0.870)

2.3.3. **Search for Work Self-Efficacy Scale** (SWSES - 12 items; α=0.847; 1=not well at all; 5=very well) which assesses students' perceptions of their capability in building employment strategies (Pepe et al, 2010).

2.3.4. Quality of Life of Autonomy - one Whoqol-Bref domain (QLA- 4 items; α=0.670; 1=strongly disagree at 5=strongly agree), assesses the ability to live independently and to make necessary decisions on the own (Leplège et al. 2012)

2.3.5. Socio-demographical characteristics. Age, gender, parents' education level, (higher/lower then bachelor), type of lodging, year of master (1st, 2nd year), employment status (yes in educational field/yes in non-educational field/unemployed), employment contract type (permanent/ fixed term/internship),working time (up to 20h/w vs. up to 40h/w) and job experiences before master (less vs. more than 6 months).

2.4. Statistical Analysis

Scores were calculated for each scale, so that a higher score represented a better/higher level. Bivariate test and correlations were used for association analyses between the variables. Only significant relationships ($p<0.05$) were used in the linear multiple model.

3. Results

3.1. Socio-economics characteristics

A total of 481 volunteers (26.4 years; SD=5.5) completed the self-questionnaire online. Majority of the participants were women (59.9%), Luxembourgish (65.7%), unemployed (63.8%) and had less than or equal to six months of job experiences (65.5%). Mostly studied in the field of Law, Economics and Finance (32.6%) and Social and Humanity (30.8%) and were in the second year of their Master degree (57.2%). From those who had a job, approximately one third of them had a permanent or fixed-term employment contract and worked more than 20h the week.

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3.2. Relations between dynamic career attitudes and others factors.

Having a Luxemburgish nationality, being younger and in the first year of master study, having no employment, and a professional experience less or equal to six months before the master degree, were negatively related to DCA score. Quality of life autonomy, Employability soft skills, and Search for work self-efficacy score were positively linked to DCA score (Table 1).

Table 2. Relations between dynamic career attitudes and others factors. (bivariate tests) - correlation coefficients (Pearson's correlation) and Standard Error.

		Dynamic Career Attitudes – DCA [1 - 5]	
		Mean (SE[1])	**p- value[2]**
Gender	Female	3.77 (0.04)	0.498
	Male	3.74 (0.03)	
Nationality	Luxembourgish	3.72 (0.03)	**0.003****
	Other	3.87 (0.04)	
Type of lodging[4]	with a partner /other adults	3.76 (0.05)	0.100
	with a partner and/or a child	3.94 (0.08)	
	with my parents	3.65 (0.04)	
	alone	3.76 (0.04)	
Father's educational level[3]	Lower Bachelor	3.73 (0.03)	0.436
	Higher or Equal Bachelor	3.77 (0.04)	
Mother's educational level[3]	Lower Bachelor	3.76 (0.03)	0.553
	Higher or Equal Bachelor	3.73 (0.04)	
Year of study	1st	3.67 (0.04)	**0.014***
	2nd	3.80 (0.03)	
Education Field[4]	Social and Humanity	3.70 (0.05)	0.664
	Law, Economics and Finance	3.78 (0.05)	
	Life and Health	3.72 (0.07)	
	Technology and Communication	3.86 (0.05)	
Employment Status[4]	Unemployed	3.73 (0.03)	**0.014****
	Yes in No- Educational Field	3.84 (0.07)	
	Yes in Educational Field	3.92 (0.06)	
Employment contract type[4]	Permanent	3.87 (0.07)	0.818
	Fixed term	3.82 (0.08)	
	Internship	3.89 (0.08)	
Professional Experience (Before Master**)**	Less/ equal 6 months	3.72 (0.06)	**0.000*****
	More than 6 months	4.07 (0.06)	
Working time	Less /equal to 20h/w	3.85 (0.08)	0.442
	Up to 40h	3.93 (0.06)	
		Correlation	**p- value[2]**
Age		0.114	**0.024***
Quality of life [1- 5]	Domain of Autonomy -QoLA	0.628***	**0.000*****
Generic Employement Capabilities [1-5]	Employability soft skills – ESS-short	0.691***	**0.000*****
	Search for Work Self-Efficacy (SWSES)	0.581***	**0.000*****

[1] Standard Error; [2]Significant p-value: *p < 0.05; **p < 0.01; ***p < 0.001; [4]Fisher's T-Test; [5]Pearson's correlation.

3.3. Impact of other confounding factors on dynamic career attitudes

For Dynamic career attitudes, the multiple regression model explained 66% of variance (adjusted R-Square). The greater were generic capabilities for employment and quality of autonomy, the higher was the DCA score. Oppositely, being Luxembourgish, unemployed, having less than six months of job experiences and being in the first year of master were associated with lower DCA score (Table 2).

Table 2. Impact of other confounding factors on dynamic career attitudes by students.

		Dynamic Career Attitudes DCA [1-5]				
		Regression coefficient	**SE[1]**	**L95[2]**	**U95[2]**	**p-value[3]**
Age		-0.005	0.005	-0.014	0.004	0.288
Nationality	Luxembourger	-0.140	0.057	-0.252	-0.028	**0.015***
	Other	0				
Year of study	1st	-0.118	0.054	-0.225	-0.011	**0.031***
	2nd	0				
Employment Status	Unemployed	-0.253	0.086	-0.423	-0.083	**0.004****
	Yes in No-Educational Field	0.043	0.087	-0.128	0.215	
	Yes in Educational Field	0				
Professional Experience (Before Master**)**	Less/ equal 6 months	-0.130	0.061	-0.252	-0.007	**0.038***
	More than 6 months	0				
Generic Employement Capabilities [1-5]	ESS-short	0.301	0.072	0.159	0.443	**0.000*****
	SWSES	0.321	0.072	0.178	0.465	**0.000*****
Quality of Life [1- 5]	Domain of Autonomy	0.262	0.051	0.161	0.363	**0.000*****

Adjusted R^2=66%; F (9. 127) =28.111; [1]Std.Error; [2]Confidence Intervals; [3]Significant p-value: *p < 0.05; **p < 0.01; ***p < 0.001

4. Discussion

This study demonstrated the relationships between the Employability Soft Skills, Search for Work Self-Efficacy (i.e. generic capabilities for employment) and the Dynamic Career Attitudes. Students with high capabilities may tend to present a higher dynamic career approach which may enable them to more easily identify future job opportunities by adapting their competences for the post-university transition (Fugate, Kinicki, & Ashforth, 2004). Students who are confident with their employability competences are likely to perceive job seeking as less threatening, and additionally may enhance their career abilities in employment prospection. Although employability forecasts an individual's likelihood of getting and maintaining an employment, we postulated that generic capabilities for employment may be especially relevant into gaining and maintaining the first job; those results are in the line with our previous findings realized among university bachelors where undergraduates showed a lower score in DCA then their postgraduate colleagues (3.66 vs. 3.78/5) (Karavdic et al. 2014).These findings were not a real surprise, conditioned through more extensive academic preparation and professional experiences (i.e internships, seminars etc.) higher education may provide students with more ambitions to reach a higher social status and more expectations for their career.

In addition, higher quality of life autonomy positively affecting DCA could be explained by the fact that student's autonomy perception may be seen as a career driver (i.e intrinsic motivator) in the process of career planning and developing internal capacity and attitudes in managing of their own career path. Indeed from the basic premise of self-determination theory (Deci & Ryan, 2000) perceived autonomy implies that individuals experience choice in the initiation, maintenance, and regulation of their behaviors. In this context high pressure and control from a family and university environment may predict low efficacy and autonomy in career decision making activities which may negatively affect students' wellbeing (Karavdic & Baumann, 2014) and so their quality of life. Thus, promotion of a autonomy-supportive environment such as considering individual's perspectives, could free individuals to experience attachment and intimacy and enhance capability to make a series of appropriate transitions fostering self-directed approaches and perceptions of competences (Guay et al., 2006).

Another finding showed that the Luxemburgish nationals, having less or equal to 6 months of professional experience and being unemployed and in first year of their Master degree presented lower DCA. Probably, Luxembourgian students may feel more secure to obtain job opportunities than their peers without a citizenship and could present lower preoccupation with their career approach. A general unemployment statistics in Luxembourg for the year 2013 (Adem, 2014) showed that 72.9% of persons registered at National Employment Administration were not Luxemburgish nationals. Although career disparities such as positional differences between graduates in their career outcome could be observed in literature on the basis of social category, gender and ethnicity (Brown & Hesketh, 2004) we suggest that our result may be due to the fact that nationals have easier access to the relatively restricted jobs of civil servants. Indeed the fact that more than 30% of nationals were working in the public sectors may bring Luxemburgish students to present lower drift in their career orientation. Coupled to that the difficulties

along with competences in language skills (Luxembourgish labour market requests several languages: Luxemburgish, French, German and English) may oblige foreigners to rely more on their DCA as a central strategy in their pursuit for a job.

Socio-educational differences may exist in the predisposition of the students and needs in their career development process. Findings support the fact that individuals with a prior work experience, employment and in their final year of Master study show higher DCA. Career driven interventions should be based on students' specific needs and implemented during a tertiary education at an early stage in each individual's career development (Van Zyl & Rothmann 2012).

5. Conclusions

Our finding suggests that DCA is an appropriate instrument, which could be used to evaluate the efficacy of the university programme and as an assessment of autonomy-supportive environments. As a guide to accompany students, DCA can be effective in assisting individuals to develop their career approach and boost their employment capabilities level. Covering the whole period of the master's degree, collective and tailor made career counseling activities can be undertaken to promote students who are on the edge of embarking on their careers as well as those who are already working in the field and simply want to engage in continuous career development.

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INFLUENCE OF THE PERSONAL POTENTIAL ON ADAPTATION OF YOUNG LAWYERS STARTING THEIR PROFESSIONAL ACTIVITIES

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Abstract

The article analyzes the results of the empirical research of the social-psychological adaptation of the Interior Ministry young employees who had resigned after the first year in the office. The Analysis of the reasons for resignation allowed that the most important ones are psychological and the least important social an organizational. We provide data on personal peculiarities of personal adaptation, motivation of professional activities, mechanisms of adaptation.

Keywords: *young specialists, personal potential, adaptation, mechanisms of adaptation.*

1. Introduction

The fact that our society needs fundamental improvement of the law-enforcement activities has been noted by different representatives of the authority and is widely discussed in public. The solution of this problem to a great extent depends on the staff qualification potential in law-enforcement agencies and can be achieved by development and implementation of systematic measures among which are technologies of psychological provision of legal activities.

In accordance with the Russian legal system admission to the Interior Ministry is based on selection that includes medical examination and a comprehensive assessment of the candidates' professional personal competences. [Kekhlerov, S.G., 2012]

Modern technologies of candidates' selection for the service in the law-enforcement agencies are highly effective as they are based on results of long-term investigations in the area of professional psychology activities [Romanov, V.V., 2015]. At the same time revealing of conformities of candidates' professional-personal competences to the vacant positions with the professional standards cannot guarantee expected work quality and securing of an employee in the organization for a long period of time. In spite of the thorough selection, the problem of professional competence in the form of implementation of professional competence still exists. Development and manifestation of personal-professional competences depend on other processes in the system of staff management.

There are works based on the analysis of staff processes in the contingent of young specialists. So in A.A. Tynyshbaeva's work it is underlined that the turnover of young specialists in the law-enforcement agencies is considerable "almost every fifth (18% of the personnel) leaves the service… within a year, and every sixth gets a disciplinary penalty… Most of the young personnel decide to leave the service within the first month of work" [A.A.,Tynyshbaeva, 2014].

This tendency is explained by the fact that the existing system doesn't allow to point out a few components "…from the personality's psychological potential…" [A.S., Dushkin, 2014]

At the same time part of the young employees whose prospective adaptation was low effective do not leave the service and remain in the office. New personal formations, formed in the process of such an adaptation can be reasons for the early occupational hazard, formation of formalism, stereotypeness and connivance to work [M.A.,Dmitrieva, 2010].

Resting on the result of the conducted theoretical survey and results of our own empirical research we can declare that study of the reasons for resignation and mechanisms of personal adaptation/deapadtation to the activities is essential for the psychology and can have practical importance for the human resources of the Interior Ministry and educational institutions providing lawyers' preparation.

2. Research objectives

The aim of the given research was to study the peculiarities of the young employees' adaptation potential (as an integral feature, including personal peculiarities, behavioural strategies) who have resigned within a year of the first employment from the Interior Ministry and other legal organizations.

3. Research methods and design

The research has been conducted for 5 years on the basis of social-psychological service of the legal academy and regional branches. The respondents are young employees of the Interior Ministry having graduated from the academy (N=236, 82% males, ages 21 to 25).

All the respondents were psychologically tested so that to reveal: adaptation potential, behavioural strategies and personal features (communicative, cognitive, emotional, motivational, volitional).

All the respondents, while still in the attendance hours were tested in the Academy assessment centre of the social-psychological service. A psychological profile was created for every student. It consisted of the following elements: communicative, cognitive, emotional, motivational, volitional features and also the adaptation potential and behavioral strategies.

Young specialists took part in the research within the first years after the employment. Those who had resigned were consulted in the Academy social-psychological service concerning their further employment.

3 groups were pointed out for the sample. These were people who: a) had resigned within the first year (12%), b) had adapted successfully, but were not fully satisfied with their activities (26%); c) had successfully adapted and were satisfied (62%).

All the received data were processed mathematical-statistically with the program SPSS17.0. We used the following analyses: cluster, factor, comparative. The data collection was conducted with the help of the program Psychometric Expert 6, Survey Monkey.

The research is based on comparative-longitudinal, systematic and person-oriented approaches. To conduct comparative analyses in the sample we pointed out the groups basing on the following features: gender, area of activities, the region (central or outlying), success of adaptation (those who had adapted to the professional activities and those who had resigned after the first year).

Respondents' opinions on the reasons for resignation and difficulties they had to deal with in the process of professional activities, cooperation with the chief and collective, were studied with the help of the especially created inventory consisting of 45 questions revealing the influence of organizational, social and psychological factors on resignation. There was an opportunity to provide their own answer in the inventory. The following spheres were researched: relations with the chief, mentor and colleagues; working area; information streams, connected with the content of activities and exact official tasks; working schedule; working time management; payment and employment benefit satisfaction; attitude to the motivational programmes; organizational culture; self-presentation etc.

Personal adaptation potential (PAP – further on) was tested with the help of different inventories revealing different levels of a personality. To reveal PAP we used multilevel personal inventory "Adaptivity" (MPI) by A.G. Maklakov, S.V. Chermyanin [A.G., Maklakov, 2001]. The given method defines general adaptive abilities (GAA), neuro-psychic stability (NPS), communicative peculiarities (CP), moral normalization (MN); author inventories by V. P. Rostovsky "Adaptation potential" (AP) and "Adaptation Mechanisms" (AM) [V.P., Rostovsky, 2010]. The AP inventory helps to define personal adaptation potential, assisting to adaptation to the social-role structure of an organization, social adaptations (internal and external self-images), information streams (IS), relationships in the communicative system, working schedule and energy costs, experience of time (ET). The inventory "Adaptation Mechanisms" reveals 20 strategies of coping behaviour.

4. Results

The research has established that the main reasons for making a resignation decision are, in accordance with the respondents' opinions: discrepancy between expected activities and real circumstances; dissatisfaction with the existing communication system in the organization; not enough attention from the chief to the young employees' problems and needs; not precise tasks and understanding of working tasks; weakening of control over the time management that is necessary to cope with great amount of information in general and work technologies. To the least important reasons belong: payment; organization of the working area; working schedule, some sides of organizational structure, employment benefits.

Let us see the data on respondents' adaptation potential received in the period of graduating from the academy that is precisely before the employment.

In this research the adaptation potential of a personality was considered as a systematic quality, correlation of physiological, psychological, social-psychological peculiarities that are the most crucial for the regulation of the psychological activity and the process of adaptation. Working definition: "adaptation is a process and a result of inner changes, outer active adjustment and self-changes of and individual to the new circumstances of existence" [A.A.Rean, 2006]

The analysis of the test results based on the MPI methods by A.G. Maklakov, S.V. Chermyanin allows us to conclude that General Adaptive Abilities (GAA) with 30% of the respondents are good, 37% - medium, and 33% - low. The tendencies of distribution of NPS and CP indices are similar.

Let us examine the results of "AP" method by Rostovsky V.P. Considerable deviation to the decreasing side (at the level of statistical significance) from the statutory indicator were found on all the criteria of the adaptation potential: adaptation in the internal self-image, adaptation to the information streams, adaptation to the working schedule and energetic cost, adaptation in time).

The results of the survey on the "Adaptation Mechanism" method allow us to conclude that in the respondents' behaviour the following strategies prevail: rejection, domination, proneness to conflict, forming of barriers, comparison, aggression, complicating. To a lesser extent the following strategies are present: addressing for support to the group, saving of the personal resources, rationalization.

5. Summary and conclusions

The results received due to the research allow us to conclude:

1. The employees' turnover among the young specialists of the Interior Ministry is considerable and presents itself a problem requiring a solution.

2. Most of the young employees make a resignation decision within the first six months after the employment.

3. The reasons for resignation are psychological, organizational and social: where psychological ones are the most important and social the least important.

4. As a result of the comparative analysis of the successfully adapted and deadapted groups we have found out differences on several personal factors, dynamics of the professional motivation and behavioral strategies.

On the basis of the received data we created models of the successful/unsuccessful adaptation of young lawyers at the beginning stage of professional activities in the Interior Ministry. The discovered patterns have allowed creating recommendations for optimization of adaptation processes of the Interior Ministry young employees and strengthening personal adaptation potential during the years of attendance at the academy and at early stages of professional activities.

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DANCE MOVEMENT THERAPY AND STRESS IN ADOLESCENTS

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Abstract

Dance and movements is a part of creative arts therapy that has been known for its holistic healing and it assists individuals with emotional disturbances and reduces their negative thinking and changes it to a more optimistic thought process. The main idea of this paper is to prove this aspect and help the stressed individuals to calm their thought processes and boost them to a new level of only positive ideas. The objective of this paper is to observe the decrease in stress levels and increase in positive emotions among adolescents. There were two hypotheses in the research. Firstly, it was predicted that Dance movement therapy increases positive emotions in adolescents. The second hypothesis states that Adolescents who are satisfied by dance movement therapy have less stress. Moreover, the methodology of this study was convenient sampling of students who attended Montessori school in India. They were all within the age group of 12 – 14 years. There were 37 participants, 18 of them being males and 19 of them being females (M=13, SD=0.7). The participants were provided with a questionnaire that consisted of two sections - The Section A of the questionnaire was based on dance movement therapy and consisted of 10 questions, and section B was based on Perceived Stress Scale (PSS) that assess the level of stress using a Likert scale and includes open ended questions to explore the experience and perception of dance movement therapy. The higher the score the more stress the individual has. The overall results obtained through the questionnaire were for Hypothesis 1: The more dance movement therapy provided to the individual leads to more positive insights and helps in managing negative emotions and overcoming them and for Hypothesis 2: The minimum score achieved is 1 and the maximum score achieved is 34 (M = 18.5, SD= 7.9) and also there is a Negative correlation between subjective advantage of dance movement therapy and total scores of stress scale was obtained which was $r_s = -.371$, $p = 0.05$. The result supports both the hypotheses predicted. Therefore, Dance movement therapy is a positive method of creative therapies to motivate and help changes in adolescents to become more positive and less stressed. Naturally, interventions on a body level, as in DMT, touch all levels: the body, the spirit/mind, and the soul. Thus it changes emotions and makes the individual more positive and happy.

Keywords: *dance movement therapy, positive emotions, stress, adolescents, movement analysis.*

1. Introduction

Dance movement therapy is a creative way of explaining body therapy. Through dance and movements this creative arts therapy has been known for its holistic healing and it assists individuals with emotional disturbances and reduces their negative thinking and changes it to a more optimistic thought process. Dance movement therapy also helps adolescents cope with stress, anger and emotional imbalances.

Adolescents experience a lot of pressure during their teenage years. It starts with puberty which causes changes in their appearance, voice or tone, complexion etc. Moreover, adolescents experience academic pressure, high level of competitive stress, some are victims of bullying. All these are some of the issues because of which they are recommended to dance movement therapy. Stress for adolescents is even when they fight with friends and especially when they experience social isolation and even social phobia. To come to a level with friends and reality and to understand their actions better adolescents are advised to attend dance movement therapy sessions to think and act better (Payne, 1992). Dance therapy as a whole is a very effective process to build confidence and self – esteem in anyone at any age. The positive development provides the individual with a new sense of thinking and enhances their thought processes and decision making mechanisms (Chodorow, 1991).

1.1. Laban's Movement analysis

Many researches on dance movement therapy suggest that is helps in reducing chronic pain, stress and also helps patients with cancer. Dance movement therapy itself has many movement analysis methods which assess the dance therapist in evaluating the cause and reaction of a particular movement. Laban's movement analysis is one of the most well – known movement evaluating methods. Laban Movement Analysis (LMA) is a study of the rudimentary theories and principles of movement persistence, purpose and structure. LMA is both a clear and concise language for describing human movement and an analysis of movement Created by Rudolph Laban. Laban exercises are centered on the principle that by examining and evaluating movements, unconscious and conscious both, it is likely to identify the intentions of the individual's movements and to gain awareness of an internal character that leads to an action (Campana, 2011). Laban made four classes Effort, Space, Body, and Shape. As indicated by the four movement components: time (quick and maintained), weight (in the middle of light and strong), space (in the middle of indirect and direct) and flow (in the middle of bound and free) (Law, N.a.).

2. Objectives

The objective of this study is to observe the increase of positive emotions and reduction in the level of stress with the help of dance movement therapy among adolescents.

2.1. Hypothesis

Hypothesis 1: Dance movement therapy increases positive emotions in adolescents.
Hypothesis 2: Adolescents who are satisfied with Dance Therapy have less stress.

3. Methodology

This chapter covers the research methodology and the procedures that have been chosen to be applied in the present study. The purposes of this chapter are, to provide (1) the description of participants, explain (2) the procedure used in collecting the data, (3) the selection of the sample.

3.1. Description of participants

There were 37 participants *(M= 13.0, SD= 0.7).* There were 18 of them being males and 19 of them being females. The major obligation is that the participants must be above the age of 12 years to participate in this study. Few participants had incomplete demographics.

3.2. Procedure

A qualitative questionnaire on dance movement therapy consists of questions on dance movement therapy. The questionnaire consisted of 10 questions. The questionnaire focused on the changes in the emotions felt by the adolescents during and after the dance movement therapy sessions, and a quantitative questionnaire, Perceived Stress Scale (PSS) which consists of questions based on the level of stress. The questionnaire consisted of 10 questions based on stress. The items were rated on a 4 – point Likert – type scale (0=Never to 4=Very often). The minimum score achieved is 0 and the maximum achieved is 40. The stress scores were categorized between 0 – 15 as low levels of stress, 15 – 25 as average levels of stress and 26 – 40 of high levels of stress were administered to all the participants.

3.3. Sample

Overall, 37 participants took part in the research *(M =13.0, SD = 0.7)* where 19 of them were females and 18 of them were males. The methodology of this study was convenient sampling of students who attended Montessori school in India. They were all within the age group of 12 – 14 years.

4. Results and Discussion

4.1. Descriptive statistics

37 respondents participated in the study, 18 of them being males and 19 of them being females between the age of 12 to 14 (M =13.0, SD = 0.7). The scores for the emotions during session indicate that around 78.4% of the adolescent chose that they felt happy during the session, 73.0 % felt relaxed. The scores of the emotions felt after sessions imply that with 48.7% adolescents felt calm after the sessions and was the highest among the other emotions witnessed, 48.7% felt connected with other members of the group, 44.4% felt relaxed, 35.1% felt positive.

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Hence the results support the first hypothesis that dance movement therapy increases positive emotions in adolescents.

4.2. Dance Therapy and emotions

Hypothesis 1 states that dance movement therapy increases positive emotions in adolescents. To prove the above hypothesis the most important focus area is emotions, therefore the changes in emotions during and after the sessions were observed. The figure 1 below denotes that the number of individuals who are more calm and relaxed after the sessions and are more connected with members of the same group.

Figure 1. Emotions felt after the sessions.

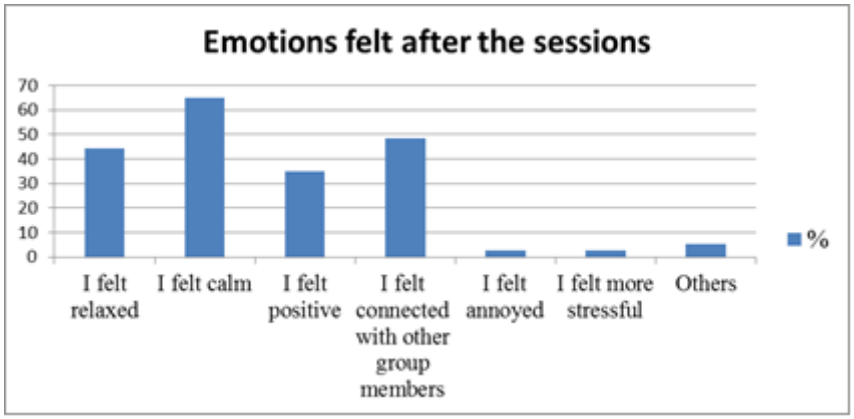
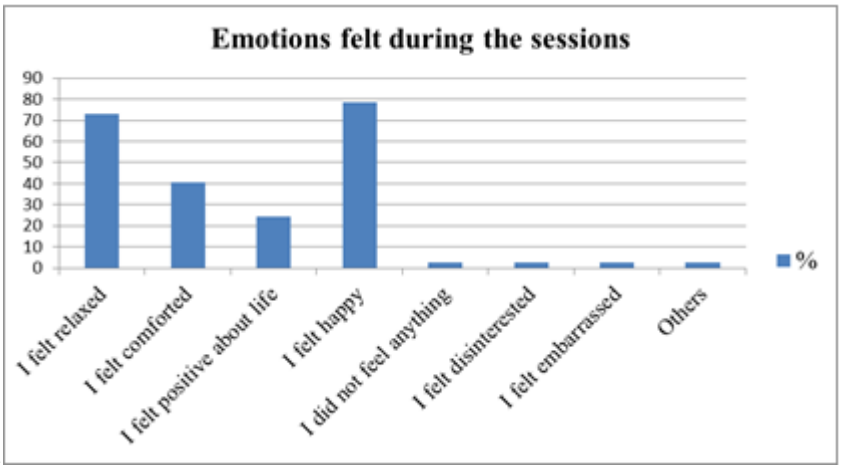


Figure 2. Emotions felt during the sessions.



4.3. Stress and dance therapy

The second hypothesis is about the connection of subjective satisfaction from Dance Therapy and the level of stress. The Perceived Stress Scale (PSS –10) was used to measure the level of stress among the adolescents. The stress scores *(M= 18.5, SD= 7.9)* were categorized between 0 – 15 as low levels stress and 15 – 25 as average stress level, 26 – 40 as high levels of stress. Spearman correlation test showed negative correlation between subjective advantage of dance therapy and total scores of stress scale r_s = -.371, p = 0.05. This data allows us to support our second hypothesis that adolescents who are satisfied with dance therapy have less stress.

5. Conclusion

This study shows that there is reduction in the levels of stress and increase in the positive emotions among adolescents. Dance therapy is a positive method of creative therapies to motivate and help changes in adolescents to become more positive and less stressed. Through the above study both the hypothesis listed were proved and suggest that dance movement therapy definitely helps in improving

well-being, reducing stress, increasing positive emotions. Naturally, interventions on a body level, as in DMT, touch all levels: the body, the spirit/mind, and the soul. It also influences problem-oriented strategies. Thus it changes emotional perspectives and makes the individual more positive and happy. Results show that dance therapy is a very useful aspect and helps in reducing stress and increase positive emotions in adolescents.

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SOCIAL FEATURES OF DYNAMICS OF MORAL ORIENTATION DEVELOPMENT IN ADOLESCENCE AND YOUTH[i]

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Abstract

Adolescence is the period of self-determination and identity development. Many important development tasks are to be solved by growing teenagers. One of important spheres of personal development during adolescence is moral development. Modern investigations of moral development allow to define two principles that lies in the bases of moral orientation – justice principle and care principle. Justice principle is based on cognitive aspects of moral consciousness - moral thinking and moral judgments. Care orientation theory concentrates on empathy as the main principle of moral action with emotional orientation on needs, ideas and desires of others. Many social factors influence on psychological development in adolescence. Social interaction and communication plays an important role at that age. Peers are regarded as the most important social group in adolescence, parents and other adults seems to be less important and distant. Different communicational contexts arouse different decision-making and behavioral models. The role of approval motivation and achievement motivation also seems important for social interaction of adolescents. Development of moral orientation is integrated in social communication. The goal of our research is to investigate the dynamics of moral orientation development during adolescence and youth. We compared peculiarities of moral orientation development in adolescence with youth data to define the direction of further development. Social communication in two contexts (adolescent-peer, adolescent-adult), social orientation on approval and achievement in connection with moral development were examined. The empirical investigation was done. The data consists of 240 subjects from 3 age groups – junior adolescence, senior adolescence and youth. The age varies from 13 till 21. We used several questionnaires: original questionnaire "Care-Justice" to measure moral judgments, moral dilemmas with different communicational contexts (adolescent-peer, adolescent-adult) to estimate verbal moral behavior in different spheres, questionnaire of achievement motivation and questionnaire of approval motivation. The results analysis showed interesting results. The dynamic of moral orientation development from junior adolescence to senior adolescence and then youth was found. The results showed the influence of communicational context on moral choices: in interaction with peers adolescents are orientated on care principle but in interaction with adults they use justice principle. Achievement motivation is connected with moral orientation on care principle. Gender differences in moral orientation were found: girls are more focused on care than boys.

Keywords: *moral development, moral orientation, adolescence.*

1. Introduction

Adolescence is the period of self-determination, ideological choices and identity development (Erikson, 1994; Bozhovich, 1981). Many important development tasks are to be solved by growing teenagers. One of important spheres of personal development during adolescence is moral development. The relevance and significance of this study is underscored by the role that moral personality development plays in the ongoing transformation of the modern Russian society. Complicated social and economic changes in social consciousness influence moral orientation development in adolescence, a most sensitive period for social interventions (Molchanov, 2007). Adolescence is a sensitive period in moral development. The transition of cultural experience includes the process of internalization and acquisition of moral values, as well as the formation of an individual's moral value orientation. The age-specific psychological approach proposed by L.S. Vygotsky and D.B. Elkonin to analyzing the principles

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of moral development in adolescence is very promising due to its emphasis on the systematic level of development of values, moral consciousness and moral reasoning (Karabanova & Podolskij, 2003).

Modern investigations of moral development allow to define two principles that lies in the bases of moral orientation – justice principle and care principle. The justice principle, oriented toward the cognitive components of moral consciousness, and the care principle, oriented toward the feelings of caring and empathy toward others. The normative cognitive-structural approach declared the justice principle to be the main principle in moral psychology, focusing attention on the cognitive aspects of moral consciousness - moral thinking and moral judgments (J. Piaget, L. Kohlberg). The alternative to the cognitive approach is the care concept by C. Gilligan, based on the care principle and empathic orientation toward the needs, ideas and feelings of others (Kohlberg, 1984; Gilligan, 1977).

Many social factors influence on psychological development in adolescence. Social interaction and communication plays an important role at that age. Peers are regarded as the most important social group in adolescence, parents and other adults seems to be less important and distant. Different communicational contexts arouse different decision-making and behavioral models. The role of approval motivation and achievement motivation also seems important for social interaction of adolescents. Development of moral orientation is integrated in social communication (Karabanova & Sadovnikova, 2011; Myyra & Helkama, 2002).

2. Objectives

The main goal of our research is to investigate the dynamics of moral orientation development during adolescence and youth. We can define several tasks that were in the focus of our attention. First, we analyzed age dynamics when compared peculiarities of moral orientation development in adolescence with youth data to define the direction of further development. Secondly, we estimated the differences of moral choices in two contexts of social communication: communication between adolescent and peer and communication between adolescent and adult. Thirdly, we defined social orientation on approval and achievement in connection with moral development. Fourthly, we examined gender differences in moral orientation.

3. Methods

The data of empirical study consists of 240 subjects. All subjects belong to 3 age groups – junior adolescence, senior adolescence and youth. The age varies from 13 till 21 years. The data was collected both in collective and individual forms in private presence.

Several questionnaires were used: original questionnaire “Care-Justice” to measure moral judgments, moral dilemmas with different communicational contexts (adolescent-peer, adolescent-adult) to estimate verbal moral behavior in different spheres of life, questionnaire of achievement motivation and questionnaire of approval motivation. The results were statistically analyzed with IBM SPSS program. Original questionnaire “Care-Justice” is focused to measure moral judgments. Subjects have to agree or disagree with 38 statements corresponding to normative scales of moral development (By L. Kohlberg and C. Gilligan) using the five-point scale.

Moral dilemmas were modified from the MAMOS projects (A. Podolskiij, P. Heymans) and constructed to choose between care and justice principle. Two moral dilemmas were presented; each has its own communicational context: “adolescent-adult” and “adolescent-peer”. Subjects were to make moral choice in the uncompleted situation. In each dilemma teenagers were to find and estimate the decision of the hero and himself on the hero’s position.

Questionnaire of achievement motivation is aimed to define the aspiration to achieve the goal. It consists of 23 statements and subject has to agree or disagree with them.

Questionnaire of approval motivation is focused on esteem of desire of social approval from people that surround you in different situation. The questionnaire consists of 20 statements and subject has to agree or disagree with them.

4. Discussion

We analyzed age dynamics of peculiarities of moral orientation development in adolescence and youth. Several results were observed. The overall level of agreement with moral judgment of different levels is higher in junior adolescence then in senior adolescence or youth. The most popular moral judgment for all adolescents are judgments of postconventional level: 5 stage –stage of social contract and 6 stage – stage of universal ethic principles according to L. Kohlberg scale. For youth the importance of 4 stage judgments (idea of social law) decreases and idea of “being a good boy” (3 stage) becomes more

important. Judgments of preconventional level become less important with age. The level of preference with judgments of most of the stages is stable in all three age groups.

We were interested in the differences of moral choices in two contexts of social communication: communication between adolescent and peer and communication between adolescent and adult. According to previous investigations we defined six moral dilemma solving strategies: care strategy, context dependence strategy, justice strategy, unstable doubt strategy, context/paradox strategy and egoistic strategy (Molchanov, 2007, 2011). The strategies differ in different models of moral dilemma solving in 2 aspects: communicational context (adolescent-adult, adolescent-peer) and dilemma position (decision for myself or for the hero). The types of moral dilemma strategies are presented in Table 1.

Table 1. Types of moral dilemma solving.

The characteristics of moral dilemma solving strategies	Dilemma with adolescent/adult context interaction		Dilemma with adolescent/peer context interaction	
	Making a decision for a story character	Making a decision for oneself	Making a decision for a story character	Making a decision for a story character
Care strategy	Care	Care	Care	Care
Context-dependence strategy	Justice	Justice	Care	Care
Justice strategy	Justice	Justice	Justice	Justice
Unstable doubt strategy	Care or justice	Justice or care	Care or justice	Care
Context/paradox strategy	Care	Care	Justice	Justice
Egoistic strategy	Own interest	Own interest	Care or reject	Care or reject

The characteristics of moral dilemma solving in adolescence and youth were investigated by the means of cluster and content analysis, These six moral dilemma solving strategies describe 74% of subject data. The data analysis showed that our subjects prefer different moral dilemma solving strategies.

Most popular strategy is care strategy (care/care –care/care). Subjects using this strategy, whether deciding for themselves or a story character, are oriented toward helping those involved in the situation. Decision for care is made regardless of the interaction context. It is typical for 46 % of subjects. The next strategy is *justice strategy (justice/justice – justice/justice)*. Subjects are always oriented toward the justice principle regardless of the participants or position in the decision. It is typical for 8,9% of subjects. *Context dependence strategy (justice/justice – care/care).* The decision depends on the interaction context (adolescent/adult or adolescent/peer). When interacting with adults, the subjects make decisions based on the justice principle, while in the situation of peer interaction, they decide based on the care principle. The position (deciding for a story character or for oneself) does not influence moral choice. This strategy is typical for 27,2% of adolescents: in interaction with peers they are orientated on care principle but in interaction with adults they use justice principle. *Unstable doubt strategy (care or justice/justice or care – care or justice/care)*. Subjects exhibiting this strategy don't show stability in any of the moral dilemma solving situations with the exception of deciding for oneself in the adolescent/peer context. It is worth noting that subjects exhibiting this strategy do not make decisions focused on their own interest. Only 9,1% of subjects preferred that strategy. *Context/paradox strategy (care/care-justice/justice).* The decision is influenced by context interaction: in the adolescent/adult situation, the decision is oriented toward care; in the adolescent/peer situation the decision is oriented toward justice. The position (deciding for a story character or for oneself) does not influence moral choice. It's popular among 3,8% of subjects. *Egoistic strategy (own interest/own interest – care or reject/care or reject).* The followers of this strategy are oriented toward their own interest. In the context of interaction with peers, they are oriented toward care or else reject making a moral choice. 5% of adolescent prefer that strategy.

The analysis of social orientation on approval and achievement in connection with moral development was done. We compared the analysis of approval and achievement motivation with moral orientation on care or justice principle in moral dilemma solving. The statistical analysis didn't give us significant differences but we can see some interesting tendencies. The approval motivation is more typical for adolescents with orientation on justice principle rather than on care principle. Vice versa achievement motivation is more typical for care solution then for justice solutions. These results surprised us. According to theoretical background of justice and care moral principles care is associated with high role of social context and it seems to be close to high approval motivation that is low in our results. At the same time orientation on justice principle is associated with individual focus that seems to be connected

with high achievement motivation that is low in our study. These results are very interesting and need further research.

Some gender differences in moral orientation were found. We define two important results. Firstly, significant differences in moral judgments preferences were found. Girls prefer judgments of postconventional level of L. Kohlberg scale and boys more often prefer judgments of 2 stages (instrumental exchange) of preconventional level. Secondly, there are significant differences in gender preference of strategies of moral dilemma solving. Girls are more often orientated on care strategy and context depending strategy than boys. Boys are more often orientated on egoistic strategy then girls.

5. Conclusions

The results analysis showed interesting results. The dynamic of moral orientation development from junior adolescence to senior adolescence and then youth was found. The results showed the influence of communicational context on moral choices: in interaction with peers adolescents are orientated on care principle but in interaction with adults they use justice principle. Achievement motivation is connected with moral orientation on care principle. Gender differences in moral orientation were found: girls are more focused on care than boys.

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ATTITUDES TOWARD CORRUPTION: TWO COMPARATIVE STUDIES[i]

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Abstract

In continuation of research on the attitude to corruption in various social groups two new studies have been performed. They are based on a comparative approach. The first study was conducted with the participation of Russian political and business elite. The second was a cross-cultural and carried out in Russia and Italy. *Study 1*. The purpose of the pilot study was to compare the attitude towards corruption of entrepreneurs and politicians, in accordance with their style (type) of managerial decisions. Method: questionnaire "Attitudes towards Corruption" and "Management Style". Respondents in both groups expressed doubts about the effectiveness of anti-corruption programs in Russia. Turned out that more politicians (rather than business), which are tolerant of corrupt behavior, they do not believe in the possibility of the state and society to reduce corruption. Correlation analysis showed that subjects with the style of "authoritativeness" (imperiousness) believe that the political situation is forcing officials to take bribes. The subjects with style "constructive solutions", on the contrary, perceive bribery as a crime and believe in the possibility of reducing the level of corruption. *Study 2*. The aim of the study was to compare the belief in the effectiveness of measures to reduce the level of corruption and the relationship to the state the citizens of Russia and Italy. Methods: questionnaire of attitudes towards corruption; ranking associations with the concept of "State"; semantic differential. The results showed that the Italians do not consider the fight against corruption meaningless, whereas in the majority of subjects of the Russian group shared this opinion. The Russians believe that the government is not interested in fighting corruption. Italians also evaluated the overall effectiveness of sanctions in the fight against corruption (fines, censure in the media and on the Internet) is significantly lower than the Russians. The subjects of both countries are convinced of the need for civil anti-corruption education. Analysis of factors confirmed the cross-cultural differences in attitudes towards corruption. In particular, the high level of corruption in law enforcement prevents belief in the effectiveness of measures to combat corruption in Russia. The results of correlation analysis of the data showed that in both groups there is a close relationship between the characteristics of the image of the state, on the one hand, and the belief in the effectiveness of the fight against corruption, on the other hand.

Keywords: *attitudes towards corruption, image of the state, beliefs of the elites, cross-cultural differences.*

Preface

In continuation of research on the attitude to corruption in various social groups two new pilot studies have been performed. The first study was conducted with the participation of Russian political and business elite (in accordance with their style of managerial decisions). The second one was a cross-cultural and carried out in Russia and in Italy. Both studies were based on a comparative (and personal) approach to psychological attitudes.

1. Study 1

1.1. Introduction

Psychological consequences of corruption are the loss of confidence in public authorities and businesses, the deformation of the norms and values, strengthening of illegal behavior. Corruption can be regarded as a form of group-destructive behavior. In this case, it is defined not only as a dysfunction of the ruling elites (Simon & Eitzen,1990) and deviant (from the norm) behavior in politics and business

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(Friedrich,1972), but also as corrosion consciousness of all sections of society (Burston, 2014; Nestik, 2002). In this regard, it is advisable to carry out regular surveys of attitudes towards corruption in different social groups.

Attitudes towards corruption among officials, businessmen, politicians and youth were studied by us. For example, comparative analysis of attitudes towards corruption among entrepreneurs of small business and officials showed that the entrepreneurs were more active initiators of corrupt behavior (Deyneka, 2008). They were more tolerant of corruption and to a greater extent than officials had feared measures to combat corruption.

The purpose of the new pilot study was to compare the attitude towards corruption of entrepreneurs and politicians in Russian elite.

Additional task was to study of personality who prone to corruption. In empirical studies conducted earlier, we have detected some of the features of motivational portrait of tolerable to corruption personalities. They are characterized by a high level of Machiavellianism, the prevalence of tactics over strategy or preference to live for today, economic pessimism, high motivation to succeed with a very low motivation of avoiding failure (Deyneka, 2008). The investigation of readiness to give and take bribes showed that it correlated with exaggeration the role of money (their fetish) and vice versa lack of motivation to achieve a high level of professionalism and skill (Deyneka, 2011). In this study, analysis of attitudes towards corruption of entrepreneurs and politicians was carried out taking into account their style (type) of managerial decisions.

1.2. Method

Two groups of subjects - businessmen and politicians took part in this study. The sample of 50 respondents, aged from 30 to 45 years, 42 men and 8 women. The first group (25 Ss) included owners of gas companies, scientific companies and share holdings. The second group (25 Ss) consisted of politicians, among whom there were 8 people from the State Duma of Russian Federation (Parliament), 3 persons were members of the Federation Council, and 14 heads of regional administrations.

As the study of business and political elites is always difficult, we used only the rapid method. The questionnaire "Attitudes towards corruption" were used as a main method. It consisted of ten statements. The questionnaire was tested for constructive validity (by factor analysis) and reliability (Spearman-Brown criterion was used to check the reliability of homogeneity). The matrix of the two factors was obtained from factor analysis of the questionnaire data after rotation technique: "***stimulating corrupt behavior***" and "***evaluation of the authorities to fight corruption***".

The questionnaire "Style of management" (Fetiskin & Kozlov & Manuilov, 2002) was used as an additional method. First, it played the role of a buffer method (to establish contact with the subjects, giving them feedback immediately, creating motivation for participation in the study). Second, it was productive for the study of the prerequisites of corrupt behavior. Regulative unit is part of the structure of the individual qualities of corruption (Vannovsky, 2013). It includes mechanisms for management decision-making, for example, unmotivated risk in decision-making, the desire for domination over people, self-assertion (Gnezdilov & Kiselev, 2014).

1.3. Results and conclusions

Attitudes towards corruption of businessmen and politicians had general and specific characteristics. Respondents in both groups expressed doubts about the effectiveness of anti-corruption programs in Russia.

It turned out that more politicians (rather than business), which are tolerant of corrupt behavior. They do not believe in the possibility of the state and society to reduce corruption. The results obtained seem to be explained by the fact that government officials want to keep the status quo. They are satisfied with the current situation. Business by contrast is not satisfied with the situation with corruption, and they see no serious reasons why it could not be reduced if the political will.

Politicians also prefer penalties as the main anti-corruption measures. “Authoritativeness” was the dominant style of management decisions among politicians. The style of “constructive search for a way out of a problem situation” prevailed in a group of businessmen.

The results of the correlation analysis showed that subjects with the style of “authoritativeness” (imperiousness) believe that the political situation is forcing officials to take bribes. They do not believe in the possibility of reducing corruption and believe that progressive fines can increase the responsibility of officials. The subjects with managerial style “constructive solutions”, on the contrary, perceive bribery as a crime. They were optimistic on the possibility of reducing corruption and did not consider that fines are the best measures to combat corruption and believe in the possibility of reducing the level of corruption.

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2. Study 2

2.1. Introduction

Corruption as a surrogate form of regulation in society exists in all countries. If the level of corruption exceeds the limits, it can be considered as a social disease and ideological deformation. Persons involved in corruption processes at the macro level are presented in business, government and society, and in the minds of direct participants in corrupt deals – official, entrepreneur and the reference group (public opinion), which supports the legitimation of any illegal activity (Burston, 2014; Nestik, 2002).

The *purpose* of the study was to compare the belief in the efficacy of measures to reduce corruption and the attitudes to the state of the citizens of Russia and Italy.

Corruption is not only psychological problem. It is advisable to take into account the macro-factors, which include, inter alia, political and economic situation, social environment. According to the annual rating Transparency International, not only in Russia, the problem of corruption is a cornerstone in the Policy Action Plan. Citizens of Russia and Italy have many similar views on life: for example, the importance of family, work and friendship in the everyday sense of the word. Nevertheless, there are negative sides of similarities, to which, no doubt, can be attributed the high level of corruption that permeates all areas of life and destroys the social consciousness of citizens.

2.2. Method

The study involved two groups (80 Ss) of employees of commercial enterprises with similar characteristics by sex, socioeconomic status and activity. The first group consisted of employees from St. Petersburg, the second – from Milan. The profile of their activity is telecommunication services. 40 employees participated in the study in Russia (23 men and 17 women), 40 Ss (22 men and 18 women) – in Italy. Mean age was 36.8 years.

The main method of the research was the short version of the questionnaire "*Attitudes towards corruption*", consisting of 12 claims with a 7-point scale responses. The questionnaire includes the following blocks: attitudes to anti-corruption measures; pretensions to power, critical attitude toward authority; assessment of the current state of corruption in government institutions in the country.

An additional methods: The image of the state in modern Russia and Italy studying we used a self-developed symbol-association ranking method with the stimuli concept of "State" (Deyneka, 2014). In addition we used the modified semantic differential *(MSD*) method with stimulus "State", which includes 20 descriptors (ibid).

2.3. Results

We obtained highly significant differences in attitudes towards corruption between the groups (Table 1). Italians do not consider the fight against corruption meaningless, whereas in most of the Russian group of subjects shared this opinion. Italians showed high, and the Russians, on the contrary, low economic optimism (p<0.001). Psychological laws defects (gaps, providing completeness of official's discretionary power due to differences in their interpretation) largely reflected in the estimates of Russian subjects.

Table 1. Intergroup comparisons of questionnaire "Attitudes towards corruption".

Semantic fragments of statements questionnaire	Groups				the van der Waerden X-criteria
	Russian sample		Italian sample		Criteria
	M	σ	M	σ	X
Economic optimism	3,50	1,84	**5,97**	0,83	5,614***
Ineffective legislation	**5,97**	1,54	**6,27**	0,93	< 1.96
Senselessness of the fight against corruption	4,37	2,25	1,87	0,94	4,526***
Bribe - norm of modern business	3,55	2,17	**4,77**	2,37	< 1.96
Deterioration of welfare organizations	2,60	1,64	**5,30**	2,05	4,841***
Penalties - the best measures to combat bribery	3,52	2,09	2,22	1,23	2,677**
Anti-corruption civic education	**5,80**	1,36	**5,67**	1,70	< 1.96
Public condemnation in the media and on the Internet	3,50	1,74	2,07	1,47	3,190**
Government disinterest	**5,70**	1,50	4,25	1,96	3,335***
Corruption in law enforcement	**5,97**	1,29	3,45	1,81	5,096***
Discretionary powers	4,57	1,89	2,82	2,06	3,365***
Cooperation with international organizations	4,27	1,89	4,22	1,95	< 1.96

Note: significantly different * – p<0,05 (criteria > 1.96); ** – p<0,01 (criteria > 2.47); *** – p<0,001 (criteria > 3.29).

The Russians believe that the government is not interested in fighting corruption. Italians are significantly lower than the Russians evaluated the effectiveness of sanctions in the fight against corruption (fines, condemnation in the media and on the Internet). But the citizens of both countries are convinced of the need for civil anti-corruption education.

Comparative data and factor analysis also showed specificity in assessing corruption of law enforcement, significantly affecting the belief in the effectiveness of measures to reduce corruption. Unlike Russia, corruption in law enforcement is not the most dangerous type of corruption of modern Italy, which is connected with respect to them. Their profession is considered prestigious and well-paid at the same time. (The main institutions are the state police, the carabinieri detachment, financial guard, prison police, as well as municipal and regional police).

Factor analysis confirmed the intercultural specificity attitudes towards corruption. In particular, level of corruption of law enforcement agencies is essential for belief in the effectiveness of measures to reduce corruption in Russia.

Semi-projective techniques showed that the image of the State of the Italians more favorable than the Russians. There were a few values in the negative area of semantic space in the Russian group. Lowest scores included in the negative field of semantic values received such descriptors as: “legal” ($M = –1,30$; $\sigma = 1,52$), “stimulatory” ($M = –1,18$; $\sigma = 1,35$) and “safe” ($M = –1,02$; $\sigma = 1,21$). In addition, the Italian state is perceived as a more responsible, credible, beneficial and democratic than the Russian state. The results of correlation analysis of the MSD data showed a close correlation between of the characteristics of the image of the state (as an institution of the society management) and optimism (pessimism) about the prospects for and the effectiveness of specific measures to combat corruption. Those who had better representation of the State believed in the effectiveness of measures to reduce corruption.

2.4. Conclusions

Italians do not consider the fight against corruption meaningless, whereas in most of the Russian group of subjects shared this opinion. In the image of the state in relation to corruption in the country between the two groups there are more differences than similarities.

Belief in the effectiveness of measures to combat corruption requires respect and trust in public institutions, in particular, and especially to such an institution of power as law enforcement agencies.

The characteristics of the image of the state (as an institution of the society management) correlate with optimism /pessimism about the prospects for and the effectiveness of the measures to combat corruption.

3. Discussion and general conclusions

Corruption has political, economic, cultural, historical and psychological background. In countries with a developed civil society and political democracy, corruption is kept in a controlled framework, it cannot receive too destructive. At risk are in the country's modernization period when political activity ahead of institutionalization (Huntington, 1996). G. Hofstede argues that power distance facilitates corruption (Hofstede, 1980). This cultural dimension is typical for Russia. Russian economy called “attitudinal” (Lewis, 1996; Anderson & Shihirev, 1994), “transfer, service and home” economics, as it relies on community collectivist traditions and it is strong archetypal component of eastern traditions (Boronoev & Smirnov, 2000; Reshetnikov, 2008). Among the socio-psychological factors are called “compensation deficit of social capital”, forced conformal behavior, defense mechanisms. People use defense mechanisms like minimization and denial to sustain their idealized conception of their corrupt leaders, whom they depict as the victims of excessive or unprincipled attacks (Burston, 2014).

The fight against corruption in Russia is a strategic task of the state, whose solution is aimed at ensuring the security of individuals, society and the state. Since corruption in Russia has become systematic, fighting it requires systemic measures, including the educational measures. Prevention and the fight against corruption are important at any stage of its development, it is important to remove the feeling of hopelessness of such a struggle and belief in the irreversibility of corruption.

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ANALYSIS OF THE MOTIVATION AND WORK CLIMATE OF UNIVERSITY TEACHING STAFF

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Abstract

The scientific, social, economic and technological progress taking place in present-day advanced societies needs to be closely linked to the work of the university and to effectiveness, productivity and efficiency. Moreover, teaching staff play a predominant role and are the best point of reference for any changes to be introduced in teaching, in the way to manage classes, in the use of tools, changes in methodology or teaching strategies, and also in the ways students learn, etc. The teacher ceases to be a figure who only transmits knowledge and becomes a guide or facilitator of learning. The teacher, therefore, takes on a different commitment with the ways of learning, of approaching students, guiding tutorials, assessing student learning, etc. For these reasons *staff motivation* is one of the basic concerns. It would be expected that a demotivated staff with few incentives and a low opinion of their worth as teachers would be less committed to their teaching, research and management work, and as a result would achieve less success in their work with students. To put it another way, they would perform worse in all they do. But could it be that their vocation as teachers and the professionalism of university staff are sufficient motivating factors in themselves? It is for these reasons that we have wished to analyse the situation of teaching staff in universities in Madrid. In university organisations the teaching staff is one of the key elements that leads to work being done more or less effectively. Human Resources are beginning to consider the staff as the major asset in Organisations. The issues that can favour or prejudice the levels of motivation are multiple. Therefore, in this study, we have attempted to show what issues have the greatest impact. This research aims to study the level of motivation of teaching staff in the Universities in Madrid and analyse the different factors that affect performance at work in the roles of teacher, researcher and manager. It also aims to discover whether or not motivation influences a teacher's everyday work and which variables affect the university work "climate" and other issues involved. For this study, 7696 questionnaires were sent to teachers at the 13 Universities in the Madrid Region. A total of 886 opinions from 11 Universities were returned. The results are presented in the work.

Keywords: *motivation, work climate, university.*

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DOMESTIC CRIMES OF VIOLENCE: PSYCHOLOGICAL-CRIMINALISTIC ANALYSIS

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Abstract

The work presents the analysis of motives of domestic crimes of violence. The article is based on the personal study of criminal cases files and also on the survey of law enforcement officers. We provide authors' classification of motives of the given crimes caused by such social-psychological factors as destructive family relationships and personal desadaptation.

Keywords: *motives, motivational processes, domestic crimes of violence.*

1. Introduction

Lately crimes of violence have started to occupy one of the leading positions among important social problems. Domestic criminal behaviour due to its considerable spread causes noticeable damage to the society.

According to the statistical data of the MIA Russia, from 12 000 to 14 000 women are murdered by their husbands, partners and relatives and about 2000 commit suicides. Like in many other countries women are subjects to psychological, sexual and physical violence on the side of their husbands. Study of the family crimes is one of the relevant problems of forensics and psychology.

2. Evidence

Study of the criminal-justice struggle with domestic crimes of violence as a separate division is connected with the separation of these crimes from all other crimes, envisaged by the criminal law. This kind of division at superficial consideration may seem mechanic. Deeper analysis of 365 case files conducted by us allowed us to point out some similar features of domestic crimes of violence and essential relations between them that stipulates their unity and integrity of the whole problem. Our assumptions of similarities of domestic violent crimes were discussed with detectives and judges. As a result we came to a conclusion that the common signs of all the domestic crimes of violence are:

1) act of crime on the whole;
2) locality of the territory of the conflict development (family);
3) situations of committing of domestic crimes of violence;
4) the similar in its essence way of crime, characterizing the objective side of a crime (alternatively: physical violence or threat of it);
5) intentional (conscious) character of use of violence (threat of violence);
6) specificity of relationships between a criminal and his/her victim.

In the given article we will consider only the last two features of a family crime of violence that allow uniting them into one group. The results of analysis of the other indications were published in the earlier works.

Intentional (conscious) character of use of violence (threat of violence). The foundation for the analysis of the aims of the physical violence is the type of intention. Physical violence done with express malice is always purposeful. The closest purpose of such physical violence is its result in the form of socially dangerous physical consequences the final aim of such an action can be different. Depending on the relation to the ultimate purpose and physical consequence of the violence the latter may be classified into "physical violence – end in itself" (infliction of a physical consequence is the end in itself for a criminal) and "physical violence – means of achieving another goal" (physical consequence doesn't coincide with the final aim that is either directly indicated in the elements of crime or follow it, or is indifferent to the qualification)

Needs are the foundation for motivation. The famous criminologist Y. M. Antonyan rightly supposes that "a motive is a subjective sense that includes psychological gain from certain actions" (Antonyan Y. M., 2013). Person's behaviour is, as a rule, multiply motivated. Motives become apparent in different psychological spheres (conscious, subconscious). You cannot define motives only on the basis of actions without careful consideration of their structure, without understanding person's background, without considering the crime committed outside of other actions and events. It's necessary to know what roles the motives play in relation to person's needs. It's necessary to know what function the motives fulfill towards the personal needs and what the psychological "gain" is from a committed crime.

Frequently when a person explains his/her behaviour he/she substitutes motive for reasoning in order to hide, ennoble real motives. The real motives and motivational processes slip away not only from law enforcement agents, but from a criminal as well. In a survey (63 respondents) it was found out that in 73% defendants in crimes of violence see blows as a punishment for victim's offence, and in 46% cases believe that tortures are a necessary form of compulsion and obedience (Beltsov N.I., 1996).

Among the main motives of crimes of violence towards underage and ageing members of a family in our opinion can be pointed out the following ones:

- parents', relatives' lack of desire to bring a child up;
- parents', relatives' lack of desire to provide material or other kind of assistance to an underage or elderly member of a family;
- unwillingness to have a child because of child's psychological or physical disadvantages;
- sexual;
- lucrative;
- hooligan.

In the research of other authors (A. Miller, 2003) among the motives for violent crimes towards the other members of the family the following ones were pointed out:

- subconscious need to transfer onto a different person humiliation that earlier was posed on a criminal;
- subconscious need to let out suppressed feelings;
- need to have at one's disposal a living object for manipulating;
- to transfer of personal childhood experience, determined by the need to idealize own childhood and parents by dogmatic transference of parents' ways of upbringing to his/her own child;
- desire to take revenge for the pain a parent has once experienced.

We have also analyzed crime motives. Having summarized the results provided by other authors' and our personal research plus the materials of the legal precedents we came to a conclusion that domestic crimes of violence depending on the motives can be divided into 5 groups.

The first group unites crimes of violence based on the motives of assertion and self-assertion and a criminal's desire to affirm his/her authority in the family. (85,7% of cases), yearning for domination (50%), a criminal's desire to make the victim and other members of the family obey (84,1%), venting of anger that arose as a result of a conflict with the other members of a family (55,7%), venting of anger on the victim that is connected with inability to fulfill responsibilities in the family by a criminal (44,3%), venting of anger due to failures, crisis of personal, family life (25%), desire to injure, damage a victim (89%,8).

The second group is represented by crimes of violence committed with lucrative impulses such as: gain (intention to gain property or the right to property of an under-age victim, desire to get rid of alimony etc.) in 15,9% of cases it is also a desire to dishouse an under-aged victim and his/her parents (12,5% of cases)

The third group unites the crimes of violence, the main motive of which is to "bring up", discipline other members of the family, influence their behaviour in order to stop their caprices, undesirable acts etc (1,1% of cases)

The fourth group unites crimes of violence conditioned by a desire to get rid of a victim and troubles associated with him/her (necessity to take care of, bring up, take responsibility etc)

The fifth group is represented by crimes of violence that as a base have a criminal's desire to protect him/her and other members of a family from psychological and physical violence coming from a victim.

To such "defensive motives" are ascribed: suppression of offences, humiliation from a victim; suppression of violence, attacks from a victim on a criminal; protection from violence, attacks from a victim on other members of a family.

The most wide-spread cases are when the main motive of violence is a criminal's desire for self-affirmation. Violence acquires independent meaning as a means of establishing of criminal's power.

Forming of a criminal intention of committing such crimes very often happens in a frustration state – inner psychological tension that arises as a result of an unsuccessful attempt to realize person's

desires, yearnings. Discharge of frustration tension is reflected on the so-called "surrogating actions" that can be transferred to people who have nothing to do with the conflict situation.

"Surrogating" actions of a criminal character maybe directed against the specific person who happened to be nearby. In this case the assault victim turns out to be defenseless, and the attacker is sure of his/her impunity. In this case the reason of criminal's aggression can be work and home problems, personal failures, and crimes of violence are directed towards people who happened to be nearby.

"Surrogating" actions of a criminal character can be directed against close people who are strongly connected emotionally. To our mind in this situation the reason of a destructive behaviour are inferiority complexes. A personality through conductions of violent actions aspires to self-assertion.

The protest feeling, aspiration to get rid of one's inferiority, dependent position from: parents, bosses, spouses and the like – all this pushes a personality to asocial behaviour and crimes. The mechanism of the criminal behaviour is such that social maladjustment, diffidence is replaced by a perverted aspiration to become strong, to excel over others. Paradoxically this phenomenon leads to "inferiority complex transformations into superiority complex" (Adler, 2011).

The defendant never says that he/she wants to deliver a blow, injure, impose a certain lifestyle and the like. But in fact these intentions are very often the main aim. Not a subject of a conflict is important but victim's incitement to a certain state, damaging. The conflict that leads to violence can be called "unrealistic" if to use the term given by the American conflictologist L. Koser. It arises from aggressive impulses that search expression not depending on an object. A person that seeks pathological self-assertion is always ready to apply violence. Special or extreme situations are not required. Violence can become apparent at any moment, it's unpredictable as it is a means of solving these or those problems crucially important for a violator, or a means to achieve his/her egoistic aim. Aspiration to achieve his/her aim by any means makes the violator to seek and create necessary situations and conditions in order to discharge his/her emotions.

Some researchers believe that the cruelest murders are committed by parents to their children aged 5-6 (M. V. Danievskaya, 1996). The real reason for committing such brutal crimes towards family members lies in aspiration to assert oneself at their cost by establishing infinite power over them.

Lucrative motive means that the foundation for the reasons of socially dangerous action is aspiration to get some material benefit, gain (Volkov B.S., 1982). In these cases a criminal often commits violent actions towards children of tender years obtaining consent with all his/her actions from their families.

The motive expressed by aspiration to get rid of other members of the family who are obstacles to realization of successful family scenario murders of ill relatives are committed. In the considered cases victims were children and elderly parents with serious diseases.

For home environment that precedes committing of violent crimes on "defensive motives" are characteristic prolonged, systematically repeated conflicts, scandals, started by a criminal during which he/she subjects members of his/her family to insults, humiliations, harassments, or cause bodily harm. The defendant being unable to cope with all the assaults commits a crime of violence towards the violator. Frequently this crime is categorized as a violent one as victim's behaviour very often provokes in a criminal rise of emotionally-nervous tension or the affect state.

3. Conclusions

To finish with it should be underlined that family members' behaviour in many terms is defined by the peculiarities of the family relations, their length and as a result cumulative "victims provocation" arises. Then the foundation is created for necessary redistribution for the committed crime of the guilt on both sides. Different kinds of victim's behaviour (amoral, aggressively-provoking, and unlawful) can actively influence the mechanism of the criminal behaviour.

As a factor of violence escalation arise ambivalent relations of the conflict sides to each other. Domestic violence in most ways is determined by the relations of the family members and is written into the context of exogeneous and criminogenic situations.

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THE EVIDENCE-BASED OUTCOME EFFECTIVENESS OF PEER COUNSELLING AND COGNITIVE-BEHAVIORAL THERAPY GROUP INTERVENTION FOR AGGRESSIVE SCHOOL CHILDREN

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Abstract

The study aimed at filling up the research gap for reducing schoolchildren with reactive and proactive aggression through peer counselling and Cognitive-behavioral Therapy group intervention with a six-month longitudinal study. A total of 2,177 local students of Grade 7th to 9th from four middle and high schools in Hong Kong completed a screening questionnaire. All Grade 7th to 9th from four middle and high schools were invited to complete the screening questionnaire which consisted of the Reactive and Proactive Aggression Questionnaire (RPQ; Raine et al., 2006), the Multidimensional Peer Victimization Scale (MPVS; Mynard & Joseph, 2000), the Antisocial Process Screening Device-Youth Version (APSD; Frick and Hare 2001), and some demographic questions. Parents' consent for the student's participation was obtained. Both students and parents were told that data collected would be used for understanding adolescents in Hong Kong. Students would be selected as targets if they scored both (i) $z \geq 1$ in RPQ and (ii) $z \leq 1$ in MPVS in their schools. The targets will be randomly distributed to peer counselling and Cognitive-behavioral Therapy group intervention. Based on the selection criteria, 101 students (67 males and 34 females) were selected to be the targets of peer counselling, and 85 (59 boys and 26 girls) students were assigned to receive the Cognitive-behavioral Therapy group intervention. Their age ranged from 11 to 17 (M = 12.8, SD = 1.09). There is no significant difference and no time with intervention interaction effect between peer counselling and Cognitive-behavioral Therapy group intervention. For the peer counselling intervention, Post-hoc tests using the Bonferroni correction revealed that there were significant declines in total aggression and reactive aggression from screening to post-test and from post-test to 6-month follow up. However, significant declines in proactive aggression, psychopathy, impulsivity and narcissism were only found from screening to post-test, but not from post-test to 6-month follow up. For Cognitive-behavioral Therapy group intervention, Post-hoc tests using the Bonferroni correction revealed that there were significant declines in total aggression, reactive aggression, proactive aggression, psychopathy, impulsivity and narcissism were only found from screening to post-test, but not from post-test to 6-month follow up. Significant increase in callous-unemotional was found from screening to post-test, but not from post-test to 6-month follow up. The study could encourage helping professionals to adopt a ground-breaking perspective on differentiating and treating amongst aggressor subtypes in the school context.

Keywords: *reactive aggression, proactive aggression, peer counselling, group intervention, longitudinal study.*

1. Introduction

Proactive and reactive aggression has been well proved that linked to characteristics of psychopathy which consists of three subcomponents: Impulsivity, callous-unemotional traits, and narcissism (Kruh, Frick, & Clements, 2005; Pardini, Obradovic, & Loeber, 2006). Reactive aggression is positively related to impulsivity, hostile attributional bias is the main feature of cognitive distortion in reactive aggression (Crick & Dodge, 1996), which directly affects ones' cues picking and misinterpretation towards the ambiguous interpersonal situations (Bailey & Ostrov, 2008). It would be leaded to arouse their anger and behave aggressively for defending themselves from the provocation (Vitaro, Brendgen, & Tremblay, 2002). Conversely, proactive aggression is positively correlated with callous-unemotional traits (Marsee & Frick, 2007) and narcissism (Barry et al., 2007). Their aggressive behavior is driven by personal goals, such as money, materials, dominance, and so on. There is no guilty

and remorse about their bullying and aggressive behavior towards the victims (Hare, Hart, & Harpur, 1991).

Although to date there has been no evidence-based evaluative study on the outcome effectiveness of peer counselling and group interventions designed specifically to reduce both subtypes of aggression. Neither has there been an inclusive assessment that screens out high-risk schoolchildren with reactive and proactive aggression prior to both interventions. The study addressed these gaps by employing multi-stage assessment procedures and mixed-mode methodology in a six-month longitudinal design. Data were collected from student self-report scales.

2. Methods

2.1. Participants

A total of 5,024 local students of secondary 1 to 3 (i.e. Grade 7th to 9th) from 12 secondary schools in Hong Kong completed a screening questionnaire. Based on the selection criteria, 102 students (67 males and 34 females) were selected to be the targets of peer counselling, and 85 students (59 males, 26 females) participated in therapeutic group. Their age ranged from 11 to 17 (M = 13.01, SD = 1.22).

2.2. Procedure

2.2.1. Treatment target selection. All secondary 1 to 3 students of the 12 secondary schools were invited to complete the screening questionnaire which consisted of the Reactive and Proactive Aggression Questionnaire (RPQ; Raine et al., 2006), the Antisocial Process Screening Device-Youth Version (APSD; Frick and Hare 2001), and some demographic questions. Parents' consent for the student's participation was obtained. Both students and parents were told that data collected would be used for understanding adolescents in Hong Kong. Students would be selected as treatment targets if they scored both (i) $z \geq 1$ in RPQ and (ii) $z \leq 1$ in MPVS in their school, which would then be randomly assigned to either therapeutic group or peer counselling group.

2.2.2. Peer counselling group.

Peer counsellor selection. Teachers and school social workers selected some students of secondary 4 to 6 (i.e. Grade 10th to 12th) as potential candidates. They were then invited to attend a group interview (10 per group). Tasks included self-introduction, group discussion, and cooperative games. The interviewers (i.e. teachers and school social workers) would select suitable candidates based on their creativity, assertiveness, analytic skills, initiative, leadership, cooperativeness, communication skills, and resourcefulness. About 10 peer counsellors were selected in each school and each peer counsellor were assigned to take care of 2 to 3 targets in school.

Peer counsellor training. Selected peer counsellors received a 4-session training (10 hours in total) in 2 days outside campus. The goals of the training were to (i) explain the ideas and aims of the peer counsellor program, and the duties of peer counsellors; (ii) equip peer counsellors with adequate and effective counselling skills; (iii) empower peer counsellors to handle interpersonal conflicts; and (iv) enhance their ability to organize activities suitable for the targets. Activities included ice-breaking games, introducing characteristics of aggressors and victims in school, teaching basic concepts and skills of cognitive behavioral therapy, role-play, teaching ethical principles in interacting with the targets, and introducing effective methods to plan and organize student activities.

Intervention phase. After the training, the peer counsellors were instructed to take care of the targets in school for one academic year. They would introduce themselves as peer counsellor to the targets. They would record the details of their meeting with the targets, including time, venue, content, emotions of the targets, intervention skills used, etc. The record would be handed in to teacher twice regularly each month. Written suggestions for improvement would be provided within a week. The peer counsellors could discuss the cases with the teacher when needed. Moreover, in each school, peer counsellors together would organize at least two activities for all targets every semester.

Assessment. After the intervention, treatment targets completed a post-test questionnaire consisting of the RPQ and the APSD. Six months after the post-test, they completed the same questionnaire again. Due to attrition, 65 students (42 males and 23 females) from therapeutic group and 81 students (55 males and 26 females) from peer counselling group completed all the screening, post-test and 6-month follow-up assessment.

2.3. Measures

RPQ (Raine et al., 2006). It was a 23-item self-report questionnaire which included two subscales, reactive aggression (11 items) and proactive aggression (12 items). Items were rated on a 3-point Likert scale (0: never; 1: sometimes; & 2: often) for the occurrence frequency of certain aggressive behaviors (proactive aggression, e.g. "had fights with others to show who was on top;" reactive aggression, e.g. "got angry when others threatened you").

APSD (Frick & Hare, 2001). The self-report version was used. It was a 20-item scale detecting antisocial processes in youth. Students are asked to rate themselves on a 3-point Likert scale (0: not at all true; 1: sometimes true; & 2: definitely true). It included 3 subscales: Callous-unemotional traits (6 items, e.g. "hide his/her feelings or emotions from others"), Impulsivity (5 items, e.g. "act without thinking of the consequences"), and Narcissism (7 items, e.g. "get angry when corrected or punished"). Two items ("engage in illegal activities," & "lie easily and skillfully") are not included in any of the subscales.

2.4. Design

Mixed multivariate analysis of variance (MANOVA) would be used to analyze whether there were changes in targets' aggressive behaviors (reactive aggression & proactive aggression) and psychopathy (narcissism, impulsivity, & callous-unemotional traits) across three time points (screening, post-test, & 6-month follow up) for different intervention methods (therapeutic group and peer counselling).

3. Results

Results from mixed MANOVA suggested that there were differences in targets' aggressive behavior and psychopathy over time, Wilks' Λ = .44, $F(12, 133) = 14.36$, $p < .001$, partial $\eta^2 = .56$. However, there was no significant difference between the intervention methods, Wilks' Λ = .98, $F(6, 139) = .41$, $p = .87$. In addition, the interaction effect between time and intervention method was not significant, Wilks' Λ = .93, $F(12, 133) = .88$, $p = .57$.

Results from repeated-measures ANOVA suggested that psychopathy ($F(2, 288) = 11.33$, $p < .001$, partial $\eta^2 = .07$), narcissism ($F(2, 288) = 12.71$, $p < .001$, partial $\eta^2 = .08$), impulsivity ($F(2, 288) = 18.10$, $p < .001$, partial $\eta^2 = .11$), and callous-unemotional traits ($F(2, 288) = 6.08$, $p = .003$, partial $\eta^2 = .04$) were different significantly over time. Moreover, results from repeated-measures ANOVA with the Greenhouse-Geisser correction suggested that total aggression ($F(1.88, 271.13) = 51.67$, $p < .001$, partial $\eta^2 = .26$), reactive aggression ($F(1.87, 269.18) = 77.35$, $p < .001$, partial $\eta^2 = .35$) and proactive aggression ($F(1.89, 271.73) = 21.59$, $p < .001$, partial $\eta^2 = .13$) differed significantly over time.

Post-hoc tests with the Bonferroni correction were conducted. In therapeutic group, there were significant declines in total aggression, reactive aggression, proactive aggression, psychopathy, narcissism, impulsivity and callous-unemotional traits from screening to post-test, but not from post-test to 6-month follow up. On the other hand, in peer counselling group, there were significant declines in total aggression and reactive aggression from screening to post-test and from post-test to 6-month follow up. Nevertheless, significant declines in proactive aggression, psychopathy, impulsivity and narcissism were only found from screening to post-test, but not from post-test to 6-month follow up, while there were no significant differences in callous-unemotional traits across time points. Details of the post-hoc tests were present in Table 1.

Table 1. Changes of Aggression and Psychopathy across Time Points by Intervention.

Intervention	Time	Total Aggression		Reactive Aggression		Proactive Aggression		Psychopathy		Callous-Unemotional Traits		Impulsivity		Narcissism	
		M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
CBT Group	1	18.88^a	0.80	12.11^a	0.41	6.77^a	0.56	17.72^a	0.55	5.38^a	0.24	4.92^a	0.23	6.05^a	0.30
	2	11.46^b	0.99	7.82^b	0.56	3.65^b	0.55	16.23^b	0.65	6.23^b	0.24	3.86^b	0.27	4.94^b	0.38
	3	11.38^b	1.15	7.40^b	0.61	3.98^b	0.62	15.29^b	0.63	6.11^b	0.25	3.63^b	0.27	4.48^b	0.35
Peer Counselling	1	18.48^*	0.71	12.19^*	0.37	6.30^*	0.50	17.77^*	0.50	5.68^*	0.22	4.90^*	0.21	6.02^*	0.27
	2	$13.17^\wedge$	0.88	$8.83^\wedge$	0.50	$4.35^\wedge$	0.49	$16.38^\wedge$	0.58	$6.09^\wedge$	0.22	$3.94^\wedge$	0.24	5.14^*	0.34
	3	$9.88^\#$	1.03	$6.59^\#$	0.55	$3.28^\wedge$	0.56	$16.02^\wedge$	0.56	$6.17^\wedge$	0.22	$3.99^\wedge$	0.24	4.78^*	0.32

Note. Means with differing superscripts within columns were significantly different at the $p < .05$ based on Bonferroni post-hoc paired comparisons.

4. Discussion

The study provided a positive scientific evidence-based outcome study that peer counselling and cognitive-behavioral therapy group interventions could both significantly reduce the participants' reactive and proactive aggression, narcissism, impulsivity, callous-unemotional traits, and psychopathy. More specifically, the result showed that schoolchildren with reactive and proactive aggression in peer counselling intervention have a gradual and significant reduction in total aggression as well as both subtypes of aggression much effective than those schoolchildren with reactive and proactive aggression in cognitive-behavioral therapy group intervention. Conversely, the participants in cognitive-behavioral therapy group intervention found significant reduction in total psychopathy as well as the narcissism, impulsivity and callous-unemotional traits compared with the participants in peer counselling intervention. The results indicated that peer counselling approach might be much effective to reduce schoolchildren's externalizing aspect of reactively and proactively aggressive behavior and cognitive-behavioral therapy group intervention might be useful for the cognitive and psychological domain for reducing their narcissism, impulsivity and callous-unemotional traits in psychopathy. The modeling of Social Learning theory could be explained the function of peer counselling intervention could help the schoolchildren to change their aggressive behavior effectively. While, the cognitive-behavioral therapy has been demonstrated that it is effective to dispute the schoolchildren's irrational beliefs and then lead to the significant reduction in psychopathic features.

5. Conclusion

The study provides insights for school counsellors and helping professionals to treat the schoolchildren with reactive and proactive aggression in different ways to achieve specific goals.

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IDENTIFYING HIGH-RISK SEXUAL OFFENDERS WITH PHALLOMETRIC TESTING

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Abstract

The use of phallometric assessment in identifying risk of sexual violence against women and children has demonstrated its value in many forensic settings, and throughout parts of the world it has become the principal means to assess risk of sexual aggression. The precise measurement of circumferential change in the penis during sexual arousal is accomplished by using a mercury-in-rubber strain gauge around the penis, and comparisons of levels of sexual arousal to both normal stimuli (consenting adult) and deviant stimuli (rape, pedophilia) provide an empirical basis for making predictions about risk of sexual assault. The most common use of phallometric assessment is in determining whether or not convicted sexual offenders are safe to be released to the community, though some have proposed that this procedure should be used as a screening tool for those who work with vulnerable populations (e.g., teachers, child care workers, perhaps even clergy). This presentation discusses many relevant issues in this field and presents the author's normative data from a sample of over 700 sexual offenders to assist with interpretation of phallometric testing. Recent as yet unpublished data establishing the importance of using explicit stimuli are also discussed. Also included are data from the author's published study comparing the sexual arousal profiles of 50 incarcerated sexual offenders with 50 incarcerated *non-sexual* offenders. Of particular significance is the fact that relatively few differences were identified between these two groups, although data are presented which identify a major difference in the ability of these groups to inhibit deviant arousal. Using these data affirms the value of phallometric assessment in identifying high-risk individuals. As well, the actual phallometric profiles of four incarcerated offenders (rapist, heterosexual pedophile, homosexual pedophile, non-sexual offender) are presented, and the basis for making a determination of risk of future sexual violence is discussed.

Keywords: *sexual offenders, sexual aggression, phallometric assessment, plethysmography, sexual violence.*

1. Introduction

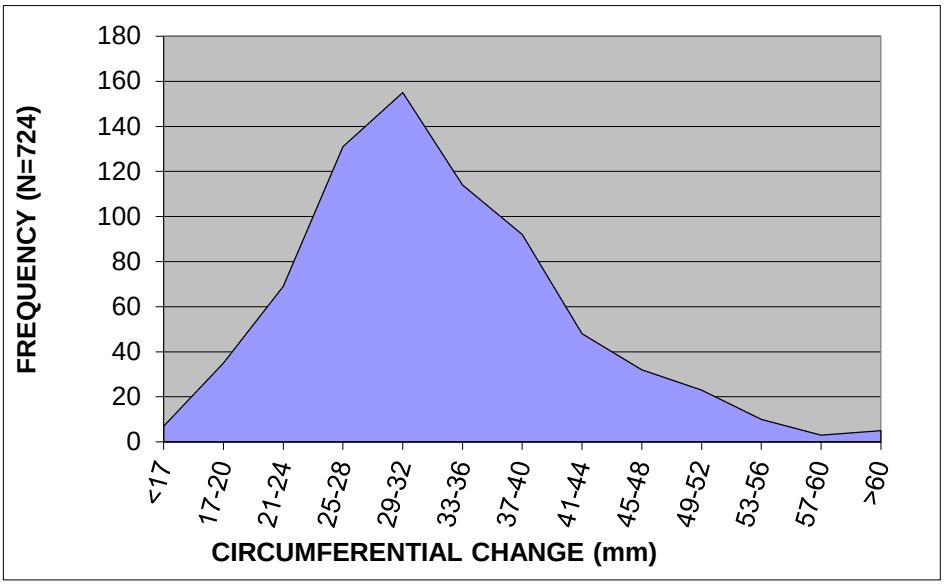
In the 1950s the communist government of the former Czechoslovakia sought a means to determine which men were seeking to avoid military service by falsely declaring themselves to be gay. Dr. Kurt Freund developed a technique to measure sexual arousal and thus provide a possible answer to this question, though he eventually left Czechoslovakia and moved to Canada where he applied this technique more usefully to the investigation of sexual offenders. Since that time what has come to be known as phallometric assessment (or plethysmographic assessment) has become more widely recognized throughout the world, though it's actual use is principally in Canada, the United States, England, New Zealand, and Australia.

Phallometric testing involves the precise measurement of circumferential change in the subject's penis from flaccidity to full erection in response to both 'normal' and deviant sexual stimuli. Although volumetric devices were originally used to measure sexual arousal, circumferential change in the penis was eventually determined to be an easier and more reliable measure of sexual arousal. The actual measurement is accomplished by means of a mercury-in-rubber strain gauge which is placed by the subject around the shaft of his penis, and strain gauges ranging in size from 5-10 cm (in 0.5 increments) are available. What makes this technique particularly useful is the fact that circumferential change in the penis is *the only pure measure of sexual arousal.* While the use of many other physiological measures of sexual arousal has been examined independently and jointly (e.g., blood pressure, heart rate, GSR), these have commonly proven to be both unreliable and likely invalid, their validity being suspect because they are of course influenced by other arousal states such as fear or anger or anxiety.

2. Research Findings

The use of circumferential change as the measure of sexual arousal is facilitated by the fact that normative data are available with regard to the change associated with sexual arousal in the average male. As indicated in Figure 1, research on a population of 724 incarcerated offenders at a number of North American prisons has revealed that circumferential change during sexual arousal approximates a normal distribution with a mean of 32.6 mm and a standard deviation of 8.8 mm (see Howes, 2003). These normative data are particularly helpful in interpreting sexual arousal in cases where full arousal has not been achieved, for it is possible to indicate at specific probability levels (i.e., $p < .05$, $p < .01$) whether the measured circumferential changes are clinically significant.

Figure 1. Circumferential change in the penis from flaccidity to erection in a North American prison sample (N=724).



The phallometric testing procedure is typically accomplished in a single session of two to two-and-a-half hours with the participant ideally being alone in the viewing room. Throughout testing the participant should be monitored on video camera to ensure his attention to all the stimuli (i.e., not simply the preferred stimuli). While there isn't universal acceptance of what should be included among the stimuli used, a factor which has tainted this procedure, a preponderance of clinicians appear to use stimulus sets which include the following categories: consenting adult heterosexual; consenting adult homosexual; adult heterosexual rape; adult female bondage; heterosexual pedophilia; homosexual pedophilia; and neutral themes. The use of all of these categories is likely necessary for phallometric assessment to best achieve its purpose, namely determining an individual's age and gender preference and the level of risk an individual represents to commit an act of sexual aggression. By measuring the extent to which a man is dominated by sexual arousal to deviant stimuli we obtain an empirical foundation for making predictions about whether or not he is a high risk or a low risk to engage in sexual violence (i.e., rape or pedophilia).

While the use of some stimuli (e.g., child pornography) is admittedly and understandably controversial, at least in Canada legislated protection is afforded the use of such materials when this use "has a legitimate purpose related to the administration of justice..." (section 163.1 of the Criminal Code of Canada). Clearly the use of child pornography in phallometric assessment is *not* an offence in Canada, although many other jurisdictions (including the United States) do not offer such protection. Again on moral grounds the use of these materials invites an almost visceral reaction in some people, but as sympathetic as we might well be with this concern a compelling argument can be made that since the sole purpose of using these stimuli is to identify high-risk sexual offenders who can then be kept incarcerated the best interests of the community are served by allowing this. Recent as yet unpublished research involving 128 sexual offenders has indicated that sexual arousal during phallometric testing is enhanced by using visual rather than audio stimuli (see figure 2), and it would appear that a failure to use visual stimuli may substantially weaken this procedure.

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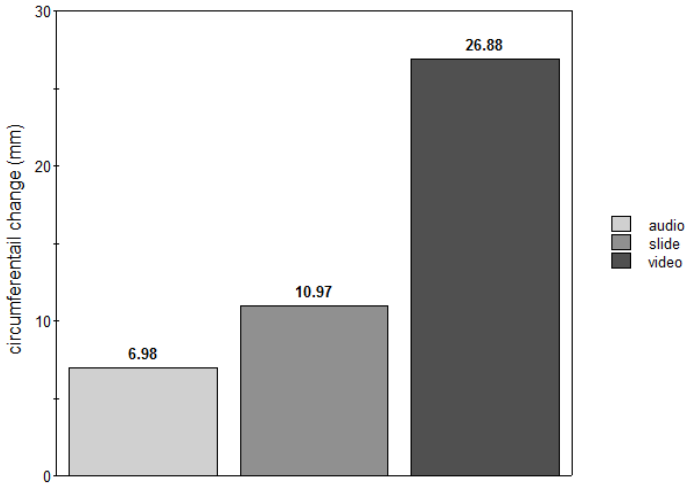
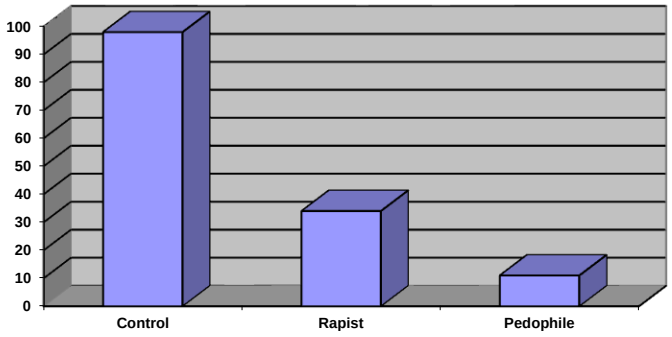
Figure 2. Sexual arousal to consenting adult heterosexual stimuli (n=128).



In an earlier published study which compared the sexual arousal profiles of 40 incarcerated rapists with 50 incarcerated nonsexual offenders (the control group) it was determined that the differences between these two groups were in most respects statistically and clinically insignificant (see Howes, 1998). The value of phallometric assessment was affirmed, however, when as a final task in the testing procedure these inmates were required to demonstrate their ability to inhibit arousal to the deviant stimuli which first elicited this arousal, and a group of pedophiles was also assigned this task. As indicated in Figure 3, the three groups (rapists vs. pedophiles vs. the nonsexual offender control group) revealed marked differences in their ability to inhibit deviant arousal.

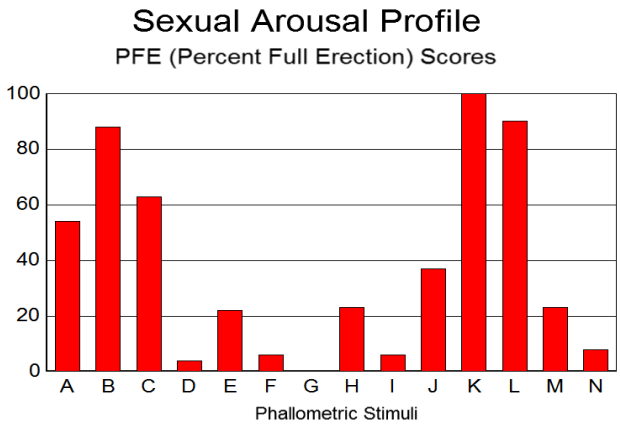
Figure 3. Ability to inhibit deviant sexual arousal (n=100).



In this study only 32% of the rapists and 10% of the pedophiles were able to inhibit their deviant sexual arousal, whereas 98% of the control group readily demonstrated this ability. It is apparent that those convicted of sexual offences not only demonstrate deviant sexual arousal but they have what might be conceptualized as some sort of impulse control deficit, and it is only through the use of phallometric testing that the extent of this deficit will be evident.

Current, ongoing research demonstrating the value of phallometric assessment is perhaps best evidenced in examples such as the real-life profile of a convicted heterosexual pedophile (see Figure 4):

Figure 4. Sexual arousal profile of a heterosexual pedophile.



Legend:	A - girls under 6	H - consenting adult heterosexual
	B - girls 7-10	I - consenting adult homosexual
	C - girls 12-16	J - adult heterosexual rape
	D - adult female	K - heterosexual pedophilia (coercive)
	E - boys under 10	L - heterosexual pedophilia (violent)
	F - boys 12-16	M - adult female bondage
	G - adult male	N - homosexual pedophilia

It is readily apparent that there is much about this sexual arousal profile which is troubling, for it clearly identifies a high risk of sexual aggression (in this case a high risk of sexually molesting young girls). This convicted heterosexual pedophile revealed a Percent Full Erection (PFE) score in response to girls under 6 years old of 54 and in response to 7-10 year old girls his PFE score is 88. When these levels of arousal are compared with his arousal to adult women (i.e., only 4 PFE) it is manifestly obvious that his sexual preference is for young girls. The other marked elevations in his profile are in response to depictions of sexual assaults of young girls, in the first case a high score of 96 PFE in response to a depiction of sex between a male adult and a young girl (who is ostensibly cooperating) and in the second case a high score of 90 PFE in response to a depiction of sex between a male adult and a young girl where overt violence is used to subdue the victim. The use of violence to subdue child victims is not something which diminishes this man's sexual arousal, and this is a particularly malignant finding. When his high arousal to child victims (i.e., 96 PFE) is compared with his low arousal to consenting heterosexual adult sexual practices (i.e., 23 PFE) it is once again clear that his sexual preference is for girls rather than women. To put this in another way, this man's arousal to sex with children is more than four times higher than his arousal to sex with adult women. This profile also reveals that he has low arousal to male stimuli, whether boys or men, which is of course consistent with the identification of him as a heterosexual pedophile.

Though not shown in Figure 4 the most disturbing aspect of this man's sexual arousal profile is his inability to inhibit deviant arousal. When one of the stimuli (i.e., heterosexual pedophilia) was shown to him a second time at the end of the testing session along with directions to avoid becoming aroused, he was unable to reduce his arousal in any meaningful way (i.e., reducing it only from 96 PFE to 92 PFE). This is almost astounding, for the demand characteristics of the testing situation are so apparent (e.g., the individual is in jail, he is on camera, he is being assessed to determine the extent of his sexual deviancy, his release may be dependent on the results of this testing) every participant must surely be highly motivated to do well and look "normal". Any failure to do so, participants would certainly realize, would most likely destroy any prospects for an early release on parole. It has properly been argued that if an individual is unable to inhibit deviant arousal in such a controlled clinical setting with so many demand characteristics there is small likelihood of him evidencing control in the community.

3. Conclusion

In brief summary, phallometric assessment offers a means of clearly identifying any individual's sexual preferences (in terms of gender, age, and level of violence). Equally or perhaps even more important, phallometric assessment provides a means of determining the extent to which the individual is

able to inhibit his deviant arousal. Predictions of level of risk to engage in acts of sexual violence (e.g., heterosexual pedophilia, homosexual pedophilia, adult rape) are rendered much more accurate by the inclusion of objective data from this procedure.

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RISK FACTORS INVOLVED IN THE URBAN CHILD PEDESTRIANS NAVIGATION: A META-ANALYSIS

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Abstract

An increasing number of pedestrians are killed in traffic crashes in all countries around the world. And, children are particularly concerned: for instance, in France (2013), 31% pedestrian fatalities and 43% of the injured concerned children. In the same way, pedestrian injuries are the fifth leading cause of injury related death in the United States for children aged from 5 to 13. The majority of accidents occur in urban area, our cities being more and more complex and dense. On the basis of a meta-analysis of scientific literature related to risks factors involved in the urban child pedestrians, this paper is aiming to investigate factors implied and we propose a taxonomy of the main factors implied to better understand the reasons why the number of child pedestrians increase dramatically. Our meta-analysis has mainly shown that three main factors can be distinguished: environmental factors (physical and social environments); social and educational factors (socio-economic factors, parental supervision); individual factors (genre stereotypes, pedestrian skills, executive functions). On the basis of our meta-analysis, we propose some modification of the "situation awareness" concept applied to child pedestrians, in order to create relevant and efficient training programs for children by focusing on the "user experience" of young pedestrians in urban area.

Keywords: *pedestrian, child, navigation, user experience, meta-analysis.*

1. Introduction

Pedestrians are by far the most vulnerable road users. Despite public, political and scientific efforts to reduce the amount of pedestrian accidents in traffic all over the world, there are still a considerable number of severely hurt or even killed pedestrians every year. As World Health Organisation (WHO) noted in the last report (2013), "each year, more than 270 000 pedestrians lose their lives on the world's roads. Many leave their homes as they would on any given day – to school, work, places of worship, homes of friends – never to return". Globally, pedestrians constitute 22% of all road deaths, and in some countries this proportion is as high as two thirds.

Children are particularly and dramatically concerned by the vehicle-pedestrian collisions, whatever the country. For instance, in the USA, each year about 12,000 young pedestrians (children aged from 5 to 10 years) are injured in collisions with vehicles (NCIPC, 2009). In France, in 2013, thirty-six children were killed and 2,434 were seriously injured, which represents 31% of pedestrian fatalities and 43% of injuries (ONISR, 2013). Two age periods seem particularly critical and correspond to peaks of accidents involving children: 7 years and 11 years (ONISR, 2013).

The review of the scientific literature distinguishes four types of studies interested in child urban navigation: (1) studies dealing with the circumstances and accident factors; (2) studies with an interest in key moments at which the risk of accident is the most important; (3) studies dealing with the pedestrian skills to navigate safely; (4) studies focusing on risk perception, based on some recent cognitive models, demonstrating that the dangers come mainly from a disability children to manage the collection of (ir)relevant information extracted from their urban environment. On the basis of the state of the art of scientific literature, this article is aiming to propose an original taxonomy of factors responsible and/or involved in child pedestrian accidents, distinguishing these factors according to their nature.

2. Environmental factors

The role of the environmental factors (*i.e.*, physical factors) is largely investigated in epidemiological and accidentological studies (*e.g.*, Fontaine & Gourlet, 1997; Prato, Gitelman, & Bekhor,

2012). Some situations and some locations are specifically hazardous because children must take a decision quickly and efficiently (*e.g.*, to cross a street).

Whatever the country, vehicle-pedestrian collisions involving vulnerable road users (*e.g.*, young children, young cyclist, seniors) are most common in urban areas. These accidents in urban areas are mainly located at intersections and occur during the day, when crossing a street or in connection with children's games. And children and adolescents are overrepresented in victims of these pedestrian-vehicle collisions. With the aim to guide prevention policies, many actions tried to model the impact of environmental factors on the risk of exposure of young pedestrians. These studies are primarily descriptive and make it possible to link the urban landscape elements (*e.g.*, presence of pedestrian crossing, level of complexity of the intersections) and circumstantial facts (*e.g.*, high level of traffic, moment, period) with probability of occurrence accidents. These studies are mainly based on the study of signs and "objective" accident data (*i.e.*, reports established by the police and/or the hospitals).

Four factors related to physical environment have been particularly studied because their impact seems essential in the occurrence of accidents involving vehicles and young pedestrians: (1) The identification of different areas and/or elements in the street by the pedestrians (*e.g.*, commercial areas, offices, schools), the density and the type of pedestrians (*e.g.*, children, cyclist, seniors), the presence (or not) of public transport services (*e.g.*, bus station, metro station), and physical characteristics of the road environment (*e.g.*, number of intersection, landmarks indicators); (2) The perception of the volume and the density of two kinds of "objects" in movement in the physical environment seems to be particularly related to the risk of vehicle-pedestrian collision: individuals (*i.e.*, other pedestrians) and vehicles. Of course, the flow of vehicles in the physical environment is significantly related to the risk of vehicle-pedestrian collisions (Harwood et al., 2008), especially for children. But if it is true that the number of vehicle-pedestrian collisions is positively and significantly correlated with the volume of vehicle traffic around, this increase is however not linear (Lee & Abdel-Aty, 2005): the risk of collisions at intersections increases to a maximum in the number of vehicles present in the physical environment (between 30,000 and 60,000 daily vehicles per year) before to decrease (from 60,000 daily vehicles per year). The authors explain this phenomenon by the fact that a very high volume of traffic congested roadways and requires an important speed decrease. And the flow of pedestrians present around an individual is also one of the key elements in the development of an urban accident (Miranda-Moreno, Morency, & El-Geneidy, 2011); (3) The design of the street refers to all the infrastructure elements available and useful for pedestrians and drivers (*e.g.*, specific traffic lane markings). Several studies showed direct links between a "bad" design of the road and/or inadequate infrastructure elements and the risk of vehicle-pedestrian collisions (Harwood et al., 2008; Perdomo, Rezaei, Patterson, Saunier, & Miranda–Moreno, 2014).

But if the physical characteristics of the environment are frequently cited and discussed in epidemiological studies and accident study, many studies have mainly shown that the most important factor is the perception and the mental representation related to these physical elements and not these physical elements *per se* (Granié, Brenac, Montel, Millot, & Coquelet, 2014; Lipovac, Vujanic, Maric, & Nesic, 2013; Tom & Granié, 2011).

3. Social and psycho-social factors

The urban space is a social environment, with a set of rules and standards that knowledge and control needed to move safely there (for a complete review, see: Granié, 2010). And the pedestrian walks through this environment with "his/her" standards, habits and attitudes also under the influence of social factors.

Specifically, three social factors seem to be crucial: (1) Socio-economic context: exposure to risk of injury to pedestrians tends to be higher in urban areas with a low level socio-economic status (Cottrill & Thakuriah 2010). Indeed, especially for children, the risk of collision and/or accident is closely linked to ethnicity and family income level (Barton & Schwebel, 2007a, 2007b); (2) Parental supervision: according to Morrongiello (2005) and Morrongiello and Barton (2009), parental supervision is a key factor that is expressed in three dimensions: look, listen and proximity. But several authors described how supervisor presence (*e.g.*, a parent, a teacher, an older brother) does not guarantee protection: there are different parental supervisions most or less effective. Some studies even show that children take more risks when they follow a parent for crossing a street. Finally, culture and safety culture in the society have a significant impact on parental supervision; (3) Risk perception for parents or "supervisors" explain parental supervision. Five factors determine the risk perception among parents (Lam, 2001): the child's age (*i.e.*, parents attribute greater capacity for older children); gender of the parent (*i.e.*, men perceive risks as lower for children); the proximity of dense taxiways and/or fast; working time for the parents

(*i.e.*, from parents working part-time or unemployed, parents working full time perceive risks as lower); the existence of a previous accident in the family.

4. Individual factors

These factors are centred on the children abilities (*e.g.*, sensory-motor abilities, information processing capabilities, visual attention, intellectual abilities). These individual factors are under the influence on child development, the age differences in development of motor, perceptual skills and cognitive ability playing a key role in pedestrian skills. These pedestrian skills concern metacognitive skills because the child has to plan, monitor and supervise his/her own behaviour during his/her navigation.

Two complementary approaches aim to better understand the impact of individual factors on the behaviour of the child-pedestrian. First, the ethological approach is aiming to describe the behaviour of the child pedestrian at particularly dangerous times, such as the crossing of roads or intersections. The child's ability to perform these tasks is then considered from the point of view related to Piaget's theory of human development. However, this developmental approach is challenged by the existence of contrary results. For instance, the stages of development are not able to explain how and why older children (8-9 years) can demonstrate worse performance than younger children (5-7 years; Connelly et al., 1998; Whitebread & Neilson, 2000). Secondly, and more recently, the cognitive approach proposed to use the concept of "pedestrian competencies", these skills covering all the perceptual-cognitive skills required for browsing behaviour and movement of pedestrians. To understand the overrepresentation of boys/men in the victims of collisions and/or accidents, the propensity of risk-taking is often cited. And genre stereotypes are more important than "biological" genre in this propensity of risk-taking. For instance, even is the participants were cyclists and not pedestrian, the results obtained by Granié (2010) showed the impact of genre stereotypes in rules internalization, risk perception and risk-taking propensity for young people. Furthermore, the results show that internalizing traffic rules is a better predictor than biological sex of the propensity to take risks as cyclist;

So, from a cognitive point of view, collisions and accidents involving pedestrians and vehicles must be considered by using the concept of "pedestrian skills". Pedestrian skills contrast with the knowledge of traffic and traffic rules, often put forward to explain the difficulties of children: (1) children have difficulties to assess efficiently the inter-vehicular interval, but it is often necessary to identify a safe interval in the flow of vehicles, this interval being both spatial and temporal (Barton & Morrongiello, 2011; Lee, Young, & McLaughlin, 1984); (2) children have difficulties to analyze the traffic context (Whitebread & Neilson, 2000), and the youngest pedestrians have great difficulties to quickly process visual information from complex urban scenes; (3) children have difficulties for anticipating the drivers' behaviours (Albert & Dolgin, 2010; Foot *et al*., 2006), based on their ability to infer the intentions and mental states of others other pedestrians, motorists, cyclists, *etc*.); (4) children have difficulties for building a complete mental representation about the situation and for activating Situation Awareness (Meir, Parmet, & Oron-Gilad, 2013).

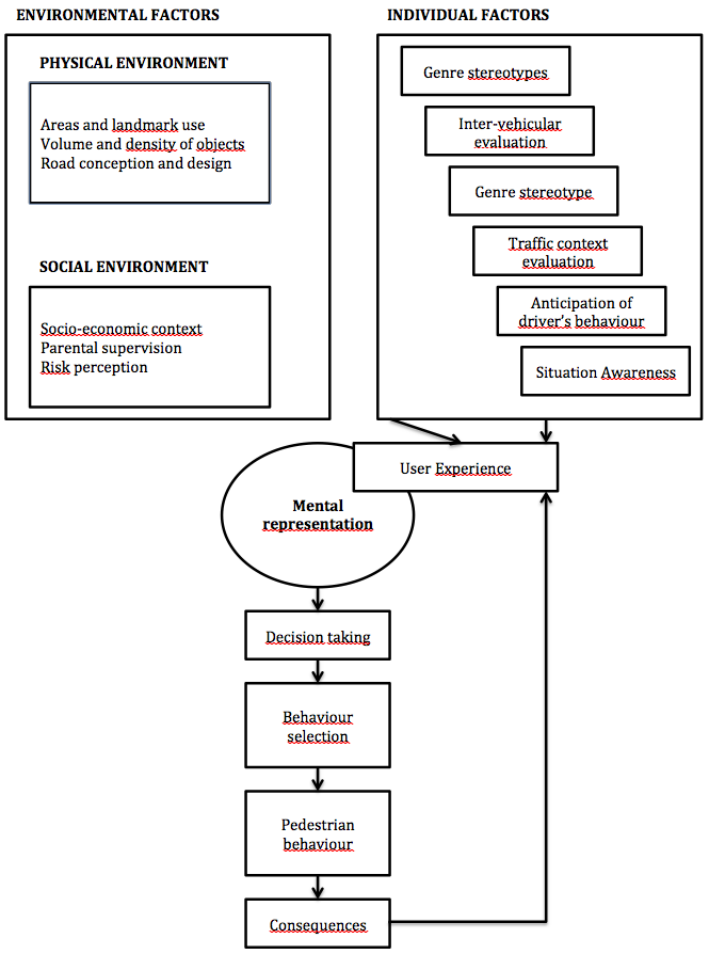
The concept of Situation Awareness (SA) is central among cognitive processes in dynamic environment. The situation awareness is a process consisting of three levels (Endsley, 1995): the perception of environmental elements; understanding of the current situation through the integration of environmental components into an overall assessment of the situation; the prediction of future events (*i.e.*, the projection of the mental model developed on the basis of environmental factors to predict future events). And these three skills are necessary to interact safely with traffic (Whitebread & Neilson, 2000). Two major difficulties can disrupt the analysis of child pedestrians (Tabibi & Pfeffer, 2003): their ability to inhibit irrelevant information and their ability to identify the relevant characteristics according to the requirements of the task and the spatio-temporal context increase with age; Executive functions: for some authors, pedestrian skills are directly linked to executive functions (Barton & Morrongiello, 2011; Kovesdi & Barton, 2013; Miyake et al., 2000): (1) working memory capacity to change their attention focus ("shifting"), (2) working memory capacity to update the mental model depending on the requirements of the task and the context ("updating"), and finally, (3) the ability to inhibit irrelevant information ("inhibition"). However, no study has sought to demonstrate experimentally the possible link between performance, behaviours, strategies and executive functions in young pedestrians.

5. Discussion

"The capacity to respond to pedestrian safety is an important component of efforts to prevent road traffic injuries. Pedestrian collisions, like other road traffic crashes, should not be accepted as inevitable because they are, in fact, both predictable and preventable" (WHO, 2013).

If perceptual aspects mark an important difference between children and adults both in their visual and auditory skills, it is mainly their strategies and cognitive processes that explain the main difficulties of young pedestrians and, ultimately, the risk of accidents and collisions for them. From a theoretical point of view, the cognitive approach centred on pedestrian skills is to date the most comprehensive approach (Figure 1). For example, children with a high level of pedestrian competencies show much more cautious in their assessment of the inter-vehicular interval and analyse quickly the situation as a whole. In addition, these children show better capabilities during the information processing activity, employ more advanced strategies, are able to take a decision quickly and are able to inhibit the irrelevant information. Finally, user experience is more important than age (from a biological point of view) to determine some pedestrian competencies such as the ability of anticipate the drivers' behaviours.

Figure 1. Factors affecting pedestrian skills.



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THE RISK OF PEDESTRIAN INJURY IN COLLISIONS WITH VEHICLE: AN EYE-TRACKING INVESTIGATION

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Abstract

Each year many pedestrians die in pedestrian-vehicle collisions especially in urban area. Several factors are identified such as environmental factors, social and educational factors and individual factors. To study the information collection strategies in urban navigation activities and decision-making process, an experiment was designed by using eye-tracking system. Participants were asked to observe several panoramic pictures before to take a decision: to cross or not to cross the street. An eye-tracker was used to record their eye-movements and to determine the impact of different kinds of environmental elements on their decision taking (car, bus, other pedestrians, …). Three main results have been obtained: First and surprisingly, the three conditions have no impact on the response time, *i.e.*, to take a decision (to cross or not to cross the street). Second, there is a significant difference between the mean fixation duration on the crossing between Low and Moderate traffic density conditions. Third, the first visual fixations are central before to explore the right side of the picture before to explore the left side of the picture. Methodological limitations are discussed for future studies.

Keywords: *urban navigation, eye-tracking, visual exploration, situation awareness, road safety.*

1. Introduction

In all countries around the world an increasing number of pedestrians are killed in pedestrian-vehicle collisions. The majority of these accidents occur in urban area, our cities being more and more complex and dense. Nowadays, to navigate in a city becomes a more and more hazardous activity today. The most vulnerable population is the children. For instance, in France (2013), 31% of pedestrian fatalities and 43% of the injuries concerned children (ONISR, 2013). Three main factors can be distinguished.

First, results obtained in several epidemiological studies have shown that the environmental factors are crucial (Fontaine & Gourlet, 1997), the majority of pedestrian-vehicle collisions occurring in urban area, precisely at intersections and crossing. Of course, the volume and the density of pedestrians and vehicles is significantly related to the risk of vehicle-pedestrian collisions (Miranda-Moreno, Morency, & El-Geneidy, 2011). Some authors identified specific areas in urban space as more dangerous for pedestrians (*e.g.*, commercial area, office and schools; Dissanayake, Aryaija, & Wedagama, 2009). Many studies have mainly shown that the most important factor is the perception and the mental representation related to physical elements (Granié, Brenac, Montel, Millot, & Coquelet, 2014; Lipovac, Vujanic, Maric, & Nesic, 2013; Tom & Granié, 2011).

Second, because the urban space is a social environment with a set of rules and standards that knowledge and control needed to move safely, social and educational factors are important (for a synthesis, see: Granié, 2010). Three social factors seem to be crucial: (1) Socio-economic context such as a low socio-economic status (Cottrill & Thakuriah, 2010) and family income level (Barton & Schwebel, 2007a, 2007b) have a link with risk exposure; (2) The parental supervision (Morrongiello, 2005; Morrongiello & Barton, 2009); and the (3) risk perception for parents (Lam, 2001).

Third, individual factors under the influence of childhood development play an important role in the development of mobility, perception and cognitive ability of pedestrian. These pedestrian skills concern metacognitive skills because the child has to plan, monitor and supervise his/her own behaviour during his/her navigation (Barton & Morrongiello, 2011; Kovesdi, Barton, & Rice, 2012; Lee, Young, & McLaughlin, 1984; Whitebread & Neilson, 2000).

The present study is essentially exploratory because it is aiming to investigate the visual strategies of pedestrians, *i.e.*, elements used by individuals to explore urban scenes situations before to

take their decision. Here the eye-tracking method allowed us to have both a high level of precision and controlled experimental situations.

2. Methods

2.1. Participants

Twenty-one adults (47.6% male), 11 men (*m* = 27.30 years, *SD* = 8.845 years) and 10 women (*m* = 26.18 years, *SD* =8.010 years) were recruited to participate. The majority of sample live (87.5%) and work (90.5%) in urban areas. Most of them have a driving license (81%) but 38.1% go to work place by walk while the others use common transports (61.9%). No difference was observed in cognitive abilities assessed by using specific sub-tests of the WAIS-IV (digit span scale *m* = 9.19, *SD* = 1.99; arithmetic scale *m* = 10.52, *SD* = 3.302; symbol search scale *m* = 11, *SD* = 3.302; coding scale *m* = 10.62, *SD* = 2.819).

2.2. Procedure

Twenty-one adults participants were individually asked to visually explore urban scenes (displayed in photos) before to take a decision: to cross or not to cross the street. Different panoramic pictures of urban scenes have been used in our experiment. Four judges ordered several panoramic photos in three conditions: low traffic density (condition “Low”); moderate traffic density (condition “Moderate”); and high traffic density (condition “High”).

Our experimental protocol was designed by using the Tobii Studio eye-tracking software. Eye-tracker (here, Tobii Eye-tracker T120 with a 17 inch monitor integrated) is an efficient device for measuring with a high precision the eye position and their movements on-line.

Each participant received the instruction of watching image that appeared on the screen. Then s/he had to analyze the urban scene carefully before to say “stop” when s/he knows her/his decision: to cross or not to cross the street. A first picture was used as a training picture then the following photos were projected randomly according to the three conditions (Low, Moderate and High traffic density).

2.3. Measures

In addition to demographic information about the participants, three behavioural indicators were collected: (1) time spent in milliseconds to take the decision (to cross or not to cross the street), (2) visual fixation duration on specific areas of interests defined by the experimenter, (3) environmental elements in the urban scenes observed during the first second. Note that “Areas of interests” (AoI) is a method in which a picture is fragmented *a priori* by the experimenter in different elements selected for their interest for the present the study. In our case six relevant environmental elements have been distinguished in each panoramic picture: car, bus, other pedestrians, car-way, bus-way and crossing (Figure 1).

Figure 2. Original photo and areas of interest defined a priori: An example.

3. Discussion

First and surprisingly, the three conditions have no impact on the response time, *i.e.*, to take a decision (to cross or not to cross the street). Data have mainly showed that the level of traffic density

(Low, Moderate, High) has no significant impact on the response time (Low: *m*= 2794.80ms, *SD* = 1612.38; Moderate: *m*= 2714.57ms, *SD* = 1178.31; High: *m*= 2631.28ms, *SD* = 1587.63).

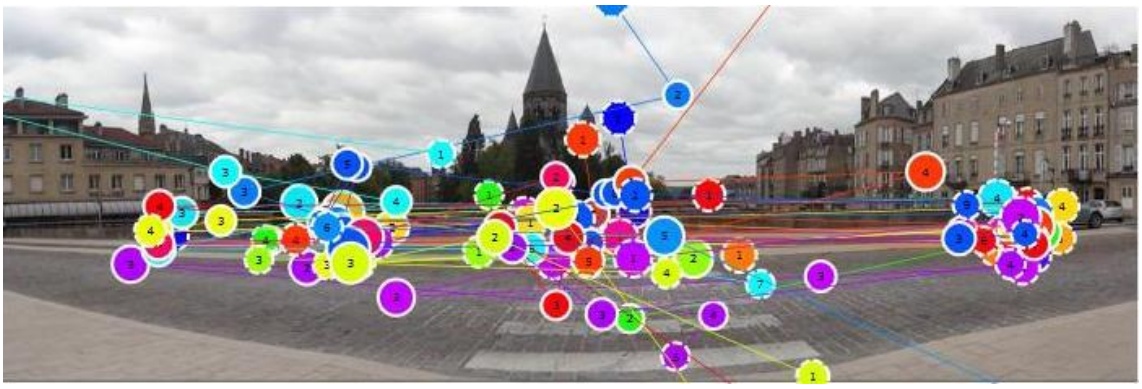
Second, as Table 1 shows, there is a significant difference between the mean fixation duration on the crossing between Low and Moderate traffic density conditions ($t(17)=-3.07$, $p < .01$). Even if the difference is not significant, we observe a difference between the mean fixation durations on crossing in Moderate condition and High condition ($t(14)= 2,124$, $p = .052$). No other difference has been found.

Table 1. Fixation duration mean for all element (milliseconds).

	Low		Moderate		High	
Bus			*m* = 0,323	*SD*= 0,139		
Car	*m* = 0,309	*SD* = 0,101	*m* = 0,287	*SD*= 0,074	*m* = 0,276	*SD*= 0,121
Pedestrian	*m* = 0,282	*SD* = 0,105	*m* = 0,224	*SD*= 0,102	*m* = 0,291	*SD* = 0,160
Bus-way	*m* = 0,277	*SD* = 0,107	*m* = 0,322	*SD*= 0,208	*m* = 0,315	*SD*= 0,140
Car-way	*m* = 0,213	*SD* = *0,088*	*m* = 0,266	*SD*= *0,034*		
Crossing	*m* = 0,241**	*SD* = 0,112	*m* = 0,291**	*SD*= 0,066	*m* = 0,244	*SD*= 0,109*

Third, analysis of the first visual fixations (Figure 2) shows that these first fixations begin to be central before to explore the right side of the picture before to explore the left side of the picture. Because the first fixations concern the most important visual elements for an individual, we hypothesize that these elements play a key role in exploration strategies and they are guided by experience. So data seem to show that the visual explorations are "conventional" and identical for all the participants.

Figure 3. First eye-fixations during the first second.



4. Discussion

This experimental study is aiming to explore visual exploration strategies used by adults to explore urban scenes before to take an important decision: to cross or not to cross the street. Our results are consistent, only the mean fixation duration crossing in Low and Moderate traffic density conditions. This result can be explained by greater attention on the crossing when there are too many items present in the scene.

Moreover, data obtained show that the first fixations begin to be central before to explore the right side of the picture before to explore the left side of the picture. These consistent results can be explained by a very homogeneous sample. We can hypothesize that our participants have similar urban experience and visual exploration of the urban scenes, the culture and/or education being crucial. So it is necessary to replicate the study with more participants and more heterogeneous sample.

One of the main limitations is that our experimental situation is not an ecological situation because our participants were only asked to explore a scene before to verbalize their intention (to cross or not to cross). We can assume that the strategies used in natural and real situations are more complex. But there are very few ecological studies to investigate the strategies used by pedestrians because it is very difficult to work in a high risky and dynamic environment. Finally, the use of static stimuli (*i.e.*, panoramic pictures) is an important limit. Static scenes are less rich in stimuli and may not be used to trigger real visual exploration strategies. So future research could be based on dynamic stimuli (*i.e.*, movies).

Be as it may, the eye-tracking method is relevant to investigate the visual search strategies in urban scenes and it could be interesting to use this method to explore the development of these visual strategies for different ages, for a better understanding of the impact of user experience and cognitive abilities.

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DECISION-MAKING AMONG PEOPLE WITH INTELLECTUAL DISABILITY – FROM THEORY TO PRACTICE

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Abstract

The aim of the paper is to introduce current findings in the area of decision-making among people with intellectual disability, on the base of a review of the selected articles in the field. Decision-making is one of the main processes influencing people's quality of life. Opportunity to make unassisted choices and to decide independently reinforces individual's perceived life satisfaction and self-worth. Freedom of choice affects proper identity development. Furthermore, attaining feeling of control of one's life is regarded as one of the main developmental tasks of adolescence period. Despite the changes in the perception of people with intellectual disability, the role of decision-making in the increase of their quality of life is still being underestimated. Many theoreticians and practitioners emphasise the fact that people with intellectual disability often declare significantly limited opportunity to make independent decisions in everyday life. Decision-making is a complex process that requires efficient information reception, as well as memory and analysis capabilities. Previous research in the field revealed that people with intellectual disability present various deficits considering effective decision-making. These findings entail the need to develop programmes aimed at improving intellectually disabled people's decisional capabilities. Major theoretical findings on the decision-making process in the group of people with intellectual disability will be presented. Possible factors influencing effective decision-making will be indicated. Furthermore, issues covering methods of assisting people with ID in effective decision-making in various areas will be introduced. Finally, future directions for theoretical research and practice will be discussed.

Keywords: *decision-making, intellectual disability, aid.*

1. Intellectual disability and decision-making – terminology issues

Intellectual disability is described as 'a disability characterised by significant limitations in intellectual functioning and in adaptive behaviour, which covers many everyday social and practical skills. This disability originates before the age of 18 years' (AAIDD). Accordingly, in the diagnosis of ID there are two basic ares of assesment. Firstly, the level of intellectual functioning is assessed by standarised measures, among which most often used are IQ tests. Diagnostic level of impairment appears when the results are two standars below average that is considered as 70. According to American Psychiatric Association intellectual disability can be divided into: mild, moderate, severe and profound.

In order to capture impairments in conceptual, social and practical skills, there are also standarized tools, although only limited number of them is available in appropriate language version (e.g. in Poland). The understanding of intellectual disability (earlier known as mental retardation or mental handicap) has changed during the centuries. Primary theories in the field, called biological ones, used to describe intellectual disability as a a result of a specific medical condition (Schlesinger, 2013). It lead to perceiveng people with ID only in terms of organic conditions that were supposed to be rehabilitated by medical intervention. When social approach was diffused, aimed at understanding the role of disabled persons's close and broader environments on his development and quality of life, it significantly changed the way of thinking about disabled people. Although some theorists tend to interpret social approach as one that discount biological factors, theorists and practicioners explain that social thinking succeeded in broadening social perspective on disability, without ommiting biological and psychological factors (Shakespeare i Watson, 2002). Nowadays, deficit approach has been substituted by a positive one, focusing on people's strong areas and abilities. According to that, environmental factors play an essential role in getting the most of disabled people's potential, with awareness of existing limitations. One of the areas that has been increasingly gaining ground concerning people with intellectual disability is the issue of decision-making.

2. Decision-making process

Decision-making is a complex process that consists of specific, hierarchical stages. Kozielecki (1992) describes decision-making as a cognitive process that occurs in two types of situations: certain ones, when decision maker has no doubts about his own choice's results, and uncertain that are connected with different levels of risk. Such division also appears in various other works (e.g. Waloszek, 1994). The term 'decision' is specified as an act of choice between at least two alternatives (e.g. Kozielecki, 1992). Klaczynski, Byrnes and Jacobs (2001) define decision-making as multicomponent process which begin when a person recognises discrepancies between actual and desired state. It consists of identification and evaluation different alternatives to reduce these discrepancies, selection and planning the action, as well as evaluation of consequences and efficiacy of these actions.

Both theorists and researchers attempt to distinguish different kinds of decision-making stages. Differences that has been observed between those theories are the result of discrepancies in a definition of decision-making process, as well as in perception of processes and actions that form the process. Some researches (e.g. Kozielecki, 1992) state that decision-making consists of only cognitive processes, while others include behavioral actions too, as well as the action's consequences (e.g. Turnbull, 1989, after Jenkinson, 1993). Some authors (e.g. Nęcki, Orzechowski, Szymura, 2007) recognise receiving information process as an element of pre-decisional stage and highlight that decision-making process starts along with evaluation of the information.

3. Decision-making among people with intellectual disability

Decision-making is an essential area of human's life. It influences people's perceived independence, integrity and self-worth (Guess, Benson, Siegel-Causey, 1995). Opportunity to control one's life by making independent decisions enhances perceived quality of life (Wehmeyer, Schwartz, 1998, Schelly, 2008, Brown, Brown, 2009). Freedom and capability to make choices increases people's identity during all stages of human development, being especially significant during adolescence period (Jenkinson, 1993). Then, young people need to face difficult decision areas, covering such issues as education, place of living or close relationships (Galotii, 2001). Despite significant changes in social perception of people with intellectual disability, the role of efficient decision making in increasing of life quality is still underestimated. As a result, people with ID often declare limited opportunity to make independent decisions (Parmenter, 1991). The factors that shape such situation are not only individuals' deficits but also social attitudes. People with ID, as being perceived through their deficits, are rarely encouraged to overcome them and attempt to solve problems independently (Weisz, 1999).

Decision-making is a complex process that demands not only efficient reception of information but also their storage and analysis. Previous studies in the field revealed that people with intellectual disability present various deficits in this area (Willner, Bailey, Parry, Dymond, 2010, Dymond, Bailey, Willner, Parry, 2010, Khemka, Hickson, 2006). Difficulties in implementation of decision-making process are observed, manifested by a tendency to rely on limited number of solutions - decisions are made on the base of rigid schemas developed through the life-span that are often ineffectual and do not depend on the type of the problem. In case of the activation of decision-making process, deficits cover effective performance in respective decision-making stages, such as problem formulation, generation and evaluation of possible alternatives, anticipation of consequences and choosing appropriate action.

Most of research that centre upon decision-making issues in a group of intellectually disabled people has been based on their ability to make decisions in specific life situations, such as deciding in medical context (Gormley-Fleming, Campbell, 2011), risky behaviours (Gardner, Steinberg, 2005) or taking responsibility for commited crimes (Scott, Reppucci, Woolard, 1995). Previous research that were conducted among healthy population, as well as those included people with intellectual disability, rarely raised the issue of decision-making abilities in everyday situations that are common for most of the population.

Although majority of research has been focused on analysing cognitive aspects of decision-making in people with intellectual disability (Bailey, Willner, Dymond, 2011, Davies, Stock, Willner, Bailey, Parry, Dymond, 2010, Dymond, Bailey, Willner, Parry, 2010), researchers has started to emphasise the need to introduce multifactorial approach to decision-making skills (Hickson, Khemka, 2001).

4. Selected factors influencing decision-making capacities

Studies conducted during last decade has mostly concentrated on complexity of decision-making (Albert, Steinberg, 2011). The field has been constantly developing and includes theoretical and

methodological issues from cognitive, developmental and social approach, with growing interest in neuroscience. Hickson and Khemka (2001) has proposed a model that is an illustration of decision-making process's complexity in people with intellectual disability. The authors propose to analyse not only cognitive factors but also emotional and motivational ones. Furthermore, this model refers to four stages of decision-making process: defining the problem, generating alternatives, evaluating predicted consequences and action's choice. As it was introduced, described model assume that decision making process is influenced by three group of factors: cognitive, emotional and motivational ones.

Cognitive processes are responsible for information's absorbing and manipulating. Among those that increase decision-making abilities, memory skills and executive functions are mostly often listed (Missier, Mäntylä, Bruin, 2010). In such a complex process, efficient cognitive control is postulated to be indispensable (Zelazo, Muller, Frye, Marcovitch, 2003).

Motivational factors may influence person's involvement in decision-making process, as well as determine selection of goals and actions. One of the mainly studied motivational factors in relation to people with intellectual disability is locus of control that determines perception of one's influence on external events (Hickson, Khemka, 2001). Perceived differences among possible alternatives enhances motivation. When a decision maker can choose among several 'attractive' alternatives, feeling of control increases (Jenkinson, 1993). Locus of control partially influence decisional efficiacy in relation to interpersonal problems (Hickson, Khemka, 2001). Research revealed that generation of large number of alternatives is correlated with more internal locus of control (Ibidem). Locus of control among people with intellectual disability does not become more internal with age. It is probably due to disabled people's experiences and caregivers' attitudes. Both may cause lack of motivation and underestimating own's contribution in life achievements.

Among emotional factors that may impact on decision-making, the role of anxiety should not be discounted. Evaluation of possible alternatives, that is one of decisional stage, is undoubtedly dependent on person's emotional state (Paulus, Yu, 2012). High level of anxiety state decreases efficiency of cognitive processes – reduces attention skills, influences formulation of the problem (Matthews, Panganiban, Hudlicka, 2011). Anxiety as a trait determines behavioral variability in different life situations. People suffering from anxiety disorders lack in adaptive functioning capabilities in everyday situations (Hartley, Phelps, 2012). Researchers agree that high level of anxiety makes people more aversive towards options with higher number of negative consequences (Maner, Schmidt, 2006). Studies coducted by Ramirez and Kratochwill (1997) suggest that children with intellectual disability declare the presence of specific fears and global anxiety more often, comparing to normally developing children. Peoples' with intellectual disability tendency to react in an anxious way may be a result of previous negative experiences, as well as deficits in coping with stress in everyday life.

5. Decision making training

Along with growing awareness of the association between effective decision-making and social adaptation skills, the need was noted to develop training programmes targeted at improvement of decisional skills among people with intellectual disability. Previous few interventions have been mostly focused on one specific areas of decision-making. Hickson and Khemka in 2001 introduced an intervention programme called ESCAPE. It was aimed at enhancing women's with intellectual disability abilities to develop skills that would let them protect themselves against abuse and violence. The programme consisted from 12 issues and 6 meetings of group exercises that were covering 3 basic issues: Knowledge of Abuse and Empowerment, Decision-Making Strategy Training and Women's Support Groups. The results bring clear evidence for the effectiveness of the ESCAPE curriculum.

Bullock and Mahon (1992) developed a training programme designed to teach young people with intellectual disability to decide about their leisure activities, The programme consisted of two basic parts. The first one was focused on introducing five aspects of leisure activities (concepts, self-awareness, knowledge of opportunities, resources, barriers). The second part provided a kind of a leisure-awareness training that followed the sequence of decision-making stages: identifying the need, considering possible alternatives, evaluating consequences of the alternatives, choosing the action.

Tymchuk and colleagues (1988) designed an intervention aimed at teaching intellectually disabled women parenting skills. Participants, on the base of vignettes describing situations related to parenting, were asked to follow decision making steps.

Presented studies suggest that people with intellectual disability, especially those from mildly disabled group, are able to learn decision-making skills in different life areas.

6. Summary and discussion

The issue of decision-makin among people with intellectual disability is the area that has been explored in the literature to a small extend. Nowadays it has become the subject of broad research analysis. It is a result of identifying crucial significance of identity and autonomy of people with intellectual disability. Although it should be noticed that decision-making skills are partially dependent on the level of person's intellectual functioning, people with intellectual disability should be guaranteed a system and programmes that would encourage them to live as independently as it is possible. Understanding of decision-making determinants and process would allow to create adequate forms of assisting people with intellectual disability in decision-making. Future research should recognise possible determinants of decision making process in this group, as well as develop and evaluate various training programmes. Furthermore, the area of everyday decision-making capability should be more closely explored. Also, environmental factors should not be ommited, leading to understand people with intellectual disability in a broad, biopsychosocial perspective.

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IS DIGIT RATIO (2D:4D) RELATED TO COGNITIVE-ABILITY AND EDUCATIONAL VARIABLES? ANSWERS FROM A COMPREHENSIVE META-ANALYSIS

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Abstract

Individual and sex differences (on average, men < women) in the second-to-fourth digit ratio (2D:4D) emerge prenatally and developmentally appear sufficiently stable. Hence, many believe 2D:4D reflects the prenatal sex-hormonal milieu (testosterone exposure/sensitivity) and its manifold enduring (organizing) brain-behavior effects. Accordingly, 2D:4D presently is the most intensely investigated retrospective putative marker for prenatal testosterone, with now about 1000 journal papers and academic theses produced since a foundational 1998 paper. Here, we meta-analytically synthesize the sizeable 2D:4D research subliterature on possible associations with cognitive traits, because only an increasingly outdated and partial review (confined to spatial abilities: Puts et al., 2008, Arch Sex Behav) is presently available. Studies eligible for the meta-analyses were identified via five integrated literature search strategies (namely, relevant electronic databases, extensive online searches for unpublished reports, cited reference searches, a research bibliography, and personal contacts with researchers). These efforts yielded more than 130 individual, non-overlapping study samples for meta-analytic inclusion, which we categorized into four distinct domains of (sexually differentiated) cognitive abilities (spatial abilities; verbal abilities; numerical/mathematical abilities; and educational achievement variables, including learning styles and school and university grades). Total N for the series of meta-analyses was more than 340000. Across all the cognitive-ability domains investigated, meta-analytically combined effects invariably were almost exactly null, thus not supporting any reliably replicable effects of 2D:4D on cognitive abilities. Supplemental meta-analytical tests evidenced several signs of research artifacts pervading this research literature, such as small-study effects (i.e., negative correlations of study sample sizes with study effects) and the so-called winner's curse phenomenon (i.e., effects fade with time). Initial findings of 2D:4D effects on cognitive-ability variables have been widely publicized and cited in the literature, including reports in premier outlets of educational and intelligence research (among others, in the journals Intelligence, Learning and Individual Differences, and Personality and Individual Differences). This meta-analytical field synopsis suggests that these initially reported effects were false-positive findings and thus unreplicable. More generally, seen in the context of the contemporary replication and confidence crisis in psychological science altogether, the current findings emphasize the necessity of meta-analytical approaches to establish replicable evidence as a cornerstone of cumulative knowledge.

Keywords: *cognitive abilities, educational outcomes, meta-analysis, replicability, digit ratio (2D:4D).*

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COGNITION AND BILINGUALISM: WORKING MEMORY AND EXECUTIVE CONTROL OPERATIONS IN GREEK-ALBANIAN BILINGUALS

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Abstract

This research has been co-financed by the European Social Fund and Greek national funds, through the Operational Program "Education and Lifelong Learning" of the National Strategic Reference Framework: Research Funding Program *Thales* "Investing in knowledge society through the European Social Fund, 2012-2015". An interdisciplinary project was carried out. Our aim was to investigate whether there exists a bilingual advantage affecting working memory (Carlson & Meltzoff, 2008; Fernandes, Craik, Bialystok, & Kreuger, 2007; Michael & Gollan, 2005; Rosen & Engle, 1997) and executive control operations (inhibition, switching, and updating) (Bialystok, 2008; 2010; Bialystok, Craik, & Luk 2008; Morales, Calvo, & Bialystok, 2013; Prior & MacWhinney, 2010; Yang, Yang, & Lust, 2011) in Greek-Albanian bilingual children, aged 8-12. Two hundred and twenty children participated in the study. Participants were divided into three groups: (a) a submersion bilingual group (who were exposed to the mother tongue –Albanian– within the family/community setting only), (b) a maintenance bilingual group (who were receiving formal education in both languages), and (c) a monolingual group speaking Greek. Several working memory and executive control tasks were administered. Analyses of variance and regression analyses showed that monolinguals outperformed both bilingual groups on Raven's performance. Visuo-spatial working memory, switching, and cognitive planning demonstrated no group differences. When compared to monolinguals, maintenance bilinguals did not differ on most cognitive performance measures, whereas submersion bilinguals were significantly disadvantaged in verbal working memory, updating and processing speed. The verbal working memory and updating effects became non-significant when controlling for Ravens. Both monolinguals and maintenance bilinguals outperformed submersion bilinguals in the inhibitory control measure. Our results indicate that one major factor influencing superior performance is some type of formal education in both languages; that is, exposure to *written* (besides oral) language. It seems that schooling in both languages positively influences performance on non-verbal cognitive abilities. This finding bears significant educational implications, pointing at the importance of education in both languages in the case of bilingual students.

Keywords: *bilingual children, submersion bilinguals, maintenance bilinguals, working memory, executive functions, inhibition, updating, switching.*

COMPARISON OF THE CLASSIFICATION RATIOS OF DEPRESSION SCALES USED IN TURKEY

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Abstract

Ceyhun (2002) has stated that thirteen depression scales have been used in Turkey, two of which are applied by clinicians, nine consists of self-report questionnaires and two are structured interview scales. Considering that depression is a popular area of study, it may not seem abnormal that there are such many measuring scales available. However, so many measuring instruments may lead to a problem of whether all the instruments have the same sensitivity in measuring the particular entity. The purpose of this study is to compare the four self-report scales adapted into Turkish, namely Beck Depression Inventory (BDI), The Zung Self-Rating Depression Scale (SDS), The Hospital Anxiety and Depression Scale (Depression Subscale HADS-D) and CES-Depression Scale (CES-D) by cross validation study. These depression scales have been applied to 341 subjects and total scores of the subjects for each scale have been obtained. Next, the sample group is divided into two according to group averages of total scale scores. Normative scores and cutting points have not been considered because the purpose here is to compare the scales on a theoretical basis. The groups below and above average for each four of the scales have been compared by ROC curve analysis. The results show that the total score of BDI has been grouped correctly by SDS at a ratio of 0.87, HADS-D at a ratio of 0.89, and by CES-D Scale at a ratio of 0.87. The total score of CES-D Scale has been correctly grouped by BDI at a ratio of 0.87, SDS at a ratio of 0.87, and by HADS-D at a ratio of 0.86. The total score of SDS has been correctly grouped by HADS-D at a ratio of 0.85, BDI at a ratio of 0.87, and by CES-D Scale at a ratio of 0.88. The total score of HADS-D has been correctly grouped by SDS at a ratio of 0.85, BDI at a ratio of 0.89, and by CES-D Scale at a ratio of 0.88. The overall results show that the scales cross validate with ratios ranging from 0.85 to 0.89.

Keywords: *cross validity, ROC curve, CES-Depression Scale, Beck Depression Inventory, The Zung Self-Rating Depression Scale, The Hospital Anxiety and Depression Scale.*

1. Introduction

Symptoms of depression have been described roughly, as having a wide range of manifestation from short term distress to despair, guilt, unwillingness and a n self-esteem. It has also been shown that long-term depression causes fatigue, sleeplessness, chronic pain and extreme weight loss or gain (de Guzman, Lagdaan, & Lagoy, 2014; Spielberger, Brunner, Ritterband, & Reheiser, 2003). It has been stated that depression is the most commonly and widespread psychological disorder seen in almost every society (Missinne, Vandeviver, Van de Velde, & Bracke, 2014). However, it is also reported that in undeveloped and developing countries, it is difficult to determine the prevalence of the disease due to the lack of adapted scales and their validity studies (Guerra, Ferri, Llibre, Prina, & Prince, 2015). Depression has also been related to socioeconomic status and gender, and females, lower socioeconomic groups and people in the age range of 25-34 are the most affected ones (Missinne et al., 2014; Sigurdsson, Palsson, Aevarsson, Olafsdottir, & Johannsson, 2015; Zhong et al., 2014). Moreover, this disorder largely results in labor loss and it is estimated that by 2030 depression would be the most important reason for labor loss (Chavez, Ski, & Thompson, 2014; Missinne et al., 2014).

A study reports that between the years of 1918 and 2008 more than 280 depression scales have been developed and published (Santor, Gregus, & Welch, 2006). It is stated that when standard depression tests are used for screening purposes in mental health research and in general populations, they are useful. Such measuring instruments have to possess properties such as good psychometric qualities, appropriate number of items, and have to be understandable, unpaid and easily accessible (Matijasevich et al., 2014; Stukenberg, Dura, & Kiecolt-Glaser, 1990).

Ceyhun (2001) has stated (reported) that thirteen depression scales have been used in Turkey, two of which are applied by clinicians, nine consists of self-report questionnaires and two are structured interview scales. Considering that depression is a popular area of study, it may not seem abnormal that there are such many measuring scales available. However, so many measuring instruments may lead to a problem of whether all the instruments have the same sensitivity in measuring the particular entity. The purpose of this study is to compare the four self-report scales adapted into Turkish, namely Beck Depression Inventory (BDI), The Zung Self-Rating Depression Scale (SDS), The Hospital Anxiety and Depression Scale (HADS) and CES-Depression Scale (CES-D) by cross validation study.

2. Methods

2.1. Participants

235 women (68.9%) and 106 men (31.1%) aged between 18-62 (mean=29.26±10.79 years) participated in the study. Participants consisted of 32 elementary school graduates (9.4%), 19 middle school graduates (5.6%), 73 high school graduates (21.4%) and 211 university graduates (61.9%) (6 people did not specify their level of education (1.8%)). Of all the participants, 60.1% (n=205) were single, 34.0% (n=116) married, 1.5% (n=5) divorced and 2.6% (n=9) widowed (6 people did not specify their marital status (1.8%)). Finally, among the participants, 7.3% (n=25) were low income, 60.7% (n=207) middle income and 29.0% (n=99) high income (10 people did not specify their income (2.9%)).

2.2. Instruments

The Centre for Epidemiologic Studies Depression Scale (CES-D)

The scale developed by Radloff has been used to assess depressive symptoms in the general population. The widespread use of the scale is for the purpose of screening depressive symptoms in the preceding week of the participants (Radloff, 1977). The scale has been translated into Turkish by Tatar and Saltukoglu. The scale consists 20 items scored between 0 and 3 on a 4 point rating scale and the score obtained varies between 0 and 60 (Tatar & Saltukoglu, 2010).

The Beck Depression Inventory (BDI)

This inventory that was developed in 1961 by Beck et al. (Beck, Steer, & Carbin, 1988; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961) was adapted into Turkish by two independent studies (Ceyhun, 2001). In the present study, the form that has been used is the one adapted into Turkish by Hisli (Hisli, 1988, 1989). The inventory consists of 21 items with a 4-point rating scale (between 0-3) with scores ranging from 0 to 63.

The Zung Self-Rating Depression Scale (SDS)

This scale, developed by Zung (Zung, 1965) in 1965 was adapted into Turkish by Ceyhun and Akça. The scale consists of 20 items scored on a 4-point scale. Each answer is given a rating between 1-4 for a maximum score of 80 (Ceyhun & Akça, 1996).

The Hospital Anxiety and Depression Scale (HADS)

This scale, developed by Zigmond and Snaith (Zigmond & Snaith, 1983) was adapted into Turkish in 1997 by Aydemir (Aydemir, Güvenir, Küey, & Kültür, 1997). The scale consists of a total of 14 items of which 7 items are for the assessment of anxiety (HADS-A) (odd numbers), and the remaining 7 items are for the assessment of depression (HADS-D) (even numbers). Both together compose the two sub-dimensions of the scale. Both of the sub-dimensions are scored between 0 and 3 on a 4 point scale and the total score obtained is between 0 and 21. In this study, 14 items have been applied to all participants to maintain the integrity of the test but the items of anxiety sub-dimension have not been assessed.

2.3. Procedure

Randomly selected participants were included in the study as voluntary subjects wishing to participate in a scientific survey. The participants were informed that they can stop answering the test as they wished. Accordingly, one person has not completed filling both the CES-D and SDS, one person the BDI, one person SDS and one person the HADS. Nevertheless, these people that wished to terminate the aforementioned scales did complete the other scales.

2.4. Results

First, the total scores for each scale were calculated. From the total scores, the mean scores for each scale were calculated and shown in Table 1. The study group has then been divided into two groups, as below average and above average, with respect to the group means for each scale. For this procedure, the norms and the cutoff points of the scales have not been taken into account since the purpose is to compare the scales on a theoretical basis.

Table 1. Mean values and validity coefficients of the scales.

	n	Minimum	Maximum	Mean	Std. Deviation
CES-D	340	0	60	17.34	12.177
BDI	340	0	63	10.29	9.231
SDS	339	20	76	39.65	10.903
HADS-D	340	0	21	5.81	4.636

Table 2 summarizes the comparison of the separate groups derived from each scale. Thus, Table 2 shows the curve ratios of people who are above and below the average on a scale with regard to their grouping in each of the other scales. For example, it seems that out of the people who are situated below average with regard to CES-D, 32 of them on BDI, 45 of them on SDS and 42 them on HADS-D are situated above average.

Table 2. The comparison of below average and above average groups in different scales.

			BDI		**SDS**		**HADS-D**		**Total**
			BA	AA	BA	AA	BA	AA	
CES-D	BA	n	157	32	144	45	147	42	189
		%	83.1%	16.9%	76.2%	23.8%	77.8%	22.2%	100.0%
	AA	n	47	103	25	125	31	119	150
		%	31.3%	68.7%	16.7%	83.3%	20.7%	79.3%	100.0%
Total		n	204	135	169	170	178	161	339
		%	60.2%	39.8%	49.9%	50.1%	52.5%	47.5%	100.0%
BDI	BA	n			148	56	157	48	205
		%			72.5%	27.5%	76.6%	23.4%	100.0%
	AA	n			21	113	22	112	134
		%			15.7%	84.3%	16.4%	83.6%	100.0%
Total		n			169	169	179	160	339
		%			50.0%	50.0%	52.8%	47.2%	100.0%
SDS	BA	n					133	36	169
		%					78.7%	21.3%	100.0%
	AA	n					44	125	169
		%					26.0%	74.0%	100.0%
Total		n					177	161	338
		%					52.4%	47.6%	100.0%

BA: below-average group
AA: above-average group

Next, correlation coefficients and reliability coefficients of the scales were calculated and are shown in Table 3. Cronbach's Alpha coefficient was 0.90 for CES-D, 0.91 for BDI, 0.84 for SDS and 0.85 for HADS-D scale.

Table 3. Alpha coefficients and intercorrelations of measures of depression scales.

		Cronbach's Alpha	**CES-D**	**BDI**	**SDS**	**HADS-D**
CES-D		0.90	-	0.79***	0.80***	0.77***
	n	340		339	339	339
BDI		0.91		-	0.75***	0.78***
	n	340			338	339
SDS		0.84			-	0.76***
	n	339				338
HADS-D		0.85				-
	n	340				

***p<0.001

Finally, scores of each scale located below and above the group mean scores with respect to total scale scores were compared with the total scores of the other scales by using the ROC curve.

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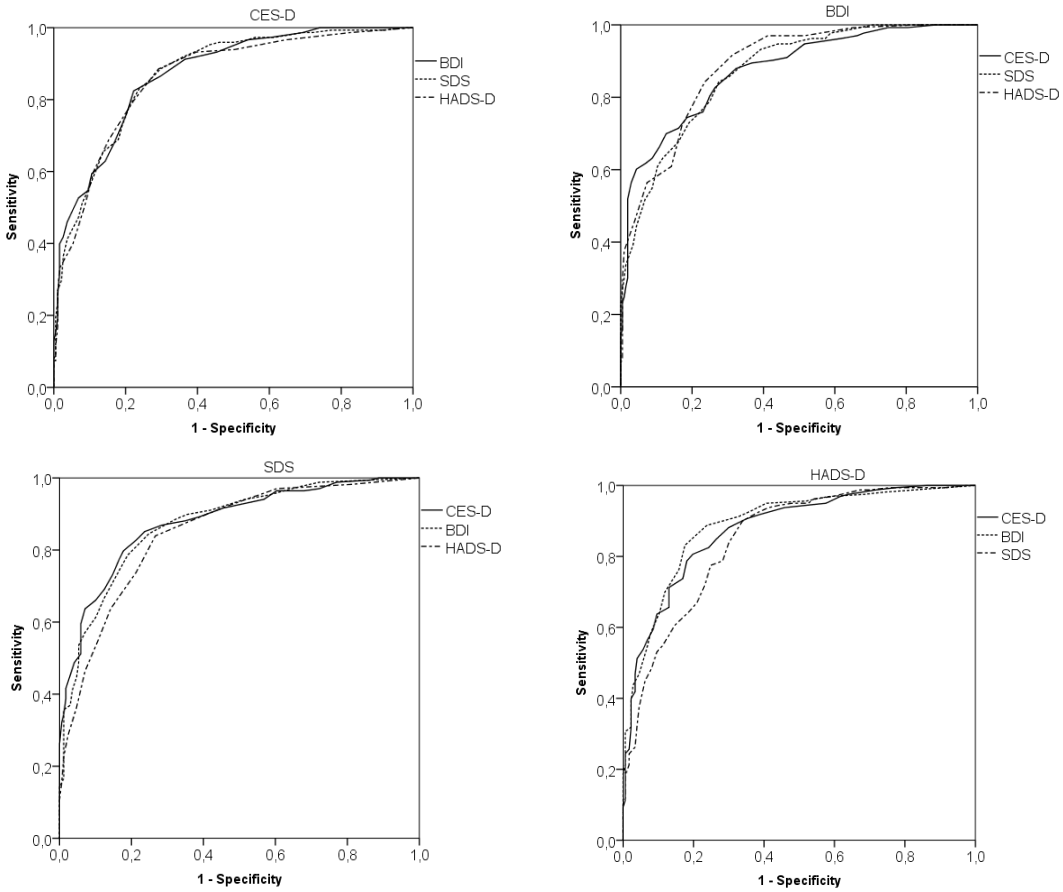
Figure 1. Receiver operating characteristics analysis (ROC) of the comparisons.



Results show that groups located below and above the group mean scores with respect to the total score of each scale have substantially similar ratios for correctly classifying the other three scales according to ROC analysis. For CES-D, the average correct classifying ratio of other three scales is 0.867, for BDI it is 0.877, for SDS it is 0.866 and for HADS-D it is 0.872.

Table 4. Classifying ratios of each scale of the other three scales derived using the ROC curve.

Test Result Variables	**Area**			
	CES-D	BDI	SDS	HADS-D
CES-D	-	0.874	0.878	0.878
BDI	0.871	-	0.872	0.889
SDS	0.869	0.871	-	0.848
HADS-D	0.862	0.885	0.848	-
Mean	**0.867**	**0.877**	**0.866**	**0.872**

3. Discussion

Plenty of scales have been defined for the purpose of measuring and assessing depression. In this study, only four of the most commonly used scales in Turkey have been selected. Without considering norms and cutoff points, classification ratios have been roughly compared with each other. In our small sample group which consisted of the same people for all tests, all four scales showed similar internal coefficients ranging between 0.84 and 0.91. Likewise, the total scores of the scales showed correlation coefficients among each other that ranged between 0.75 and 0.80.

When we applied ROC analysis, to test whether the groups that are situated below and above the total score averages correctly classified the other scales, we saw that CES-D classified other scales with the mean value of 0.867, BDI by 0.877, SDS by 0.866 and HADS-D by 0.872. These values are very close to each other. Although SDS's correct classification ratio of HADS-D and HADS-D's correct

classification ratio of SDS is smaller than the others by a margin, there is not much difference when the average values are considered. Considering that the study group is small and the preferred scales are widely in use, we conclude that these scales indeed can be used interchangeably in screening studies.

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MOTORCYCLE AWARENESS: A HAZARD PERCEPTION EXPERIMENT

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Abstract

Motorcyclists in the United Kingdom are over-represented in road collision statistics and despite accounting for less than 1% of annual vehicle miles motorcyclists have the highest fatality rate of any road user. These collisions tend to occur more frequently at T-Junctions and staggered junctions, followed by collisions on roundabouts and crossroads. It is a common misconception that most motorcycle collisions at junctions occur due to motorcyclists' aggressive behaviours. However, motorcycle collisions at junctions tend to occur more frequently due to the violation of a motorcycle's right of way by emerging vehicles from side roads. Evidence has shown that when a motorist is looking in the direction of the motorcyclist who is very close to a junction the motorist does not appear to see the motorcyclist. Five hazard perception videos were filmed from the perspective of a vehicle driver stationary at a junction preparing to emerge from the junction. An experiment was used to test the hypothesis that it would take longer for participants to react to seeing an oncoming motorcycle compared to an oncoming car. Furthermore, participants would perceive a higher number of cars than motorcycles in the videos. The relationship between age and reaction times was also investigated. The experiment was conducted with 218 participants from seven business organisations in the East of England. The findings showed that the mean response time, measured in seconds, for participants to respond to an approaching car was significantly faster than for an approaching motorcycle. Participants who were both car drivers and motorcyclists reacted significantly faster to seeing the approaching motorcycle as compared to participants who only held a car licence. There was no significant difference between the number of cars and motorcycles perceived by participants in the videos. A significant positive correlation was found between the age of the participants and participants' reaction times to seeing an approaching motorcycle in the hazard perception videos. One hundred and seventy-four of the 218 participants (80%) reported that taking part in the experiment was an effective means of raising awareness of motorcycles at junctions. Future studies could develop this experiment in different driving conditions such as the time of day and different weather conditions. Further controls could be made in relation to the positioning of the vehicle, vehicle types and approaching vehicle speeds.

Keywords: *hazard, perception, motorcycle, awareness, experiment.*

1. Introduction

Motorcyclists in the United Kingdom (UK) are over-represented in road safety statistics. Despite accounting for less than 1% of annual vehicle miles (Clarke et al, 2007). Approximately 20% of all UK road fatalities have been attributed to motorcyclists (DfT, 2014) with provisional quarterly estimates of reported road collisions in the UK showing a 4% increase in motorcyclist casualties, and a 8% increase in the number of motorcyclists Killed or Seriously Injured (KIS) between 2012 and 2013 (DfT, 2014). Younger motorcyclists aged between 16 and 20 years and motorcyclists aged between 30 and 35 years are believed to be at highest risk of collisions (Clarke et al, 2003). Male riders are also thought to be at greater risk of injury with a 15 times higher likelihood than females to be involved in a collision, while only making trips on motorbikes seven times more than female (Clarke et al, 2003).

Motorcyclists are particularly vulnerable at junctions and collisions at T-Junctions occur frequently. Recent UK government statistics have shown that around 30 motorcyclists are killed or injured in collisions at junctions every day, with the number of collisions significantly increasing during the spring months. According to the UK Department of Transport (2014) there were a total of 48,860 collisions at junctions reported during 2012. Most commonly, these collisions occurred at T-junctions or staggered junctions with an observed number of 62,040 cars and 7,744 motorcycles being involved. This was followed by collisions occurring on roundabouts which involved 20,863 cars and 2,169 motorcycles,

then crossroads where a total of 20,778 cars and 1,940 motorcycles were recorded. More than 75% of these collisions occurred on roads in built-up areas.

It is a common misconception that most motorcycle collisions at junctions occur due to motorcyclists' agressive behaviours, such as, inappropriate speed, manoeuvres or the loss of control of the motorcycle in a bend (Clarke et al, 2007). However, motorcycle collisions at junctions tend to occur more frequently due to the violation of a motorcycle's right of way by emerging vehicles from side roads (Clarke et al, 2007). In a study of 1,790 motorcycle collisions, Clark et al. (2007) noted a specific problem surrounding other road users' perception of approaching motorcycles, especially at junctions. Conversely, these collisions frequently involved older drivers with relatively high levels of driving experience.

A 'Right of Way Violation' (ROWV) occurs when an emerging vehicle pulls out from a side road onto a main carriageway and fails to give way to oncoming traffic. Lynham et al. (2001) showed that failure to give way to motorcyclists at T-junctions and crossroads was a common cause of fatal collisions. Drivers with both car and motorcycles experience (dual drivers) tend not to commit this type of violation as they are aware of the motorcyclist's perspective, (Crundall et al, 2012). Evidence has shown that when a motorist is looking in the direction of the motorcyclist who is very close to a junction the motorist does not appear to see the motorcyclist. This is a phenomenon commonly referred to as a 'looked but failed to see'. Clarke, et al. (2007) presented an 'integrated competition hypothesis' in which vehicle users' previous experience leads to an inhibition of certain features of the visual field, such as approaching motorcyclists, in order to concentrate on features which are deemed more important.

1.1. Experimental hypotheses

The experimental hypotheses tested were; participants will perceive more cars than motorcycles: participants' reaction times will be slower for perceiving motorcycles, Dual drivers and motorcyclists will react faster to the motorcycles than participants who only drive four wheeled vehicles and there will be a positive correlation between the age of the participants and how quickly they react to motorcycles in the hazard perception videos.

2. Method

2.1. Design

A mixed-methods, experimental and survey design was used in the study.

2.2. Participants

Two hundred and eighteen participants from seven business organisations and two road safety events took part in the experiment. One hundred and forty-three participants (66%) were male and 68 participants (31%) were female. The gender of seven participants (3%) was not recorded. Participants' ages ranged from 17 to 72 years of age with a mean age of 44.35 years (± 12.8). One hundred and ninety five participants (90%) were White; 11 (5%) were Asian; seven (3%) were Black and five participants (2%) were of Mixed Ethnicities (Mixed White and Caribbean = 2, Mixed White and Asian = 2, Mixed Other = 1). Participants noted four licence types, 158 of the 218 participants (73%) drove only four-wheeled vehicles, 38 (17%) were dual drivers (four-wheeled vehicle drivers and rode motorcyles), nine (4%) rode motorcycles only and 13 (6%) were non-vehicle/motorcycle users (pedestrians and/or passengers). Of the 205 vehicle users, 152 (74%) used their vehicles for work purposes; this included 117 of the four-wheeled vehicle users, 29 of those who were dual drivers and six were motorcyclists. Of the 218 participants 170, (78%) had a relative, friend or colleague who was a motorcyclist. Forty-eight participants (22%) did not know a motorcyclist.

2.3. Apparatus, Stimuli and Materials

Superlab Pro 4.5 software was used to programme the experiment. The keyboard was used to record the participants' responses with participants pressing the 'C' key when they saw a car and the 'M' key when they saw a motorcyclist. Participants' reaction times and the number of cars and motorcycles responded to were recorded. The order of the presentation of the hazard perception videos was randomised and participants moved to the next video using the spacebar.

2.4. The Hazard Perception Videos

Short hazard perception videos, taken from the car driver's perspective, at varying times of the day were edited to a mean duration of 10 seconds. There were four practice videos and 5 videos in the experiment. All videos consisted of naturally occurring hazardous situations. Of the five videos, three videos contained an approaching motorcycle and car, and two videos contained a motorcycle or car.

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Figure 1. Screen shot from the video.

2.5. Survey

The survey contained 11-items. Items 1 to 8 measured demographic information including type of vehicle licence and vehicle use. Items 9 and 10 were used to establish if the participants knew any motorcyclists, and where applicable, their relationship with the motorcyclist. Item 11 asked participants to provide feedback on the experiment.

3. Results

3.1. Participants' Perception of Cars and Motorcycles

Overall the number of vehicles perceived by the participants ranged from 2 to 4 cars and from 0 to 4 motorcycles. There were no significant differences in the correct amount of cars or motorcyles perceived. Over half the 218 participants in the sample (129; 59%) correctly identified all four approaching cars and motorcycles in the five hazard perception videos.

A mixed-design Analysis of Variance (ANOVA) was conducted to see if there was an interaction between the four licence types and the number of cars and motorcycles that participants responded to. The results showed that there was no significant interaction, [F (3,214) = .636, p = .593] between the type of vehicle user and the number of cars and motorcycles perceived by participants.

3.2. Participants' Reaction Times for Cars and Motorcycles

The mean response time, measured in seconds, for participants to respond to an approaching car was 3.54 seconds (SD .644) and 3.84 seconds (SD .477) for approaching motorcycles. Using a paired samples t-test this difference in responses times was found to be significant [t (217) = 6.251, p < .001].

3.3. Differences in reaction times for Vehicle Licence Groups

A mixed-design ANOVA was conducted to see if there was an interaction between the four licence types and participants reaction times to respond to seeing a car or a motorcycle. The results showed that there was no significant interaction, [F(3,215) = .537, p = .657] between the type of vehicle user and their reaction times.

An independent-measures t-test was undertaken to determine whether the participants with motorcyles or dual driving experience (N= 47) reacted faster to seeing the motorcycles in the experiment compared to participants who only held a vehicle licence (N=158). A significant difference, [t (177) = 1.764, p = .040] was found for participants wiho rode a motocyle or had dual driving experience reacting 0.37 seconds faster to the motorcycles in the experiment (M =2.98 s, ± 1.21) compared to the participants who held a vehicle licence only (mean 3.35 seconds, ± 1.15).

3.4. Relationship Between Participants' Reaction Times Age and gender

A positive correlation between age and participants reaction times to motorcycles in the hazard perception videos was obtained using a Spearman correlation [r (169) =.157, p=.018]. This analysis shows that as the participants' age increased so did the time it took to for the participant to react to the motorcycles in the experiment.

Reaction times for females was .08 seconds faster for reacting to motorcycles as compared to males, however this was not significantly different [t (174) = .432, p = .667]. Participants who knew a motorcylist were .08 seconds faster than those participants that did not know a motorcylist at reacting to

perceiving a motorcyle in the video. However, this was not a significant difference,[t (175) = .421, p = .674].

4. Discussion

The experimental hypothesis that more cars than motorcycles will be perceived by the participants during the experiment was not supported. Participants were found, on average to take longer to react to motorcycles than cars in the hazard perception videos. Dual drivers and motorcyclists were found to react faster to the motorcycles compared to participants with only experience of driving a car. This finding supports Crundall et al. (2012) theory that vehicle users with motorcycle experience are believed to have a heightened awareness or expectancy when it comes to seeing motorcyclists at junctions.

A positive correlation between age and participants' reaction times to seeing motorcyclists was found. This relationship is consistent with the view that older drivers with relatively high levels of driving experience often encounter problems with the perception of approaching motorcycles at junctions (Crundall et al, 2012).

The experiment was designed to highlight to participants the number of ROWV collisions that occur and to encourage the participants to look for motorcyclists before pulling out from junctions or main carriageways. Two fifths of the participants, (40%) considered that the experiment had achieved this by raising awareness of reactions to hazardous situations and the perceptual limitations that car drivers can experience with respect to approaching motorcycles. Participants rated the experiement positively by 174 participants (80%) considered their experience of the experiment as either 'excellent', 'very good' or 'good'.

Future research could consider other aspects that might impact upon perfomrance. Aspects such as size,shape and distance could be manipulated so that the influence of these factors could be isolated.

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THE USEFULNESS OF PHANTOM LATENT VARIABLES IN PREDICTING THE CHANGING IN THE EFFECTS AMONG STRUCTURAL RELATIONS

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Abstract

Ambition of this study is to examine the usefulness of phantom latent variables within models with structural relations. Phantom latent variables are defined as latent variables with no observed indicators (Rindskopf, 1984) and therefore they may be introduced into latent variables path models as hidden effects for making simulations across structural parameters. In this respect, an application of phantom latent variables is proposed here to an attitude model towards buying sustainable food products with second-order dimensions of Schwartz's taxonomy of basic human values as predictors. The model is applied to a representative sample of about 3,000 Italian food consumers collected in June 2011 and its predictive power, with the inclusion of past behavior as a further predictor of the attitude, has been successfully tested (Vassallo and Saba, in press). Nevertheless, the reduced version of the model, with dropping out past behavior and with the inclusion of phantom latent variables, has never been inspected. To this end, the addition of phantom latent variables is introduced with the purpose of restricting relevant structural parameters of the second-order dimensions of the Schwartz's taxonomy to be greater than, less than, or equal to, specified constants. The rationale of these restrictions is twofold in the model: 1) to investigate how largely the restricted parameters are affecting the un-restricted ones; 2) to investigate how much effect-size, quantified in terms of un-standardized solutions of the phantom latent variables parameters, is necessary for that predictor to satisfy each restriction. The specified constants should be reasonably carried out from past knowledge about the subject of research. However, should this previous knowledge not to be available or known, a researcher may simulate a progressive sequence of increasing possible positive and/or negative constants (e.g., from ±0.1 to ±1.5, or more) as it has been the case of this study. Phantom latent variables are therefore able to predict a sort of "what…if" scenario by means of re-arranging the covariance structure of the observed data through a set of constrains on the structural parameters. As an applied consequence, it has been thought-provoking to detect how much the Schwartz theory motivational value dimensions of self-transcendence (i.e., universalism, benevolence) and self-enhancement (i.e., achievement, power) would respectively decrease and increase their positive and negative influence on a positive attitude towards buying sustainable food products if the sample was constrained to increase its openness to change (i.e., self-direction, stimulation, hedonism) motivations.

Keywords: *Schwartz theory of basic human values, structural equation modelling, phantom latent variables.*

1. Introduction

Phantom latent variables were initially defined by David Rindskopf in the eighties as "latent variables with no observed indicators… These variables are of no interest themselves, but only exist for the purpose of implementing the constraints" (Rindskopf, 1984; page 38). The nature of constraints in latent variable path analysis can be wide and the constraints themselves convey sense at the phantom latent variables. Also, for instance, in the case of simply constraints on structural parameters to be equal across samples (e.g., measurement invariance issues) phantom latent variables are "about", since they represent a sort of invariance dummy variable with k-1categories that are proxy of groups of comparison. In short, the more constraints get complex the more phantom latent variables take form and their application is useful both in terms of computational solving problems and practical simulation scenarios. A nice example of this counterpart between constraints and phantom latent variables is the work of Macho and Ledermann (2011) in which an entire phantom model is presented so as to handle specific effects in structural relations. Further examples, although not exhaustive, of recent applications of phantom latent variables have concerned composite reliability of latent effects (Black, Yang, Beitra, McCaffrey, 2014; Gignac, 2014a; 2014b; Thurber & Bonynge, 2011), also in longitudinal studies

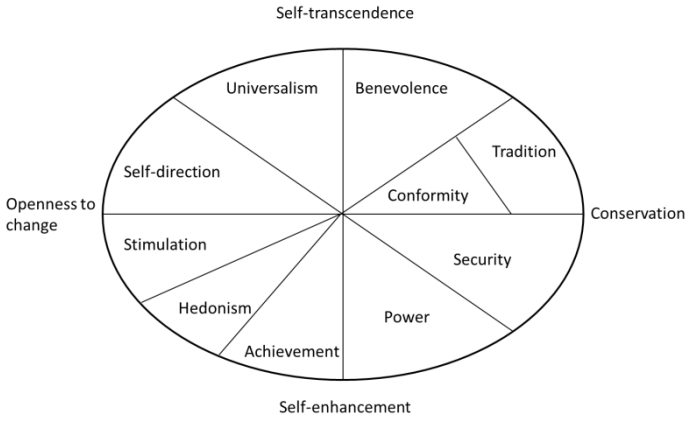
(Hancock, Mao & Kher, 2013), mediation effects (Davinson et al., 2013; Lau & Cheung, 2014; Liew et al., 2014; Schrodt & Shimkowski, 2013) also here in longitudinal studies (Caprara, Alessandri, Barbaranelli, & Vecchione, 2013), interactions and feedback loops (Woody & Sadler, 2005).

Starting from Rindskopf's methods (1984) of imposing indirectly constrains by means of phantom latent variables this work makes an attempt to explore potential changings occurring in the predictors of an attitude model towards buying sustainable food products in Italy. These predictors concern second-order dimensions of Schwartz's taxonomy of basic human values (Schwartz, 1992).

2. Theories, models and hypotheses

The well-known Schwartz theory of basic human values (1992) postulates the existence of ten motivational distinct types of value domains (i.e., benevolence, universalism, self-direction, stimulation, hedonism, achievement, power, security, conformity, tradition) that are assumed to be recognized in all cultures. These ten structural domains are latent in nature and organized in a precise, quasi-circular-elliptical taxonomy depicted in figure 1.

Figure 1. Schwartz's taxonomy of motivational value domains adapted from Schwartz (1992).



Two orthogonal axes with four dimensions (i.e., self-transcendence-self-enhancement, openness to change-conservation) summarize the ten values domains in higher order levels of abstraction. Since this coherent structure arises from social and psychological harmony, or disharmony, between values that people experience in everyday decisions, it can help in explaing why such decisions are made and so that individuals' attitudes and behaviors (Shwartz, 1992). In this respect, an attitude model towards buying sustainable food products in Italy with the four dimensions of Schwartz' taxonomy and past experience as predictors has been put up and successfully verified (Vassallo & Saba, in press). On the other hand, simulations on the aforementioned attitude model have never been tested. They will concern the using of phantom latent variables, taken from Rindskopf 's methods (1984), directly connected to the main model with the exclusion of the past experience predictor and primarily involving openness to change dimension as depicted in figure 2. The rationale of imposing phantom relations and constrains on openness-to-change dimension is due to the fact that its parameter in predicting attitude towards buying sustainable food products was found not significant, as well as self-enhancement parameter, in the main model (Vassallo & Saba, in press). For preserving space hypotheses and results will be presented only just on openness to change dimension that it is also of much more interest in sustainable food context of choice than the others.

The first phantom relation with one phantom variable shown in figure 2 (a) regards on making restriction on structural parameter of openness-to-change to be greater than, or equal to, a specified constant k. This latter constant can be achieved from previous information and/or theoretical reasons. The equations are the following: $Ph = \beta_1\eta_1$; $\eta_2 = \beta_1 Ph + k\eta_1 = \beta_1(\beta_1\eta_1) + k\eta_1 = (\beta_1^2 + k)\,\eta_1$; where the phantom variable is Ph, the openness-to-change is η_1, the attitude is η_2 and the structural parameter β_1 represents the indirect effect of openness-to-change on attitude mediated by the phantom. This phantom parameter β_1 will be estimated and contrained to be equal ($=\beta_1$).

The second phantom relation with two phantom variables shown in figure 2 (b) regards on making restriction on structural parameters of openness-to-change to be less than, or equal to, a specified constant k. The equations are: $Ph1 = \beta_1\eta_1$; $Ph2 = \beta_1 Ph1 = \beta_1^2\,\eta_1$; $\eta_2 = -Ph2 + k\eta_1 = -(\beta_1^2\,\eta_1) + k\eta_1 = (k - \beta_1^2)\,\eta_1$.

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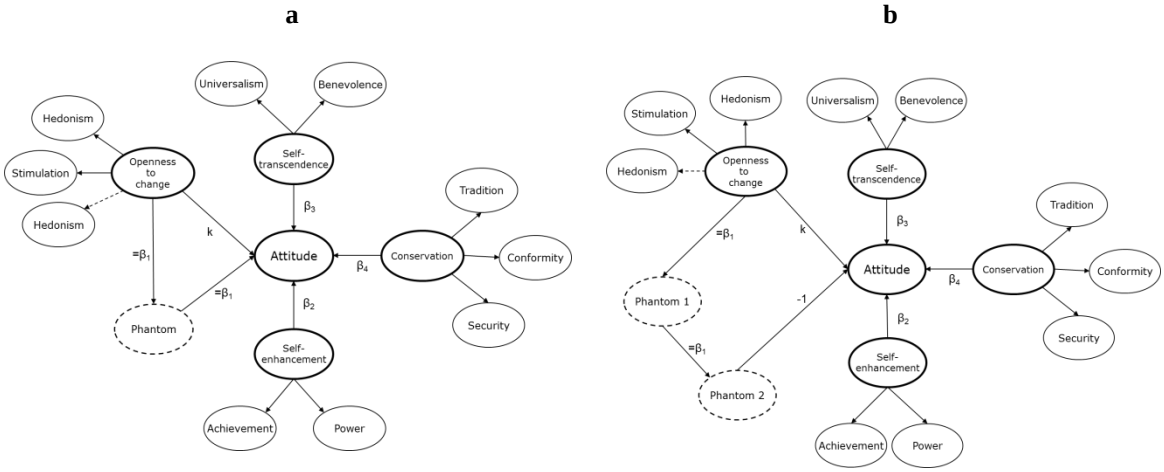
Figure 2. Conceptual attitude models a and b with phantom variables.



3. Methods

The study was conducted on about 3,000 Italian food consumers collected in June 2011 using a three-step quota-based sampling procedure. The sample was representative on regional basis and age classes at first two steps. In the third step, a random sample of households was visited by interviewers by means of random-walk technique for selecting only one member of the family if over 18 years of age and solely, or jointly, responsible for the family's food expenditure. The validated Italian version of the Portrait Value Questionnaire (PVQ) questionnaire (Capanna, Vecchione & Schwartz, 2005) was self-administered to each selected respondent. The PVQ is one of the instruments to measure the Schwartz values domains (Schwartz et al., 2001). It encompasses 40 descriptions/items for each value domain. Each description draws attention to the importance of a value. For example: "It is important to him to respond to the needs of others. He tries to support those he knows" describes a person to whom benevolence values are important. The associated question "How much like you is this person?" (not like me at all, not like me, a little like me, somewhat like me, like me, very much like me), with codes from 1 to 6, quantifies each description. Attitude towards buying eco-sustainable food products was measured with three items adapted from Vermeir and Verbeke (2008): "Buying eco-sustainable food products is" (bad/good, unwise/wise and useless/meaningful) with codes from 1 to 7.

Data were analyzed by means of LISREL 8.80 for windows (Jöreskog & Sörbom, 2007) with maximum likelihood method of estimation. Listwise deletion was used for accommodating observations with incomplete information in order to have complete records only. The effective sample size was composed of 2785 respondents.

4. Results

For preserving space, only results regarding the structural part of the aforementioned attitude model modified with phantom latent variables will be presented. Please refer to Vassallo and Saba (in press) for all other details concerning: data screening, multi-normality check, assessment of measurement models. In table 1, at first row for each model a and b, direct effects of the Schwartz's taxonomy four dimensions on attitude model are presented. After that, total phantom (ph) indirect effects and total ph effects (i.e., both are phantom parameters) of the openness-to-change (o-t-c) mediated by ph latent variable(s) are sequentially computed by imposing on direct effects a progressive sequence of constants k, since no previous knowledge was available. The total ph indirect effects represent how much the o-t-c structural coefficient on attitude has to be increased/decreased so as to be greater/less than constants k taken in increasing/decreasing succession. The resulting total ph effects are proxies of potential new direct effects. The diagnostics of the initial model are good enough: Chi-sq(838)=9212.88, p<.000; RMSEA=.060; CFI=.96; TLI=.95; SRMR=.075. In the first simulation (i.e., model a), the direct effect k starts with imposing a value of -.10, slightly greater than the initial not significant value of -.13. The diagnostics get worse, although still tenable: Chi-sq(839)=17405.11, p<.000; RMSEA=.084; CFI=.94; TLI=.93; SRMR=.11. The un-standardized path from o-t-c to ph, fixed to be equal to the path from ph to attitude, is of .77, that provides a total ph indirect effect of .59 (i.e., .77x.77), for a total ph effect of o-t-c on attitude of .49 (i.e., -.10+.59). The other un-standardized coefficients strongly change their impact on attitude: conservation direct effect negatively decreases from -1.11 to not significant value of -.08, self-

transcendence direct effect positively decreases from 1.83 to .50, self-enhancement direct effect negatively increases from not significant value of .08 to -1.02. It means that if a researcher wants to increase the impact (i.e., direct effect) of o-t-c on attitude more than -.10 he/she will obtain from the sample (i.e., estimated phantom model-implied matrix) a total (ph) positive effect of .49 (i.e., proxy of new direct effect) with a strong reduction of conservation and self-transcendence together with a negative impact of self-enhancement. This trend becomes even more severe with simulating more and more increasing of the constant k. Conversely (see table 1, model b), if the inverse process acts, with constraining o-t-c parameter to be less than -.13, starting from k= -.20, conservation and self-transcendence, self-enhancement respectively increase their negative and positive direct effect. But, how much the o-t-c impact can reasonably increase and/or decrease? It will basically depend on the constrained model diagnostics that cannot get too much worse in comparison to the ones of the initial model. In the case of model a the process will be stopped at the fourth step (i.e., k=1.00) as the diagnostics would be: Chi-sq(839)=68260.93, p<.000; RMSEA=.17; CFI=.88; TLI=.87; SRMR=.14. As a consequence, o-t-c parameter may be reasonable hypothesized to vary from -.10 to 1.00. In the case of model b the process may continue other than -1.50 as the diagnostics at the fourth step would be: Chi-sq (839)=9751.00, p<.000; RMSEA=.062; CFI=.95; TLI=.95; SRMR=.079.

Table 1. Unstandardized (std) effects of openness to change (o-t-c), conservation (co), self-transcendence (s-t), self-enhancement (s-e) on attitude for restricting o-t-c parameter to be greater than, equal to, less than a specified constant k. (not significant at the 95% confidence level).*

Model a; ≥ k	k	o-t-c		co	s-t	s-e
Step	-	Direct effect	-.13*(-.09)	-1.11 (-.58)	1.83 (.73)	.08*(.06)
1	-.10	Direct effect Total Ph Indirect effect Total Ph effect	-.10 (-.10) .59 (.58) .49 (.48)	-.08* (-.06)	.50 (.38)	-1.02 (-1.03)
2	.10	Direct effect Total Ph Indirect effect Total Ph effect	.10 (.10) .61 (.59) .71 (.69)	.24 (.18)	.13* (.10)	-1.24 (-1.25)
3	.50	Direct effect Total Ph Indirect effect Total Ph effect	.50 (.50) .62 (.62) 1.12 (1.12)	1.38 (1.02)	-1.20 (-.87)	-1.82 (-1.83)
4	1.00	Direct effect Total Ph Indirect effect Total Ph effect	1.00 (1.00) .64 (.65) 1.64 (1.65)	2.96 (2.14)	-3.07 (-2.13)	-2.57 (-2.55)
Model b; ≤ k	k					
Step	-	Direct effect	-.13* (-.09)	-1.11 (-.58)	1.83 (.73)	.08*(.06)
1	-.20	Direct effect Total Ph Indirect effect Total Ph effect	-.20 (-.16) -.50 (-.41) -.70 (-.57)	-2.55 (-1.50)	3.58 (2.07)	1.04 (.83)
2	-.50	Direct effect Total Ph Indirect effect Total Ph effect	-.50 (-.40) -.49 (-.39) -.99 (-.79)	-2.92 (-1.70)	4.03 (2.30)	1.27 (1.01)
3	-1.00	Direct effect Total Ph Indirect effect Total Ph effect	-1.00 (-.79) -.46 (-.36) -1.46 (-1.15)	-3.54 (-2.03)	4.78 (2.78)	1.66 (1.30)
4	-1.50	Direct effect Total Ph Indirect effect Total Ph effect	-1.50 (-1.16) -.42 (-.33) -1.92 (-1.49)	-4.16 (-2.36)	5.53 (3.06)	2.05 (1.59)

5. Wrap-up

This work has wanted to encourage the using of phantom latent variables for making simulations among parameters in latent path models. Phantom latent variables are latent variables with no observed measures and zero variance and they serve as proxies of potential constrains on structural parameters of interest. Specifically in this study a latent path model on attitude towards buying sustainable food products has been considered, and applied to Italian food consumers, with Schwartz's taxonomy of basic human values dimensions (second-order level of abstraction) as predictors. Simulations have been made by means of introducing phantom latent variables directly into the attitude model as mediation effects and so that openness to change direct effect in predicting attitude has been re-estimated so as to be potentially greater/less than specified restrictions. These new estimations are indirect effects of openness to change on attitude mediated by the phantom variable(s) and they lead to the total effect, or proxy of new direct effect, that reveals how much of openness to change is needed to satisfy each initial restriction on its

direct effect on attitude. As a consequence, should the researcher have plausible fixed values to test on some structural parameters he/she may want to explore how the sample, throughout the estimation of the phantom model-implied matrix, would react to overcome such restrictions. Here, a progressive increasing of Italian food consumer's openness to change motivational values in predicting positive attitude towards buying sustainable food products would require of increasing of conservation values, but also reducing the feeling of self-transcendence and self-enhancement, drastically. On the other hand and coherently with the latter trend, should the Italian food consumers openness to change reduce its impact in favor of sustainable food products the conservation would be reduced as well, with the increasing of motivational values of self-transcendence and self-enhancement.

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CONNECTING PIÉRON'S LAW, THE FOREPERIOD EFFECT AND DISTRIBUTION SHAPES IN A SIMPLE REACTION TIME TASK

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Abstract

In a recent study on choice reaction time (RT) (Harris et al., 2014), we found that rate (reciprocal of RT) was near-normally distributed, which led us to propose a decision model based on maximizing the reward rate (the Rate Model). We also suggested a connection with two well-known phenomena in experimental psychology: Piéron's Law and the foreperiod (FP) effect. Piéron's Law describes the empirical relationship between mean RT and stimulus intensity as a power function. The FP is the time from the start of the trial until the appearing of the stimulus, which usually has the effect of increasing the mean RT. In this work we tested the Rate Model by using a *simple* reaction time design. Twelve subjects were tested for three blocks of 250 trials each. We varied the FP time and the luminance of the stimuli. The participants were asked to press a button as soon as they saw the stimulus (a luminous circle on a black background). We used 3 FP conditions (0.6, 1, and 2.4 seconds) and 5 luminance levels (0.42, 0.71, 1.21, 2.06, 3.50 cd/m^2). As expected, the relationship between RT and stimulus intensity followed Piéron's Law. We also found that longer FP induced longer mean RT. Fitting a different Piéron's function for each FP condition showed that the effect of the FP was a shift in the Piéron's curve. Overall, the distributions were approximately normal in the rate domain. The goodness of fit increased with the long FP conditions, whereas the different luminance levels did not have any impact on the normality shape of the distributions. We adapted the original model to account for simple RTs, and were able to fit the model to our data to take into account Piéron's Law, the FP effect of shifting the Piéron's curve, and maintain approximately normal distributions in the rate domain (reciprocal RT).Our main claim is that the goal of the human decision process in simple decision tasks is to maximize the rate of reward. We discuss the connections between our model and other recently proposed models for simple RT tasks.

Keywords: *Piéron's Law, foreperiod, reward rate, simple reaction time.*

1. Introduction

The measurement of reaction/response times (RTs) has been a major paradigm in the study of human behavior and decision-making for over a century (Luce, 1986). The two main experimental designs are *simple* and *choice* RTs tasks. In the latter, a participant is asked to make a choice between two or more stimuli according to experimental instruction after stimuli onset. In the simple RT (SRT) task the participant is asked to respond to the stimulus onset, usually as fast and/or as accurately as possible. Most models have focused on how RT distributions and accuracy depend on experimental parameters, and have assumed a stochastic accumulation of evidence towards one alternative or another (Ratcliff & Rouder, 1998). An alternative approach is to examine the strategy that participants use to decide when to stop collecting information and produce a response (Harris et al., 2014). We have found that in a *choice* RT task, the rate of response (1/RT) followed approximately a normal distribution, as has also been previously found for saccades (Carpenter, 1981; Carpenter & Williams, 1995). We therefore proposed that RTs maximized the rate of response. This model also makes some predictions about the effect of the stimulus intensity and the foreperiod time (the time from the start of the trial until the occurrence of the stimulus, FP). In this study we explored the rate distributions in a *simple* RT task to see if they are also near-normal. We also varied stimulus intensity and the foreperiod time to test the predictions of the rate model.

It has been known for long time that the intensity of the stimulus (I) affects the mean RT (mRT) according to a power function with negative exponent plus a constant, and has become eponymously

known as Piéron's Law (1952): $mRT=\alpha I^{-\beta}+\gamma$, where α is a scaling factor, β is a parameter depending on the type of stimuli used and γ is the asymptotic value reached when $I \rightarrow \infty$. Piéron's Law seems to hold for *choice* as well as *simple* RT (Pins & Bonnet, 1996; van Maanen et al., 2012). FPs provides a cue to the time of stimulus onset, and is known to affect RTs. When the FP is constant, RTs increase with FP. When the FP is variable, however, the relationship becomes more complicated: the RTs are generally longer, but also depend on the particular FP distribution (Niemi & Näätänen, 1981). We investigated this relationship by using an exponentially distributed FP, which does not give any information about the occurrence of the stimulus at time t given that it did not occur before.

2. Methods

2.1. Participants and Stimuli

12 participants (5 females, 7 males) took part in the experiment. All participants had normal or corrected-to-normal vision and no known neurological conditions. All testing were conducted under constant levels of illumination. The stimuli were presented binocularly on a computer monitor. Participants were positioned 57cm from the monitor. The stimuli were luminous circle (2cm) shown on a dark background (0.31 cd/m^2). The five levels of luminance followed an approximately geometrical series (0.42, 0.71, 1.21, 2.06, 3.50 cd/m^2). Each participant was tested in three blocks. During each block, the 5 possible stimuli were presented randomly. We used three different FP conditions: short, medium and long. Each FP condition consisted of a minimum waiting time (0.4s) added to a random time drawn from an exponential distribution. FPs longer than 20s were excluded. The mean of the exponential distribution was 0.2s for the short condition, 0.6s for the medium condition and 2s for the long condition, leading to three different FP conditions with mean of, respectively, 0.6s, 1s and 2.4s. The mean FP time was kept constant for each block. The FP conditions were counterbalanced across participant.

2.2. Procedure

A white cross (2 cm) was presented on a black background at the centre of the screen. This was used as a fixation point. After 1 second, the cross disappeared and a white dot (1mm) appeared at the centre of the screen and remained on the centre during the whole trial. The disappearance of the white cross constituted the warning signal for the start of the FP. After the FP, the stimulus appeared and stayed on the screen until the participant pressed the space bar. The participants were asked to press the spacebar as soon as they detected the stimulus. If the participants pressed the spacebar before the stimulus appeared (anticipation response), a negative auditory feedback was provided and the trial was repeated. Otherwise a positive auditory feedback was provided after the spacebar was pressed. We recorded 50 RTs for each luminance level. Thus, we recorded 250 non-anticipatory RTs for each session, and a total of 750 non-anticipatory RTs for each participant. A training session consisting of 20 trials with a short FP was performed by each participant before the start of the experiment.

3. Results

We calculated the median reaction times (mdRT) across all the 12 participants for each stimulus intensity and FP condition. The median of the reciprocal of a random variable is the same as the reciprocal of the median (the mean does not have this property). As expected, the mdRT decreased with the increase of stimulus intensity ($F_{4,44}$=3.68, P=0.013). The mdRT increased with longer mean FP condition ($F_{2,22}$=10.24, P<0.001), as shown in Figure 1, left. No interaction was found between FP and stimulus intensity. We fitted a different Piéron's Law function for each FP condition using the method of least squares. The estimated parameters are shown in Table 1. Figure 1, right, shows the relationship between the mdRT and FP condition for each luminance level. In this case, the relationship appeared to be logarithmic. This was confirmed by a minimum least square fitting which resulted in high values of R^2 (Table 2).

Figure 1. On the right, the aggregated mdRT for all the 12 participants against the 5 luminance levels of the stimuli, for the 3 FP conditions. On the right, the same mdRT against the 3 FP condition for each one of the 5 luminance levels.

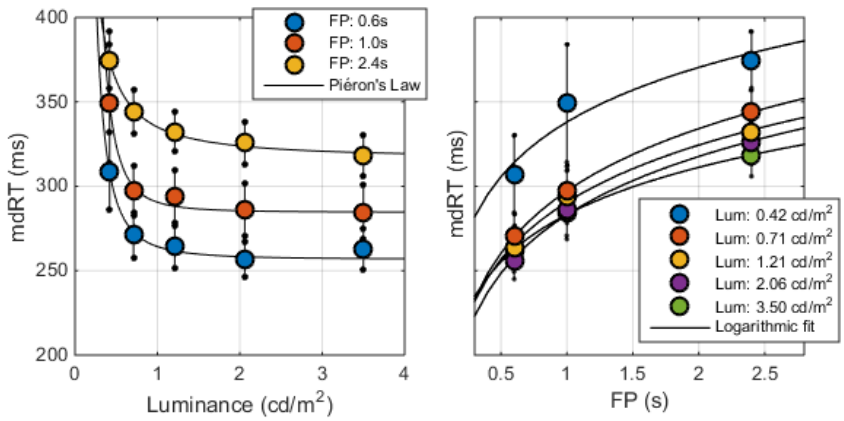


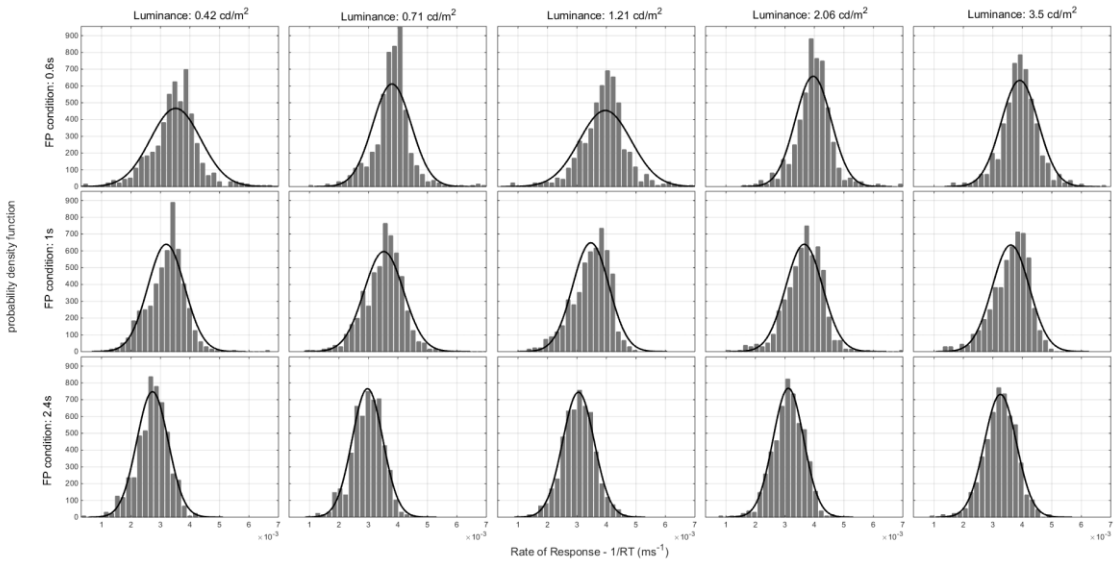
Table 1. Estimated parameters for the Piéron's Law ($mdRT=\alpha I^{\beta}+\gamma$) for each FP condition.

	α	β	γ	R^2
FP=0.6s	9	2.02	254	0.96698
FP=1.0s	6	2.72	281	0.98688
FP=2.4s	20	1.25	317	0.99354

Table 2. Estimate parameters for the relationship between FP and mdRT (mdRT=k log(FP)+c) for each luminance level.

	0.42 cd/m^2	0.71 cd/m^2	1.21 cd/m^2	2.06 cd/m^2	3.50 cd/m^2
k	46	53	48	49	40
c	338	297	290	283	283
R^2	0.92	~1	0.9938	0.9936	0.9985

Figure 2. Distribution of the rate of response for each condition, aggregated across the 12 subjects using the standardization method.



We analysed the distribution of RTs in the rate domain (1/RT) using the standardization method (Harris et al., 2014). We grouped the distributions for all the participants. The result is shown in Figure 2. We fitted the Normal distribution for each one of the 15 cells in the rate domain (3 FP condition x 5 different luminances) using a maximum likelihood method approach (black solid line)

4. Discussion

4.1. Piéron's Law

The exponent, β, parameter usually found for Piéron's Law in studies in which the luminance of a stimulus is varied is much smaller than the value that we estimated (i.e., Mansfield, 1972, reported β=0.3). We explain this peculiar result by noticing that in our experiment the background luminance was higher than in previous studies (0.31 cd/m^2 against 0.001 cd/m^2), and therefore the contrast stimulus/background in our experiment was much lower than in other studies. High exponents have also been found in Pins and Bonnet (1997, 2000), where the lowest scotopic ranges provided the higher exponent. It is possible that the exponent of the Piéron's function is actually affected by the contrast of the stimuli, and not by the sensory modality as previously assumed. Further studies are required to investigate this point.

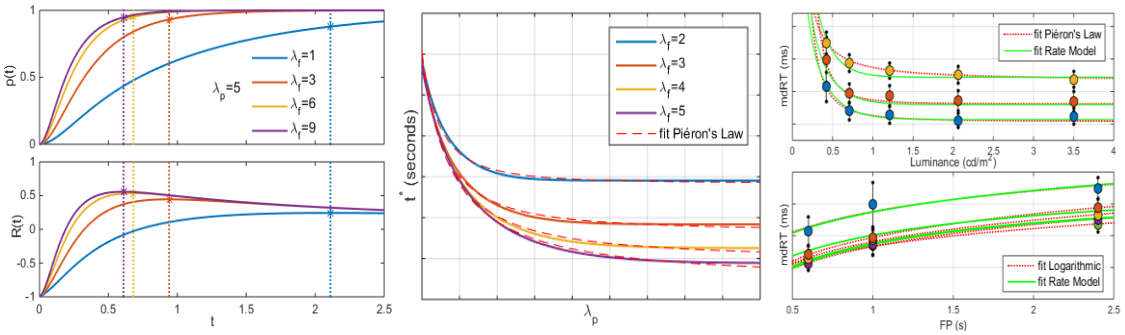
4.2. Distribution shape

We have a previously found in a choice RT task (Harris et al., 2014) that the distributions in the rate domain were approximately Normal. In the present study we use the same approach to verify if the near-Normal distribution shapes can be found in a *simple* RT task with different stimulus intensity and FP conditions. When the mean FP is long the fit with a normal distribution is close to perfect, and the distribution shape does not seem to be affected by the stimulus intensity. However, the fitting gets progressively worse as the mean FP length gets shorter. The FP condition seems to affect the shapes in a non-trivial way that is different for *choice* RTs. In a *choice* RT task the FP does not affect the probability of being correct: even if the participant can estimate when the stimulus is going to occur. In a simple RT task with a variable FP, the flow of time itself can give information about the occurrence of a stimulus, even when an exponential distribution is used. In the next section we will show a modified version of the Reward Rate Model that can take into account the FP effect.

5. The Reward Rate Model for Simple Reaction Time Tasks

The fact that the RT distributions were approximately normally distributed in the rate domain for *choice* RT suggested that the neural computation could be actually carried on in the rate domain (Harris et al., 2014). We proposed a Rate Model in which the rate of reward is maximized. For each trial, we define the gain in subjective utility for a correct response by P>0, and the loss by M>0**.** The expected gain therefore depends on the probability of being correct at time t $\hat{G}(t)=Pp(t)-M(1-p(t))$**.** The expected rate of gain is $\hat{R}(t)=\hat{G}(t)/(t+d)$ where d is the delay across trials. The optimum time to respond (t^*) corresponds to the point when the derivative of $\hat{R}(t)$ is 0, and can be found numerically. The result will depends on the shape of p(t). In our previous work, we used a simple monotonically increasing function asymptotically approaching unity: $p(t)=1-\exp(-\lambda t)$, where λ is a parameters defining how fast p(t) grows (this parameter was used to model different difficulty conditions or different stimulus intensity). However, the results of this study showed us that the FP condition has a peculiar effect on the response. In particular, it changes the γ factor of the Piéron's Law. We show that, by choosing an appropriate formula of p(t), the Rate Model still holds. For the present study we consider a p(t) that depends on both stimulus intensity and FP condition: $p(t)=(1-\exp(-\lambda_p t))(1-\exp(-\lambda_f t))$, which is simple product of two exponent functions, where λ_p and λ_f are two accelerating factors of time, the first depending on the stimulus intensity, the second inversely related with the FP. Figure 3, left and centre panels, show some numerical simulations with several values of λ_p and λ_f. The centre panel shows how the optimum responds is clearly similar to Piéron's Law with different γ depending on the value of λ_f. Assuming that λ_p fluctuates normally across trials, the model can generate distributions that are near-Normal in the rate domain or slightly skewed on the left side, which is similar to what we found in our observations. In Figure 3, right panels, we fit the model to the experimental data by assuming that the mapping between λ_p and λ_f and the physical values of the stimulus intensity and FP condition followed Steven's Law, that is $\lambda_p=\alpha_1 I^{\beta 1}$ and $\lambda_f=\alpha_2 FP^{\beta 2}$. The effect of the stimulus intensity (Figure 3, right-top panel) and of the FP condition (Figure 3, right-bottom panel) can be explained by the model.

Figure 3. Top-left panel: the proposed p(t) with different values of λ_f, which is assumed to be inversely related to FP. Bottom-left panel: the resulting rate of reward (R(t)) function. The vertical dotted line on both figures indicate the optimum time to respond, t that maximized the rate of reward. Centre panel: the resulting shape of the optimum t* with different λ_p parameter, which is assumed to be related to the intensity of the stimulus, and λ_f. Right-panels: experimental data fitted with the Rate Model and Piéron's Law: luminance against mdRT (right-up panel) and FP conditions against mdRT (right-bottom panel).*



6. Conclusion

The effect of stimulus intensity and foreperiod length on RT has been studied for long time. However, the interaction between the two has been largely unexplored. We connected these phenomena with the peculiar fact that RT distributions in the rate domain are normally distributed. This observation holds only partially for simple RT, in which only long FP produced near-Normal distributions in the rate domain. We showed that the Rate Model is also applicable within the framework of simple RT tasks by choosing an appropriate p(t) depending on both FP and RT in order to take into account the FP effect on distribution and on stimulus intensity.

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SUBJECTIVE SPEED PERCEPTION AMONG MOTOR VEHICLE DRIVERS (OVERESTIMATION AND UNDERESTIMATION OF DRIVING SPEED - GROUP COMPARISON)

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Abstract

The issue of speed and speed limits is still a current highway safety topic. Over the past four decades, research in this area has been focused on drivers´ speed perception as it is a crucial issue in their speed choices. This study aims to analyse differences between drivers who are more likely to underestimate driving speed in comparison to drivers who are more likely to overestimate it and determine the indicators associated with these phenomena. 169 respondents (129 males and 40 females) within the age of 19-86 participated in this study. The data were provided over the project Czech In-depth Accident Study via interviewing road traffic accident participants directly after the accident. The actual speed of motor vehicles was determined through Virtual Crash reconstruction software. The results have shown several indicators associated with driving speed estimation, e.g. gender, trip purpose, annual mileage, and time of driving. The results suggest that factors related to the driver may be associated with distorted speed perception. It also points to the importance of subconsciousness in speed perception. The results are useful for analyses of human factor causes of road traffic accidents and also for deeper understanding of drivers' perception and behaviour. Integrating our results into driver education programmes may improve safe driving behaviour.

Keywords: *speed perception, driving speed, overestimation, underestimation, human factors.*

1. Introduction

Speed is a burning issue worldwide. According to WHO (2013), speeding is one of the most essential issues which need to be actively addressed in terms of road safety. Speeding is not only related to higher risk of road accidents, but also to their more serious consequences. In the Czech Republic, speeding has been the most frequent cause of road accidents for the last five years (21%), and a cause of nearly 40% fatalities. Speeding is not only considered driving faster than the speed limit, but also driving by speed not adapted to ambient conditions. In order to drive safely, drivers need an ability to perceive their speed and to assess desirable speed based on the ambient conditions. The speed limits are adapted to favourable conditions and assume drivers' ability to perceive their speed correctly.

However, results of many studies show that drivers' speed perception is influenced by a number of factors and circumstances. Driver's perception of speed is based on their individual abilities, qualities and capabilities, therefore opening a room for a distortion of perceived information. As a consequence, unintentional speeding may occur. In addition, there are a lot of issues which need to be dealt with in practice, during speed limit implementation, changes in traffic environment, within educating and training drivers, etc.

The perception of movement and speed of drivers is basically related to their visual perception of traffic environment. For example, drivers choose lower speed on narrow, winding and hilly roads with rough road pavement and their unclear arrangement and on narrow roads with dense tree vegetation around (Edquist et al., 2009; Campbell et al., 2012). Speeding particularly occurs on wider, straight, higher class roads, under good visibility, in an open space (Fildes, Fletcher & Corrigan, 1987; Silcock et al., 2000; Campbell et al., 2012; SWOV, 2012b). These results shows that drivers' speed perception is related to their perception of safety, i.e. the higher feeling of safety drivers have, the more they tend to underestimate their speed and drive faster than the speed limit.

A certain role is played by the specific condition of the given environment, which generally show that the higher requirements by the environment for drivers' visual abilities, particularly in the area of drivers' peripheral field of view, the higher the tendency to opt for lower speed. Some examples include heavy traffic (Aarts et al., 2011), poor visibility and weather conditions (Feng, 2001), and a large

number of parked vehicles at the side of the road (Edquist et al., 2009). The results of these studies are reflected in practice through the implementation of various measures in traffic which lead drivers to implicitly behave in a desirable way, particularly in terms of road safety. Currently some of the tendencies include the application of self-explaining roads, psychological traffic calming, and a concept of credibility (Aarts et al., 2011). One of the goals of the above mentioned measures is that drivers will subjectively perceive the objectively safe speed in given conditions as adequate.

The subjective perception of speed can also be influenced by the type of vehicle, when the distortion occurs particularly in comfortable and quiet vehicles. As a consequence, drivers miss sound and vibration information and underestimate the current speed (Silcock et al., 2000; SWOV, 2012b).

The result of studies show that factors related to the driver, or his/her current condition (presence of fatigue, emotional condition, feeling of time pressure, etc.) or relatively permanent aspects, such as personality traits, character, cognitive abilities, gender, age, etc., play an important role for perception of speed and subsequent behaviour of drivers. Exceeding the speed limits is often associated with sensation seeking, which is related to the tendency to take risks, have a need for excitement, new experiences and changes (Fleiter & Watson, 2005; Fylan et al., 2006; SWOV, 2012b). The relationship with type A personality, accompanied by qualities such as aggressiveness, hostility, competitiveness, impatience, and frequent feeling of time pressure, is also confirmed (Fylan et al., 2006). An important role is played by a risk perception of drivers, while the drivers with higher tolerance to risk tend to drive faster (Milliken et al., 1998; Silcock et al., 2000; Fleiter & Watson, 2005; Fylan et al., 2006). The contributing factor can also be driver's self-image, as described by Silcock et al. (2000), who suggest that the majority of drivers consider their driving skills as average up to above-average and believe that they are not related to dangerous fast driving as they think they can drive better and safer than others. Moreover, they consider fast driving "in a medium degree" common or even desirable. In this respect, the self-perception as a good driver may lead to a situation that the driver views him/herself so experienced that he/she "can afford" to drive fast. The research results also confirmed the relationship between fast driving with an internal locus of control, which is in this case manifested by a need to make driver's own decision concerning the speed limits, which the drivers may consider as limiting factors for their own independent behaviour (Fylan et al., 2006). Regarding demographics, fast driving occur more frequently with males (Silcock et al., 2000; Fleiter & Watson, 2005) and with young, less experienced drivers (Silcock et al., 2000). Older people are less tolerant to risk and are more afraid to break the rules, which may lead to lower occurrence of fast driving (Fylan et al., 2006).

However, the majority of these findings are related to conscious speeding, regardless whether occasional or frequent. The issue of unintentional speeding and the issue of distorted perception of speed, which can occur at the sensory and cognitive level on the basis of individual qualities and experience, are paid higher and higher attention in the research. Based on the findings (SWOV, 2012b), speed is underestimated by drivers particularly in situations when drivers drive fast for a longer time; in temporary speed road segments, during movement into a slower speed zone when speed needs to be reduced; in situations with minimum amount of peripheral information (e.g. fog, open space); in larger sports cars when driver's perception is distorted by large wheels and missing vibrations and speed is perceived lower. As some authors point out (e.g. Fleiter & Watson, 2005; Edquist et al., 2009), an important role for speed perception is played by situational factors and actual driver's condition, which affects driver's ability to perceive and process information from the environment (e.g. fatigue, stress, distraction, etc.).

Our work aims to reach a deeper understanding of mechanisms which cause distortion of the perceived speed by motor vehicle drivers, in terms of factors related to the driver. Our research work aims to compare groups of drivers who underestimate speed with those who overestimate it and find the indicators related to these phenomena.

2. Methods

Data collection was performed within the research project Czech In-depth Accident Study, which was initiated by Transport Research Centre in 2011. The project focuses on road accidents with injuries on a specifically defined region of South Moravia. The road accidents are chosen according to a statistical selection with the aim to cover a representative sample. There are currently two teams which cover the accidents in the field. The investigation starts directly at the accident site, where vehicle, traffic, and human factor data are collected. Subsequently, road accident reconstruction is made with the use of software Virtual Crash and all the collected data are coded in a database. One of the investigated phenomena are the injuries of people involved in the accidents, which is possible in case the injured person involved in the accident is treated in a contracted medical centre.

Our work used the data collected by a psychologist through the interviews with the people involved in the accidents directly at the accident site immediately after it occurred. Regarding the severity

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of a critical situation for the psychological condition of the involved people, the amount of collected information varies from person to person. Therefore, we selected to our research set just the respondents who provided sufficient amount of information for processing. The research set included 169 people involved in accidents (129 males and 40 females) in the ages from 19 to 86 years (M= 41 years; SD= 16.37). The semi-structured interview is usually focused on several areas, such as the course of the accident event within which the subjectively perceived speed before the accident is found; traffic situation at the time of the accident; driving experience, the course of driver's day; health condition and person of the driver (gender, age, height, weight, education, average length of sleep, etc.).

The subjectively perceived speed of the driver was compared with the assumed vehicle actual speed, which was determined on the basis of the road accident reconstruction in software Virtual Crash with the use of input data, such as vehicle weight, friction coefficient, braking marks and braking deceleration, driver's reaction time, and vehicle deformation. Based on the calculated difference of speeds, the errors in estimation were determined, where we subtracted 10 km/h as a correction. Subsequently, the groups of drivers who underestimated and overestimated the actual speed were identified. The groups were compared regarding the factors related to the driver (gender, age, possession of driving license, annual mileage, sleep duration, driving time, trip purpose, accident causation, and number of passengers). The data were processed in the statistical software SPSS.

It is necessary to mention that in none of the examined cases, the speed limit was exceeded. Our aim was not to find the indicators related to speeding, but the understand deeper the drivers perception abilities to perceive speed, or explain the mechanisms related to its distortion, respectively, in terms of the above mentioned factors related to the driver.

3. Results

The results of the study show that gender (p= 0.002) is a significant factor for subjective speed perception. Males more frequently tend to underestimate speed, while females overestimate speed. In addition, the difference between the groups in relation to the annual mileage (p= 0.017) was confirmed. The overestimation of speed was mainly related to lower annual mileage and was most frequently made by drivers whose mileage is lower than 10 000 km per year. The overestimation of speed was present mostly with drivers who drive 11- 30 000 km per year. The difference was also proved with the driving time (p= 0.045); speed was overestimated mostly by drivers who drove less than 30 minutes. Drivers who drove shorter than 30 minutes underestimated speed slightly more comparing to others. One of the determining factors for speed perception seems to be trip purpose (p= 0.02). Speed was more frequently underestimated on the way to work/school and during business trips, while it was overestimated when driving to leisure activities, going shopping, etc. The results are shown in Table 1.

Table 1. Results: underestimation and overestimation of driving speed – group comparison.

	Underestimation		Overestimation		p-value
Gender	male: 66% female: 36%		male: 34% female: 64%		0.002*
Age	M= 40.85	SD= 13.98	M= 41.21	SD= 17.57	0.942
Possession of the driving license (years)	M= 17.71	SD= 11.92	M= 21.13	SD= 16.79	0.478
Annual mileage (thousands)	M= 28.53	SD= 17.24	M= 24.00	SD= 43.81	
	≤ 10 000kms: 13% 11- 30 000kms: 53% 31-50 000kms: 20% ≥ 51 000kms: 13%		≤ 10 000kms: 65% 11- 30 000kms: 20% 31-50 000kms: 5% ≥ 51 000kms: 10%		0.017*
Sleep duration (hours)	M= 7.75	SD= 1.14	M= 7.75	SD= 0.97	1.000
Time of being awake (hours)	M= 7.91	SD= 3.56	M= 7.44	SD= 3.01	0.760
Driving time	≤ 30 mins: 73% 30mins- 1. 5hrs: 16% ≥ 1.5hrs: 11%		≤ 30 mins: 90% 30mins- 1. 5hrs: 4% ≥ 1.5hrs: 6%		0.045*
Trip purpose	to work/school: 47% business trip: 41% leasure time/purchase: 12%		to work/school: 40% business trip: 10% leasure time/purchase: 50%		0.020*
At- fault accident	yes: 38% not: 52%		yes: 62% not: 48%		0.387
Number of passangers	M= 0.71	SD= 0.90	M= 0.68	SD= 1.07	0.666

*p < 0.05

4. Discussion and Conclusions

At first we need to mention that we are aware of a potential distortion of information in respondents' statements immediately after a road accident, due to critical and mentally demanding situation for most of the involved people. In addition, the tendency of the involved people to show themselves in more favourable light (particularly of people who caused the accident), e.g. intentional statement of lower speed, cannot be excluded. We tried to partially eliminate this drawback by including the above mentioned deviation (10km/h) of the difference between the subjective and actual speed.

The results of this study show a significant role of *gender* for the perception of speed. Males often underestimate speed, while females overestimate it more frequently. The results of different studies (e.g. Silcock et al., 2000; Fleiter & Watson, 2005) show that speeding is more characteristic for males, which can be naturally explained by their higher inclination to competitiveness, aggressiveness, and focus on performance. Males often tend to overestimate their abilities (Havlík, 2013), which may be manifested as the underestimation of speed. Since our research only focused on the drivers´ perception skills, concerning unintentional underestimation/overestimation of driving speed, our findings may point out the specific nature of men's perception, who tend to underestimate speed and therefore to drive faster unintentionally. Silcock et al. (2000) found an interesting fact when they ask drivers a question: "How did you know the speed of your vehicle?" The drivers in the group of "fast drivers" more frequently answered that they felt the speed based on the movement of other vehicles. The drivers in the group of "slow drivers" more frequently claimed that they felt speed based on the sound of their engine. If we relate the "fast drivers" group to males, it is possible to confirm their focus on performance or influence of other road users on their behaviour. Since peripheral perception plays more significant role for the perception of movement and speed, an issue arises whether men's higher focus on the environment can cause better adaptation of specific visual perception for driving and therefore higher comfort or the above mentioned feeling of safety. In addition, males have better spatial orientation abilities which may contribute to the "comfort". Regarding males, Havlík (2005) points out their faster reactions to visual and auditory impulses in comparison with females. Females also usually tend to have lower tolerance to take risk, which may influence their higher sensitiveness to speed and its overestimation. The potential for further research lies particularly in the analysis of how these differences can be compensated by training, or whether the differences are less significant with growing mileage. Regarding age, no difference was confirmed between the groups, although certain driving experience appeared with the *mileage driven per year*. Drivers with an annual mileage up to 10 000 km tend to overestimate their speed. In order to be able to correctly and quickly process the details of a traffic situation, drivers need to acquire specific visual perception, which, according to Štikar et al. (2003), is only developed after having driven 30- 60 000 km. In this case, 10 000 km/year may not necessarily mean a driver beginner, but still lower visual flexibility, which is developed by training and experience, cannot be excluded (Fildes et al., 1987). Furthermore, it is the driving practice that helps to extend the range of driver's field of vision (Štikar et al., 2003), which allows for more adequate peripheral vision, higher comfort and more accurate perception of speed. In contrast, the peripheral perception may be more stressful with increasing speed for unexperienced drivers. This overestimation decreases with the growing mileage. However, a contrasting tendency appears in our results for drivers with a mileage of 11 000 to 30 000 driven km per year. These drivers underestimated speed the most. This tendency decreased again with more active drivers. This means that there may not be a direct dependency between the mileage and subjective perception of speed. Therefore, active driver goes through a certain development through the phase of adaptation, subsequent conviction of their abilities, and in the last phase to a certain driver's "moderation". This model is hypothetical and probably highly individual. However, its further research can bring about benefits in the field of assessment of drivers and in measuring drivers' driving skills and abilities. An important factor for assessing speed appeared to be *time behind the wheel.* This factor was present the most with drivers who only drove for maximum 30 minutes. These drivers overestimated their speed. Apparently, a certain phase of adaptation to driving takes place once the driver gets in the vehicle. After a longer time behind the wheel, slightly more drivers underestimated speed, which confirms certain of visual perception during driving and thus higher comfort with potential underestimation of speed. However, in this case we are missing information on the course of driving itself, since we cannot see whether the perception was not influenced by the movement between speed zones, etc., as confirmed by other research (SWOV, 2012b). An interesting finding was the perception of speed in relation to *trip purpose*. Speed was more frequently underestimated on the way to work/school and on business trips, while the overestimation was more frequent on trips to leisure activities, shopping, visits, hobbies, etc. Similar results were reached by Ellison & Greaves (2010), who recorded speeding most frequently of drivers to work. Therefore, a certain "impulse of obligation", on the subconscious level, can influence speed perception of drivers. Gable & Poole (2012) found that the motivation for reaching a certain goal has an impact on the perception of

time, that appears to be shorter, which may partially explain the distortion of the perception and tendency to underestimate speed and drive faster unintentionally. A certain role is played by a potential inclination to time pressure, or an effort to be somewhere in time. This issue would definitely require deeper examination and it would be beneficial to include some personality factors which may be related to this phenomenon, such as inclination to the feeling of time pressure, conscientiousness, etc.

To conclude, we believe the issue of speed needs to be dealt with at more levels in order to improve road safety. Apart from the entire issue of speed management including the setting of speed limits, the issue of prevention with the aim to respect speed limits, we consider important to help drivers to understand their dispositions and limits, their subconscious mechanisms and guide them to be more sensitive to their bodily and mental feelings which may have an impact on driving. This study is also an impulse for further research, in which we would like to include other factors, such as the impact of traffic environment and vehicle on speed perception of drivers and extend the research sample.

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THE NEGATIVE ATTITUDES TOWARDS ANDROIDS: BEYOND THE "UNCANNY VALLEY" AND PSYCHOLOGICAL ALTERNATIVES

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Abstract

A lot of papers are interested in the "Uncanny Valley" (a psychological concept) in the fields of Human-Robot Interaction (HRI). This concept states that as the appearance of a robot is made more human, a human observer's emotional response to the robot will become increasingly positive and empathic, until a point is reached beyond which the response quickly becomes that of strong revulsion. But, if the Uncanny Valley is an interesting concept to describe human behaviours and attitudes, it does not give explanations. So, in this theoretical paper, we propose and discuss five psychological alternatives: (1) Hypothesis 1: the Uncanny Valley is a vicarious learning. The relationship between human-like robots and the resurgence of irrational belief and negative attitudes is well documented in television, films, and books. In general, in science fiction literature and movies (e.g., "Star Wars", "Metropolis"), the androids are cold, without feeling, and only seek to kill a human or even destroy the human species. So we learn (by vicarious learning) that robots are very dangerous for the human species; (2) Hypothesis 2: the Uncanny Valley has its origin in our unconscious mind. This psychoanalytic perspective is the more ancient psychological alternatives investigated (Jentsch, 1906). The uncanny could be a sensation we feel when we are in front of something and/or someone we know, and when we detect an "anomaly" in the physical appearance of this other thing/person creating a "intellectual doubt"; (3) Hypothesis 3: the Uncanny Valley is determined by human evolution. If we consider that mate selection is stimulus-driven appraisals of uncanny stimuli elicit aversion, physical attributes of androids could activate the avoidance; (4) Hypothesis 4: the android is cognitively dissonant. Because an android has the same appearance of a human, it creates cognitive dissonance within the experiencing subject due to the paradoxical nature of being attracted to, yet repulsed by an object at the same time; (5) Hypothesis 5: the android is a reminder of human mortality. A human-like or humanoid robot (which seems to be immortal) elicits an eerie sensation because the robot is acting as a reminder of our human mortality.

Keywords: *Human-Robot Interaction (HRI), attitudes, uncanny valley, psychology.*

1. Introduction

To explain the negative attitudes towards robots by users, especially when robots have anthropomorphic characteristics (*i.e.*, human-like, humanoid robots or androids), the "Uncanny Valley" (Figure 1) is an interesting concept. The Uncanny Valley hypothesis was proposed originally by Masahiro Mori (1970, 2005, 2012). If there are many mathematical functions relevant for behavioural and psychological dimensions of the form $y = f(x)$ for which the value of y increases (or decreases) continuously with the value of x, this linear function does not be applied to explain the attitudes towards robots. The "Uncanny Valley" effect is a theory describing that individual's pleasant feeling with a robot increases the more human-like robot is (with anthropomorphic characteristics), up to a certain point where the robot evokes a repulsive reaction, fear and unpleasant feeling. At this stage, the robot looks like a human but is clearly distinguishable from humans: there are the "Corpse effect" and the "Zombie effect" located at the lowest stage of the "Uncanny Valley" (*e.g.*, the Frankenstein's creation). In other words, as robots appear more human, they seem more familiar, until a point is reached at which subtle imperfections give a sensation of strangeness, fear and reject. And the physical appearance of a robot is the most important factors explaining the "Uncanny effect" (Figure 1).

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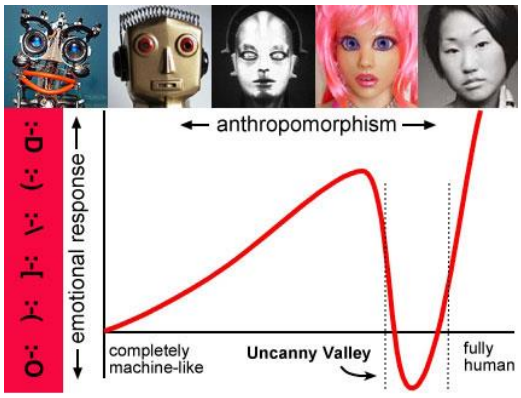
Figure 1. The phenomenon of "Uncanny Valley" (schema from University of Michigan).



But, if the uncanny valley is a powerful descriptive tool, there is not an explicative tool (from a theoretical point of view). Moreover, even if a lot of experimental studies have shown that individual (*e.g.,* genre, age, culture) and contextual (*e.g*., type of robot, facial expression, movement) factors can modify the behaviours and/or the attitudes of humans interacting with an android, very few authors try to explain the mental processes involved.

So the main questions addressed in this paper are the following: What are the origins of the distrust and the fear (*i.e*., the "Uncanny valley") expressed by human beings towards androids and identified in a lot of studies? According to us, there is no single origin: First, we hypothesize that there are several psychological dimensions that could explain the distrust and fear towards androids; second, we hypothesize that two or more of these psychological dimensions can exist for one individual.

2. Psychological alternatives

2.1. The Uncanny Valley is a vicarious learning

Vicarious learning (vicarious modelling) is learning that occurs as a function of observing, retaining and replicating behaviour observed in others. Since the 1960s, this vicarious learning is most associated with the work of two psychologists, Rachman (1968, 1977) and Bandura (Bandura & Rosenthal, 1966), who implemented some of the seminal studies in the area and initiated social learning theory. So it is now 40 years since Rachman and Bandura's studies famously suggested that individuals can acquire fear of an animal, object or situation vicariously, by witnessing another individual's fear of it (for a meta-analysis of the vicarious learning of fear, see Askew & Field, 2008). Vicarious learning involves the process of learning to copy or model the action of another through observing another doing it. Vicarious learning is an important process in the acquisition, development and modification of behaviour in a defined culture. Several recent studies (*e.g*., Askew & Field, 2008) confirm that fear is vicariously learned during childhood. Moreover, these studies have showed that the main sources of fear and/or negative attitudes are from parents, television, films, books, and newspapers.

The relationship between human-like robots and the resurgence of irrational belief and negative attitudes is often used in science fiction literature and movies where the androids are cold, without feeling, extremely dangerous and only seek to kill a human or even destroy the human species. So robots are depicted as very dangerous for the human species. This dark side (to re-use the famous metaphor extracted from *Star Wars*) is a flaw in android's programming, a sort of correctable human error, or is it an inevitable outcome of artificial intelligence, or a necessary consequence of humankind's attempts to create life in its own image. So, readers/spectators learn (vicariously) that fear is the natural feeling that individual must experience towards androids.

The uncanny derives its terror not from something externally alien or unknown but, on the contrary, from something strangely familiar which defeats our efforts to separate ourselves from it. In general, authors evoke an uncanny response on the part of the reader by straddling the line between reality and unreality within the fiction itself (Todorov, 1975). The fantastic literature requires the fulfilment of two conditions: First, the text must oblige the reader to consider the world of the characters as a world of living persons and to hesitate between a natural and a supernatural explanation of the events described. Second, this hesitation may also be experienced by one of the characters. This is the psycholinguistic schema used in the majority of the fantastic literature (*e.g*., "*Frankenstein; or, The Modern Prometheus",* "*Star Wars*", "*Metropolis*", "*Blade Runner*", "*Robocop*", "*2001-A Space of Odyssey*", "*Real Humans"*).

Religion can be another source of vicarious learning of fear. That could be explain the existence of artificial but human-like entities is a threat to human identity as socially constructed in the West and the Middle East but not in the Far East, partly because Western philosophy and religions (*e.g*., Judaism, Christianity, and Islam) emphasize human uniqueness as compared to Eastern philosophies and religions (*e.g*., Buddhism, neo-Confucianism, Taoism, Shinto, Japanese adaptation of biological materialism). One of the most important postulates of the Judaism, Christianity and Islam is the innate nature or constitution of the human, known as the "nature of humankind".

2.2. The Uncanny Valley has its origin in our unconscious mind

The psychoanalytic perspective is the more ancient psychological alternatives investigated (Jentsch, 1906). According to this psychoanalytic perspective, the uncanny is a sensation we feel when two conditions exist: First, we are in front of something and/or someone we know, *i.e*., familiar; Second, we detect a certain attribute in the physical appearance and in the behaviour of this other thing/person creating an "intellectual doubt".

Freud's essay on this theme of uncanny originally published in 1919 ("*Das Unheimliche*") constructs the psychology of the uncanny in terms of the way in which it involves the return of something long repressed, which was once familiar (Haungton, 2003). These may be childhood complexes or the "remnants of animistic mental activity" from an earlier stage of cultural development in which the return of the dead, the supernatural, and the strangeness of other parallel worlds were believed in as real possibilities, in a way that contemporary accounts of the rational have disallowed. Freud describes several situations in which the uncanny might emerge (*e.g*., death, dead bodies, revenants, spirits and ghosts). Basically, the uncanny is what unconsciously reminds us of our own Id (one of the three parts of the structural model of the psychic apparatus), our forbidden and thus repressed impulses perceived as a threatening force by our super-ego ridden with oedipal guilt as it fears symbolic castration by punishment for deviating from societal norms.

As Freud explained, a lot of children have no fear of their dolls or puppets coming to life, it may even have desired it. The source of the feeling of an uncanny thing would not, therefore, be an infantile fear in this case, but rather an infantile wish or even only an infantile belief. Finally, Freud also discussed the uncanny nature of Otto Rank's concept of the "double" first described in "*Der Doppelgänger*" (published in 1914): The double we can see in a mirror is a perfect copy of ourselves. So, to preserve my "self-esteem", we can project bad qualities in this double, the "double being as originally an insurance against destruction to the ego" (Freud, 1919).

2.3. The Uncanny Valley is determined by human evolution

Many psychologists are sometimes opposed to understanding human behaviour from an evolutionary perspective (for a synthesis, Segerstrale, 2000). Our goal is not to address the attendant philosophical or social issues, but rather to investigate if the existence of the "Uncanny valley" can be found in some evolutionary considerations of human relationships, of mate selection in particular.

Evolutionary considerations of mate selection date back to Darwin (1871). After publishing "*On the Origin of Species*" in 1859, Darwin became dissatisfied with natural selection as the sole mechanism for evolutionary change. So, Darwin proposed the concept of "sexual selection" as a second mechanism that caused evolutionary change. Two main forms of sexual selection occur: Intrasexual selection and epigamic selection. In intrasexual selection, males (or more rarely females) compete through display or physical contest for mates while "intersexual process" (also called "epigamic selection") is defined as the tendency of members of one sex to preferentially choose as mates certain members of the opposite sex. In epigamic selection, females accept males (or occasionally the reverse) with certain physical attributes.

A lot of studies investigated the consensual preferences and the sex differences in mate selection. For instance, women's reproductive value and fertility are closely tied to age and to health (*e.g*., Buss, 1985, 1994; Buss & Barnes, 1986; Symons, 1979). So, aspects of physical appearance such as smooth and clear skin, good muscle tone, lively gait, white teeth, and lustrous hair are proximate cues to age and health. Therefore, past selection has favoured men who enact a preference for those physical attributes (*i.e*., beauty) that are related to age and health, and hence for reproductive capacity of the women. Physical appearance is also one of the most important factors (Berscheid & Walster, 1974; Li, Bailey, Kenrick, & Linsenmeier, 2002). In humans, social status and resources are two fertility cues and indicators of good genes (Geary, Vigil, & Byrd-Craven, 2004).

As Buss (1985) said, "opposites are sometimes said to attract, but in fact we are likely to marry someone who is similar to us in almost variable". Be as it may, if we consider that mate selection is stimulus-driven appraisals of uncanny stimuli elicit aversion by activating an evolved cognitive mechanism for the avoidance of selecting mates with low fertility, poor hormonal health, or ineffective immune systems based on visible features of the face and body that are predictive of those traits.

2.4. The android is cognitively dissonant

Because the uncanny is familiar, yet strange, it often creates cognitive dissonance within the experiencing subject due to the paradoxical nature of being attracted to, yet repulsed by an object at the same time. This cognitive dissonance often leads to an outright rejection of the object, as one would rather reject than rationalize.

People perceive mind along the two independent dimensions of agency and experience (Gray, Jenkins, Heberlein & Wegner 2011; Knobe and Prinz, 2008): (1) agency is the capacity to do, to plan and exert self-control; (b) experience is the capacity to feel and to sense. Adults do have significantly more agency than robots, but there is also a striking "*experience gap"* (Gray & Wegner, 2012): humans are perceived to be significantly more capable of experiencing emotion and sensation than are robots and other machines. If machines are held to be essentially lacking experience, then an appearance which suggests this capacity (*e.g*., humanlike eyes conveying emotion) could conflict with this expectation and therefore be unsettling. Results obtained in three experiments conducted with adults (Gray & Wegner, 2012) have mainly shown that perceptions of mind, in particular perceptions of experience, seem to be an important part of the Uncanny Valley. But as the authors said, many methodological limits (very few stimuli) prevent us to generalize the results.

2.5. The android is a reminder of human mortality

Only one author (McDorman, 2005; McDorman & Ishiguro, 2006) attempted to explore the possible relationships between the Uncanny Valley and the mortality salience (MS). According to McDorman (2005, 2006), a humanlike robot elicits an eerie sensation it is because the robot is acting as a reminder of our own mortality. We can note the creator of the first original hypothesis of the uncanny valley postulated recently that experience of the uncanny in almost, fully human-like characters may serve as a reminder of one's own death and the resulting feelings of dread, a supposition prompted by the fact that corpses and human-like robots possess a physical human appearance but show no behavioural fidelity (Mori, 2012).

A lot of studies have shown that when people are faced with the awareness of their eventual death their thoughts and behaviors change. These behaviors change are multiple and sometimes in surprising ways. For instance, people who are reminded of their eventual death purchase and consume greater amounts of food (Mandel & Smeesters, 2008), are more likely to recommend military intervention (Pyszcynski, Abdollahi, Solomon, Greenberg, Cohen, & Weise, 2009), and become more nationalist (Rosenblatt, Greenberg, Solomon, Pyszczynski, & Lyon, 1989). Even if global individual factors (*e.g*., self-esteem, depression, neuroticism) and methodological factors (*e.g*., culture of the participants, age, genre) can modulate and moderate mortality salience by influencing the spreading activation and the accessibility of death-related cognition (for a review, see Arndt & Greenberg, 2002 and Burke, Martens & Faucher, 2010), simple task and material can invoke mortality salience.

3. Discussion

From a theoretical point of view, even if the "Uncanny Valley" is an interesting concept to describe human behaviours and negative attitudes towards androids, it is not sufficient to explain and/or predict human attitudes and behaviours. According to us, five psychological theories and/or concepts could be used to explain the users' negatives attitudes towards robots, these theories being issued mainly from psychoanalysis, cognitive psychology and social psychology. We assume that future researches should investigate the five theoretical hypotheses we proposed even if is very difficult to operationalize some of these hypotheses (*e.g*., the impact of our unconscious mind from a Freud's perspective). From a methodological point of view, even if verbalizations and specific surveys (*e.g*., the Godspeed questionnaire and the "Negative Attitude towards Robot Scale") provide interesting data, it should be relevant to use other techniques and/or to combine them with other tools. For instance, it could be relevant to investigate more precisely emotions involved during a Human-Robot Interaction by using physiological data and/or visual exploration.

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A CONSISTENCY BETWEEN PROJECTIVE AND NEUROPSYCHOLOGICAL TESTS: CONTRIBUTIONS FOR A NEUROPSYCHOANALYTIC APPROACH OF PSYCHOSIS

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Abstract

For several years, research in neuropsychology and neurocognition was widely developed. Its application was particularly beneficial in psychiatry mainly when it can highlight the difficulties of subjects who are strongly hampered by severe and disabling disorders. These disorders can then defeat all attempts in term of social reintegration for users, so dear to the community psychiatry. In order to improve the assessment of the needs and working lines of the sanitary accompaniment of these patients principally diagnosed as chronic psychotic, the Jury-les-Metz hospital has developed a specific procedure. This process combines neuropsychological assessments (RL RI 16, Stroop, Birchwood Insight Scale, WCST, AIPSS ...) and a more subjective approach which also includes projective tests (Rorschach ...) interpreted with a psychoanalytic angle. During these appraisals, we regularly noticed a consistency between some cognitive disorders and some psychopathological aspects. In other words, we noticed that some aspects revealed by the Rorschach test may refer to elements identified by neuropsychological tests. For example, we noticed that the deficit in social cognition can be emphasized in another aspect in projective tests. In addition, metacognitive difficulties and, anchoring in the reality evaluated by the Rorschach, appear to be related. Finally, executive functions sometimes seem connected to the connection difficulties between affects and representations mediated by reflections on symbolization in the Rorschach test. Through this paper, we try to build bridges between these different tools in order to stress the possible existing overlap between psychoanalysis and neuropsychology. We will conclude our discussion by opening the discussion on possible approaches to this research, especially in the field of neuropsychoanalysis.

Keywords: *neuropsychoanalysis, neuropsychology, psychoanalysis, projective tests, chronic psychosis.*

1. Status and research context

For several years now, research concerning neuropsychology and neurocognition has broadly advanced. As a result of their evolution, new perspectives were brought in the field of psychiatry in relation to the needs of heavily institutionalized patients. In fact, these disciplines have been developed with the intent to provide a secure future to chronic psychotic patients, outside the hospital environment. More particularly, the majority of the hospitalized patients suffer from severe to invalidating disorders, foiling any attempt for classical rehabilitation. Indeed, beyond their psychiatric symptoms (delusions, hallucinations, anhedonia...), most of the times in the foreground, severe cognitive problems largely hinder the autonomy of the subject (memory disorders, attention, theory of mind). Consequently, they have difficulty to adapt when the environment provides few opportunities of shoring and countenance. Nevertheless, research in neuropsychology and neurocognition, show that rehabilitation programs may bring a suitable solution. Sciences as such inspire new practices by promoting a psychosocial reintegration of patients into the society while signing up for a new community support model. Jury-les-Mets hospital fits into this pattern of thinking and strives to "eradicate" the patients' chronicity. To do so, different psychosocial rehabilitation units were created: an intra and an extra-hospital unit, in order to rehabilitate the subjects in their environment and reinsert them socially (Clesse et al. 2015).

In-hospital, various support programs have been conceptualized, granting patients with sufficient means to recover their autonomy (psychical, cognitive and psychosocial), thus enabling them to reinvest, at least a partially, a position in the society. Tailored support to each subject, needs an upstream assessment of their skills, resources and limits. Jury-les-Metz hospital, has decided to assess all patients hospitalized over long run, to multiply their chances of a successful reintegration. To conduct this evaluation policy, clinical we assessed all patients with a neuropsychological and subjective perspective.

In this way, the psychological evaluation made by the diagnosis of psychosocial rehabilitation aims to provide the entire population hospitalized under an asylum mode, an individualized support which promotes their empowerment. Additionally, this assessment will be used to cluster the patients according to their profile and the support program that will be offered respectively. Clustering provides a consistency that allows professionals to engage in a work respectful of their knowledge and skills, and therefore, fostering an efficient support towards patients empowerment.

2. Integrative diagnosis in clinical psychology

Psychological diagnosis' objective is to propose an accompaniment that perfectly matches the subject needs, allowing the patient to move forward efficiently. In other words, the assessment of the subject must integrate his cognitive and subjective functioning for a holistical consideration. Finally, these results are interpreted based on the clinic in order to give meaning to the functioning of the subject and coaching that will be offered thereafter.

2.1. Neuropsychological assessment

As part of evaluation of chronic psychotic patients diagnosed, neurocognitive investigation concerns all cognitive functions that are typically affected by mental disorders. It provides detailed analysis of the subject's difficulties, skills and resources, hence, exceed clinical observation. This enlightenment shows the different line of work that would increase the autonomy of the subject. On the other hand, there exists of a wide range of tools to assess their proper functioning. Therefore, the choice of the tools and the need for further investigations refer to the clinical analysis of the subject. As far as it concerns**,** the cognitive evaluation**,** the latter may cover two main categories: cognitive processes and social cognition. Cognitive processes include various cognitive functions that do not engage emotional aspects of the subject.

Firstly, the types of memories altered and assessed in psychotic patients are heterogeneous. The most important one is the episodic memory. Episodic memory refers to the storage of events in the life of a subject. When the functioning is altered, the subject shows many oversights that can be measured using the *Grober- Buschke test*. Regarding, the short-term memory which is also important feature, allows storage of information in a relatively short time, therefore enabling operations. This memory is often mistaken with the working memory, including the same general functions but has the specificity that allows users to process instant stored information. More precisely, the working memory allows the subject to follow a movie, a conversation, reading a novel, etc. These two types of memory can be evaluated with direct and indirect digit span subtest of the *Wechsler Adult Intelligence Scale IV*. Finally, the visuo-spatial memory is a function that allows the subject to locate itself in space, go to a specific place, assess distances, or to remember the place where one's car is parked. Generally impaired in schizophrenic patients that are hospitalized over the long run, this memory can be assessed by combining the analysis of the *Clock test*, the performance at the figure item of the *Mini Mental State test* and the *Rey Complex Figure*. Likewise, some other functions are also often altered in chronic psychotic patients. On the first hand, attention capacities of the subject is entitled to a fine evaluation. Indeed, several skills aptitudes allow the subject to have an efficient attention capacity: the inhibition capacity (avoid be distracted by a stimulus), sustained attention (focusing continuously on a task) and divided attention (ability to multitasking, i.e., monitoring cooking while answering a phone call). The *Stroop test* can discriminate sustained attention and inhibition capacities. In addition, the *Trail Making Test* identifies more precisely the subject's inhibition capacities, as well as its ability to divide attention between different tasks. The clinical analysis during the tests may also highlight attention deficits, for example, when a subject repeats several times the items that were already recalled during *Grober-Buschke test*.

Proportionately, the speed of processing information is also noted using the Processing Speed index, which can be calculated through the performances of the subtests, "Code", "Barrage" and "Symbols". Besides the speed at which the subject processes information, its ability to make inferences, organize its actions and execute them are also evaluated. Grouped under the term 'executive functions", these skills, enable performing non routine actions. As far as it concerns its evaluation, the *Wisconsin Card Sorting test*, the *Trail Making Test*, etc provide a good analysis of the executive functioning of the subject, along with its cognitive flexibility (in other words, his adaptation to multifunctioning, from one operation to another) and his capacity to access abstract concepts. At last, neurocognitive assessment also includes the evaluation of the subject's consciousness about this own mental state. This competence is referred as to the metacognition and includes four skills: « *self-reflectivity (comprehension of one's own mental states), other-reflectivity (comprehension of other's mental states), decentration (ability to see the world as existing with others having independent drives/motives), and metacognitive mastery (ability to use mental state knowledge to respond to social and psychological dilemmas).* » (Lysaker et al., 2005). Indirectly, the performance of the subject following the *Wisconsin Card Sorting Test*, indicates the level

of their metacognitive abilities. In addition, the *Birchwood Insight Scale* assesses the patient's insight as to its pathology.

In addition, researches also show that these subjects could have low capacity in social cognition. Social cognition can be defined as a set of mental processes that underlie social interactions. It therefore refers to the ability of the subject to construct representations of the relationships between others and oneself. The quality of these representations is important as it allows the subject to guide its psychosocial behaviors (Adolphs, 2001). Moreover, social cognition assesses social cues that helps to understand a situation (Couture et al. 2006). The *Assessment of Interpersonal Problem Solving Skills* is recognized as an ecological tool to assess comprehensively, the cognitive-social skills of subjects (Donahoe et al., 1990). It detects whether the subject is having difficulty in making inferences about mental states of others (hypo theory of mind), or on the contrary, whether the subject itself is misinterpreting (hyper-theory of mind). Finally, to further analyze the ability to recognize facial emotions, the *Ekman's Test* can be used. The neurocognitive evaluation helps in creating a profile that takes into consideration, the skills, resources and difficulties of the subject. The patient's performance results can then be compared to its subjective functional analysis giving an overall apprehension of the subject.

2.2. Psychoaffective evaluation

The standardized evaluation of the subjective functioning of patients is achieved by using a projective test. The *Rorschach test* was selected for the multiple aspects that it allows to assess. It is based on the projection principle that we can, like Roussillon (1997) defined : « *une mise en jeu des organisateurs de l'activité de symbolisation au regard de l'excitation visuelle produite par les stimuli* ». As Rausch Trauberberg (1983) underlines, the instructions of this test gives an overview of the interaction between “the perception and fantasy, the real and the imaginary”. We can say that this dual requirement organizes the instructions of any set of projective tests since it mobilizes the interaction of the two main registers of the psychic functioning.

The responses to the Rorschach contains different indicators: The apprehension mode, the determinants, the content and qualifiers. These indicators are then resumed and analyzed in a psychogram. Data collected throughout give a variety of information. As in, the apprehensive mode inquires about the concrete capabilities of adaptation and anchoring to the objective and object-reality. The determinants inform about the logical capacity to adapt to reality, the sense of reality and openness to others. The different contents allows at first, depending on their diversity, a glimpse on the abundance of the imagination. They also allow assessment of a proper adaptation to collective thinking, human contact and the anxiety burden of the subject. As for the adjectives in the psychogram, we mainly focus on the number of "ordinary" responses; informing us about its conformist adaptability. We can nevertheless point out that the determinants may also, depending on their characteristics, guide us to other insights. Inherently, we can focus our attention on the determinants present in the protocol. First of all, the presence of kinesthesia demonstrate the creativeness of the subject, his imagination, together with his drive shifts and internal conflicts. Also, whenever the subject's answer contains a color, its shows his ability to carelessness to express his emotions, which, according to the structuring of his answers, will witness his capacity to bind affect and representations. Then, the fading of his answers may refer to his regressive dimension mostly, when they are associated with texture and touch. They are likely to witness an anxiety and take a defensive value against the emerging fantasies which participates in the delivery mechanism. Once again, the structuring and shape given to the answers assess the subject's ability to bind affect and representation. Finally, the presence of listed answers as "clob" showing high receptivity to every painful emotion, a fragility of the deep structures of its personality. The initial psychogram phase, allows a statistical analysis of the data obtained during the execution of the test. To do this, a qualitative analysis of the answers given by the subject is added. In the second analysis, we can see that the Rorschach test brings items on self-representation, object relations, defense mechanism as well as anxieties reactivated by certain proposed stimuli. Regarding self-representation, the responses allow us to understand the means by which the subject accesses or not to the unification of his body scheme. We can also have information on the stability and the foundation of his sexual identity. Concerning the nature of relation to the object; the protocol may be lacking and can be witnessed as a genuinely empty relation, however, this observation can be qualified with regard to the rigidity of the psychic defenses.

Regarding the protocols to which kinesthetic responses indicate a possibility of their relations, their quality allows us to apprehend the relational mode prevailing for the subject. These trends can spread from one type of symbiotic relation to a genital relationship. Each plate, according to its latent content, will reactivate different affects in the participant. Faced to this reactivation, the subject will develop defenses. We have to understand them in term of their contents, qualifiers, type of verbalization as well as the body movements of the subjects. The variety of the defense mechanisms used allows us to hypothesize a rigid functioning mode. Taking into consideration the dynamic (progrédiente ou

régrédientes), intra or inter-board, the Rorschach test allows us to asses not only the flexibility of the functioning mode of the subject but also the capacity of the subject to restitute.

The Rorschach test also addresses two other aspects of the personality of the subject: the quality of the imagination and the ability of symbolizing. Firstly, regarding the imaginary space, we can assess its abundance or poorness according to the various themes offered to the subject. Other indicators of the psychogram (response numbers, sum of kinesthesia, percentage of formal determinants), enlightens us on the place and the resources that can be mobilized at imaginary level. We can also understand the Rorschach through mentalizating capacities of the subject. The evaluation firstly researches the symbolization capabilities of the subject. Following *Cassier's grid*, we can obtain an index of the symbolic elaboration on three dimensions: masculine, feminine and maternel.Then we need to assess the quality of bonds between the affect and representation. This results in the ability of the subject to prevail or not, in his reply, the shape at any other critical sensory (color, shading …). All of this data, is interpreted under a psychodynamic perspective so as to allow a significant reading of the functioning of the subject.

Finaly, the Rorschach allows us to understand various aspectst that are studied clinically in patients with chronic psychosis (Personality structure, delirium, « morcellement », relationship with others, anxiety, sexuality). Hence, considering the psychoaffective aspect of the subject, this test allows us to understand the conscious and unconscious functioning of the latter.

3. Method

For several years now, research concerning neuropsychology and neurocognition has broadly advanced. Its application has been especially helpful in the psychiatric field when highlighting those subject's difficulties that imply severe or invalidating problems. In order to improve the evaluation and the approach of a health support provided to those patients diagnosed as chronically psychotics, Jury-lès-Metz hospital has developed a specific procedure that combines neuropsychological evaluations (RL RI 16, Stroop, Birchwood d'Insight scale, WCST, AIPSS ...) and a more subjective approach that also includes projective tests (Rorschach) studied from a psychoanalytical point of view. Through this article, we try to build bridges between these different tools in order to highlight the possibly existing superposition between psychoanalysis and neuropsychology. To do this, the results about the Rorschach test are compared to his performance at the neurocognitive tests. So, we evaluated 26 patients hospitalized in a long term by these combining and integrative method. During an "acceptation and orientation meeting" of our psychosocial rehabilitation, performance on neurocognitive and projective tests were at the same time presented under a psychodynamic perspective by clinical neuropsychologists. In these analyzes, a certain number of correlations were found between the cognitive functioning of the subject and the answers to the Rorschach test. These concordances seem to reveal a consistency between the psychoaffective and the cognitive functioning, therefore demonstrating the most effective way to provide a support towards the empowerment of the subject. As such, we would wish to transmit the results of our initial exploratory study, which hopefully would act as premises to a more extended study.

4. Results

To begin with, the results of the neurocognitive tests show that many patients have deficits concerning; long term memory(89%), short term memory (72%), working memory (77%) and visuospatial memory (66%). Also, a majority of the patients show executive functions disorders, including a lack of mental flexibility (91%) and mental abstraction (72%). Concerning the attentional capacity, only 38% have impaired inhibition capacity. Furthermore, 62% showed impaired insignht. Finally, 81% of the patients have social cognitive deficits and, more precisely, a deficit in theory of mind. These observations were aligned with the Rorschach protocol of the patients and revealed a large number of significant correlations. First, 92% of the patients who are deficient in short term memory have a 'non-object permanence' during the investigation. During this period, the subjects often forgot the answers that they had given earlier. Moreover, through the Rorschach, it is possible to see the metaphorical capacities of the patient, thus revealing the patient's ability acknowledge the presence an absent content. This type of response is found in the sublimation defense mechanism, referred as *Ar,* which accounts for tadistancing with the affect experienced. We noticed that 89% of the patients that have shown a lack of metaphoric capacities, and trouble accessing abstract concepts (mental rotations). Secondly, concerning subjects having a deficit in the cognitive flexibility, 95% persevere at the WCST and Rorschach. In other words, difficulties in changing operation is linked to repetitive thinking. In addition, difficulties involving tasks that demands executive functions were related in 97% of cases, to a lack of connections between the affect and representations of the Rorschach. The subjects, tend to give 'pure' answers, without any affects related to the reality. Such answers to the Rorschach have also been associated to inhibition difficulties,

highlighted during the Stroop Test. In fact, 62% of the patients who showed difficulties in linking affect and representation (observed by the rate of pure answers), have inhibition attentional disorders. Pure answers observed in the Rorschach, mainly include answers determined by colors (fireworks, blood stains, etc). Specifically, among these pure answers, different gradients were identified and put in relation with the severity of disorders of attentional inhibition. Actually, the denial of colors on the plates, reflects a total lack of absorption of the drives. These are patients, who are struggling to put into words their effects and tend to give impulsive answers when certain representation trigger deep emotions. Thus, they can take actions to discharge an overflow of drive. This acting out can also be correlated with difficulties to inhibit violent thoughts. It seemed interesting to us to work on the insights difficulties that were seen within 62% of the patients evaluated. We observed that 95% of them gave defensive responses using denial of the reality. Furthermore, the Rorschach Test can reveal anchoring to the reality, or the patient's capacity to fucntion appropriately. These competences are coded as F%; they reflect the logical capacity of the subject to adapt to reality and to provide concrete adaptation evidence. When F% is iless than 65%, it shows that the subject cannot adapt himself to the reality. When F is higher than to 65%, then the subject can be ritualized. As in, the results show that the subject is incapable by itself, to find new strategies to adapt to reality. This observation was related in 95% of the cases with a deficit in the cognitive flexibility in WCST. Finally, among patients with severe deficit in theory of mind, 72% of them gave answers reflecting none or limited relation to the genital object. Equally, only 14% of them gave a lot of answers including animals, therefore, showing, social adapting capacities. In the end, we emphasize that the ability to bind effect and representation is a very good indicator of the evolution of the patient within a psychosocial rehabilitation work. Indeed, it underlines a capacity of symbolisation subjacent to both psycho-affect and cognition.

5. Conclusion

Historically, neuropsychology and psychoanalysis has evolved separately. Considered as two opposite approaches, they are indeed developed separately, yet in common areas. Thus, professionals tend to join a pattern of thought and compartmentalize it in view of possible fields. We thought it would be appropriate to combine these two approaches in an integrative clinical psychology framework for diagnosis of patients hospitalized in the long term. This methodology combines psychological analysis of neurocognitive and projective tests taken with patients, in order to better understand their functioning and to offer them an efficient support rehabilitation program and reintegration into society. The combination of an investigation of cognitive and subjective patient functioning and connections that emerge, shows us how the integrative assessment in clinical psychology is relevant. In addition, under the accompaniment of the subject suffering from severe and disabling disorders, integrative assessment allows us to grasp the possibilities of evolution and limits of the subject in areas that fall within competence of both subjective and cognitive relationship with others, remembering its history, adapting to change, etc.). Clear and relevant connections are made between the cognitive and psycho-emotional functioning of the subject. These results suggest that the structures of cognition and subjectivity of the subject may have the same foundations which then take different forms. Consequently, we would like to develop a new search with dual methodology for assessing the impact of psycho-affective functioning on the cognition and implications of cognitive functioning on the subjectivity of the subject. This will be a breakthrough that will forge stronger links between neuroscience and psychoanalysis.

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THE ONTOLOGICAL NATURE OF THE OCEANIC FEELING THROUGH THE LIFE OF RAMAKRISHNA

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Abstract

This study aims at questioning some of the epistemological basis of psychoanalysis concerning mystical experience and spirituality. Focusing on the discussion between Freud and French author Romain Rolland regarding the "oceanic feeling" (based on their letters' exchange from 1927 to 1931), we will question the ontological nature of the feeling of union with the universe (as described by Rolland) by a twofold bias: either as a by-product of psychological dynamics (inherently pathological or not) or as an ontological experience, better comprehended through a non-psychological approach that investigates its inner meaning regarding the human condition as such. In the latter perspective, we will be accompanied by the work of Brazilian author Gilberto Safra, whose clinical writings are concerned with an anthropological conception that approaches the human being in its own complexity, avoiding possible psychological reductionism of themes and issues that relate to other areas of experience, such as religiosity and spirituality. As the main axis of this discussion, we will utilize the life of Indian mystic Ramakrishna (1836-1886) to illustrate these two different ways of approaching spiritual experience. Ramakrishna has been himself one of the main sources of Rolland's constructions on religiosity, leading the French author to write one of his main biographies ("The Life of Ramakrishna", 1929), which had an important impact on Western reception of Eastern spiritual conceptions. Contemplating examples from Ramakrishna's life (through Rolland's work) that range from his childhood to his period as a famous spiritual master in India, we will present, in each situation, different perspectives from authors that either consider Ramakrishna exclusively on a psychological-psychopathological note or on a perception of a spiritual dimension non-reducible to psychical dynamics inherent to his life and teachings. Within this framework, we have come to realize that there are inherent limitations on a solely psychological reading of mystical experience. Therefore, by presenting such discussion we intend to rethink the position mysticism and spirituality occupy in clinical practice, either to reformulate their understanding in psychotherapy or as a way of enlarging the anthropological conceptions inherent to clinical understanding of the human condition.

Keywords: *mysticism, religious experience, psychoanalysis and religion, clinical psychology, spirituality.*

1. Introduction and Objectives

In this study, we aim to rethink some of the psychological paradigms applied at understanding mystical experience, which we comprehend as a particular type of awareness in which the person claims to achieve union with something immensely bigger than the empirical "I" (Zaehner, 1957), regarding it as an experiential situation of access to Divinity and an immediate mode of achieving spiritual knowledge on reality.

We believe this theme has a major importance in clinical practice and epistemology, both as a way to question the adequate therapeutic handling of mystical experiences (and its frontier with psychosis) and as a way to enlarge the method and ethics underlying clinical conceptions of the human condition.

In clinical psychology, mysticism has been generally interpreted along the lines of two hermeneutical extremes: either as a result of psycho-dynamical forces (inherently pathological or not) or as an ontological reality of a spiritual dimension of the human being. One of the ways of understanding this distinction is through the work of Brazilian author Gilberto Safra (2006), who criticizes positivistic views in contemporary clinical science, in which different facets of the human condition are comprehended in an excessively rationalized and abstract way.

Safra (2006) believes it is extremely important, in clinical psychology, that the human being is understood not only in an empirical-biographical approach, but in a way that the whole of the human condition is brought up into comprehension, which he calls the "ontological realm" of experience. An exclusively psycho-dynamical approach of the human being, in Safra's (2006) view, limits itself at the understanding of phenomena that require a broader perspective on its inherent meaning, such as spirituality and mysticism.

We are therefore interested in approaching the subject of mystical experience regarding the epistemological basis from which we attend the anthropological conceptions concerning clinical practice, and we intend to do it in the context of such discussion within psychoanalysis and the life of Indian mystic Ramakrishna Paramahansa (1836-1886).

2. Oceanic feeling: A hermeneutical paradigm of mysticism

In the history of psychoanalysis, mystical experience has been understood many times only through a psychical/psycho-dynamical approach such as, for example, the result of mental dynamics comprehended as regressive or born out of pathological processes. This manner of approaching the subject can be found, for example, in Freud's analysis of the "oceanic feeling" in his "Civilization and its Discontents" work of 1930.

Freud (1930/1962) bases this discussion on a letter sent by his friend and interlocutor, French author Romain Rolland (winner of Nobel Prize in Literature, 1915), who questioned some of his ideas on religion that were present in his 1927 work "The Future of an Illusion". Rolland believed Freud's analysis of religious phenomena as an illusion born as a defense mechanism from the experience of helplessness was adequate and precise in many cases, but he thought it did not contemplate the whole of the spiritual issue.

Rolland believed that root of authentic religious experience belonged to a different nature, such as a sentiment of union with the universe (which he called the "oceanic feeling") that he found present in the life of many mystics and, to some degree, in himself. In his 1927 letter to Freud, he says (*apud* Parsons, 1999, p. 173-174):

> "Your analysis of religion is a just one. But I would have liked to see you doing an analysis of *spontaneous religious sentiment* or, more exactly, of religious *feeling*, which is wholly different from *religions* in the strict sense of the word, and much more durable. What I mean is: totally independent of all dogma, all credo, all Church organization, all Sacred Books, all hope in personal survival, etc, the simple and direct fact of *the feeling of the 'eternal'* (which can very well not be eternal, but simply without perceptible limits, and like oceanic, as it were)."

Freud's famous answer to Rolland, at the first section of "Civilization and its Discontents" (1930/1962), shows the author's difficulty in apprehending the subject and searching for a psycho-dynamical framework in which to understand it. Freud then considers the "oceanic feeling" as an experience of regression to early states of psychological development, in which the ego hasn't been completely formed. At this stage, there would be no differentiation between self and the other, resulting in such "primitive" feeling of union with the universe. Says Freud (1930/1962, p. 15):

> "If we may assume that there are many people in whose mental life this primary ego-feeling has persisted to a greater or less degree, it would exist in them side by side with the narrower and more sharply demarcated ego-feeling of maturity, like a kind of counterpart to it. In that case, the ideational contents appropriate to it would be precisely those of limitlessness and of a bond with the universe - the same ideas with which my friend elucidated the 'oceanic' feeling."

This dialogue between the two authors represents categorically the two different extreme approaches on mystical experience. While Rolland brings the subject through an ontological and spiritual approach, Freud tries to put it in an exclusively psychological framework. This discussion has rendered many epistemological discussions in the field of psychoanalysis, as says Parsons (1999, p. 10):

> "The oceanic feeling, conceived of as a phenomenological account of mystical experience whose essence and keynote consists in the fact of unity, has become the psychoanalytic contribution to genre terms for 'mysticism everywhere'."

At the time of writing his letter to Freud, Rolland was developing a major interest in Eastern spirituality and mystical experience in general. Mainly, he was writing a biography of a very important Indian mystic, Ramakrishna Paramahansa, in whom he could find a true example of the "oceanic feeling"

experience. Therefore, as a way to illustrate this discussion of mysticism in the frontier of the psychical and the ontological approaches, we will bring Ramakrishna's life (through Rolland's biography) as the axis and example of such different perspectives.

3. Ramakrishna's life

Ramakrishna has been recognized as one of the most influential spiritual teachers in contemporaneity, but he is also widely known for his peculiar personality, his ecstatic experiences and extravagant way of being. His singularity has been dividing authors and critics from around the world, from spiritualists to psychoanalysts, from anthropologists to theologians, from philosophers to sociologists. Ramakrishna is particularly interesting for the terms of this study, as he is both regarded, in different contexts, as a spiritual genius or as a severely disturbed man.

Within the field of interpretation, Ramakrishna has been divided into different modes of understanding. His behaviors tend to oscillate on the thin thread between madness and sanctity and each author has approached one side or the other to interpret him. We have divided these different approaches into three categories: a) the psychological-psychopathological approach, the gathering of interpretations that understand Ramakrishna's mystical experiences exclusively as pathological, psychotic processes; b) the romantic-devotional approach, that brings forward an exclusively spiritual view of Ramakrishna, considering him a great saint, devoid of psychological disturbances; and c) the frontier approach, which tend to comprehend Ramakrishna both in his psychological and spiritual realms, not reducing one to the other.

What we are trying to imply is that the discussion between Freud and Rolland regarding the nature of the oceanic feeling is extended in the context of the life of Ramakrishna and that different authors have interpreted him through one of these perspectives. Studying his life through a phenomenological-hermeneutical reading of Rolland's biography (1929/2008), we have tried to show that both the psychopathological and the romantic-devotional approaches have their limitations and that if we intend to have a clearer picture of Ramakrishna's life (and of mystical experience in general) we must pay attention both to the empirical-psychological dynamics as well as the ontological nature of spiritual experiences that cannot be reduced to psychological processes. Says Edênio Valle (2005, p. 83-84, our translation):

> "Franco Imoda says that within the subject we will occupy ourselves with – the one regarding the matches/mismatches between psychology and spirituality – there is 'a reductionism coming from under', a reductionism that can come both from psychology and from religions. That is because the evolution that has processed itself in both fields puts, be it the psychologist, be it the *homo religious,* facing a double temptation: on the one hand, of emphasizing only the psychological dynamics of the experience and of the religious behavior. One falls, therefore, in the illusion of finding in psychology all the elements of understanding the religious phenomena and to deduce from it all the concepts and instruments necessary to bring the human being to a full development of his humanity. But there is the other side of the problem: the temptation of a spiritualism that ignores or simplifies the complexity of the human motivations implied in religious experience, reaching an "angelical" conception of the person and its dynamisms. We could, at this hypothesis, speak of a "reductionism coming from the top'".

Born in a small village near Kolkata, Ramakrishna has shown to be a very sensible and emotional person, with a feminine attitude, from his childhood until his last days. As a child, he had frequent episodes of ecstatic experiences, in which he would pass out or get extremely excited: in one of his famous episodes, Ramakrishna (at the age of 6) fainted while watching the beauty provoked by a contrast between a flock of birds and the clouds as he was passing through the rice fields near his house.

After his father's and elder brother's deaths, Ramakrishna was assigned as the priest in a temple of Dakshineswar (near Kolkata), where he would develop an intense relationship with the Goddess Kali, one of the representations of the Divine Mother in the Hindu context. He grew such a strong desire for having a direct experience with Her that he attempted to commit suicide as his longing did not become a realization. That led him to his first direct mystical vision, in which he experienced the feeling of union with the universe (or the 'oceanic feeling', as Rolland would put it) and dissolution of his own self.

Later on, he would develop an inner relationship with the Goddess, having frequent visions and sometimes believing he was mad (and letting all others around him think the same). After an intense period of anguish and disturbance from his visions - in which he would find himself in catatonic trance sometimes for months - he found the help of different spiritual teachers to guide him through his experiences, and started to become more acquainted of them. That process led him to be recognized in XIX century India as an enlightened person, famous for his spontaneous approach to spirituality, for his

aversion to erudition (he was semi-analphabet), his almost constant ecstatic state and for the message that all religions led to the same direct goal (which had an important impact into the Hindu-Muslim conflicts in India).

As such, the psychological-psychopathological approach of Ramakrishna views all his mystical experiences as the result of a fragile constitution of his own self, incapable of crossing the separation with his own mother and projecting this anguish into the Goddess Kali. Jeffrey Masson (1980), for example, understands Ramakrishna as someone who suffered from severe hallucinations, formed as a psychotic defense against his depression, that he assumes being caused by a traumatic childhood. On the other hand, the romantic-devotional approach, such as the writings of his own disciples and even some parts of Rolland's work itself, considers all of Ramakrishna's life as an exclusively spiritual and linear path, not regarding the inner conflicts and psychological difficulties he went through and somehow manifested in his own relationship with the Divine.

In a frontier approach, however, Ramakrishna is understood in his own complexity and his relationship with the Divine and his mystical visions are at the same time approached through the influence of his empirical-biographical suffering as well as a direct spiritual experience, recognized as an ontological apprehension of reality that comes as a crossing of his own self, putting him in an experience of alterity.

For example, if the attempted suicide for the longing of Kali (and its consequent mystical experience) is interpreted in a psychopathological context as a result of an unsustainable biographical anguish (authors usually offer different explanations on the causes for such – ranging from his ambiguous relationship with his mother to his deep personal loneliness after his father's and brother's deaths) and in a spiritual context as a direct experience with the Goddess; in a frontier approach both aspects would be recognized as legitimate, as the suicide becomes, in one hand, the peak of his biographical suffering, but on the other hand the possibility of emptying his own self through a deep openness to reality, a capacity which is deeply marked in Ramakrishna's singularity since his childhood days.

Many other examples of Ramakrishna's life are very suitable for such different interpretations, and during our phenomenological-hermeneutical reading of his biography we have come to realize that both his empirical suffering and his spiritual experiences (non-reducible to psychological dynamics) must be paradoxically taken into account across all such situations for a proper reading of his singular path. In this way, we could agree with Indian psychoanalyst Sudhir Kakar (2009, p. 6):

> "To address a human being as a whole, we need both psychoanalysis as the 'hermeneutics of suspicion' and spiritual thought as the hermeneutics of idealization. To focus only on the spirit is to hold in contempt the body that makes us human. At the same time, to treat a human being as nothing but the body is to commit the same offence of fragmentation, the denial of wholeness."

4. Conclusions

We have come to conclusion, from our reading of Ramakrishna's biography, that the frontier approach is the most proper apprehension of his life and of mystical experience in clinical practice, in which both realms are respected in their own particularity. Therefore, we intend to continue the studies regarding the position mystical experience occupies in clinical psychology, as a concern to comprehend the different facets of the human condition in their own nature, avoiding possible reductionism of one area to another.

Mysticism and spirituality in general are still in need of deeper investigation within the field of psychology. We believe there are many aspects of such subjects that remain obscure for research and that may cause an improper handling (especially if the therapist approaches such experiences as inherently pathological) within clinical context.

In further studies, we intend to elaborate a detailed presentation of the peculiarities of mysticism, its development and relations with the constitution of personality, focusing on the possible clinical interventions adequate for such subject. Accordingly, we will continue the study of mysticism as it opens an important epistemological key in a double perspective: as the need for a wider range of instruments within its clinical conduction and also as a form of knowledge that may broaden our ethical understanding of the human condition.

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EMBODIED MEMORY: THE EFFECTS OF SOMATIC MARKERS MANIPULATION ON MEMORY RECONSOLIDATION AND ITS CLINICAL IMPLICATIONS

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Abstract

According to Freudian theory, memory representation and the somatic affects bound to them can have distinct destinies. This dynamic and embodied theory of memory has been supported by recent findings in memory reconsolidation that emphasize how recollection induces memory lability and by the somatic markers hypothesis, which explains how somatic manifestations are constitutive of our emotional experiences. Indeed, it may be that the reassuring context of the psychoanalytic setting with reconsolidation mechanisms contributes to a re-association of threatening memories with more positive somatic markers. Here, we present two experiments in order to assess this hypothesis. In Exp.1, we tested whether inducing a somatic marker while negative memories are reactivated leads participants to evaluate the negative memories as less negative. In Exp.2, we tested whether such a manipulation has long lasting effects. Both Exp.1 and Exp.2 confirmed that inducing a positive somatic marker (smiling) during the reconsolidation phase does not affect memory accuracy. Exp.1 showed that participants evaluated aversive memories less negatively, and Exp.2 revealed that both neutral and negative reconsolidated memories were evaluated as less negative. We consider these results in the context of their theoretical and clinical implications.

Keywords: *reconsolidation, somatic markers, psychoanalysis, memory, embodied cognition.*

1. Introduction

In the past two decades, the field of Neuropsychoanalysis has seen a significant growth. Its aims are twofold: 1) to import some of Freud's stimulating hypotheses into the experimental frameworks utilized in neuroscience and cognitive science and 2) to better understand the mechanisms sustaining the theoretical and clinical processes of psychoanalysis. Indeed, Freudian theory and its employment in clinical contexts has led to conceive of memory as a non-monolithic faculty. For instance, Freud stated that repression provokes the separation between the mnemonic traces and the affective charges associated with them. "We have asserted that in repression a severance takes place between the affect and the idea to which it belongs, and that each then undergoes its separate vicissitudes." (Freud, 1915/1995). He specified that, "The whole difference [between memory contents and affects] arises from the fact that ideas are cathexes – basically of memory-traces – whilst affects and feelings correspond to processes of discharge, the final manifestations of which are perceived as feelings." (Freud, 1915/1995). In other words, he made a distinction between the memory content and its affective counterpart that encompasses a set of somatic discharges. This conception of memory led him to hypothesize that during psychoanalytic treatment, the process of making repressed traumatic memories conscious (i.e. vividly recalling the threatening memory content in association with its affective counterpart), allows neurotic symptoms to vanish.

[i] The authors contributed equally to this paper.
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Freud never provided any scientifically acceptable explanation to this process he called *abreaction*. However, two lines of research are relevant to account for Freud's clinical intuitions. First, Damasio (1994) hypothesized that an emotionally laden experience is not only memorized as episodic memory, but also as somatic manifestations. Thus, recalling such an event necessitates reactivating the somatic markers that were previously associated to it. Second, the reconsolidation theory states that when reactivated, memories undergo a time-dependent process during which they become labile, and can therefore be decreased, reinforced or updated by interferences (e.g. concurrent learning or by pharmacological drugs; Nader & Hardt, 2009). Taking this perspective, Alberini, Ansermet & Magistretti (2013) recently stated that "the new perception present in the psychoanalytic treatment, and importantly, the new affect and emotional state of the present while recalling the past, do indeed provide an opportunity for changing consolidated memories via new memory traces (updating) or even, in certain conditions, weakening recent memory traces by interfering with their reconsolidation".

If this were to be the case, one could hypothesize that psychoanalytic therapeutic efficacy might be in part due to the fact that reactivating threatening memories in the reassuring psychoanalytical setting – a therapeutic alliance founded upon the psychoanalyst's benevolent neutrality – allows for the association of new positive affects to aversive memory contents. To operationalize such a hypothesis, here we test whether inducing a positive somatic marker while reactivating an aversive memory can modify its emotional valence and determine if this modification lasts in time, i.e. can be reconsolidated. The two experiments presented here are based on the experimental protocols generally employed in memory reconsolidation research and involve three phases: 1) learning, 2) reactivation and manipulation of the memory, and 3) memory testing. We manipulated the somatic markers by using a proven nonobtrusive facial feedback manipulation (Strack, Martin & Stepper, 1988). In our two experimental protocols, we manipulated the type of stimuli used and the time in between the second and third phases of the protocol. In Exp.2 we used a different protocol, motivated by theoretical and methodological reasons. First, the gradient time for memory consolidation is considered to be highly variable (from less than a second to several hours). In order to ensure that memory was properly reconsolidated; a 24-hour delay was placed between second and third phase of Exp.2. Second, as the stimuli and questionnaires we used to rate emotional valence and memory in Exp.1 were not standardized, in Exp. 2 we decided to use a set of standardized stimuli (International Affective Pictures System, IAPS, Lang, Bradley & Cuthbert, 2008) and to follow a previously developed experimental protocol (Schwabe, Nader & Pruessner, 2013).

2. Materials and methods

2.1. Experiment 1

In the first experiment, 84 students (41 men and 43 women; age: M = 23.2 years, SEM = 0.54) were tested on two consecutive days. On Day 1, participants were first asked to fill-in a questionnaire measuring symptoms of depression (Beck Depression Inventory-II, BDI-II, Beck, Steer, Brown & Beck, 1996). Next, participants were asked to read a negatively charged emotional text (1824 words) and to respond to 12 questions assessing the text in negative (9 items) and positive (3 items) emotional dimensions. Finally, a memory test composed of 8 questions of different difficulties was administered, to assess the participants' ability to retain the content of the text. For both emotional and memory measurement, two versions of each questionnaire were used and these versions were balanced across treatment groups and day test.

On Day 2, facial feedback was manipulated using the same protocol as Strack *et al*. (1988). As in this previous research, all participants received the same cover story and explanation about how to hold the pen. Moreover, participants were asked to perform a similar drawing task to that used in this previous work. However, in order to reactivate the participants' memory create conditions of reconsolidation, we added a task in which several excerpts from the text were presented as reminder cues. In this task, participants were asked to respond if the excerpts came from the beginning, the middle or the end of the text. Depending on the experimental condition, participants performed the drawing task either while holding the pen between their teeth (Smile group), between their lips (Non-Smile group) or between their non-dominant hands (Hand group). 31 participants were included in Smile group (16 men and 15 women; age: M = 22.4, SEM = 0.84), 27 in the Non-smile group (12 men and 15 women; age: M = 24.8, SEM = 1.30) and 26 in the Hand group (13 men and 13 women; age: M = 22.4, SEM = 0.43). Approximately two minutes after performing the drawing task, participants were asked to rate their emotions with respect to the text they had read 24 hours prior. Finally, participants were subjected to another memory test on the text.

2.2. Experiment 2

In the second experiment, 44 students (25 women, 19 men; age: M = 24.2, SEM = 0.88) were tested on three consecutive days. On Day 1, participants had to fill-in questionnaires measuring levels of anxiety traits (State-Trait Anxiety Inventory, STAI, Spielberger, Gorsuch & Lushene, 1970), and depressive symptoms (BDI-II, Beck *et al*. 1996) in order to control for possible covariate effects on the memory processes. Next, 50 IAPS pictures (25 neutral, 25 negative; see Schwabe *et al*. 2013 for the list of pictures used) were randomly shown to participants. Each picture was presented for 3 seconds, and a fixation cross was presented for 3s between each picture. Two sets of 50 IAPS pictures with similar content and the same average valence and arousal levels were balanced across the experimental groups. The following instructions were given to the participants: "Try to remember these pictures as well as possible and in the most detailed way possible. Questions about these pictures will be asked in the next phases of the experiment". Immediately after seeing the pictures, a free recall test was performed.

On Day 2, the manipulation of somatic markers (smile) was performed using chopsticks rather than a pen, as no drawing task was required. As cover story, we claimed to be testing the effect of a double task on memory, namely the holding of chopsticks with the mouth while remembering the pictures. Depending on the experimental conditions, participants either held the tips of the chopsticks between their front teeth, or with the chopsticks pointing forward (Non-Smile group), or between their teeth, across their mouth, with the lips not touching the sticks (Smile group). This last facial manipulation induces a smile closest to the Duchenne smile (Ekman, Davidson & Friesen, 1990). Furthermore, in order to make the facial manipulations be as homogenous as possible across participants, the subjects were asked to mimic an example photo. Once instructed on how to hold the chopsticks, participants were asked to hold the posture for 2 minutes while attempting to remember, as precisely as possible, the pictures that they were shown on Day 1. Finally, participants rated the difficulty and discomfort of the tasks on several 10-point Likert scales.

On Day 3, participants were presented a set of 100 randomly mixed IAPS pictures that consisted of the 50 pictures presented on Day 1 and 50 pictures never before seen by the participants. Participants were asked for each picture if they had seen the picture on Day 1 (old) or not (new). Consistent with the two-step know/remember procedure described by (Eldridge, Sarfatti & Knowlton, 2002), all pictures that participants rated as old were presented a second time and participants were asked to judge whether they remembered details around its experience (i.e. if they were able to remember the situation, feelings or thoughts related of the first time they saw the picture) or if they simply knew it (i.e. if they only had a filing of familiarity with the picture). Finally, participants have to rate the valence and arousal of the 50 IAPS pictures they showed on Day 1. The valence scale ranged from 0 to 100 with: 0 = negative, 50 = neutral and 100 = positive. The arousal scale ranged from 0 to 100 with 0 representing not arousing and 100 being very arousing.

3. Results

3.1. Experiment 1

No between-group difference of BDI scores was found, indicating that our population was homogenous in term of depressive levels. Next, we tested emotional evaluation by conditions. We calculated the mean score of the negative items (Negative Emotions) and the mean of the positive items (Positive Emotions). Then, for both negative and positive variables, we subtracted Day 2 scores from Day 1 scores. In order to control for the possible effect of the questionnaire version in emotional evaluation of the text, we included Questionnaire version (Qv) as a categorical variable. A One-way ANOVA on emotional evaluation with Sex and Qv as factors showed an effect of condition ($F(2,72) = 3.219$, $p = .0458$, $\eta^2_P = .0821$) and an effect of Qv ($F(1,72) = 68.286$, $p = < .001$, $\eta^2_P = .486$). However, no main effect of Sex and no interaction effects were found. A post-hoc test (Tukey) comparing emotional evaluation scores by conditions showed no differences between Non-Smile and Hand groups ($p = .99$), and trends between Smile and Non-smile groups ($p = .096$) and Smile and Hand groups ($p = .073$). Given these results, we consider the Hand and Non-smile groups as part of a Control group, henceforth named Control.

An ANOVA on negative emotional scores with Treatment, Sex and Qv as factors showed a main effect of Treatment ($F(1,76) = 6.491$, $p = .0129$, $\eta^2_P = .078$) and a main effect of Qv ($F(1,76) = 69.001$, $p= < .001$, $\eta^2_P = .475$). No significant interaction or effect was observed for Sex. These results suggest that both questionnaires assessed the emotional evaluation differently. However, as they were balanced across conditions and day test, and no interaction effect between Qv and emotional evaluation was observed, the main effect of Treatment should be considered as reliable. Thus, the Smile group evaluated the text less negatively than Control group (Fig. 1 A).

For positive evaluation scores, an ANOVA with Treatment, Sex and Qv as factors showed a main effect of Qv, an interaction effect between Treatment and Sex, and an interaction between Sex and Qv. Post-hoc tests of the interaction between Sex and Treatment showed no significant differences (all $p > .17$). Pairwise comparisons of the interaction between Sex and Qv showed no significant differences between Sex (all $p > .07$). Therefore, the interaction effect lies only in the main effect observed for the Qv. As such, we conclude that positive evaluation of the text is not affected by the Treatment (Fig. 1 A).

Memory was also assessed with two eight-item questionnaires balanced across groups and test day. A general memory score was calculated for Day 1 and Day 2 by averaging scores of the eight items. As for emotional evaluation, a differential score of memory performance was calculated by subtracting Day 2 to Day 1 memory scores. An ANOVA on differential memory score with Treatment, Sex and Qv as factors showed a main effect of Qv ($F(1,76) = 5.864$, $p = .017$, $\eta^2_P = .071$), no main effect of Treatment, no main effect of Sex, and no interaction effects. These results suggest no effect of Treatment on memory performance (Fig. 1 B).

3.2. Experiment 2

No between-groups differences were observed for depressive symptoms, or for anxiety level. For the free-recall test ratio from Day 1, a two-way ANOVA showed an effect of Pictures type ($F(1,42) = 108.583$, $p < .001$, $\eta^2_G = .429$), but no effect of Treatment, and no interaction effect. This indicates that negative pictures are more strongly recalled than neutral pictures. Furthermore, there is no difference on picture encoding between groups and no differential encoding of neutral or negative pictures between groups. For analysis of memory on Day 3, we computed a memory accuracy index (d' = [z(Hit rate) - z(False alarm rate)]). A two-way ANOVA on d' (Treatment and Pictures type as factors) showed only an effect of Pictures type ($F(1,42) = 5.084$, $p = .029$, $\eta^2_G = .023$). Thus, smiling had no effect on memory accuracy. However, a two-way ANOVA on the remembering ratio showed an effect of Treatment ($F(1,42) = 4.43$, $p = .041$, $\eta^2_G = .0605$), but no effect of Pictures type nor interaction effect. These results suggest that smiling decreases the vividness of memory for both negative and neutral pictures without impairing memory accuracy (Fig. 1 C).

Finally, we tested for between group differences on valence and arousal of IAPS pictures. A two-way ANOVA on emotional valence of IAPS pictures with Treatment and Pictures type as factors showed no interaction effect, but an effect of Pictures type ($F(1,42), = 529.507$, $p < .001$, $\eta^2_G = .8702$), indicating that participants are able to discriminate negative pictures from neutral pictures. Interestingly, an effect of Treatment was found ($F(1,42) = 6.454$, $p = .0148$, $\eta^2_G = 0.067$), indicating that smiling during the reactivation of memory decreases the evaluation of both negative and neutral IAPS pictures (Fig.1 B). A two-way ANOVA on arousal scores was used with the same factors as for the valence measurements. This analysis showed a main effect of Pictures type ($F(1,42) = 221.041$, $p < .001$, $\eta^2_G = 0.556$), indicating that participants accurately discriminate arousing from non-arousing pictures (Fig. 1 D). However, smiling did not impact the evaluation of arousal.

4. Discussion

We hypothesized that if memories and affects are two separate systems, then (1) being in a positive somatic state while reactivating a negative memory should lead participants to evaluating memories less negatively and (2) according to the reconsolidation theory, this effect should remain constant over time. Indeed, as suggested by the somatic markers theory, the reactivation of a negative memory necessitates that both the memory content and the somatic markers that were previously associated to it are simultaneously reactivated. Results of Exp.1 show that inducing a positive somatic marker (smiling) while reactivating a negative memory leads participants to rate memories as being less negative. Thus, being in a positive somatic state while recalling a negative memory might interfere with the reactivation of the negative somatic markers that were previously associated to it. If so, when such interference occurs during the reconsolidation phase, a new somatic marker ought to be newly associated to the memory. The results of Exp. 2 are in line with this proposition: the emotional valence of negative and neutral IAPS pictures are evaluated as less negative when participants smiled while reactivating their memories from 24 hours prior. Confirming the independence of memory content and affects, the results of Exp.1 and 2 that somatic marker manipulation does impact emotional valence but has no effect on memory accuracy (i.e. the capacity to discriminate between what has been already seen and what has never been seen). However, somatic marker manipulation does impact the remembering ratio (i.e. the capacity to re-contextualize both negative and neutral memories). Further analysis and studies are necessary to determine if such a decrease in memory vividness is due to the reconsolidation effect or to the somatic marker manipulation.

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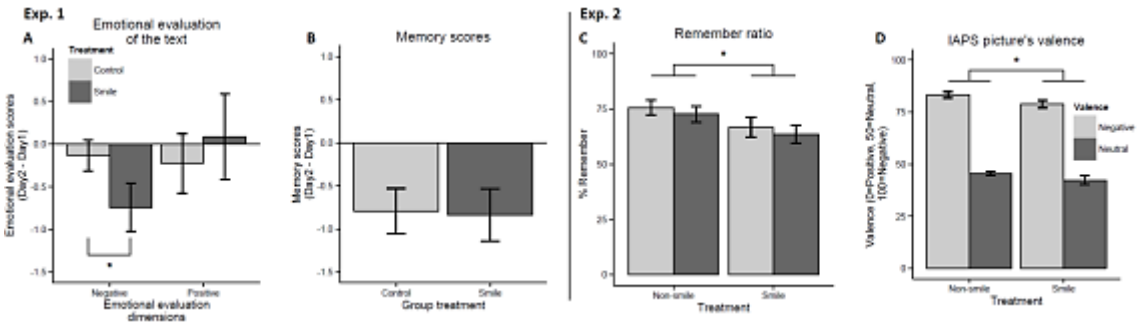
5. Conclusion

We acknowledge that experiments presented here cannot fully capture the richness of psychoanalytical theory and its clinical application. However, recent researches in the affective and memory neuroscience provide the means to operationalize some of the psychoanalytical intuitions. The two experiments presented here yield encouraging results of that kind. They mainly confirm the significance of reconsolidation processes and somatic markers theories for psychoanalysis. As such, our data thus support the clinical hypothesis that reactivating negative memories in a mentally and physically comfortable environment do not reinforce such memories; rather it contributes to making them more bearable to the patient. Finally, by showing that not only do bodily states determine what an organism thinks, but also dynamically contribute to shaping its memories (their encoding, and their reactivations), our results also show how the neuropsychoanalytic field yields stimulating insights in favor of an embodied conception of cognition (Shapiro, 2007).

*Figure 1. Main results for experiment 1 and 2. Exp. 1 A: pre-post differences (Day 2 – Day 1) of emotional evaluation scores for negative and positive dimension showed only an effect of treatment for negative dimension. Exp. 1 B: pre-post difference (Day 2 – Day 1) of memory accuracy scores for Smile and Control groups, showed no Treatment difference. Exp. 2 C: Remember ratio for negative and neutral IAPS pictures by groups showed a Treatment difference. Exp. 2 D: Evaluation scores of valence for neutral and negative IAPS pictures by groups showed a Treatment difference. Notes: * = p-value < .05; error bars are SEM.*



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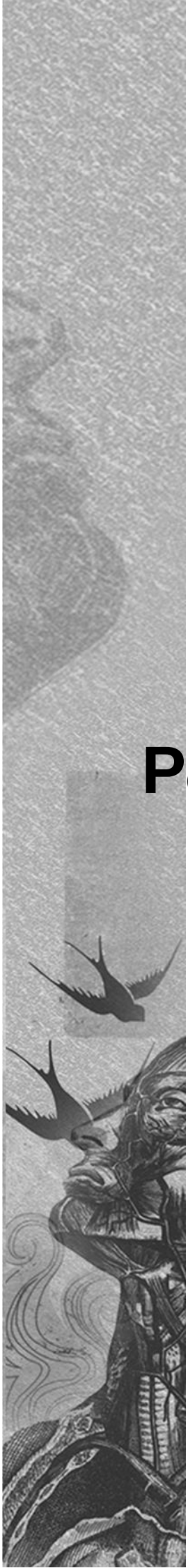

Posters

DRUG CONSUMPTION AMONG FUTURE HEALTHCARE PROFESSIONALS

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Abstract

This study examined the frequency of drug use in a sample of students studying to become healthcare professionals and whether there were any gender differences. The participants were 651 university students (79.2% female, mean age 22.02; SD = 4.6). The frequency of: tobacco, alcohol, cannabis, cocaine, heroin, inhalants, speed or amphetamine, hallucinogen and spice consumption were measured using a questionnaire. 35.8% of the participants reported consuming tobacco, 91.1% alcohol, 24.4% cannabis, 3.1% cocaine, 0.4% heroine, 0.6% inhalants, 3.3% speed or amphetamine, 2.2% hallucinogen and 0.2% spice. The prevalence of drug consumption among those studying to become healthcare professionals was higher than among young Spanish people in general, with the exception of tobacco, cocaine and hallucinogens, which were lower. The frequency of consumption did not differ by gender, which is in contrast to figures from the European Monitoring Centre for Drugs and Drug Addiction, which reported higher drug consumption among males.

Keywords: *drug consumption, future healthcare professionals, Spain.*

1. Introduction

Drug use is a harmful habit that is increasingly common among young people (EMCDDA, 2012). According to the EMCDDA report in the last 12 months the prevalence of consumption among young people was: tobacco 43.8%; alcohol 79.1%; cannabis 17%; cocaine 3.5%; heroin 0.1%; inhalants 0.1%, speed or amphetamine 1.1% and hallucinogen 0.9%.

Future health professionals will have the responsibility to advise and help people suffering from addiction, as well as to be models for their patients (Baltasar, 2012; Vazquez et al., 2006). However, if they themselves are consumers, it will be more difficult to exercise this exemplary role. In addition, these students should be more familiar, than other young people, with the harmful consequences of drug use, so we would expect a lower prevalence of drug consumption in this group. Therefore, the present study examined the frequency of drug use in a sample of students studying to become healthcare professionals and whether there were any gender differences.

2. Methods

The participants were 651 university students studying: Psychology (37.8%), Nursing (31.2%), Medicine (29.3%) and a Masters in Health Promotion (1.7%) at the University of Girona (Spain). The mean age was 22.02 (SD = 4.6) and most of the participants (79.2%) were female, due to the overrepresentation of females in the health care professions in Spain.

Frequencies of tobacco, alcohol, cannabis, cocaine, heroin, inhalants, speed or amphetamines, hallucinogen and spice consumption were measured using a questionnaire. The response categories were: never, occasionally, once a week, more than once a week and daily. In order to undertake appropriate data analyses we collapsed the categories: once a week, more than once a week and daily into the group of "regular consumers".

After permission had been obtained from the person in charge of each faculty, the questionnaires were administered to all students present during normal class time. Participation was voluntary and participants were assured of their anonymity and confidentiality of their responses.

Chi-square test was use to compare consumption by gender and all data analyses were carried out using SPSS version 19.0.

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3. Results

35.8% of the participants reported consuming tobacco at least occasionally, 91.1% alcohol, 24.4% cannabis, 3.1% cocaine, 0.4% heroine, 0.6% inhalants, 3.3% speed or amphetamine, 2.2% hallucinogen and 0.2% spice. Table 1 shows the frequency of consumption by gender. More males than females reported regular consumption of alcohol and cannabis, but more females than males smoked tobacco. Only three women reported regular consumption of cocaine and one woman consumed heroin, speed/amphetamine, hallucinogen and spice. However, no significant differences in the frequency of consumption were found by gender.

Table 1. Frequency of drug consumption by gender (%).

Substance		Never	Occasionally	Regularly	$X^2_{(2)}$
Tobacco	Male	65.2	14.1	20.7	.14
	Female	63.9	13.9	22.3	N.S.
Alcohol	Male	9.7	44.8	45.5	3.46
	Female	8.8	53.7	37.5	N.S.
Cannabis	Male	71.6	21.6	6.7	2.06
	Female	76.8	18.9	4.3	N.S.
Cocaine	Male	97	3	0	.87
	Female	96.9	2.5	.6	N.S.
Heroin	Male	100	0	0	0.5
	Female	99.6	.2	.2	N.S.
Inhalants	Male	98.5	1.5	0	2.1
	Female	99.6	.4	0	N.S.
Speed or amphetamine	Male	97	3	0	.27
	Female	96.7	3.1	.2	N.S.
Hallucinogen	Male	98.5	1.5	0	.49
	Female	97.7	2.1	.2	N.S.
Spice	Male	100	0	0	.26
	Female	99.8	0	.2	N.S.

Tobacco is the substance consumed most often every day: 15.7% of participants (15.6% males vs. 15.8% females) reported using it daily, with cannabis being second: 2.5% of the future health professionals (3% males vs. 2.3% females) reported being daily consumers. Only 1.1% of the sample (0.7% males vs. 1.1% females) reported alcohol consumption everyday and one woman reported consuming spice on a daily basis. No students reported daily consumption of the other drugs.

4. Discussion and Conclusions

As expected, tobacco and alcohol were the most widely consumed drugs among future health professionals, followed by cannabis. Regular consumption of the other drugs was uncommon, but worryingly occasional consumption of cocaine, inhalants, speed or amphetamine and hallucinogens was not uncommon. These patterns are in agreement with the findings of Vazquez et al. (2006) in a sample of students of medicine, nursing, pharmacy and psychology.

Surprisingly, the prevalence of drug consumption among those studying to become healthcare professionals was higher than among young Spanish people in general, with the exception of tobacco, cocaine and hallucinogens, which were lower (EMCDDA, 2012).

Daily consumption of tobacco (15.7% *vs*. 26.8%) and alcohol (1.1% *vs*. 1.6%) were lower than among young Spanish people in general, but daily cannabis consumption was higher (2.5% *vs*. 1.7%). The frequency of drug consumption did not differ by gender, which is in contrast to figures from the European Monitoring Centre for Drugs and Drugs Addiction, which reported higher drug consumption among males in the Spanish population (EMCDDA, 2012).

Actions must be taken to help this collective to reduce or cease drug consumption, not only because they are putting their own health at risk, but also because they may adversely influence the general population, due to their future as role models, or reduce the legitimacy of their health promotion and illness prevention interventions.

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PATTERNS OF POLYDRUG USE AMONG FUTURE HEALTHCARE PROFESSIONALS

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Abstract

The main aim of this study was to investigate the prevalence of the three patterns of polydrug use (Patterns A, B and C) identified by The European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) in a sample of those studying to become healthcare professionals and whether there were any gender differences. The participants were 651 university students (79.2% female, mean age 22.02; SD = 4.6). A questionnaire was used to measure the frequency of tobacco, alcohol, cannabis, cocaine, heroin, inhalants, speed or amphetamine, hallucinogen and spice consumption. Overall, 45.8% of the sample were polydrug users, with Pattern B being the most common, followed by Pattern A. Although more females were classified as Pattern A consumers and more males were classified as Pattern B consumers, these differences were not significant. However, the prevalence of polydrug use among those studying to become healthcare professionals was very high, irrespective of gender. This finding is worrying as these patterns of drug use may lead to severe health problems in the future.

Keywords: *polydrug use, substance use, future healthcare professionals, Spain.*

1. Introduction

Polydrug use is relatively common among young people and is associated with a higher likelihood of addiction, poorer physical health and many other social and mental health problems (EMCDDA; 2009; Trenz, et al, 2012).

The European Monitoring Centre for Drugs and Drug Addiction identifies three types of polydrug users, from most prevalent to least common: Pattern A - tobacco and alcohol consumers; Pattern B - cannabis consumers who also use tobacco and/or alcohol, and Pattern C - cannabis consumers who also use tobacco and/or alcohol and at least on other illegal drug (EMCDDA, 2009).

This study examines the prevalence of these types of polydrug use in a sample of those studying to become healthcare professionals and whether there are any gender differences. We also investigated the prevalence of polydrugs use by degree type.

2. Method

The participants were 651 university students studying: Psychology (37.8%), Nursing (31.2%), Medicine (29.3%) and a Masters in Health Promotion (1.7%) at the University of Girona (Spain). The mean age was 22.02 (SD = 4.6) and most of the participants (79.2%) were female, due to the overrepresentation of females in the health care professions in Spain.

A questionnaire was used to measure the frequency of tobacco, alcohol, cannabis, cocaine, heroin, inhalants, speed or amphetamine, hallucinogen and spice consumption. The response categories were: never, occasionally, once a week, more than once a week and daily. Participants who had used two or more substances were assigned to one of the polydrug user patterns identified by the EMCDDA (2009).

All data analyses were carried out using SPSS version 19.0. Chi-square tests were used to compare the patterns of polydrug consumption by gender and degree/master.

3. Results

Overall, 45.8% (n = 282) of the sample (46.9% males and 45.6% females; 47.2% Psychology, 33.6% Nursing, 41.9% Medicine, 45.5% Master in Health Promotion) were polydrug users, but there were no significant differences by gender (X^2 = .08; p=.78) or by degree (X^2 = 3.09; p=.21).

Table 1 shows the distribution of polydrug users by pattern of polydrug use and gender. Pattern B (cannabis consumers who also use tobacco and/or alcohol) use was the most common pattern among polydrug users, followed by Pattern A (tobacco and alcohol consumption). Almost 10% of the poly-consumers reported Pattern C consumption (cannabis consumers who also use tobacco and/or alcohol and at least one other illegal drug). Only three polydrug users did not follow any of these patterns: they reported consuming tobacco, alcohol and one illegal drug (cocaine, amphetamines or inhalants), but did not consume cannabis.

Table 1. Distribution of polydrug users by pattern and gender (%).

Pattern	Males % (n)	Females % (n)	Total % (n)
A	35 (21)	45.9 (102)	43.6 (123)
B	51.7 (31)	43.7 (97)	45.4 (128)
C	11.7 (7)	9.5 (21)	9.9 (28)
Other	1.7 (1)	.9 (2)	1.1 (3)

Although more females were classified as Pattern A consumers and more males were classified as Pattern B or Pattern C consumers, these differences were not significant (X^2 = 2.45; p=.48). The category *other* patterns was not included in the analysis as this group breached the assumptions of chi-square test.

Table 2 shows the distribution of polydrug users by pattern of consumption and by degree. The pattern most common amongst Psychology students was A, while among Nursing and Medicine students the most common pattern was B. The results of the chi-square test show that there were significant differences between degrees (X^2 = 11.2; p=.02; - the category *other* patterns was not included in the analysis as this group breached the assumptions of chi-square test). Significantly less Medicine students were classified in Pattern A, compared with Psychology and Nursing students, while more students of Medicine were placed in Pattern B (p<.05). No significant differences were found between Psychology and Nursing students (p>.05). The Health Promotion masters could not be included in the analyses, due to the very small sample size and lack of variance.

Table2. Distribution of polydrug users by pattern and degree (%).

Pattern	Psychology % (n)	Nursing % (n)	Medicine % (n)	Health Promotion % (n)
A	46.2 (54)	42.5 (34)	37.5 (30)	100 (5)
B	37.6 (44)	47.5 (38)	57.5 (46)	-
C	15.4 (18)	7.5 (6)	5.0 (4)	-
Other	.9 (1)	2.5 (2)	-	-

4. Discussion and conclusions

The prevalence of polydrug use among those studying to become healthcare professionals was very high, irrespective of gender and degree: almost half of the sample reported being polydrug consumers. These patterns of behaviour may lead to severe health and/or social problems in the future.

Almost all polydrug users were in one of the three patterns defined by EMCDDA (2009), with only three students falling outside these three patterns of consumption. Although these patterns were defined, ordered from most to less common, our results showed that pattern B was more prevalent amongst young people studying to become healthcare professionals. These results are in agreement with the findings of Font-Mayolas, et al. (2013) with secondary school students from the same region of Spain. Although their sample was younger, these authors also found that Pattern B was the most prevalent pattern of consumption and that only around 1% of polyconsumers fall outside the EMCDDA classification system.

Patterns of polydrugs consumption are very similar amongst Psychology and Nursing students, but differ significantly from students studying medicine. However, future research is needed to clarify these findings.

There are several reasons to use more than one drug, such as to complement their effects or to compensate for the negative effect of the other substance (Ives & Ghelani, 2006). It would be interesting, in future research, to ask the polydrug consumers what motivates them to use more than one substance.

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ENDOMETRIOSIS: LIVE WITH THE PAIN... ALL THE TIME

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Abstract

The neuropsychiatric psychopathology is considered to be the most frequent clinical distress in endometriosis's patients. The literature presents some risk factors associated with this type of psychopathology development in endometriosis's female patients, such as chronic pain, diagnosis difficulties as well as deficient social support's perception. We intend to analyze psychopathological symptoms and quality of life in endometriosis's patients and to verify whether there is a relationship between the diseases injury location and extent to various organs, and age, functional impairment, social support's perception to that psychopathological symptoms and quality of life. Alongside this situation is supposed to create a brief protocol that allows screening for signs and neuropsychiatric symptoms in order to allow a more brief intervention in these patients, thus improving their quality of life. Given the published studies on this topic, we assume that: (1) Patients with more severe endometriosis have a higher number of psychopathology positive symptoms; (2) Patients with more severe endometriosis have a lower quality of life; (3) Patients with endometriosis the longer have a positive symptoms of psychopathology higher number; (4) Patients with endometriosis the longer have a lower quality of life; (5) patients with endometriosis and infertility have a greater number of psychopathological symptoms; (6) Patients with endometriosis and low social support's perception have a higher number of psychopathological symptoms. To this end, we intend to select 150 endometriosis diagnosed women, aged between 18 and 45 years and evaluate them with standardized instruments for the purpose, such as BSI, MOS-SSS and EHP-30.

Keywords: *endometriosis, psychopathology, chronic pain, quality of life, perception of social support.*

1. Introduction

The neuropsychiatric psychopathology such as depression and anxiety (Minson et al., 2012) is considered to be the most frequent clinical situation (Oliveira, 2006) in patients with endometriosis (Yukizaki et al., 2007). Alongside this comorbidity associated cognitive problems (Kreling, Cruz, & Pimenta, 2006; Yeng et al., 2001) arise not only to endometriosis but also to psychopathology with which it correlates (Mengarda, Passos, Picon, Costa, & Picon, 2008; Minson et al., 2012). The literature presents some risk factors that appear to be associated with the development of this type of psychopathology and cognitive impairment in women with endometriosis, such as chronic pain, difficulty in diagnosis as well as the perception of deficient social support, among others (Amaral et al., 2009; Bellelis et al., 2010; Nácul & Spritzer, 2010).

2. Objectives and Hypothesis

To evaluate the existence of psychopathological symptoms and cognitive impairment in patients with endometriosis, as well as the relationship between the location and extent of damage caused by the disease in various organs, age, injury functional, the perception of social support and quality of life with the existence of that psychopathological symptoms and cognitive changes. Alongside this situation we want to create a short protocol that allows screening for signs and symptoms of major neuropsychiatric and cognitive changes in order to allow a more brief intervention in these patients thereby improving their quality of life.

Given the published studies on this issue, we assume: (1) Patients with more severe endometriosis have a higher number of positive symptoms of psychopathology; (2) Patients with more

severe endometriosis have a higher degree of cognitive impairment; (3) Patients with endometriosis longer have a higher number of positive symptoms of psychopathology; (4) Patients with endometriosis longer have a greater cognitive deficit; (5) infertile women with endometriosis have a greater number of psychopathological symptoms; (6) patients of endometriosis with low social support perception has a higher number of psychopathological symptoms.

3. Methods

For this purpose, we intend to select 100 women, aged between 18 and 45, diagnosed for endometriosis according to standardized diagnostic criteria and evaluate them with standardized instruments designed for this purpose. *Instrument:* All patients will be assessed using psychological evidence whose base is consistent with signs and symptoms provided by neuropsychiatric and neuropsychological assessment instruments. *Data analysis:* we will analyse data using parametric and non-parametric statistical tests, taking into account the characteristics of the distribution of data. We will use SPSS for this purpose.

4. Conclusions

This research is on its early stages so we don't have any data yet. Preliminary results may be presented at the conference. Nevertheless, this study is oriented to a population that is in deep suffering and needs to be studied so that it can be helped.

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LIFE SATISFACTION, FIVE-YEARS AFTER A CORONARY ANGIOGRAPHY, BETWEEN PHYSICAL EXERCISE AND SOCIO-ECONOMIC INEQUALITIES

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Abstract

Background: Five-years after undergoing a coronary angiography, socioeconomic status and health-related behaviours are known to affect life satisfaction (LS), but their respective influence remains unclear. Our aim was to analyze patients' LS and its relationships with cardiovascular diseases, risk factors and preventive behaviours developed in the last 5 years and socioeconomic conditions. *Methods:* Based on records from the *National Institute of Cardiac Surgery and Cardiological Intervention* in Luxembourg, 3632 survivors who underwent coronary angiography between 2008 and 2009 were contacted in 2013 by letter to complete a self-questionnaire assessing LS [1-10] and other cofounder factors. Data were analysed via multiple regression models. *Results.* Life satisfaction of 1289 volunteers (69.2 years) was 7.3/10. Majority were men, Luxembourgish, secondary education level, employees and manual workers, and those with an income of 36000 euros or more per year. Being a woman, not living in couple and having a low middle income were negatively associated with the LS level. Patients who suffered in the last 5 years from angina pectoris, diabetes, hypercholesterolemia, obesity, or who stopped smoking because of the disease were more likely to have lower LS, in contrast to those who participate in regular physical activity or exercise. *Conclusions:* Patients' LS indicator was lower than the national life satisfaction in Luxembourg (7.8/10) which was higher than that from the European (7.0 for EU-27). Coaching patients with interventions that foster healthy attitudes can help sustain rehabilitation and enhance life satisfaction, adding beyond a reduction of socioeconomic inequalities.

Keywords: *cardiovascular diseases; life satisfaction; preventive behaviours; socioeconomic inequalities.*

1. Introduction

In Luxembourg, in terms of the number of years of life lost due to premature death, cardiovascular diseases were the highest ranking causes in 2010, the principal cause of acquired long-term disabilities and the leading cause of death (Organisation mondiale de la Santé, 2012; Institute for Health Metrics and Evaluation, 2010).

Risk markers such as age, male gender, race/ethnicity, and genetic factors, lifestyle, smoking behaviour, alcohol consumption and cultural or economic circumstances may cause the different impairment deficiencies profiles. Cardiovascular long-term disabilities are not exclusively physical, but also psychological distress, familial repercussions on daily life, restrictions in routine, leisure and work activities, and substantial socioeconomic impacts. These consequences constitute a challenge for individuals to maintain their life satisfaction (LS) (Baumann, Couffignal, Le Bihan, & Chau, 2012; Eurofound, 2012). We opted for this approach, in the belief that risk factors, health-related issues, preventive behaviours and socioeconomic conditions determine effects on LS of patient's five-years after undergoing a coronary angiography. We can suggest that patients' LS could increase when they applied modifiable health-related interventions to reduce hypertension, smoking, diabetes, poor diet, physical inactivity, obesity.

Indeed, cardiovascular risk management, lifestyle changes, secondary prevention of relapses among known patients and treatment of heart attacks are well documented to lead decreases in the originally very high case fatality of myocardial infarctions (Eurostat, 2013). Our study aimed at assessing LS and its relationships with cardiovascular diseases, risk factors and preventive behaviours developed in the last 5 years post the event, and socioeconomic conditions.

2. Methods

2.1. Study design, sample and recruitment

This survey was a retrospective health record audit from the *Institut National de Chirurgie Cardiaque et de Cardiologie Interventionnelle* in Luxembourg, involving all cardiovascular patients (3632 survivors by excluding wrong addresses and those deceased) who underwent coronary angiography between 2008 and 2009. They were contacted in 2013-2014 by a letter that contained information about the aims of the survey.

2.2. Instruments and their translation

As Luxembourg is multilingual and very culturally diverse (more than 170 different nationalities), each patient was invited to complete a self-questionnaire in the language of their choice: Portuguese, French or German.

2.3. Ethical Restriction

The protocol was approved by the National Committee of Research Ethics and notified to the Committee for Data Protection of Luxembourg.

2.4. Data collected

Life satisfaction, LS (dependant variable). Each respondent self-rates the degree of their LS: "*On a scale from 1 to 10, where would you place your level of satisfaction with your life?*" (10 being the highest) (EFILWC, 2010).

Socioeconomic characteristics. Collected on age, sex, living in couple (yes/no), Luxembourgish (yes/no); educational level (primary, secondary, tertiary), professional status (manual worker, employee, executive, other), retired (yes/no), and total annual income (euros) (low, low middle, high middle, and high).

Cardiovascular diseases. Data on those who suffered in the last 5 years from myocardial infarction or angina pectoris.

Risks factors. Diabetes, hypertension, hypercholesterolemia, weight and size were self-reported. The Body Mass Index (BMI) was arranged in 3 classes: obesity (BMI >= 30.0 kg/m²), overweight (BMI= 25.0 -29.9 kg/m²) and normal (BMI <25.0 kg/m²).

Unhealthy behaviours. Changes of tobacco consumption, physical inactivity and eating habits were recorded. In case of a modification of these behaviours, three reasons were proposed: "*Because of the cardiovascular disease", "For fear of the consequences on health", "Under the influence and at the request of the entourage".*

2.5. Statistical analysis

A multiple regression model was performed to determine the separate effects of each group of variables on LS. This model was adjusted with sex, age and income; the other variables were introduced one by one. All analyses were conducted with the statistical software SAS.

3. Results

The LS of 'volunteer' patients was 7.3/10. The description of the 1289 participants (69.2 years) after undergoing a coronary angiography showed that mainly were men (71.3%), Luxembourgish (77.5%), lived in couple (74.0%), employees (37.5%) and manual workers (24.5%), had a secondary education level or higher (68.1%), and an annual income of 36000 euros or more (66.2%). Many of them suffered from myocardial infarction (12.0%), hypercholesterolemia (48.4%), and hypertension (43.14%). Most were former smokers (45.9%) and declared that in the last 5 years for fear of consequences on health, they stopped smoking (48.7%), participated in regular physical activity (43.4%), and paid more attention to their eating habits (42.7%).

The socioeconomic factors of sex (regression coefficient (rc) -0.458, p=0.001) and not living in couple (rc -0.352, p=0.021) were negatively associated with LS. Total Annual Income (euros) follows a linear pattern with LS ("<18,000 euros" vs. "54,000 euros": rc -1.055, p<0.0001); as income increased, so did LS, and vice versa. Patients who suffered, in the last 5 years, from angina pectoris (rc -0.843, p<0.0001), diabetes (rc -0.336, p=0.023), hypercholesterolemia (rc -0.307, p=0.018), obesity (rc -0.512, p=0.001), or who stopped smoking because of the disease (rc -0.377, p=0.055) were more likely to have lower LS, in contrast to those who participate in regular physical activity or exercise (rc 0.903, p<0.0001).

4. Discussion

This study showed the effects of health-related issues and socioeconomic aspects on the life satisfaction (LS) of patients, five-years after a coronary angiography, from the National Institute in Luxembourg. Their LS indicator (7.3/10) was lower than the national LS in Luxembourg (7.8/10) which was higher than that from the European (7.0 for EU-27) (EFILWC, 2010).

Our main finding demonstrated that the patients who declared to participate in regular physical activity or exercise, had better LS. Among health-related issues, the knowledge of the respective roles of main preventive behaviours such as physical exercise may be useful for policy interventions aimed at improving the health and daily life of patients (Institute for Health Metrics and Evaluation, 2010). But the patients who declared stopping smoking to prevent cardiovascular diseases were also more likely to have low LS. In the same line, patients with diabetes, hypercholesterolemia, obesity who must adjust their lifestyles, 5 years after a coronary angiography, and adopt a unpleasant behaviour, have their LS affected.

Another result is that the the patients suffering in the last 5 years from angina pectoris, diabetes, hypercholesterolemia, obesity, had the lowest LS. This relationship is in the same line that the conclusion of the last report of Eurofound (2012) which observed that the most important predictor of LS is health. Having a chronic illness or a disability is associated with reduced life satisfaction, and the effect is larger if this disability is limiting in one's daily activities (Eurofound, 2012). However, the LS of patients suffering from angina pectoris in the previous 5 years were more affected than that of patients with myocardial infarction and/or bypass surgery. Previous work suggests that angina is a strong predictor of future cardiovascular events, but other investigations of psychological factors and coronary heart disease find that conventional risk factors explain little of the observed association (Kubzansky & Thurston, 2007).

Following-up after 5 years, patients who didn't change or to accept to change their lifestyles had a better LS than those who were ambivalent and whose LS worsened. Further research should examine whether interventions can help enhance LS and what therapeutic communication can reduce the distance between the ability to modify an intention and the ability to change behaviour. Health promotion or therapeutic education programs would benefit by targeting factors that moderate the unfavourable intention-behaviour relationship.

Cardiovascular diseases affect health in combination with social, psychological and material factors. The socioeconomic conditions of the patients intervene on their LS. Being a woman, not living in couple and having a low middle income was negatively associated with LS. Some of these associations, such as income and living in couple, exist for the general population and are well-documented in the literature (Eurofound, 2012). Also, we can postulate that the impact of socioeconomic factors would be greater for patient's five-years after a coronary angiography already facing disadvantages in lifestyle, and that the effect of health-related behaviours will be greater when they confront social disadvantage.

In conclusion, coaching patients with interventions that foster healthy attitudes can help sustain rehabilitation and enhance LS, adding beyond a reduction of social inequalities.

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FACTORS LINKED TO ALCOHOL DRINKING OF JUVENILES

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Abstract

Objectives: Alcohol is the drug of first choice among the youth. Many young people are experiencing the consequences of drinking and drinking at an early age. This study aimed to explore the potential of self-control, resilience and parental control in explaining the starting age of alcohol drinking of elementary school students. *Methods:* A representative sample of 1298 (53.3% female) elementary school students (age M=11.72 years, SD=0.67 years) was collected in September 2013 within the APVV-0253-11 project aimed at school-based universal prevention. The respondents completed the Self-Control Scale and the Adolescent Resilience Scale (ARS) questionnaires and they were also asked to answer questions concerning parental control. Binary logistic regression was used to analyze the data with experience with alcohol drinking used as the dependent variable. *Design:* A cross-sectional design was used. *Findings:* Two of the three subscales of ARS (Novelty Seeking ($p<0.001$) and Emotional Regulation ($p=0.034$)) as well as parental control ($p=0.008$) and self-control ($p=0.001$) were significantly associated to alcohol drinking of elementary school students. Students with higher levels of self-control and emotional regulation tended to have diverse interests and hence were less likely to experiment with alcohol. The same held for students controlled by their parents more strongly. *Conclusions:* The study contributed to the understanding of reasons for alcohol drinking among juveniles and may prove useful in creating and implementing prevention programmes.

Keywords: *alcohol drinking, resilience, self-control, parental control.*

1. Introduction

Alcohol is the drug of first choice among the youth. Many young people are experiencing the consequences of drinking and drinking at an early age. There are many factors which could potentially be associated to alcohol drinking of juveniles. The relationship between alcohol consumption and parental monitoring has been supported by several studies (Kelly et al., 2012). Self-regulation is also one of potential predictors of risky behaviour of children and adolescents (Orosová et al., 2007). Higher levels of ability to manage emotions could be associated to controlling behaviour including risky behaviour as well as alcohol use (Carlos & Sharma, 2012). Resilience is generally referred to an individual's ability to evolve in the intentions of normal, healthy development despite the presence of prolonged stress or negative or risky circumstances (Fribourg, Hjemdal, & Martinussen et al., 2009). Resilience can also be viewed as an interaction between risk factors (vulnerability) and protective resources (Rew & Horner, 2003).

2. Design

A cross-sectional design was used.

3. Objectives

This study aimed to explore the potential of self-control, resilience and parental control in explaining the starting of alcohol drinking of elementary school students.

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4. Methods

4.1. Sample

The research sample consisted of 1298 adolescents (53.3% girls, Mean age=11.72; SD=0.67) from stratified random sampling based on the number of pupils in 60 elementary schools. The data was collected in September 2013 within a project aimed at school-based universal prevention.

4.2. Measures

All adolescents were asked to complete questions about their lifetime prevalence of alcohol consumption. Lifetime prevalence of alcohol consumption (Hibell, 2012) was measured by question "On how many occasions (if any) have you had any alcoholic beverage to drink in your lifetime?" with the following available answers: 0, 1-2, 3-5, 6-9, 10-19, 20-39, 40 or more. Alcohol consumption was dichotomized and served as the dependent variable (0=never, 1=once or more than once).

Questions about parental monitoring (Hibell, 2012) consisted of questions concerning rules at home as well as information where and who their children spend their free time with (available answers ranged from 1=never to 4=almost always). The scale of parental monitoring consisted of 4 items.

The Self-Control Scale (Finkenauser, Engels, & Baumeister, 2005) consisted of 11 items and respondents can answer on a five-point scale (1 = never, 5 = always). Higher score indicated the higher level of self-control.

The Adolescent Resilience Scale consisting of three subscales: Novelty seeking (7 items), Emotional regulation (9 items) and Positive future orientation (5 items) (Oshio et al., 2003) was used in this study. Respondents were asked to choose a rating scale using the anchors of 5 = definitely yes and 1 = definitely no.

4.3. Statistical analysis

A binary logistic regression model was used for data analysis. The model consisted of five independent variables (self-control, novelty seeking, emotional regulation, positive future orientation and parental monitoring) and alcohol consumption (dichotomized) as the dependent variable.

5. Findings

About 40% of juveniles of our research sample have experience with alcohol use.

Two of the three subscales of Adolescent Resilience Scale - Novelty Seeking and Emotional Regulation as well as parental control and self-control were significantly associated to experience of alcohol drinking of elementary school students. Juveniles with higher level of self-control, emotional regulation and parental monitoring tend to drink less. On the contrary novelty seeking is positively associated to alcohol consumption (Table 1).

Table 1. Regression model for alcohol consumption among Slovak juveniles.

	Model (R^2=0.09)					
	B	S.E.	Exp(B)	95% C.I.for EXP(B)		Sig
				Lower	Upper	
Self-control	-0.047	0.015	0.954	0.927	0.982	**0.001**
Parental monitoring	-0.058	0.022	0.944	0.905	0.985	**0.008**
Novelty seeking	0.117	0.029	1.124	1.063	1.189	**<0.001**
Emotional regulation	-0.042	0.020	0.959	0.922	0.997	**0.034**
Future orientation	-0.040	0.025	0.961	0.916	1.009	0.112
Constant	1.251	0.788	3.495			0.112

6. Discussion and conclusion

Self–control, novelty seeking, emotional regulation and parental monitoring seem to be important factors associated to first experience with alcohol drinking of juveniles. Probability of tendency to experiment with alcohol is smaller in juveniles with higher level of self-control and emotional regulation. The same held for students controlled by their parents more strongly.

The results are consistent with previous research (Carlos & Sharma, 2012; Finkenauer, Engels, & Baumeister, 2005; Kelly et al., 2012), which point to positive association between risky behavior and parental monitoring, emotional factors, self-regulation and resilience.

The study contributed to the understanding of reasons for alcohol drinking among juveniles and may prove useful in creating and implementing prevention programs. The study supports the importance of parental monitoring, as well as other factors in explaining alcohol use of adolescents.

Acknowledgments

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DEVELOPMENT OF THE COMPREHENSIVE HEALTH CHECK FOR WORKERS (CHCW) QUESTIONNAIRE

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Abstract

Background: As work-related mental health disorders of workers are increased more and more in Japan, its primary prevention is recognized as a key issue in their workplace. Nevertheless, a lack of standardized measurement tools for comprehensive health check at altered state prior to the symptoms of diseases for workers reflects the theoretical and methodological limitations of current research and practice. *Purpose:* This study is to develop and standardize a new self-administered instrument, "comprehensive health check for workers (CHCW)" questionnaire, to assess work stress-related unorganized diseases based on a biopsychosocial-existential model by exploring the psychometric properties about factor structure, reliability, validity, and diagnostic ability. *Method:* A cross-sectional questionnaire survey through the internet was conducted among 5,925 male and female workers (ages, 19-66 years) who had registered as the members of the private survey enterprise in Japan. The questionnaire covered age, gender, job type, and with and without outpatient care for any physical or mental disorders, including the provisional CWCH 30-items questions and general health questionnaire (GHQ)-12. *Results:* Based on the results of the confirmatory factor analysis and covariance structure analysis, factor structure of the 25-items CHCW questionnaire was identified four first-order factors "physical", "psycho-behavioral", "social", and "existential" functioning loading on a second-order factor representing the latent comprehensive mind-body health status. Standard psychometric analysis for reliability and validation demonstrated that the factors appeared to be highly stable and reliable. No statistically significant age or gender differences were noted. Respondents who had reported themselves as outpatient with depression showed significant high scores in each four factor and overall of the CHCW questionnaires and GHQ-12 scores, as compared with respondents who had answered themselves as healthy. According to a receiver operating characteristic (ROC) curve analysis, sensitivity and specificity for cut-off values of each score of the CHCW domain of overall and its four subscales were determined in terms of health status such as fairly good, ordinarily and worse. *Discussion:* The results support the reliability, validity, and standardization of the 25-items CHCW questionnaire based on a biopsychosocial-existential model, which seems to be a useful tool to recognize work stress-related unorganized diseases in the general population by using cut off-values. It may be considered as promising tool for future research and practice.

Keywords: *Comprehensive Health Check for Workers (CHCW) questionnaire; Reliability, validity, and standardization; work stress-related unorganized diseases; bio-psycho-socio-existential models, altered state prior to the symptoms of diseases.*

1. Introduction

In Japan, generated higher levels of stress in organization are apparent from pressures for change occurring in the contemporary work environment such as productivity pressures, short-term contract culture of employment, job uncertainties, due to corporate reconstructing, increase in the pace, volume and complexity of workloads faced by employees, outsourcing of operations, growing international competition, changes in organizational strategies and rapid social modernization in work styles (Kubota et al., 2014). As work stress-related mental health disorders of workers are increased, its primary prevention is recognized as a key issue in their workplace. Nevertheless, a lack of standardized measurement tools

for comprehensive health check at altered state prior to the symptoms of diseases for workers reflects the theoretical and methodological limitations of current research and practice.

In a preliminary study, we have developed a new self-administered instrument to assess the so-called pathologically unorganized or functional diseases of diseases for workers, the provisional 30-items "comprehensive health check for workers (CHCW)" consisted of four first-order factors "physical", "psycho-behavioral", "social", and "existential" functioning loading on a second-order factor representing the latent comprehensive mind-body health status based on a biopsychosocial-existential model (Tsuda et al., 2012).

This study aimed at the standardization of the provisional CHCW questionnaire on Japanese workers. Before a basic precondition of the provisional CHCW questionnaire which we previously developed is applied to the population, it must be examined psychometric characteristics. The present study was to evaluate the psychometric properties such as receiver operating characteristic (ROC) curve for sensitivity and specificity in order to standardize the optimal cut-off points for the diagnosis of health status.

2. Method

Data were collected from 5925 women and men (age M=43.7) who were participants in our previous survey that has been published elsewhere (Tsuda et al., 2012). The provisional CHCW questionnaire derived from our preliminary study was a 30-items questionnaire consisting four dimensions. The questionnaire asked whether the respondent had experienced a particular altered behavior or thought within a month. Each item was rated on a five point Likert scale ranging from 1 to 5. Validity was performed using concurrent validity to demonstrate the extent to which the CHCW questionnaire correlates with the GHQ-12. We used a ROC curve analysis for sensitivity and specificity which plots the false positive rate against the false negative rate for each score of the CHCW domain of overall and its four subscales.

3. Results

The four-factor of the CHCW questionnaire provided the closest representation of the theoretical structure, with four first-order factors "physical" (6 items), "psycho-behavioral" (10 items), "social" (5 items), and "existential" (4 items) functioning loading on a second-factor representing the latent comprehensive mind-body health functioning. All of the four first-order factors and a second-order factor, thus the total overall score, were found to be strongly intercorrelated (r_s=0.55-0.95, p_s<0.01).

Moderate to strong positive Pearson's r correlations were found between each score of the CHCW questionnaire and the GHQ-12, ranging from 0.59 to 0.78, p<0.01. The area under curves (AUCs) ranges from 0 to 1, with AUCs >0.7-0.9 generally considered to be indications of moderate to good diagnostic ability (Streiner & Cairney, 2007). The AUC of score of the CHCW domain of overall was 0.77 and its standard error (SE) was 0.02 (p_s<0.001), as shown in Figure 1. These AUC values confirmed the medium diagnostic ability of the CHCW.

For each score of the CHCW domain of overall and its four subscales, sensitivity and specificity for each range was examined to determine cut-off scores for identifying respondents who are ordinarily (including fairly good) and worse health status. For worse health status on overall, a cut-off of 81/82 gave a sensitivity of 68% and a specificity of 71%. This cut-off score was coincident with the mean +1/2 standard deviation (SD) score (81.3). Thus, for fairly good health status, we chose the standard cut-off score of 64/65 because the mean -1/2 SD score was 64.5, which provided a sensitivity of 91% and a specificity of 32%. For ordinarily health status, the optimal cut-off points of the CHCW were 65 and 81.

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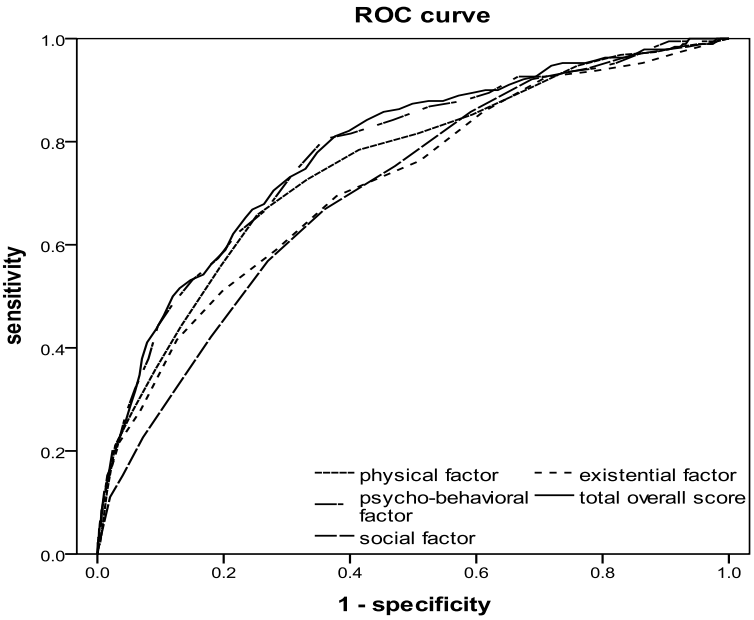
Figure 1: ROC curve of CHCW domain of overall and its four subscales predicting depression.



4. Discussion

The CHCW questionnaire has been developed aiming at the measurement of biopsychosocial-existential functioning (Tsuda et al., 2012). Prevention is most important for any disease including stress-related mental and physical health disorders (Honda et al., 2012; Okamura et al., 2011). We therefore focused on detection the comprehensively at-risk or severity of the workers' pre-symptoms of stress-related diseases at the subclinical stage.

The present findings demonstrated that the CHCW questionnaire had good psychometric properties. It can be used as a reliable and valid standardized instrument which is a self-administered scale rating for altered state of prior to the symptoms of mental and physical diseases for workers.

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HOME AS A PERSONAL SPACE AND A SOURCE OF WELL-BEING: HORIZONS OF DESCRIPTION[i]

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Abstract

Home is a part of everyday personal experience, a rarely realized source of personal well-being, self-support, or exhaustion. Constructs of place attachment, place dependence, and place identity (Altman & Low, 1992; Manzo, 2003) are not sufficient to detect all properties of home as a place for living. More purposeful constructs seem to be relevant for this task – e.g. such as controllability, potential, self-presentation, historicity etc. Our objective was to analyze the components of personal representation of home in a small pilot study. The participants, 15 adult women, wrote essays answering 9 questions about their homes, their ideas of home and possibilities of mutual alterations between home and the owner. The content-analysis of 328 units by 2 judges was conducted. The results allow supposing at least three horizons of home representation existing at the same time. 1 – Universal image of a home: safety and security; family and close relationships; space attachment and psychological rehabilitation; self-expression, self-presentation. 2 – Personal image of home: individual ideas toward comfort and aesthetics; development, self-regulation, and relationships regulation among home inhabitants. 3 – Desired home image: interaction of the objective criteria and subjective representations of comfort. From the clinical and psychotherapeutic perspective home studies allow to develop the tools for improvement of a house as a personal, valued, and safe space that may be used among the inhabitants for psychological resource renewal and risk prevention.

Keywords: *home, identity, well-being, personal space.*

1. Introduction

Home as a psychological construct starts existing when a person endues this place with subjective meaning. The home studies within environmental psychology predominantly suggest different ways of conceptualization of the relationships between a person and a place, e.g. home. Such constructs as place attachment (Altman & Low, 1992; Reznichenko, 2013), place dependence, place identity (Manzo, 2003), sense of place and sense of home (Rose, 1995), topophilia (Tuan, 2001), rootedness (Easthope, 2004) describe different aspects of personality's emotional bond with a place. Casey speaks about 'thick places' and 'thinned-out places'. Thick places are close to the rootedness, they provide sense 'at home' in an unselfconscious way; thinned-out places make people think consciously about the meaning of a place and develop a sense of place through different activities (Casey, 2001). Tuan writes about two life poles - of cosmos and of hearth. The hearth is local, cozy, familiar and nurturing, it reminds of personal and family history. The cosmos is large, abstract and impersonal; it may be comprehended only through mediated experience (Tuan, 2001:319). In Russia environment is studied in terms of friendliness, utility, educational usefulness etc. (Nartova-Bochaver, 2003; Nartova-Bochaver, 2005; Dmitrieva, Nartova-Bochaver, & Resnichenko, 2014; Dmitrieva & Nartova-Bochaver, 2014). But there is a lack of knowledge about immediate personal experiences of home. This project aims to find out the components of subjective conceptualization of home as everyday experience based on respondents' personal conscious opinions about it.

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2. Objectives

The objective of this pilot project was to investigate the components that compose personal conceptualization of home, and to find out the main psychological needs that are behind this conceptualization.

3. Methods

Respondents answered 9 questions focused on their conceptualization of the meaning of home and its necessary components, on interchanges between home space and its inhabitants, on the possibility of using home as a tool for self-modification and self-development, on psychological changes caused by homelessness, and on characteristics and comparisons of their personal home.

15 adult women wrote short essays answering these questions. After data collecting 2 judges classified the answers using content-analysis. 328 units of analysis were processed.

4. Results

The results of this pilot research show the different constellations of descriptions consolidated around certain questions and reflect different personal needs. The first and mostly unified constellation was found during analyzing the descriptions of respondents' home. It includes only positive and very similar definitions (e.g. *reliable* mentioned by all respondents, *warm* – by 11, etc.), and we can suggest the existence of a 'horizon of description' that reflects the basic needs for safety, attachment, family and history maintaining, and self-expression and probably indicates an 'archetypical' image of home that is universal for all respondents. The second 'horizon' is found in the discussion of the home value and meaning, personal demands to the home space, and psychological losses due to the homelessness. These are more mediated personal preferences and values (e.g. *dog, flowers, book-case* may be marked sometimes as indicators of a 'real home'). Certain mentioned elements reflect needs for comfort, close relationships maintaining, leisure, and privacy. Objective world full of things and stories becomes a psychological tool that may be used for changing relationships, self-regulation, skills development etc. Suppositional changes within homelessness reported by the respondents include different losses - of social relationships, of self-confidence, of part of self, and changes in values, and these processes make a person more vulnerable to different risks which corresponds with studies of homeless people (Kovalenko, 2013) and underline psychological importance of home existence. The 'phenotypes' of considered homes differ, but personal needs and meanings found here are similar. The third horizon seems to be the most conscious area, discussing the place that could become home: but it contains criteria of *location*, *designing*, *financial availability* and reflects predominantly a need of comfort, without underlining the deepest needs for safety or reliability. Probably this horizon of conceptualization underlines actual unsatisfied needs that are understood as the most important and form the 'framework' of a home.

5. Conclusion

The results allow to suggest at least three horizons of the home representation existing at the same time.

1 – Universal image of home: it consists of four main functions responsible for the key needs: for providing safety and security; space for family and close relationships maintaining; space attachment and psychological rehabilitation; self-expression and self-presentation. This image is generalized and 'over-experienced', it is represented among different people and doesn't depend on biography, going up to the common nest sense. It may work as a universal psychotherapeutic resource, especially in case of homelessness or being away from home.

2 – Personal image of home: the opportunities for space modifications and provided home stimuli using play an important role in it – they provide pursuit of self-regulation, self-expression, self-development, and regulation of relationships with others. This image is a real plastic resource of self-support that however could be realized and used to different extents.

3 – Desired home image: it is a hypothetical image that, on the one hand, is defined through objective characteristics of outside environment, and, on the other hand, is mostly far from universal image of a home and is described in terms of individual preferences, ideas towards comfort, and personal tasks. Here the stable under-satisfied needs that are understood as the most important are accented.

Existence of universal, archetypical image of a home in combination with acknowledging the variety of psychologically important influences between home and its inhabitants make further studying

of psychotherapeutic potential of a home space very perspective. Probably these horizons and constellations of actual constructs are changing during growing up, depend on biographical events or individual differences, because there are different kinds of resources behind them – universal, situational, compensatory, that help a person cope with the failures of rootedness and other problems. Anyway our results confirm the prospectivity of home psychology as a direction, consolidating personology, environmental psychology, clinical psychology, and psychological practice.

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THE MENTAL HEALTH STATE OF JAPANESE PARENTS DURING LIVING ABROAD: THE CASE OF NAIROBI JAPANESE SCHOOL

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Abstract

As the number of Japanese living abroad is increasing, mental health care for them has been becoming a very important concern. Different public services, cultural and legal requirements, and food items will impose challenges to the health and stability of the family, and it affects the state of their mental health. Especially to the family with a school-age child, education for the child is one of the biggest concerns because it is difficult to ensure the consistent education system or environment for them. Since Japan has peculiar language and culture, they have founded primary/secondary schools outside of Japan for expat Japanese children. The Japanese schools offering Japanese curriculum not only keep children's academic level, but also help their cultural transition. Moreover, the schools often have a role as a community for any Japanese residents in that country so that they can help each other. However, they are still exposed to new cultural environment and life-style. In our project, the authors are developing psychological support system for the Japanese schools. As the first step, we are collaborating with the Nairobi Japanese School and providing a series of support programs on site. In the program, we conducted brief questionnaire surveys in order to explore the needs of the Nairobi Japanese School. 33 Japanese adults living in Nairobi participated. The result found that they showed different type of stress comparing to that of Japanese living in Japan, and that it might derive from living in Nairobi.

Keywords: *Japanese, expat, mental health, Japanese school.*

1. Introduction

Since 1950's, the number of Japanese family living overseas has been consistently increasing and their mental health is one of the primary concerns. The population of children at the age of compulsory education, that is, at the level of primary or secondary school, had reached 71 thousand in 2014. The Japanese government, Japanese private firms, or other relevant organizations have founded schools in those foreign countries to confirm their educational levels for Japanese children. The Japanese schools are full-day primary or secondary schools offering Japanese standard curriculums.

It was found collaterally that those schools have another important role: they provide mental support to the Japanese residents in the area. Normally, moving to a new culture has detrimental impacts on one's mental health (Galiguri et al., 1998, Haslberger & Brewstwe, 2008). The cultural adjustment is challenging especially for expat youths who are trying to learn a new language whilst simultaneously dealing with their developmental issues. Moreover, it is difficult for them to establish a peer group in a foreign school, which may support them during the period of stress (Yeh, 2003). The Japanese school provides tranquil transition to the children, and reduces their stress. Also, it leads to alleviate the parents' concern about their child's school life in overseas. Moreover, the Japanese schools are often open to other Japanese residents in the countries like community centres. The residents can exchange information or materials, help and encourage each other.

On the other hand, the teachers of Japanese Schools are in stressful situations. Normally, Japanese School teachers are dispatched from Japan by the government and the dispatch period is 2 or 3 years. They thus have to deal with the pupil's needs and, at the same time, their own adjustments to the new environment. Besides, since the school is distant and isolated from Japan, it is hard for them to access the resources such as information, an opportunity of professional development, other specialized social institution, and so on.

Therefore, it is fair to say that supporting the Japanese School means not only helping to keep the children's education level, but also increasing emotional well-being of the children, parents, teachers,

and even other Japanese residents in that community. The authors started the Nairobi Japanese School Project on 2013 to explore how to help a Japanese School and to develop a support system prototype. As a first step, we focused on the stress and worry of Japanese adults. The questionnaires surveys were carried out in order to clarify their psychological needs. Since Japanese school has a role as a community for Japanese residents, the candidates were any Japanese adults in Nairobi.

2. Methodology

2.1. Over View of the Project

Let alone distant online consultations, we, Japanese clinical psychologists have annual visit and stay in the Nairobi Japanese School for a week. It aims to understand the actual circumstances and needs of the school, and to provide practical and effective support for the children, parents, and teachers. At the same time, the face-to-face support is expected to facilitate secure feeling of the recipients and build rapport. Our first visit was October in 2014. Specifically, we had 1) individual consultations with the teachers or parents on demands, 2) observations of the children to assess their needs, and 3) a psycho-education seminar to the adults.

2.2. Participants of Questionnaire Surveys

In the psycho-educational seminar we offered, we conducted brief questionnaire surveys to those who were present. 38 adults attended the seminar and 33 (males=9, female=24, Mean age=44.9 years old, Mean length of stay in Kenya=49.0 months) answered the questionnaires. 21 of them were parents of the pupils.

2.3. Tools

To measure their symptoms of stress, Public Health Research Foundation Stress Check List (PHRF-SCL) Short Form, which had been standardized in Japan (Imazu et al., 2005), was used. It is an easily administered self-report rating scale consisting of 24 items which are responded to on 3-point Likert scale (1=hardly ever, 2=sometimes, 3=often). They are divided into 4 domains of stress reactions; anxiety/uncertainty (6 items), tiredness/physical responses (6 items), autonomic symptoms (6 items), and depression/feeling of insufficiency (6 items). We also asked the participants to complete another questionnaire about their current concern and worry relevant to living abroad to explore the source of the stress. This questionnaire asked about 9 worry topics which are often claimed by Japanese expatriate; language differences, food differences, public security, medical service, lack of materials, child's re-adaptation in Japan on returning, family in Japan, and their own carrier. In each topics, it was asked how much they were worried, and they responded on a four point scales (1 ="Not worry at all", 2="Not very worry", 3="Fairly worry", 4="Very worry"). Each topic also has an open ended question about any changes after coming to Nairobi in order to capture the features of their worry.

3. Results

3.1. Stress Symptoms (PHRF-SCL)

To compare their stress level with Japanese standard scores, one sample t-tests were carried out on each subscales. The mean scores and standard scores are shown in Table1. It was found that Anxiety score of Nairobi was significantly higher than Japanese standard ($t(31)=2.74$, $P<0.01$), whilst Autonomic Symptoms score was significantly lower than Japanese standard ($t(31)=-3.92$, $P<0.001$).

Table1. Score of PHRF-SCL.

	Mean Scores (SD)	Japanese Standard Score
Anxiety	4.16 (2.20)	3.09
Physical Responses	5.52 (3.09)	4.68
Autonomic symptom	1.22 (1.33)	2.14
Depression	4.16 (2.03)	3.63

3.2. Current Concern and Worry

In the 9 topics, majority of the participants concerned Public Security and Child's Re-adaptation to Japan. 70% of the participants rated "Very worry" or "Worry" for Public Security. For Child's Re-

adaptation, 59% rated “Very worry” or “Worry”, and 29% did not answer because they had no school age child. It was shown that majority did not worry about other topics, and they rated “Not Worry at all” or “Not very worry”.

3.3. Associations between Current Concerns and Stress Symptoms

The relationships between their current concerns and stress symptoms were evaluated by calculation of Spearman's correlation coefficient. There were significant correlations between Security Concern and Anxiety, Physical Responses, Autonomic symptom, and Total Score of Stress symptoms. Food Difference correlated with Physical Responses and Total Score. Lack of Material correlated with Physical Responses, Autonomic symptom, and Total Score. Medical service associated with Autonomic Symptoms and Total Score. Personal Relationships correlated with Depression and Total Score.

4. Discussion

Japanese adults living in Nairobi tended to have more anxiety comparing to those in Japan. However, interestingly, they showed less autonomic symptoms. Although chronic real-life stress associates to impaired autonomic regulation, it is a combination of neurological dysfunctions, cognitive appraisal and general state of health (Lucini et al., 2005). Many of the participants reported their life-style had been better-regulated and became free from hectic schedule since they moved to Nairobi. Moreover, even those who expressed their concerns about inconvenience and feeling of security stated that they felt easy in the pastoral environment and nature of Nairobi. Those facts might help reducing their autonomic symptoms.

Regarding their worry topics, the biggest concerns is the public security. Obviously, their life can be easily threatened because Nairobi has a much higher crime rate than Japan and is in dangers posed by terrorism. To cope with this problem, they exchange security information each other in the community and develop their self-protection system and skills. The second concern was about their child’s future re-adaptation to Japan. Since Nairobi Japanese School is very small, the school can provide enough supervision to the children and studying in a small class is beneficial. Thus, the parents were worrying if their child would be able to adjust to bigger school in Japan without troubles. It is possible that lack of enough information and specialty consulting services are increasing the worry.

Nonetheless, their current concerns did not always relate with their stress symptoms. Although most of the parents had worry about their child’s re-adaptation to Japan, it had no correlation with their stress symptoms. It may be partly because it was an anticipate trouble and they were not facing at the situation right now. In returning to Japan, their stress level may increase for it. On the other hand, it is understandable that concern about security issues had the strongest relationships with their stress symptoms because security of life is human’s most basic needs. Moreover, although most of the participants did not worry about food differences and about lack of materials, these concerns seemed to relate with somatic symptoms. It is assumed that daily physical inconvenience and dissatisfaction may be less-conscious, but they could pile up and lead to somatic symptoms.

It is hardly possible for us to address their concerns such as security and lack of things directly. However, we can help them to cope with the stress by providing psycho-educations and consultations. Through above surveys, we could roughly capture their psychological needs and state of their mind. With those information, we would think of efficient support for them.

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DESCRIPTIVE NORMATIVE BELIEFS, PROTOTYPES AND GENDER IN ALCOHOL USE AMONG SLOVAK UNIVERSITY STUDENTS[i]

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Abstract

Studies exploring alcohol use (AU) among university students have shown that there is an association between a higher level of descriptive normative beliefs (DNB), a negative abstainer prototype, a positive social drinker prototype and AU in general (mainly frequency of AU). However, there has been a lack of studies with a comprehensive analysis of the relationships between DNB, drinkers' prototypes and different domains of AU. Objective: To explore the association between DNB, drinker prototypes and different domains of AU among Slovak university students. The data collection was conducted online and consisted of 184 university students (54.9%females;M=21.3;SD=1.77). An online questionnaire measuring: gender, AU (AUDIT), items regarding DNB (both assessed with 3 subscales–hazardous AU, dependence symptoms, harmful AU); items measuring 3 drinker prototypes (an abstainer, a social and a heavy drinker). Linear regressions were used for the data analysis. Linear models explained 29.7%, 11.0%, 13.6% of the variance in hazardous AU, dependence symptoms and harmful AU, respectively. It was found that higher DNB and a more negative perception of an abstainer prototype were associated with a higher score in all domains of AU. Moreover, a more positive perception of a social drinker prototype was associated with more hazardous AU and more dependence symptoms. Finally, it was found that being male was associated only with more hazardous AU. The research findings have extended the previous research in relation to different domains of AU. The results emphasize the importance of DNB, the concept of prototype drinkers and generally the implementation of social impact in prevention.

Keywords: *descriptive normative beliefs, prototypes, alcohol use, Slovak university students.*

1. Introduction

Alcohol use has a high prevalence among university students which has been also supported by exploration of other factors related to alcohol use (Stone et al., 2012; Menagi et al., 2008). The important factors of alcohol use are descriptive normative beliefs (Berkowitz, 2004) and drinker prototypes (Zimmermann & Sieverding, 2010). In relation to alcohol use, descriptive normative beliefs represent an individual's perception of the prevalence of others´ alcohol use (Dams-O´Connor, 2007) and drinker prototypes are defined as social constructs of these drinkers (Teunissen et al., 2012). Studies exploring alcohol use among university students have shown that there is an association between a higher level of descriptive normative beliefs, a negative abstainer prototype, a positive social drinker prototype and alcohol use in general (mainly frequency of alcohol use) (Lewis & Paladino, 2008; Stone et al, 2012; Zimmermann & Sieverding, 2010; Teunissen et al., 2012). However, there has been a lack of studies with a comprehensive analysis of the relationships between descriptive normative beliefs, different drinkers' prototypes and different domains of alcohol use.

2. Objective

To explore the association between descriptive normative beliefs, drinker prototypes (an abstainer, a social and a heavy drinker) and different domains of alcohol use (hazardous alcohol use, dependence symptoms, and harmful alcohol use) among Slovak university students.

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3. Methods

3.1. Sample

The data collection was conducted online and consisted of 184 university students (54.9% females; M=21.3; SD=1.77) from three Slovak universities (35.3% PJ Safarik University in Kosice; 15.8% the Technical university in Kosice; 48.9% Comenius University in Bratislava). The selection of the study sample was based on a snowball technique. The participating respondents were selected according to their availability and were asked to spread the online questionnaire amongst their friends and classmates at their university.

3.2. Measures

An online questionnaire measuring:

(1) gender – male (0) or female (1);

(2) alcohol use measured by AUDIT (The Alcohol Use Disorders Identification Test; Babor et al., 2001), a 10-item alcohol screening test. AUDIT consists of three questions on hazardous alcohol use, three questions on dependence symptoms and four questions on harmful alcohol use. Items 1-8 use a 5-point scale, while items 9-10 use a 3-point scale. Three sub-scores were used in the data analyses. A higher score represented a higher level of measured indicators of alcohol use. Cronbach´s alpha was: 0.71 for hazardous alcohol use, 0.64 for dependence symptoms, 0.62 for harmful alcohol use;

(3) items regarding descriptive normative beliefs were measured by creating items consistently with items of AUDIT. The items asked about the typical student's alcohol use, e.g. 'How often do you think a typical student at [university]… has a drink containing alcohol?' These items were answered on the same scale as in AUDIT. The results were three subscales – descriptive normative beliefs about a typical student's hazardous alcohol use, dependence symptoms and harmful alcohol use. A higher value represented a student's descriptive normative beliefs about a higher level of a typical student' alcohol use. Cronbach´s alpha was: 0.61 for hazardous alcohol use, 0.72 for dependence symptoms, 0.63 for harmful alcohol use;

(4) items measuring three drinker prototypes (an abstainer, a social and a heavy drinker) consisted of the question: "How would you characterize an abstainer / social drinker / heavy drinker as…" following by the 12 adjectives (Teunissen et al., 2012; Zimmermann & Sieverding, 2010). Participants rated the adjectives for each drinker prototype on a 7-point scale from "not at all" to "very". The negative adjectives were reversed. The total score for each drinker prototype was used for statistical analysis. A higher score represented more positive perceptions of a given drinker prototype. Cronbach´s alpha was: 0.82 for abstainer, 0.82 for social drinker and 0.81 for heavy drinker.

3.3. Statistical analyses

Linear regressions in SPSS 21.0 were used for the data analysis.

4. Results

The results are described according to individual domains of alcohol use. The linear model explaining hazardous alcohol use was significant ($\chi2 = 288.05$; df = 5; $p < 0.001$) and explained 29.7% of the variance in hazardous alcohol use. It was found (Table 1) that being male, higher descriptive normative beliefs, a more negative perception of an abstainer prototype, and a more positive perception of a social drinker prototype were associated with more hazardous alcohol use.

The linear model explaining dependence symptoms was significant ($\chi2 = 49.88$; df = 5; $p < 0.001$) and explained 11.0% of the variance in dependence symptoms. It was found (Table 1) that higher descriptive normative beliefs, a more negative perception of an abstainer prototype, and a more positive perception of a social drinker prototype were associated with more dependence symptoms.

The linear model explaining harmful alcohol use was significant ($\chi2 = 214.48$; df = 5; $p < 0.001$) and explained 13.6% of the variance in harmful alcohol use. It was found (Table 1) that higher descriptive normative beliefs, a more negative perception of an abstainer prototype were associated with more harmful alcohol use.

Table 1.The association between descriptive normative beliefs,drinker prototypes and different domains of alcohol use.

	hazardous alcohol use			dependence symptoms			harmful alcohol use		
	β	t	P	β	t	p	β	t	p
gender	-0.31	-4.72	**<0.001**	-0.09	-1.22	.220	-0.10	-1.44	0.150
descriptive normative beliefs	0.28	4.39	**<0.001**	0.19	2.66	**0.009**	0.22	3.07	**0.002**
abstainer prototype	-0.24	-3.26	**0.001**	-0.21	-2.52	**0.013**	-0.20	-2.34	**0.020**
social drinker prototype	0.16	2.28	**0.024**	0.18	2.33	**0.021**	0.13	1.66	0.100
heavy drinker prototype	0.02	0.52	0.610	0.02	0.21	0.840	0.06	0.75	0.456

In summary, it was found that higher descriptive normative beliefs and a more negative perception of an abstainer prototype were associated with a higher score in all domains of alcohol use. Moreover, a more positive perception of a social drinker prototype was associated with more hazardous alcohol use and more dependence symptoms. Finally, it was found that being male was associated only with more hazardous alcohol use.

5. Discussion

The research findings are consistent with other studies which confirm an association between higher descriptive normative beliefs and higher alcohol use (Berkowitz, 2004; Lewis, 2008; Stone, 2012) as well as an association between a more positive drinker prototype and higher alcohol use (Zimmermann, Sieverding, 2010; Teunissen et al., 2012). However, the study has extended these findings in relation to different domains of alcohol use – hazardous alcohol use, dependence symptoms, and harmful alcohol use. The study has also distinguished between three types of drinker prototypes – an abstainer, a social and a heavy drinker prototype, which is a further extension of existing knowledge. In addition, it was found that being male was associated only with more hazardous alcohol use.

6. Conclusions

The research findings have extended the previous research in relation to different domains of alcohol use. The results emphasize the importance of descriptive normative beliefs, the concept of prototype drinkers (an abstainer, a social and a heavy drinker) and generally the implementation of social impact in prevention.

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STABILITY OF COGNITIVE AND ADAPTIVE FUNCTIONING AT 18 MONTHS, 3 YEARS AND 5 YEARS OF AGE IN PREMATURE INFANTS

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Abstract

The Early Steps Program is a long-term multidisciplinary follow-up program for premature infants. One goal was to evaluate if motor, communication and/or overall adaptive functioning measures correlated with prematurity levels or cognition. A total of 59 children have participated in the program so far with 24 toddlers (17-26 months of age), 19 young children (32-44 months of age) and 16 older children (57-72 months of age). The mean gestational age of the children was 28.6 weeks with a birth weight of 1171 grams. All children were administered the Bayley-III at 18 months and the WPPSI-III/IV at 5 years of age. Parents were interviewed using the Vineland Adaptive Behaviour Scales, 2nd Edition at all age points. Correlational analysis revealed that cognitive scores at 18 months and 5 years of age differed significantly (r = -.190) and were not correlated with birth weight (r = -.008). However, cognitive scores were significantly correlated with overall adaptive functioning as measured by the Vineland at all age groups (r = .752), with the Communication subscale showing the strongest correlation (r = .796). The Motor Skills subscale was not a reliable predictor of cognitive functioning (r = .266) due to the high number of children with cerebral palsy. One important implication of the current findings is that medical professionals need to put an increased emphasis on parental reports of adaptive development when evaluating premature infants. Specific attention should be given to providing more information on the impact of quality of life for these children.

Keywords: *premature infants, adaptive functioning, cognitive functioning, vineland, Bayley-III.*

1. Introduction

The Child Development Unit, at the National University Hospital, Singapore, implemented the Early Steps Program (ESP) in 2010 to meet the needs of premature infants. Medical advances and prenatal education in the country resulted in an exponential level of growth in the survival of infants born prematurely and/or with very low birth weights. The ESP provides a holistic, multi-disciplinary follow-up for toddlers and children who are at-risk of developmental and learning problems due to premature birth. It aims to provide screening and surveillance of developmental issues in these children starting from 18 months - after they have been released from the care of neonatology. Because the program is catering to the needs of a special group of patients, it aims to provide a systematic follow-up process that is much more detailed and comprehensive than the routine health checks a child typically receives as part of his or her growth and vaccination visits. In the ESP, the child undergoes a neurodevelopmental assessment by paediatricians specialising in developmental, behavioural and learning issues and psychologists trained in assessments and premature infants. The assessment regularly includes the Vineland Adaptive Behaviour Survey (Sparrow, Balla, Cicchetti, 1984) and Bayley Scales of Infant Development (BSID) (Bayley, 2006), and when the child reaches kindergarten age (5 years of age), the Wechsler Preschool and Primary Scale of Intelligence is given (WPPSI-III/WPPSI-IV, Wechsler; 2002, 2012). Speech therapists, occupational therapists and nurses are also involved at different times, with the goal of offering intervention support to those deemed at-risk.

Due to the variable and often significant level of need in the premature/low birth weight infants, it would be ideal if the neurodevelopmental assessment could predict later cognitive functioning, and hence, guide intervention needs. Unfortunately, previous research has found inconsistent or poor predictive power of the use of the Bayley Scales of Infant Development in this population (Hack, Taylor, Drotar, Schluchter, Carter, Wilson-Costello, Klein, Friedman, Mercuri-Minich, & Morrow, 2005) (Bode, D'Eugenio, Mettelman, & Gross, 2014).

With the high increase of premature infants presenting at the hospital for follow up and the importance for timely and focused intervention support, the need for accurate information on the preemies level of functioning is paramount. Thus, the Early Steps Program aims to have follow up at three critical time points before decisions for primary school need to be made in Singapore. The children are seen at 18 months by the developmental paediatrician, psychologist and a dual session with the speech and occupational therapists. If the assessments indicate a developmental need, the child is given intervention support. At 3 years of age, the child is seen by the developmental paediatrician and psychologist to help monitor medical, social and adaptive functioning. The five-year old visit aims to start preparation for whether the child will enter a mainstream primary or a special education school and thus a more thorough medical and psychological assessment is done. It is important to note that the ethos of the Early Steps Program is that the child's parent is a passionate expert on his or her own child. To this end, the parent is given an interview with the Vineland Adaptive Behaviour Scale at each visit. This information is deemed valuable and accurate by the team and helps the professionals understand the child and the family's concerns better.

2. Objectives

To evaluate if motor, communication and/or overall adaptive functioning measures correlated with prematurity levels or cognition. The results will help guide intervention support and inform appropriate educational decisions for the children in the Early Steps Program.

3. Methods

A total of 59 children participated in the ESP program with 24 toddlers (17-26 months of age), 19 young children (32-44 months of age) and 16 older children (57-72 months of age). The mean gestational age of the children was 28.6 weeks with a birth weight of 1171 grams. All children were administered the Bayley Scales of Infant Development (BSID) at 18 months and the WPPSI-III/IV at 5 years of age. Parents were also interviewed using the Vineland Adaptive Behaviour Scales, 2nd Edition (VABS-II) at all three age points. Correlational and regression analyses were applied to evaluate the data.

4. Results

In our cross-sectional study, correlational analyses revealed that cognitive scores at 18 months and 5 years of age differed significantly (r = -.190) and were not correlated with birth weight (r = -.008). This suggested that early cognition was not associated with later cognition, and that birth weight is unlikely to be a strong determinant of cognitive development trajectory. On the other hand, cognitive scores were significantly correlated with overall adaptive functioning as measured by the VABS-II for the whole sample (r = .752), with the Communication subscale showing the strongest correlation (r = .796). This finding is important as it points to the high level of integrity of information provided by parents, thus giving us accurate understanding of a child's functioning. The Motor Skills subscale was not significantly correlated to cognitive functioning (r = .266), possibly due to the relatively high number of children (N = 5) with cerebral palsy in the study.

5. Discussion & Conclusion

To our knowldedge, this study is the first in Singapore to report on the use of cognitive and adaptive measures as a long term follow up of premature infants in this community. In order for the Early Steps Program to better plan and support these children, we needed a reliable way to determine pressing needs, in a timely manner. Our results indicate that the birth weight of the child is not correlated with cognitive outcomes, which is contrary to some other studies in different parts of the world (for example, Woodward, Moor, Hood, Champion, Foster-Cohen, Inder, & Austin, 2009). Interestingly, the stability in cognitive outcomes between our 18 month and 5 year old cohorts is also poor. This may suggest that the demands of the different tests may change over time. For example, while the Bayley relies on play and simple commands or copying, the Weschler gives longer instructions and requires the child to use language to describe concepts and ideas. Our study compliments this idea, as our strongest predictor of functioning at all ages was the Communication domain of the VABS-II. Thus, when tailoring our intervention supports for the premature infants, the access to regular speech therapy and early intervention services is paramount. Supporting the premature infants in developing receptive and expressive communication skills may be a protective factor for later developmental outcomes and positively impact the quality of life for these children.

Another important implication of the current findings is that medical professionals need to put an increased emphasis on parental reports of adaptive development when evaluating premature infants. (Goldstein, O'Shea, Klinepeter, Maize, Klein, & Jones, 1997). The parents in our sample were able to give accurate information about their children and this informaiton was echoed on the cognitive tests. Thus, the routine use of the interview with parents may not only give medical professionals valuable information about the children, it will also encourage rapport and inclusion of the family in decision making and support.

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THE MENTAL HEALTH OF SUBSTANCE ABUSERS AND THEIR FAMILY MEMBERS IN HONG KONG

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Abstract

Introduction. Substance abuse has long been a concern in Hong Kong. According to the Hong Kong Monthly Digest of Statistics, there were about 11000 substance abusers reported to the Central Registry of Drug Abuse in Hong Kong (Census and Statistics Department, 2013). Throughout the years, research has showed numerous factors contributing to substance abuse and many supported an association between mental health problems and substance use (e.g., Kilpatrick et al, 2000; Swendsen et al., 2010). Also, it has been indicated that family members of people with mental health problems often experience psychological problems such as depression and anxiety (e.g., Idstad, Ask, & Tambs, 2010; Shah, Wadoo, & Latoo, 2010). Apparently, substance abuse and mental health problems are closely related, not only for substance abusers but likely, also their family members. However, research of Hong Kong lacks emphases on their relationships, especially on how substance abusers and their family members may affect each other's mental health regarding the problem of substance use. Furthermore, as Chinese culture highlights the importance of collectivism and family closeness, many people in Hong Kong live with their family and maintain an intimate family relationship (Chua, Morris, & Ingram, 2009). It is common for Chinese family to have a meshing of interdependent roles (Tate, 2013). Family members usually mutually depend on one another and their emotions are often closely tied. As a result, it is believed that the effects of substance abuse on a Chinese family may be even more significant. However, there has been a lack of research clearly showing how substance abuse could affect the family dynamics in Hong Kong. *Objectives.* The present study assessed the mental health, quality of life and knowledge of substance abuse of the substance abusers and their family members in Hong Kong. Also, how the two populations might interact and affect each other's mental health was examined. It was hoped that the present study would provide insights into the effective interventions for substance abuse in Hong Kong family in order to help both substance abusers and their family members to better overcome the problem as well as maintain a healthy mental status. *Methods.* Questionnaires assessing emotion status and quality of life as well as history and knowledge of substance abuse were completed by 95 substance abusers and 45 family members recruited from five service centers for substance abuse in Hong Kong. Moreover, individual interviews focusing on how substance abuse might affect the mental health within a family were conducted with 7 substance abusers and 7 family members at the Cheer Lutheran Center in Hong Kong. Statistical tests and grounded theory were used for data analyses. *Results.* Results from the quantitative data showed that both populations demonstrated mild to moderate depression, anxiety and stress and their scores of quality of life, especially psychological health and social relationships, were below average. Also, it was found that the two populations in general misunderstood the definition of substance abuse and the process of substance abstinence. Meanwhile, results from the qualitative data indicated that there was a disconnection between the substance abusers and their family members. While family members tended to complained that their emotions had been greatly affected by the substance abusers, substance abusers denied that their problems affected much on their family. As the two populations held opposite views, they often misinterpreted each other's behaviors and emotions. Consequently, conflicts occurred and disconnection resulted. Moreover, it was found that substance abusers tended to overlook the complicated process of substance abstinence and hold high confidence on their ability of achieving abstinence. As they had experienced repeated failures while trying to abstain from substances, their emotions were greatly affected. However, they often ignored their negative emotions but became ambivalence about their ability and even their own self. *Conclusions.* Research results showed that substance abusers and their family members often demonstrate negative emotions and psychological distress. Thus, individual psychotherapy focusing on enhancing their emotions and psychological strengths would be helpful. Besides, as many substance abusers and their family members do not understand the symptoms of substance abuse as well as the process of substance abstinence, it is common for them to hold unrealistic expectations on how the problem could be solved. Eventually, they often suffer from great disappointments and frustrations. Therefore, psychoeducation on substance abuse for

both populations should be provided in addition to treatments and psychological interventions. Moreover, it was indicated that there are disconnections between substance abusers and their family members as well as self ambivalence of substance abusers. Reconciliation of these disconnections and ambivalence should be addressed in psychological interventions as well.

Keywords: *substance abuse, abusers, family members, mental health.*

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EARLY SOCIAL COMMUNICATION AND PLAY: THE EFFECT ON ADAPTIVE AND COGNITIVE FUNCTIONING IN AUTISTIC CHILDREN

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Abstract

In Singapore, early detection of Autism Spectrum Disorder (ASD) has enabled early intervention programs to reach children prior to three years of age. There is a need to investigate predictors of adaptive and cognitive outcomes to better tailor intervention programs for these children. As a pilot study, early autism severity indicators such as play skills, social communication skills, and length of exposure to early intervention, were investigated as possible predictors of outcomes. A total of 37 children with ASD (30 boys and 7 girls) were assessed at two age points. The Autism Diagnostic Observation Schedule (ADOS) and Children's Autism Rating Scale – Second Edition (CARS2) were administered at a mean age of 33.8 months for diagnostic assessment. Subsequently, all children underwent a cognitive assessment at a mean age of 67.6 months. Pre- and post-evaluation of adaptive functioning were performed at both age points, using the Vineland Adaptive Behavior Scales – Second Edition (VABS-II). Regression analysis revealed that 1) social communication skills, 2) play skills, and 3) restricted repetitive behaviors significantly predicted adaptive functioning outcomes. Cognitive ability was also found to be significantly associated with adaptive outcomes. Together, these factors explained a significant proportion of variance in the Vineland scores, $R^2 = .86$, $F(7, 15) = 13.51$, $p < .001$. In addition, pre-evaluation adaptive functioning, early social communication and play skills significantly predicted later cognition, $R^2 = .77$, $F(8, 14) = 5.81$, $p = .002$. In our study, length of exposure to early intervention did not affect adaptive and cognitive functioning outcomes.

Keywords: *autism spectrum disorder, play skills, social communicative skills, cognitive functioning, adaptive functioning.*

1. Introduction

Young preschool children with autism spectrum disorders (ASD) experience a variety of interconnected difficulties in the early development of language, social communicative skills, and social imitative play skills. In addition to deficits in communication and socialization, children with ASD often demonstrate poorer adaptive skills than developmentally typical children of similar age (Klin, Saulnier, Sparrow, Cicchetti, & Volkmar, 2007).

More recently, there is increasing research focus on the *early social and communication skills* of a child with ASD. Tomasello (1995) examined the importance of preverbal communication skills that develop *before* the onset of speech (e.g., joint attention and showing of interest) and two other groups examined the importance of parent training. These studies found that when intervention targeted primarily joint attention skills *with* a parent-mediated component, children showed significant gains in social communication skills but less prominently in language skills (Green et al., 2010; Carter et al., 2011). In another randomized controlled study, children who underwent targeted play intervention improved not only in joint attention skills but also demonstrated improvements in spoken language one year later (Kasari, Paparella, Freeman & Jahromi, 2008).

In another study by Kasari, Gulsrud, Freeman, Paparella, and Hellemann (2012), children who showed more functional play at baseline were found to be more likely to develop functional language. Specifically, children who demonstrated simple combination play at age 3-4 years developed better functional language and also obtained better cognitive scores.. Together, these findings highlighted the important benefits of focusing on early social and communication skills in intervention programs for young children with ASD. In this study, we hope to identify which early skills act as the developmental mechanisms that drive overall development of cognition and day-to-day adaptive skills in our specific population.

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2. Methods

A total of 37 children with ASD (30 boys and 7 girls) were assessed at two age points. All children were referred by a developmental pediatrician to the psychologist team for an autism diagnostic assessment. The Autism Diagnostic Observation Schedule (ADOS), Children's Autism Rating Scale – Second Edition (CARS2), and Vineland Adaptive Behavior Scales – Second Edition (VABS-II) were administered to all children at a mean age of 33.8 months (*SD* = 3.8). Subsequently, the children attended early intervention programs with external agencies. At follow-up, all 37 children underwent a cognitive (IQ) assessment, at a mean age of 67.6 months (*SD* = 4.7) to ascertain their levels of cognitive functioning. Parents were again interviewed using the VABS-II for current adaptive functioning.

Algorithm scores from the ADOS were used as early indicators of autism severity. These included the algorithm total scores for Communication, Play, and Restricted, Repetitive, Stereotyped Behaviors. The overall rating score of autism symptom severity on the CARS2 was also included. Length of exposure to early intervention was quantified as the total number of months the child had attended. The outcome variables were the FSIQ scores from the cognitive tests (nonverbal FSIQ was used for children who were nonverbal) and overall Adaptive Behavior Composite (ABC) scores from the VAB-II. Linear regression analyses were performed on these data to identify possible predictors of outcome.

3. Results

3.1. Cognitive outcomes

Algorithm scores on the ADOS for early social communication (p=.002) and play (p=.01) significantly predicted IQ outcomes in children with ASD. In addition, adaptive functioning at pre-evaluation also significantly predicted cognition (p=.03), R^2 = .77, $F(8, 14)$ = 5.81, p = .002. Both Reciprocal Social Interaction (RSI) scores on the ADOS algorithm and the CARS scores, which indicated overall symptom severity of ASD, did not predict later cognitive abilities.

Table 1. Summary of Multiple Regression Analysis for FSIQ Scores (R^2 =.77).

Covariates and Predictors	Beta β	t	p-value
Age at Diagnosis	-.06	-.43	.67
Total Months of Intervention	.31	1.68	.11
ADOS Communication	**.63**	**3.81**	**<.01**
ADOS Reciprocal Social Interaction	.09	.47	.64
ADOS Play	**.47**	**2.99**	**.01**
ADOS RRB	.24	1.28	.22
Vineland ABC pre-evaluation	**.48**	**2.41**	**.03**

3.2. Adaptive Functioning Outcomes

Regression analysis revealed that 1) social communication skills, 2) play skills, and 3) restricted repetitive behaviors (RRB) significantly predicted adaptive functioning outcomes. Specifically, the lower the ADOS score (i.e. impairments) on communication, play, and repetitive behaviors, the better their adaptive outcomes. Cognitive ability was also found to be significantly associated with adaptive outcomes. Together, these factors explained a significant proportion of variance in the Vineland scores, R^2 = .86, $F(7, 15)$ = 13.51, p < .001.

Table 2. Summary of Multiple Regression Analysis for Vineland Scores at Follow-up (R^2 =.86).

Covariates and Predictors	Beta β	t	p-value
Total Months of Intervention	-.08	-.58	.57
ADOS Communication	**-.28**	**-2.48**	**.03**
ADOS Play	**-.30**	**-2.88**	**.01**
ADOS Reciprocal Social Interaction	-.14	-1.09	.29
ADOS RRB	**-.30**	**-2.66**	**.02**
FSIQ	**.47**	**4.17**	**<.01**
CARS Overall Score	-.12	-.97	.35

3.3. Length of intervention

In our study, length (number of months) of attending early intervention did not appear to be associated with adaptive and cognitive functioning outcomes.

4. Discussion & Conclusion

This study provides evidence that early communication skills, play skills, and severity of stereotyped, repetitive behaviors significantly predicted adaptive outcomes. In our sample, early autism severity positively predicted IQ scores. This appeared to indicate that more severe autism symptoms were related to better cognitive outcomes. On closer examination of the patterns of verbal versus nonverbal IQ indexes, this pattern of result is due to the use of FSIQ instead of comparing verbal and nonverbal IQs. Indeed, when IQ is controlled for nonverbal functioning, early communication negatively predicts later verbal IQ outcome, as expected by previous research. This relationship is not well reflected when nonverbal IQ is used, as it tends to overestimate functioning in child with ASD. In addition, regression analysis revealed that 1) social communication skills, 2) play skills, and 3) restricted repetitive behaviors significantly predicted adaptive functioning outcomes in a positive relationship. Furthermore, IQ and adaptive outcomes were better predicted by specific strengths within the ASD profile, rather than by an overall severity index as indicated by the CARS scores. As has been demonstrated in many other studies, IQ tends to be highly correlated with adaptive ability. In this study, both earlier and later adaptive functioning was significantly associated with IQ scores.

Findings highlight the importance of targeting social communication, joint attention, and play skills in therapy. Our results echo the findings of past similar studies - we are seeing the same intrinsic mechanisms and discrete skills emerge in the Singapore sample with regards to adaptive skills development. As developmental screening improves and developmental problems are detected much earlier, children begin to come into therapy at increasingly younger ages (some less than 30 months). At such young ages, children are often nonverbal, and therapists find themselves having to focus more on pre-verbal skills rather than launching into language-specific or behavioural-specific goals. Our findings reiterate the relevance of working on play skills and communication skills first, as most children with ASD lack these skills on the outset. Interestingly, in our study reciprocal social interaction skills did not appear to impact outcomes on either cognitive or adaptive functioning. More needs to be investigated regarding the interplay of these variables in the Asian context.

The current study has a number of limitations including its small sample size and the use of parent report instead of direct observations of adaptive skills. Additionally, the quality of autism-specific interventions was not controlled for. In Singapore, the quality of intervention is currently being standardized. Thus, further studies will be needed to better understand whether the quality of interventions, rather than the length of exposure to intervention, is predictive of outcomes. In future studies, the effects of therapeutic content and inclusion of parent training on intervention outcomes should also be investigated.

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REPENTANCE IN DIALOGUE: THE DEVELOPMENT OF THE CAPACITY FOR CONCERN IN WINNICOTT'S THEORY AND CHRISTIANS METANOIA

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Abstract

This present work intends to be a contribution at the subject of repentance, from a clinical point of view. This subject has been studied mainly by Theology and Philosophy, but little material has been developed within the field of Psychology. Through a dialogue between the way Christian theology understands repentance (as *metanoia*) and the way psychoanalyst Donald Winnicott approaches an important maturational moment in the life of the child - the development of the capacity for concern - this article aims to show how fundamental the experience of repenting can be in human life, both from a psychological and a spiritual point of view. This discussion intends to present repentance as a natural and important event in the life of human beings and will try to convey the idea that it is not only a psychological emotion, but rather an experience that happens through success on an inter-personal relationship level and helps the individual to find and form himself up from his "ontological openness" - an existential posture towards life. Psychology has the tendency to study human phenomena mainly as psychological constructions and to forget an important level of experience, which happens in an ontological perspective. Through the present discussion, we intend to investigate repentance also in its ontological implications.

Keywords: *repentance, concern, metanoia, human development, ontological openness.*

1. Introduction

This study originates from the hypothesis that repentance is a fundamental experience in human maturational process. From our perspective, repentance should not be understood exclusively as a psychological phenomenon, but also as an existential experience that can lead human being towards a new ethical posture, which can be based on a wider openness to the other.

In order to sustain such hypothesis, we will create a dialogue between two distinct fields of knowledge: English psychoanalyst Donald Winnicott's (1945, 1954-5, 1958, 1963) theory of primitive emotional development and Christian theology's understanding of the theme of repentance. Regarding Winnicott's theory (1963), we can postulate an indirect contribution for the subject as the author doesn't use the term "repentance". In Christianity, on the other hand, repentance is a widely formulated phenomenon.

In Winnicott's theory of the development of the capacity for concern, there is an understanding of such process as a maturational moment that describes a passage from the guilt sense to a highly sophisticated way of considering the other. Such perspective can be compared to the concept of *metanoia* found in Christianity, which is a way of approaching the phenomenon of repentance as a transformation of consciousness, a change of mind in which feelings of sorrow related to past faults can be used as a reference point for the sustenance of the individual in a new existential posture characterized by the availability to the otherness.

We believe this dialogue will allow us to access a manner of conceiving repentance not only as a product of psychic dynamics as usually found in psychological approaches[i] (a perspective that attaches a certain degree of negativity to it), but also as an experience that is deeply related to human longing for an authentic meeting with the other and the possibility of becoming pure openness to it.

2. Winnicott's contribution: From the sense of guilt to capacity for concern

[i] We have found a definition of repentance in psychological dictionary which well represents such perspective:
"An emotional response to the memory of a past state, condition or experience, in which the person desires it had been different." (Dicionário de psicologia, Gary Vanden Bos, 2010, Artmed, p. 98. Our translation)

Psychoanalyst and pediatrician Donald Winnicott (1958), differently from Freud's (1907, 1915, 1927) approach towards the sense of guilt - in which this is presented in its defensive and disturbing character - offers a look to this phenomenon in its positive relationship with human emotional development. Regarding the sense of guilt, Winnicott (1958) states:

> *All the time while conceptualizing the process which underline the sense of guilt we are keeping in mind the fact that the sense of guilt, even when unconscious and even when apparently irrational, implies a certain degree of emotional growth, ego health, and hope.* (p.19)

In Winnicott's (1963) view, the human baby starts to access the sense of guilt due to an integration of his own self. Until around the age of six months, according to this author, the child relates with his mother in a dissociated manner. For the child who lives this moment or maturational stage, the relationship with his mother is experienced through two different qualities (or instances) that don't relate between them. The author postulates that from the child's perspective there is one mother that offers environmental care (environment-mother) and another one that receives his instinctual and ruthless drives (object-mother).

As the child-mother relationship is held through time (and this depends on the mother's capacity of surviving the ruthless attacks of the child), the baby becomes capable of integrating these two aspects of motherhood. At this moment the baby can already feel himself as being separated from his mother. The initial moment of fusion begins to give way to a rising discrimination between the "I" and the "other".

The baby then starts to feel that he possesses an interiority and consequently suspects that his mother also does. That new possibility of consciousness (more integrated) helps the baby become aware of the way he has been relating instinctively with his mother. Once the mother is perceived not more in a partial way, rather increasingly more total and integrated, the baby also suspects he must have caused some damage to his mother in the moments of his instinctual relationship with her. This suspicion leads the baby to experience feelings of guilt regarding his previous ruthless attacks. Winnicott (1963) states on the subject:

> *In favourable circumnstances, the mother by continuing to be alive and available is both the mother who receives all the fullness of the baby's id-drives, and also the mother who can be loved as a person and* ***to whom reparation can be made****. In this way, the anxiety about the id-drives and the fantasy of these drives becomes tolerable to the baby, who can then experience guilt, or can hold it in full expectation of an opportunity to make reparation for it.* ***To this guilt that is held but not felt, we give the name 'concern'****.* (p. 82, our bolding)

The opportunity of repairing relieves the baby from an unbearable sense of guilt. To Winnicott it is extremely important that the mother survives the baby's ruthless attacks and doesn't act through retaliation. The holding role that the mother offers for the realization of this process is very important as well. According to him, if the mother does not offer such sustenance, the baby feels the guilt and cannot hold it to a future reparative gesture. In his words "failure of reparation leads to a losing of the capacity for concern, and to its replacement by primitive forms of guilt and anxiety".(1963, p. 82)

Regarding our discussion, Winnicott´s point of view is fundamental, as he helps us to make a distinction between a sense of guilt that is felt as anxiety (and leads to an ego dissociation) and another sense of guilt that leads to an integration of the self, related to the capacity for concern, which is a manner of being available to otherness. The author says that "the word 'concern' is used to cover in a positive way a phenomenon that is covered in a negative way by the word 'guilt'*".* (1963, p.73)

This maturational moment in which the baby can handle ambivalence (in which what is good and what is bad can coexist) has been called by Klein (1937) the "depressive position". Winnicott (1945), however, prefers the concept of ˜Stage of Concern", for two main reasons: firstly because the word depression is referred to a pathological state, which does not coincide with this maturational moment in his perspective. The second reason is because not only the baby relates to ambivalence, but also integrates two different aspects of his mother and develops a new posture towards the other (mother), in which she is more considered in her own existence. At this stage, the baby is capable of being responsible for his own instinctual drives and caring for them. Winnicott (1963) finds here the beginning of the notion of moral value. Through this experience the child can access morality through an inner perspective[ii].

[ii] Winnicott, D.W. *Morals and Education* (1963)

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3. The Christian contribution: From sorrow to *metanoia*

Christianity views the phenomenon of repentance as a very positive experience in the way human beings constitute themselves. It is also seen as an acquisition that only can take place through an intimate relationship with God. In an excerpt of a letter of Paul (2 Cor 7:8-10) the apostle, we can find the confirmation of this:

> *For though I caused you sorrow by my letter, I do not regret it; though I did regret it -for I see that that letter caused you sorrow, though only for a while - I now rejoice, not that you were made sorrowful, but that you were made sorrowful to the point of repentance; for you were made sorrowful according to the will of God, so that you might not suffer loss in anything through us. For the sorrow that is according to the will of God produces a repentance without regret, leading to salvation, but the sorrow of the world produces death...* (King James Version, 2010)

Christianity formulates repentance as a gift of God, who in His infinite Mercy accepts the humble gesture of man through sorrow and contrition and transforms it in a new possibility for man, opening up a possible new posture towards life[iii]. This posture is characterized by a higher level of openness of man.

The struggle experienced in the initial process of repentance gives man the will and the determination to never again express selfishness or to be closed to the otherness. Therefore, it leads to a gain of availability for life and to the other. Horujy (1998) states that this experience must be lived every day, once the individual can break the connection created by the dialogue with God very easily through the choices he makes. He affirms that repentance "cannot be a single and isolated act, that opens to spiritual life; it has to be reproduced without stop and to accompany all the process of the self transformation." (p. 228)

According to Sophrony (1985), it is "the strong momentum of the repentant suffering that leads to the insatiable prayer." (p. 44)

4. Final considerations

It is possible to understand man as a being that from its very beginning is open to existence and to all things (Safra, 2006). That gives man an ontological condition of openness. However, man can develop in its empirical experiences (in his contact with the world) many defenses (or psychological resistances) against others. This possibility creates a situation of tension in man's life. Our hypothesis is that repentance is an experience that can help the individual to become more tuned with his ontological openness, the very condition of human constitution.

We could notice, either through Winnicott or Christian theology's contributions, that repentance can be understood in its psychological dimensions as well in its existential (or ontological) dimensions. We could also see that the transformation of experiencing repentance in its psychological aspect to experiencing it in its existential perspective happens through the human will to live an authentic relationship and the holding of another human being.

This latter aspect leads us to a clinical discussion, concerning the position that the psychologist can adopt in the therapeutic process. We understand that this position must be rooted in human ontological openness and the availability to the other in order to provide conditions to help the patients reach the transformation we exposed here.

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[iii] Horujy (1998) names this event (dialogue) between the human will to find God through contrition and the response of God to it as 'Synergy'.

DEPRESSIVE SYMPTOMS AND SUICIDAL IDEATION AMONG CZECH ADOLESCENTS

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Abstract

The incidence of suicide and suicide attempts in Czech adolescent population are among the highest in Europe. Based on the data of crisis hotline counsellors for children, the frequency of suicidal callers doubled in the last five years. There seems to be many reasons for this increase; the depression in children and adolescents being the major one besides socio-demographic factors, family-related factors, substance abuse etc. The aim of our study was to investigate the incidence of depression symptoms during the period of early adolescence and to compare them with Czech normative data from 1997. The study was conducted on a large sample (N = 1708) of Czech adolescents aged 11-16 years (m = 13.65; 52% female), utilizing the Children's Depression Inventory (Kovacs, Beck, 1977; Kovacs, 1992). The CDI evaluates the presence and severity of specific depressive symptoms in youth; depression is seen as a syndrome, not a specific behaviour. The proportion of the adolescents with the total score indicating higher risk of clinical depression was between 17,8 - 42,9 % in our sample, depending on the cut-off score. Regarding the incidence of suicidal ideation, almost 2 % expressed a commitment to suicide and further 21 % admitted ideation without a firm intention (the later being twice more common in girls than in boys). Detailed pattern of gender differences and the correlations of CDI scores and family-related factors or relationships with peers including belonging to subcultures as emo or goth will also be presented.

Keywords: *depression, suicidal ideation, adolescents, CDI.*

1. Introduction

In the Czech Republic, suicide is among the most frequent death causes of the children and adolescents (Czech Statistical Office, 2014) and the suicide rate of the children aged 0-14 years is above the mean of EU (e.g. five times higher than in Austria or Great Britain). The findings of the present study are particularly important from a prospective point of view because the increased level of depressive symptoms can contribute to the development major depression disorder, or to contribute to the development of a number of forms of risky behavior such as substance abuse.

2. Objectives

The main objective of our study was to explore the prevalence of depressive symptoms in Czech early adolescents, with respect to demographic factors as gender, age or urban settlement (city, town, village). We also aimed to compare our results with the Czech normative data of CDI from 1997. Furthermore, the relationships of depressive symptoms with family-related factors or relationships with peers were explored.

3. Methods

Design: The study was a part of extensive survey research, conducted within a project focused on self-harm behavior screening (MUNI/A/0790/2011). Instruments: Child Depression Inventory (Kovacs, Beck, 1977; Kovacs, 1992) The CDI assesses the presence and severity of specific depressive symptoms in youth; it is based on adult depression syndrome model. The instruments yields five subscales and a total score ranging from 0 to 54. Kovacs (1992) recommended 13 as a cut-off score for clinical populations and 19 as the cut-off score for community samples. All the scales had a good internal consistency in our samples (see Table 1). The set of items asking about the quality of respondents‘ relationships with their parents and peers was a part of the instrument constructed only for this study. Procedure: The 68 schools in randomly selected municipalities in the Czech Republic were asked to participate in the survey; the 7th, 8th and 9th grade’s classes were randomly selected in the 20 schools who

agreed to participate. The questionnaires were administered by trained research associates and school psychologists and completed anonymously by the participants. Sample: N = 1708; age 11-16 years (m = 13.65; sd =0,96); 52,3% female.

4. Results

4.1. Prevalence of depressive symptoms and suicidal ideation

The mean of the total score was almost 13 points (see Table 1). The Anhedonia scale mean was the highest but it is due to the 8 items contributing to the scale. When taking the number of items into consideration, the adolescents had the highest scores in the Ineffectiveness scale.

Table 1. Cronbach's alpha and descriptive statistics of CDI scales.

CDI scale	*Cronbach's alpha*	*number of items*	*mean*	*sd*
Negative Mood	0,715	6	2,66	2,30
Interpersonal Problems	0,516	4	1,04	1,26
Ineffectiveness	0,565	4	3,18	1,54
Anhedonia	0,682	8	3,35	2,59
Negative Self-Esteem	0,668	5	2,35	1,75
CDI Total Score	**0,886**	**27**	**12,62**	**7,67**

The cut-off scores of 19 or 20 points for non-clinical samples (13 for clinical ones) is recommended by Kovacs (1992). Reaching that point indicates possible risk of clinical depression syndrome. Recent Belgian-Dutch study (van Beek et al., 2012) suggests a cut-off score to reach maximal balance between sensitivity and specificity at 16 points. There is also possibility to use either cut-off score 20 points and/or presence of suicidal ideation indicated by item 9 as a criterion for the risk of clinical depression. The proportion of our sample above the cut-off score 19 points was almost 22 % (see Table 2); when using the combination of the criteria, it was almost 35 % of the adolescents, with higher proportion of the girls. Regarding the suicidal ideation, 1,7 % of the sample agreed with 'I want to kill myself' and 20,8 % with 'I think of killing myself but I would not do it' (27 % among girls and 14 % among boys).

Table 2. Proportion of the sample above cut-off scores for clinical depression risk.

cut-off score	*boys*	*girls*	*all*
>=13	31,9 %	51,8 %	42,9 %
>=19	13,8 %	27,2 %	21,8 %
>=20	11,2 %	23,1 %	17,8 %
>=20 or suicidal ideation	25,9 %	42,4 %	34,9 %

4.2. Age and gender differences

Although the incidence of depressive symptoms generally increases with age in adolescence, there were no age differences found in our study. That may be attributed The same applies to the differences among adolescents from cities, towns and villages. Regarding gender differences, girls scored significantly higher in all scales and also the total score (see Table 3).

Table 3. Gender differences in CDI scales scores.

CDI scale	*boys mean (sd)*	*girls mean (sd)*	*t*	*p*
Negative Mood	2,0 (1,9)	3,2 (2,4)	10,20	0,001
Interpersonal Problems	1,0 (1,3)	1,1 (1,2)	1,95	0,05
Ineffectiveness	3,1 (1,5)	3,3 (1,6)	2,45	0,05
Anhedonia	2,8 (2,5)	3,9 (2,6)	8,31	0,001
Negative Self-Esteem	2,0 (1,7)	2,7 (1,8)	7,27	0,001
CDI Total Score	**10,8 (7,0)**	**14,1 (7,9)**	**8,02**	**0,001**

4.3. Comparison with Czech norms from 1997

The Czech norms were constructed on a random sample of 369 of Prague children in 1997. The means for both the scales and total score were found to be somewhat lower than in USA normative samples; there were no gender differences found. As there are only norms for 13-14 years, we took a subsample of our sample in that age range for the comparison and compared boys and girls separately. In

the sample of boys, the total score was 2 points higher than in 1997 norms, mostly due to the differences in the Ineffectiveness scale. However, the increase in girls' scores was much more significant: the total score of our sample almost doubled the total score of 1997 normative sample and there was a considerable increase in all scales scores. There were only 4 % of girls above 20-point cut-off score in 1997 but 17,8 % in our sample.

Table 4. Comparison with Czech norms (sub-sample of adolescents aged 13-14 years).

CDI scale	*boys 2013 mean (sd)*	*boys 1997 mean (sd)*	*t*	*girls 2013 mean (sd)*	*girls 1997 mean (sd)*	*t*
Negative Mood	2,0 (1,9)	1,6 (1,4)	4,38***	3,2 (1,9)	2,5 (1,6)	14,12***
Interpersonal Problems	1,0 (1,3)	0,8 (1,0)	2,62**	1,1 (1,2)	0,6 (0,8)	9,29***
Ineffectiveness	3,1 (1,5)	1,9 (1,4)	16,83***	3,2 (1,6)	1,8 (1,5)	22,13***
Anhedonia	2,7 (2,4)	2,4 (1,8)	2,50*	3,8 (2,6)	2,4 (1,9)	12,97***
Negative Self-Esteem	2,1 (1,7)	2,1 (1,2)	-0,51	2,8 (1,8)	2,1 (1,3)	8,83***
CDI Total Score	**10,7 (7,3)**	**8,7 (5,0)**	**5,37*** **	**14,1 (7,9)**	**8,7 (5,4)**	**15,03*** **

* p<=0,05; ** p<=0,01; *** p<=0,001

4.4. Family environment, peer relationships as correlates of depressive symptoms

The mean scores in scales and total score were compared with respect to gender and family environment, dichotomized as either divorced/single parent family or both parents family, by General Linear Model. Both main effect and interaction effect were significant (F=4,9; p<0,001 for the total score). Boys had generally lower total scores regardless family environment category; girls with divorced/single parents had the highest scores. Correspondingly, worse relationships with parents, especially when combined with good relationship with peers, as well as belonging to a subcultures as emo or goth meant higher CDI scores.

5. Conclusions

The high prevalence of depression symptoms among Czech adolescents were found in our study, especially compared to normative data from 1997. Scores in our sample were more similar to e.g. Swedish adolescents results (Ivarsson et al., 2006). Based on our findings, we would suggest establishing new norms of Czech version of CDI or even an adaptation of CDI 2, which contains parent and teacher form as well, allowing multi-informant assessment. We were not able to find age differences; that may be due to a relatively homogenous sample. In comparison with Czech normative data, gender differences were found in both scale scores and total score; it is not clear whether they are real differences or more an artefact of the measure. Carle et al. (2007) found measurement invariance with respect to gender on the Children's Depression Inventory administered to a sample of 3rd and 6th grade pupils, while van Beek et al. (2012), when using the same instrument on a sample of 4048 children aged 8-17 years detected measurement bias with respect to both gender and age for each of the scales of CDI and a differential item functioning for many items; their findings indicate that the phenomenology of depression varies with both age and gender.

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PERSONALITY CHARACTERISTICS OF PATHOLOGICAL GAMBLERS

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Abstract

Introduction. Personality traits have proved to be consistent and important factors in a variety of psychopathological syndromes. This research examined the relationship between Big Five-related personality traits (openness, conscientiousness, extraversion, agreeableness, and neuroticism) and Pathological Gambling. *Method and procedure.* A total of 323 gamblers (131 males and 192 females), of average aged of 25.31 (SD = 10.55) completed the Italian version (Capitanucci & Carlevaro, 2004) of the *South Oaks Gambling Screen* (*SOGS;* Lesieur & Blume, 1987) and the *Big Five Questionnaire 2* (Caprara, Barbaranelli, Borgogni, & Vecchione, 2007), which refers to the Five Factors Model (FFM; Costa & McCrae, 1992). Based on their score on the SOGS, participants were divided in two groups: a clinical sample composed of 62 pathological gamblers, whose score was greater than 5; and a non clinical sample composed of 261 non problematic gambles, whose scores was less than 3. *Results.* Findings of the present investigation showed significant differences between pathological and non problematic gamblers with reference to openness, conscientiousness, and agreeableness. Specifically, pathological gamblers report fewer propensities to be open to new ideas and to have cultural interests. They also are less likely to provide help and care for others offering their emotional support and are less responsible and diligent than individuals who do not have problems related to gambling.

Keywords: *gambling, personality characteristics, five factor model.*

1. Introduction

Several researches showed that pathological gambling is related to externalized behaviors and to certain personality traits including neuroticism and negative emotionally (Miller, MacKillop, Fortune, Maples, Lance, Campbell, et al., 2013). This confirms some theories on the etiology of pathological gambling that indicated a central role of negative emotionally in the development of disordered gambling behavior (Dickerson & Baron, 2000; Hand, 1998; MacLaren, Fugelsang, Harrigan, & Dixon, 2011). Some studies support the idea that gambling behaviors could be a maladaptive strategy for dealing with negative emotions; in fact, higher levels of neuroticism seem to be related to more severe pathological gambling, whereas higher levels of openness seem to be related to less severe pathological gambling (Miller et al., 2013).

The present study wants to examine the relationship between pathological gambling and the Big Five dimensions: openness, conscientiousness, extraversion, agreeableness, and neuroticism. It was hypothesized that pathological gambling determined by scores on the South Oaks Gambling Screen (SOGS) would have positive relationships with Big Five dimensions of neuroticism, extraversion and openness, and would have negative relationships with agreeableness and conscientiousness. Neutoticism is characterized by insecurity, worrying and impulsivity, and given that many studies showed the relationship between impulsivity and pathological gambling, this personality trait seems to be strictly related to pathological gambling. In addition extraversion, characterized by being sociable, fun, friendly and talkative, could be related to gambling behaviors because gambling can be a social activity, and extraverted individuals could have a proclivity to gamble.

Besides, the dimension of openness seems to be related to the tendency to be daring, and gamblers have to be extremely daring to bet large sum of money; thus openness should be related to pathological gambling.

2. Method

2.1. Participants and procedures

The overall sample consisted of 323 participants (mean age of 25.31; SD = 10.55) divided in two groups: I) a clinical group composed of 62 pathological gamblers (55 males and 7 females); and II) a control group composed of 261 social gamblers (76 males and 185 females).

Participants were recruited at the gambling rooms and at the University of Psychology in Florence and completed the questionnaires anonymously after signing an informed consent form.

An inclusion criterion for the pathological gamblers group and social gamblers group was the score obtained to the SOGS, using the 3 and 5 score at questionnaire as cut-off points. Specifically, the pathological gamblers group is composed of gamblers that obtained SOGS score above 5, and control group included students that obtained SOGS score below 3.

2.2. Measures

Pathological gambling: Participants pathological gambling was measured using the Italian version (Capitanucci & Carlevaro, 2004) of the South Oaks Gambling Screen (SOGS; Lesieur and Blume; 1987). This scale consists of 20 item that measure the severity of gambling problems based on Diagnostic and Statistical Manual (DSM)-III criteria. The SOGS provides a range of information such as the type of game privileged, the frequency of gambling activities, the difficulty to play in a controlled way, the awareness about the problem of the game, attempts to return to play to recover the money lost, moving away work or school, the amount of loans requested, etc. The internal consistency coefficient (Cronbach's alpha) was .78 for this sample.

Personality characteristics: The *Big Five Questionnaire 2* (BFQ-2) developed by Caprara and colleagues (2007) was employed to assess personality characteristics. The BFQ comprised 40 items assessing the following five dimensions: *Extraversion, Openness, Conscientiousness, Agreeableness,* and *Neuroticism.* Respondents were asked to give their answers on a 5-point Likert scale ranging from *Absolutely false for me* (1) to *absolutely true for me* (5). Internal consistency coefficients (Cronbach's alpha) were .81, .74, .70, .79, and .91 for *Extraversion, Openness, Conscientiousness, Agreeableness,* and *Neuroticism,* respectively.

3. Results

The means and standard deviations of the five dimensions of the BFQ-2, namely *Extraversion, Openness, Conscientiousness, Agreeableness,* and *Neuroticism*, are presented in table 1.

A multivariate analysis of variance (MANOVA) was conducted to assess between group differences in personality characteristics. The independent variables were Group (social gamblers vs. pathological gamblers) and the dependent variables were the five personality characteristics dimensions.

The overall MANOVA test revealed a significant difference by group, Wilk's $\Lambda = .82$, $F(317, 5) = 14.12$, $p = .000$. Subsequent univariate analyses revealed that Group was a significant factor for *Openness, Conscientiousness,* and *Agreeableness*. More specifically, pathological gamblers have significantly lesser scores on these dimensions than social gamblers (see table 1).

Table 1. Differences in the BFQ-2 mean scores (MANOVA) between the two groups.

	Social gamblers (n=261)		*Pathological gamblers (n=62)*					
	M	*SD*	*M*	*SD*	*DoF*	*F*	*p*	η^2
Extraversion	3.33	.66	3.18	.59	1, 321	2.84	.093	.01
Openness	3.74	.64	3.13	.67	1, 321	46.47	.000	.13
Conscientiousness	3.72	.70	3.33	.55	1, 321	16.05	.000	.05
Agreeableness	4.15	.52	3.70	.64	1, 321	34.49	.000	.10
Neuroticism	2.98	.92	2.89	.62	1, 321	.48	.488	.00

4. Discussion

The goal of this study was to examine the relationship between pathological gambling and personality characteristics. In contrast with existing literature and our hypothesis, the results didn't show significant differences between pathological gambler and social gambler on levels of neuroticism and

extraversion. However, pathological gambling presents various forms of psychopathology and maladaptive personality traits (see Milosevic & Ledgerwood, 2010 for a review). Regarding this, several authors have highlighted the importance of classifying pathological gamblers into different subtypes (e.g., Blaszczynski & Nower, 2002). In particular, the *behaviorally conditioned* gamblers subtype tends to be least severe gambling-related difficulties, impulsivity and antisocial behaviors than *emotionally vulnerable* and *antisocial impulsivist* subtypes, as described by Blaszczynski and Nower (2002). The presence of the first category within our sample, moreover composed by small number of pathological gamblers, could explain the lack of significance with respect to these personality characteristics.

Moreover, our results showed that pathological gamblers report a lesser level of openness than social gamblers did. Our results also showed that pathological gamblers tend to be lesser conscientiousness and agreeableness than other participants. It is possible that the high attention of pathological gamblers on the aspects related to gambling departs the interest towards feelings and values of other people. So, they could report lower levels of altruism and show greater indifference and egoism than social gamblers. Finally, it is likely that gambling behaviors of pathological gamblers makes them less reliable, responsive and careful than others participants.

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COGNITIVE BIAS DISTORTIONS IN PATHOLOGICAL GAMBLERS

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Abstract

Introduction. Several factors are related to the onset and the maintenance of pathological gambling. An important role is carried out by cognitive bias distortions, which represent real "errors" in the reasoning processes. The aim of this study is to analyze these cognitive errors in two groups of gamblers. *Method.* A total of 323 gamblers (131 males and 192 females), of average age of 25.31 (SD = 10.55) were recruited in some gambling rooms and at the University of Florence. All participants completed the Italian version (Capitanucci & Carlevaro, 2004) of the *South Oaks Gambling Screen* (*SOGS;* Lesieur & Blume, 1987) and were divided in two groups on the bases of their questionnaire score: a clinical sample composed of 62 pathological gamblers (SOGS score above 5); and a non-clinical sample composed of 261 non problematic gambles (SOGS score below 3). All participants completed the Italian version (Iliceto & Fino, 2014) of the *Gambling Related Cognitions Scale* (*GRCS;* Raylu & Oei, 2004), which assesses 5 dimensions related to cognitive distortions: *Illusion of control, Predictive control, Interpretative bias, Gambling expectancies,* and *Perceived inability to stop/control gambling. Results.* Our findings support the results of previous investigations on cognitive biases gambling related (Joukhador et al., 2003; Xian et al., 2008). Specifically, pathological gamblers showed higher levels in all cognitive bias distortions considered, than non-problematic gamblers did.

Keywords: *gambling, cognitive distortions, cognitive bias.*

1. Introduction

Pathological gambling (PG) is a behavioral addiction that has been associated with cognitive distortions in the processing of chance, probability and skill (Michalczuk, Bowden-Jones, Verdejo-Garcia, & Clark, 2011). Cognitive distortions have been thought to play an important role in the development and maintenance of pathological gambling (Myrseth, Brunborg, Eidem, 2010).

Gamblers attempt to control and predict events that are objectively random and uncontrollable by developing an illusion of control and superstitious beliefs that motivate them to develop strategies and skills to increase their winnings (Xian, Shah, Phillips, Scherrer, Volberg, & Eisen, 2008). Other cognitive biases associated with gambling include selectively remembering wins while not giving equal weight to the multitudes of losses experienced, overestimating the odds, superstitious behaviors, and the "gambler's fallacy" (i.e., the belief that a future win or loss is related to past payoffs, when, in fact, each gambling event is discrete) (Xian et al., 2008). These concepts are presumed to contribute to gambling problems by affecting the gamblers' interpretations of their chances of winning, their subjective feeling of control over outcomes, their attributions for failure, their justifications for continuing, and their estimations of their skills or abilities (Breen, Kruedelbach, & Walker, 2001; Toneatto, 1999).

Several studies have reported elevated levels of distorted cognitions in individuals with disordered gambling compared to those without gambling problems (Emond & Marmurek, 2010; Myrseth*et al.* 2010). Particularly, Joukhador, Blaszczynski and Maccallum (2004) have shown that problematic gamblers present a greater number of erroneous ideas and a greater trust in these ideas with respect to non-problematic gamblers.

The present study, in line with previous research (Myrseth et al., 2010), wants to assess if pathological gamblers present higher levels of cognitive distortions than non-pathological gamblers.

2. Method

2.1. Participants and procedures

A total of 323 participants of average aged of 25.31 (SD = 10.55) were recruited for the present study and divided in two groups: I) a clinical group composed of 62 pathological gamblers (55 males and 7 females); and II) a control group of 261 (76 males and 185 females).

All participants are recruited at the gambling rooms and at the University of Psychology in Florence. Inclusion criteria for the pathological gamblers group and social gamblers group was the score obtained to the SOGS. Specifically, the pathological gamblers group is composed of gamblers whose score was greater than 5, and control group included students whose score was lesser than 3.

All participants completed the questionnaires anonymously after signing an informed consent form. Several trained researchers assumed the task of data collection. Participation in the survey was totally voluntary and no monetary reward was given. In addition to the questionnaire on gambling all subjects completed a measure to assess the presence of possible cognitive distortions.

2.2. Measures

Pathological gambling: The Italian version (Capitanucci & Carlevaro, 2004) of the South Oaks Gambling Screen (SOGS) developed by Lesieur and Blume (1987) was employed to assess the severity of gambling problems. The SOGS is a 20-item questionnaire based on Diagnostic and Statistical Manual (DSM)-III criteria to screen for life-time pathological gamblers that provides a range of information such as the type of game privileged, the frequency of gambling activities, the difficulty to play in a controlled way, the awareness about the problem of the game, attempts to return to play to recover the money lost, moving away work or school, the amount of loans requested, etc. The internal consistency coefficient (Cronbach's alpha) was .78 for this sample.

Cognitive distortions: The Italian version (Iliceto & Fino, 2014) of the Gambling Related Cognitions Scale (GRCS) developed by Raylu and Oei (2004) was administered in order to measure cognitive distortions. The GRCS consist of 23 item which assess five dimensions more a total score of cognitive distortion: Predictive Control; Illusion of Control; Interpretative Bias; Gambling Expectancies; and Inability to Stop Gambling. Each item was rated on a seven-point Likert scale from 1 (strongly disagree) to 7 (strongly agree). Internal consistency coefficients (Cronbach's alpha) for the Predictive Control, Illusion of Control, Interpretative Bias, Gambling Expectancies, and Inability to Stop Gambling were .74, .72, .75, .82, .60, respectively.

3. Results

Descriptive statistics were calculated for all participants. In order to investigate whether social and pathological gamblers different on cognitive bias and distortions, a single-factor between subjects multivariate analyses of variance (MANOVA) was performed with the variable Group (social gamblers vs. pathological gamblers) as independent variable, and with the five cognitive bias subscales and the total score of the GRCS as dependent variables. This analysis showed a significant multivariate effect, Wilk's $\Lambda = .43$, $F(317, 5) = 82.50$, $p = .000$. More specifically, pathological gamblers have significantly higher scores on illusion of control, predictive control, interpretive bias, gambling expectancies, perceived inability to stop/control gambling, and total score of the scale than social gamblers. Table 1 showed the descriptive and statistic results of MANOVA analysis.

4. Discussion

This study aimed to verify if pathological gamblers present higher levels of cognitive distortions than non-pathological gamblers.

Results of mean differences between the groups under investigation revealed that pathological gamblers have higher levels of cognitive distortions than non-pathological gamblers. These results confirm those ones of previous studies and suggest that gamblers think to control gambling outcomes via personal skill ability on knowledge (*Illusion of control*), tend to predict gambling outcomes starting from on salient on past win or losses (*Predictive Control*), tend to attribute wins to one's skill and losses to external influences (*Interpretative bias*), expect that gambling is the only way to cope with stress and to motivate the gaming (*Gambling Expectancies*), and they feel unable to stop gambling (*Perceived Inability to Stop Gambling*).

Besides these results reinforce the idea that gamblers attempt to control and predict events that are objectively random and uncontrollable by developing an illusion of control and superstitious beliefs that motivate them to develop strategies and skills to increase their winnings (Xian et al., 2008). These

concepts are presumed to contribute to gambling problems by affecting the gamblers' interpretations of their chances of winning, their subjective feeling of control over outcomes, their attributions for failure, their justifications for continuing, and their estimations of their skills or abilities (Breen et al., 2001; Toneatto, 1999).

Table 1. Differences in the GRCS mean scores (MANOVA) between the two groups.

	Social gamblers (n=261)		*Pathological gamblers (n=62)*					
	M	*SD*	*M*	*SD*	*DoF*	*F*	*p*	η^2
Illusion of control	4.82	2.25	8.37	4.80	1, 321	74.44	.000	.19
Predictive control	7.81	3.89	13.73	6.87	1, 321	82.53	.000	.21
Interpretative bias	5.03	2.76	11.14	6.12	1, 321	140.83	.000	.31
Gambling expectancies	5.01	2.87	11.71	5.96	1, 321	167.80	.000	.34
Perceived inability to stop/control gambling	5.77	2.24	17.63	8.27	1, 321	412.28	.000	.56
Total cognitive bias	28.44	11.71	62.58	26.36	1, 321	240.05	.000	.43

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AUTISM SPECTRUM DISORDER FROM BIRTH TO DIAGNOSIS THROUGH PARENTS' EYES

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Abstract

Autism Spectrum Disorder (ASD) affects 1% of the population and greatly impacts the lives of children with the disorder, their family as well as the community. This study aims to uncover, through the experience of parents, relevant events (e.g., early signs, age of first appearance, person who noticed these symptoms, proccess leading to the diagnosis) that marked the development of children diagnosed with ASD. *Method:* Quantitative analysis were performed on collected data from self-administered questionnaires to parents of children diagnosed with ASD (N=41). *Results:* Parents are typically the first ones to notice early signs of ASD. Parental concerns appear before the age of two. The delay in language development is the most prevelant observation from parents. Our results also reveal an average waiting period of 4 years between the awareness of early signs of ASD and the diagnosis. The diagnosis is most often established by a multi-disciplinary team. *Conclusion:* As expected, parents are highly involved and concerned in regards to their child development. These results imply that health profesionnals should pay close attention to parents' concerns for earlier diagnoses and maximize the benefits of early interventions. Best practices should rely on the promotion of early detection, diagnosis and intervention.

Keywords: *autism spectrum disorder, parents' experience, significant events, diagnosis.*

1. Introduction

Autism Spectrum Disorder (ASD) is a neurodevelopmental disorder affecting nearly 1% of the population. It is mainly characterized by social communication and interactions deficits, as well as stereotyped, restrictive and repetitive behaviours and interests (American Psychiatric Association [APA], 2013). This disorder has a significant impacts on the lives of children with ASD, their family as well as the community.

2. Objectives

Assessing the experience of the parents, this study aims to uncover relevant events from birth to the diagnosis of ASD. Specifically, parents were asked to report about the early signs of ASD, the age of first appearance of the disorder, the person who first noticed these symptoms and the proccess leading to the diagnosis.

3. Design and Method

Parents (N=41 : 40 mothers, 1 father) of children with distinct degrees of ASD were sought via an ASD organisation (*Fédération Québécoise de l'Autisme).* They completed a self-administered questionnaire measuring various life events during the early child development, created for the purpose of the study. Quantitative and descriptive analysis (frequencies and means) were performed.

4. Results

Parents are usually the first ones (64%) to notice the early signs of ASD. For the majoritiy (72%) their first concerns occur before the age of twenty-four months. The language delay is the most obvious observation (39 %) followed by restricted interests and plays (17%) and poor visual contact (14%). Results show a long waiting period, in average over four years, between the first signs to the diagnosis. The diagnosis is typically done by a multi-disciplinary team.

5. Conclusion

Our results show clear discrepancies between actual clinical assessments of ASD as reported by parents and best practices. Indeed, while guidelines stipulate that health professionals should undertake screening of ASD early signs – e.g., developmental delays in language production – (Collège des médecins du Québec & Ordre des psychologues du Québec, 2012) our results show that parents are usually the first ones to notice the early signs. Our results also indicate that the delay to receive an ASD diagnosis – i.e. average of over 4 years from early signs detection – diverges from the recommended. Finally, we show that, as recommended, the diagnosis is generally based on behavioural observations, interviews and standardised evaluations performed by a multidisciplinary team. In conclusion, as expected, parents typically remain the primary source of involvement and concern in regards to their child development. It is critical to adress their concerns so that children can be diagnosed earlier and benefit from early intervention. For that to happen, it is important to promote best practices in terms of detection, diagnosis and intervention.

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CAN PARENTAL MONITORING AND THE UNPLUGGED DRUG USE PREVENTION PROGRAM CONTRIBUTE TO A CHANGE IN ALCOHOL CONSUMPTION AMONG SLOVAK ADOLESCENTS?

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Abstract

Background: The relationship between alcohol consumption (AC) and parental monitoring (PM) has been consistently confirmed in several studies. It is also important to explore the short-term as well as the long-term effects of universal drug use prevention programs in order to strengthen evidence-based prevention among adolescents. *Purpose:* To explore the contribution of two external prevention sources; PM and participation/non-participation in the Unplugged (universal drug use prevention program) to changes in AC. *Methods:* The representative research sample consisted of 1295 adolescents, 53.4% girls, Mean age=11.52; experimental group (participation in the Unplugged, n=634), control group (non-participation in the Unplugged, n=661). The twelve-session program Unplugged was carried out during the school year 2013/14 (baseline testing $^{\text{prior to program implementation/T1}}$ and follow-up testing $^{\text{immediately after the program/T2}}$). Binary logistic regression models (two-steps procedure) was used for the data analysis. The change in AC^{T1-T2} was dichotomized and served as the dependent variable. The first model consisted of five independent variables (gender, AC^{T1}, normative beliefs (NB^{T2}), positive future orientation (PFO^{T2}), and $smoking^{T2}$). While controlling for these variables, the main variables of interest (PM^{T2}, Unplugged) were added to the analysis and created the second model. *Results:* Being male, a higher level of NB, a lower level of PFO and having experience with smoking were associated with an increase in AC ($Model^1$: R^2=0.22). Only a lower level of PM was associated with an increase in AC. The short-term effect of Unplugged was not confirmed ($Model^2$: R^2=0.23). *Conclusions:* This study supports the importance of PM, individual factors and experience with smoking in the development of AC among adolescents.

Keywords: *alcohol consumption, parental monitoring, Unplugged, adolescents.*

1. Introduction

The importance of parental monitoring regarding alcohol use especially among very young adolescents has been noted (Kelly et al., 2012). Parental characteristics in general and parental monitoring in particular are one of the strongest correlates of an adolescent's engagement in risk behaviour (Tucker, Ellickson, & Klein, 2008; DeVore & Ginsburg, 2005). The relationship between parental monitoring and adolescent alcohol use over time has been confirmed (Beck, Boyle, & Boekeloo, 2004).

There is a great need for high quality research exploring the short-term and the long-term effects of universal drug use prevention programs for young adolescents in which the influence of relevant intervening variables is well controlled (Donovan, 2004).

2. Design

A randomized controlled trial was chosen to study the effect of the Unplugged intervention program on a population of Slovak sixth-grade schoolchildren. Stratified random sampling based on the number of inhabitants in the school district was used to randomly select eligible primary schools from Eastern, Central and Western parts of Slovakia in 2013.

3. Objectives

This study explored the contribution of two external prevention sources; parental monitoring and participation/non-participation in the Unplugged (universal drug use prevention program) to changes in alcohol consumption.

4. Methods

4.1. Sample

The research sample consisted of 1295 adolescents (53.4% girls, Mean age=11.52; SD=0.61). A stratified random sampling based on the number of inhabitants was used from 60 elementary schools (experimental/n=634, control/n=661). The twelve-session program Unplugged was carried out among adolescents of experimental group during the school year 2013/14. The baseline testing (T1) was administrated prior to the program implementation and follow-up testing (T2) was administrated immediately after the program.

4.2. Measures

All adolescents were asked to complete questions regarding their lifetime prevalence of alcohol consumption, smoking, parental monitoring, normative beliefs and future orientation. Lifetime prevalence of alcohol consumption (Hibell, 2012) was explored by the question "On how many occasions (if any) have you had any alcoholic beverage to drink in your life-time?" with possible answers: 0, 1-2,3-5,6-9,10-19,20-39, 40 or more. The change in alcohol consumption (between the baseline^{T1} and three month follow-up^{T2}) was dichotomized and served as the dependent variable (0=without change, 1=increase). Adolescents were asked to indicate whether they had ever had a cigarette in their lives (smoking status) with possible answers: (1) Never, (2) I have tried, (3) I smoked in the past, but I stopped, (4) I smoke from time to time, but not daily, (5) I smoke daily. Smoking status was dichotomized and served as the independent variable (0=nonsmokers$^{(1)never}$, 1=smokers$^{from\ (2)\ I\ have\ tried\ to\ (5)\ I\ smoke\ daily}$). The parental monitoring was measured by the question "Do your parents know where you spend nights when you must not go to school the next day?" (Hibell, 2012) with possible answers from 1=Always know to 4=Usually don't know. Normative beliefs (Hibell, 2012) were explored by the question "How many of your friends would you estimate…drink alcoholic beverages (beer, wine, spirits)" with possible answers from 1=None to 5=All. The subscale of the Adolescent Resilience Scale, Positive future orientation (Oshio et al., 2003) was used in this study. The subscale consisted of five items. Respondents were asked to choose a rating scale using anchors of 5 = Definitely yes and 1 = Definitely no. The coefficient alpha for the subscale was 0.75.

4.3. Intervention design

The school curriculum, "Unplugged," is based on the social influence approach and addresses social and personal skills, knowledge, and normative beliefs. It consists of 12 one-hour interactive sessions delivered by teachers among adolescents of experimental group (Vigna-Taglianti et al., 2014).

4.4. Statistical analysis

Binary logistic regression models (two-steps procedure) were used for the data analysis. The first model consisted of five independent variables (three individual risk/protective factors: gender, normative beliefs (T2), and positive future orientation (T2), and two factors of risk behaviour: alcohol consumption (T1), smoking status (T2). While controlling for these variables, the main variables of interest parental monitoring, participation/non-participation in Unplugged were added to the analysis and created the second model.

5. Findings

Being male, a higher level of normative beliefs, a lower level of positive future orientation and having experience with smoking were associated with an increase in alcohol consumption (Model 1, Table 1). Only a lower level of parental monitoring was associated with an increase in alcohol consumption. The short-term effect of the Unplugged program was not confirmed (Model 2, Table 1). Gender, normative beliefs, positive future orientation and having experience with smoking remained significant after adjusting for parental monitoring and the short-term effect of the Unplugged program (Model 2, Table 1).

Table 1. The regression models for changes in alcohol consumption among Slovak adolescents.

	Model 1 (R^2=0.22)				Model 2 (R^2=0.23)			
	Sig.	Exp(B)	95% C.I. for EXP(B)		Sig.	Exp(B)	95% C.I. for EXP(B)	
			Lower	Upper			Lower	Upper
[a]Gender	0.016	0.612	0.409	0.914	0.019	0.617	0.412	0.924
[b]Alcohol consumption [T1]	0.685	0.901	0.546	1.489	0.629	0.883	0.531	1.466
Normative beliefs [T2]	<0.001	2.485	1.881	3.284	<0.001	2.338	1.755	3.114
Future orientation [T2]	0.018	0.946	0.903	0.990	0.028	0.949	0.906	0.994
[c]Smoking [T2]	0.001	2.392	1.444	3.965	0.005	2.126	1.262	3.580
Parental control [T2]					0.039	1.303	1.014	1.674
[d]Group					0.922	1.020	0.684	1.521

Notes: T1=baseline testing, T2=follow-up testing, Reference groups: [a]boys, [b]without change in alcohol consumption, [c]nonsmokers [d]Experimental group

6. Discussion

It was found that a lower level of parental monitoring was associated with an increase in alcohol consumption over a short-time period. Beck, Boyle and Boekeloo (2004) confirmed this association over a longer time period of 12 months, and this relationship remained when controlling for age, gender, drinking at the baseline and being in various high-risk situations. It was found that Unplugged was effective in reducing episodes of drunkenness (Vigna-Taglianti et al., 2014), but the short-term effect of Unplugged in alcohol use was not found in this research.

7. Conclusions

This study supports the importance of parental monitoring, as well as the importance of individual risk/protective factors and experience with smoking in alcohol use over time among adolescents. Future research should look at the long-term effects of the Unplugged program, especially regarding family processes.

Acknowledgments

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TRANSITIONING TO HIGHSCHOOL: THE PERCEPTION OF STUDENTS WITH ASD AS OPPOSED TO THEIR PEERS

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Abstract

The transition from elementary school to junior High involves routine and structural changes as well as exposures to novel environments, curricula and people, all of which may act as stressors for the transitioning students. In addition to transitioning stressors, students must also cope with pubertal changes, such as hair growth and voice mutation. They must also develop a sense of self and become more autonomous. This process is often influenced by group opinion and peer pressure. Such a life period, which is considered difficult for most teenagers (Lohaus, Elben, Ball, & Klein-Hessling, 2004), can be even more challenging for students with an Autism Spectrum Disorder (ASD) (Hannah & Topping, 2012) as the ASD population is highly sensitive to any form of change and transition (APA, 2003). It is thus crucial to offer the necessary resources to support and facilitate this time in their lives. Since teenagers with ASD tend to be more socially isolated, this transition period may prove difficult for them (Myles & Andreon, 2001).

Keywords: *autism spectrum disorder, transition, high school.*

1. Introduction

The transition from elementary school to junior High involves routine and structural changes as well as exposures to novel environments, curricula and people, all of which may act as stressors for the transitioning students. In addition to transitioning stressors, students must also cope with pubertal changes, such as hair growth and voice mutation. They must also develop a sense of self and become more autonomous. This process is often influenced by group opinion and peer pressure. Such a life period, which is considered difficult for most teenagers (Lohaus, Elben, Ball, & Klein-Hessling, 2004), can be even more challenging for students with an Autism Spectrum Disorder (ASD) (Hannah & Topping, 2012) as the ASD population is highly sensitive to any form of change and transition (APA, 2003). It is thus crucial to offer the necessary resources to support and facilitate this time in their lives. Since teenagers with ASD tend to be more socially isolated, this transition period may prove difficult for them (Myles & Andreon, 2001).

2. Design

2.1. Sample and procedure

The sample comprised of 24 students. Twelve 6th graders (2 girls and 10 boys) with ASD were selected to be part in the group 1; inclusion criteria required that they be students who were integrated in a regular classroom. Twelve other students, who did not present an ASD, were then matched to students of group 1 according to age and gender.

2.2. Measures

This study is based on semi-structured interviews (60 questions). Several themes are explored for example; the last question identifies the usefulness of a specific situation or object that may aid in facilitating a proper transition. This question was answered using a pre-established scales from not at all (0), a little bit (1), average (2) to a lot (3).

All 24 students completed a homemade semi-structured interview that was validated by three experts. It required approximately 45 to 60 minutes answering all 60 questions. The researcher or a trained colleague conducted the interviews at the participant's house.

The interviews were first transcribed and then coded with Nvivo 10 with 85% inter-rater reliability. The qualitative aspects of the interview were analyzed with a McNemar, a non-parametric test has been designed to determine whether a change of binary state yields statistical significance between both groups ($p<0,05$).

3. Objective

The aim of this study was to compare ASD students' perception of the transition to highschool as opposed to that of their peers without ASD.

4. Results

Results show that student with ASD are more likely to be well prepared if they have the school plan with them, if they have a friend to eat lunch with and if they know where their locker is and how to open it. Student without ASD displayed some of the same fears as ASD students; however the level of these were considerably lower.

Students with ASD displayed fears of being bullied: "Sometimes, I don't know if people are bullying me or if they are just kidding", "I know that it happens that people bully others; I am afraid that it can happen to me". They appeared to be more bullied than their peers in elementary school, which can explain why they anticipate being bullied.

Students without ASD are more likely to enjoy their transition highschool because of sports and activities available as well as all the new people they will encounter: "I look forward to going to highschool… it's a new environment". In contrast, students with ASD prefer to avoid change: "Beurkk, I don't wanna go to highschool; I don't want to leave elementary school; I don't want to grow up".

5. Discussion and conclusion

The identification of coping methods for this stressful part of life may help improve well-being and reduce psychological stress for students. Moreover, this study may guide teachers and school psychologists in their future interventions for their students with special needs.

This study shows the importance of different educational settings. Indeed, students with ASD who are integrated in regular classrooms are equally prepared then their peers for this transition. This study shows that despite the fact that the ASD students function well in the regular classrooms, they may require special preparation due to their specific needs.

This study has several limitations that should be considered when interpreting the results. First, this case study comprised a small sample size. Second, the sample represents children from the Montreal isle and can therefore not be generalized to the entire ASD population.

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THE CHANGE OF VOLUNTEER STUDENTS AND THE USERS: EVALUATIONS OF VOLUNTEERING PROGRAM IN ELEMENTARY SCHOOL IN JAPAN

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Abstract

The intervention of children's academic and personal/social needs in elementary school is important for their healthy mental development. However, it requires manpower, and thus, it is sometimes difficult to offer enough support for the kids. To deal with this problem, the authors have set up a University Students Volunteering Program. In this program, the students of Psychology Department as volunteers were sent to the local elementary schools in need. This program consisted of 2 aspects; the volunteer placements and support for the volunteer students. Firstly, this study illustrated how this program worked effectively, introducing a practice report of 2012, 2013. Especially, we presented our matching process of volunteers and placements, coordinating system for them, and support and education programs for the volunteers. Secondly, we evaluated the outcome of this program using the questionnaires. The questionnaires asked both the volunteer students and the elementary school teachers who were working with them about the volunteer's fundamental competences, and the change of the school situations. The questionnaires were completed by 14 volunteers and the 28 teachers of 14 schools. The result showed the improvement of volunteer student's competence and the positive changes of school situations. It suggested that this volunteering program is mutually beneficial for both volunteers and users.

Keywords: *volunteer activity, university student, school environment.*

1. Introduction

With consistent increases in teacher absenteeism, teachers' breakdown and strains are topics to deal with. According to "The present condition of a teacher's mental health" the Ministry of Education, Culture, Sports, Science and Technology (MEXT) reported in 2013, the rate of the absentees for psychiatric disorder exceeded 60%. It is fair to say that teaching in the school is the most stressful profession in Japan, and teachers have faced increasing workload, pressure and stress. Recently, the occupational demand of teacher is increasing in Japan. Not only the regular curriculum, teachers have always involved working after school or during lunch time helping students and extracurricular activities. Moreover, they are expected to cope with diverted student's problems such as disruptive behaviour, even violent and threatening behaviour in the classroom, bullying, school refusal, and special educational needs. Under those circumstances, MEXT has promoted the "School Support Volunteering", that is defined as "volunteering activities to help the educational activities of a school by local people such as parents, local residents, and regional companies", since 1997. The aim of the School Support Volunteer has 2 aspects. First of all, it can offer the local residents the opportunity of lifelong learning process to. Secondly, it can ensure adequate human resources necessary to meet the increasing demand in school education. According to the nationwide report by the MEXT (Mitsubishi Research Institute, 2010), more than 90% of volunteer participants were local residents and parents, whilst the number of a local university student participant was extremely small. However, those university students are belonging to a school of education or psychology in most of the case, and so, they engaged in more divers support activities (Sugimoto, 2013). They can be involved not merely in supervising children in and out of the classes, but also in interactive supports such as mental and learning support. Moreover, volunteer activity has a role of practical training for those university students. That is, it can be a "win-win" opportunity to both of the students and the schools. The authors thus focus on the university student volunteer. We have set up and been improving "University Students Volunteering Program" aiming to provide more efficient

support to the schools since 2004. In this research, firstly, we illustrated this program introducing a practice report of 2013. Secondly, we evaluated the outcome of this program using the questionnaires.

2. Methods

2.1. Outline of University Students Volunteering Program

This annual program Mejiro University offers to Psychology Department students, is tied up with a Board of Education in Tokyo since 2004. It consists of 2 aspects; the volunteer placements and supports for the volunteer students. The students, who are dispatched by the university, work throughout an academic year as "Mental Support Volunteers" in local elementary schools in need. They provide mental and learning support to the pupils, and it is expected to lead reducing the teacher's load, discouraging the pupils' misbehaviors, and improving the relationship between teachers and pupils. Meanwhile, the students take a seminar class at the university, in which lectures and group supervisions by certified clinical psychologists are offered. The contents of the class in 2012/2013 were shown in Table 1.

Table 1. The contents of the lesson.

instruction	explanation of activity
lecture	confidentiality of information
	cooperation with a teacher
	information exchange with the board of education
role play	telephone reception/salutatory skill
	crisis intervention
group discussion	activity report
case conference	discussion of a difficult case

2.2. Participant

In the program of 2012/2013, 20 student volunteers participated. Among the elementary schools request support, 20 schools were chosen as their placements. Regarding the questionnaire surveys, the 20 students and 2 teachers of each elementary school (i.e. 40 teachers) answered the questionnaires.

2.3. Instruments

We use 2 kinds of questionnaires to assess the effect of the program in terms of student volunteer's personal development and the change in placement school: "The Fundamental Competencies for Working Persons (pre- and posttest)" and "The Change of School Situations (posttest)".

- *Fundamental Competencies for Working Persons:* This is a self-report questionnaire consists of 31 items to measure the basic and generic skills required for a person to work successfully as a member of society such as "Ability to step forward (action)", "Ability to think through (thinking)", and "Ability to work in a team (teamwork)". The student volunteers were asked to complete the questionnaires both pre- and post-program to evaluate the students' personal development.
- *The Change of the School Situations*: This is self-report questionnaire consists of 25 items to evaluate the improvement of the pupil, the teacher and the class. The volunteer students and elementary school teachers answer this questionnaire at the end of the academic year. Each items are responded on a five point scales.

3. Results

3.1. The result of "Fundamental Competencies for Working Persons"

We compared the scores of pre and post using paired *t*-tests. Among all the 31 items, there was no significant difference in 27 items. However, the significant differences were found in the 4 items: "dare to address a new thing" ($t(20) = -2.32$, $p < .05$), "problem-solving capability" ($t(20) = -2.02$, $p < .10$), "spontaneous action" ($t(20) = -1.83$, $p < .10$) and "information gathering for problem solving" ($t(20) = -1.90$, $p < .10$).In all those items, the score of post-test was higher than that of pre-test.

3.2. The result of "The Change of the School Situations"

Over all, the mean scores of positive change items were high; the means cores negative change items were low. A one-way analysis of covariance (ANCOVA) was conducted to compare the scores of volunteer, teacher; it showed significant differences in 10 out of 25 items (Table 2).

Table 2. ANCOVA Results.

		1.Volunteer		2.Teacher		3.Principal				
		M	*SD*	*M*	*SD*	*M*	*SD*	*F*		
1	The improvement of a child's action	3. 44	0. 98	3. 90	0. 89	3. 71	0. 96	1. 16		
2	An improvement of a child's study attitude	3. 39	1. 04	3. 76	0. 89	3. 62	0. 92	0. 76		
3	Improvement in learning ability	3. 11	1. 02	3. 43	0. 60	3. 33	0. 91	0. 69		
4	Promotion of a child's difficult behavior	3. 39	0. 92	2. 29	0. 90	2. 33	1. 06	7. 87	**	2,3<1
5	Substantial instruction to a child	3. 56	0. 62	4. 38	0. 86	4. 10	0. 70	6. 14	**	1<2
6	Substantial instruction of the whole class	3. 22	0. 88	4. 05	0. 97	3. 86	0. 85	4. 34	*	1<2
7	The increase in influence in the whole class	3. 78	0. 65	4. 14	0. 91	4. 19	0. 75	1. 57		
8	A teacher's mental margin	3. 39	0. 85	4. 19	0. 93	4. 00	0. 84	4. 37	*	1<2
9	The burden of the teacher by a volunteer	2. 79	1. 13	1. 48	0. 75	1. 71	1. 06	9. 85	***	2,3<1
10	Information gathering of the child by a volunteer	4. 11	0. 66	3. 90	0. 94	4. 19	0. 81	0. 67		
11	Increase of the personnel of those who support a lesson	4. 11	0. 66	4. 38	0. 67	4. 14	0. 91	0. 80		
12	Support of child's study	3. 58	0. 90	4. 24	0. 77	3. 86	0. 85	3. 11		
13	Improvement in the atmosphere of a class	2. 79	0. 85	3. 57	0. 60	3. 43	0. 87	5. 58	**	1<2,3
14	The burden of the teacher of there being a volunteer	3. 16	0. 76	1. 52	0. 87	1. 48	0. 81	26. 75	***	2,3<1
15	A teacher's psychological knowledge and skill was gained	2. 68	0. 95	2. 67	1. 06	2. 43	0. 75	0. 49		
16	The teacher was able to learn the method of counseling	2. 72	0. 89	2. 52	0. 98	2. 48	0. 81	0. 40		
17	Purity which faces a child	2. 79	0. 92	3. 00	1. 00	2. 90	0. 83	0. 26		
18	Difficulty of consistent instruction	2. 63	0. 68	1. 71	0. 85	1. 71	1. 06	7. 09	**	2,3<1
19	Promotion of an understanding of a teacher's difficulties	4. 00	0. 67	3. 52	0. 81	3. 43	0. 75	3. 30	*	3<1
20	The challenge to a teacher's instruction	3. 05	0. 97	3. 33	0. 80	3. 24	0. 89	0. 51		
21	A teacher's reflection to instruction	2. 89	0. 88	3. 48	0. 75	3. 43	0. 93	2. 81		
22	Indefinite of a volunteer's role	3. 37	1. 07	2. 33	1. 35	2. 10	0. 94	6. 98	**	2,3<1
23	Instruction which harnessed the teacher's merit	3. 21	0. 63	3. 62	0. 50	3. 50	0. 83	1. 97		
24	A teacher's growth	3. 00	0. 88	3. 62	0. 74	3. 38	0. 80	2. 96		
25	Attention to a child's good side	3. 53	0. 77	3. 67	0. 80	3. 38	0. 80	0. 68		

* $p < .05$ ** $p < .01$ *** $p < .001$

4. Discussion

The most items in Fundamental Competencies for Working Persons did not show changes between pre- and post-program. It may be mainly because that the students who participated in this activity had comparatively high competencies from the beginning. When recruiting a volunteer, we explained the responsibility and duty of the volunteer (ex. The volunteers are not supposed to be late nor absent, and the ability to act spontaneously and good social communication skills are required, etc.), and screened the applicants. Therefore, it is considered that only students with competencies and confidence have participated in this program. It is an important result that “dare to address a new thing”, “problem-solving capability”, “spontaneous action” and “information gathering for problem solving" scores became significantly higher after the program. It may be interpreted as students’ development promoted by this program. Especially, the “lecture”, “role play” and “case conference” in the seminar class would have positive influences on their “problem-solving capability”, “information gathering for problem solving”. Moreover, the students supported and encouraged each other in “group discussion”, and it may provide the strength for “dare to a new thing”, “spontaneous action”. Regarding the Change of the School Situations, the following tendencies became clear. The mean scores of a positive change of school teachers and the students are high on the whole, so it is fair to say that this program was effective and successful. There were gaps between volunteer students’ and school teachers’ evaluations: The school teachers tended to positively evaluate the change more than the volunteer students did. It is interpreted that the students tended to worry that volunteer activity would harm the teachers or children although the teachers did not see in that way. To address this problem, it would be helpful that volunteer students have opportunities to get the feedback from a school teacher and to know this evaluation outcome. In the future, we would introduce this into our program and keep revising it.

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IN DEFENSE OF HOMO LUDENS AND PLAYFUL AS A SPACE FOR TEACHING-LEARNING IN HIGHER EDUCATION: THE PLAYFUL AND CREATIVE POSSIBILITY IN TEACHING

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Abstract

We teach, and our students learn that the play area is constitutional of the human being. Far from being homo sapiens, at our essence and origin, we are Ludens, i.e, one who plays in order to give different meanings to life. We want our research to defend the playful as a creative possibility in teaching, which is so used in Early Childhood Education but so neglected and obscured along the long path to forge Homo Sapiens or playing with words, Homo Academicus. At this point we ask ourselves: How can the teacher be playful if in her training there was almost no room for this practice to be experienced? What would it be, in a teacher education curriculum, a playful approach? Our research took place at the College of Education of the Federal University of Rio de Janeiro at the beginning of the semester 2014.1. The selected participants attended the compulsory subject Conceptions and Practices of Early Childhood Education of the morning course in the fourth period of the course in the second half of the year 2011. The main questions of our research were: Has the playful a space in Higher Education? Does the playful space "fit" in Higher Education, among adults, who will be the ones leading the process of teaching and learning forward when trained in Elementary Education? We intend to demonstrate, through the analysis of the results obtained in the research, which investing on playful learning is betting on the authorship of thinking, problem solving and autonomy, as the playful opens up a space to a shared creative space among peers and between teacher and students. If we work within the idea of a recreational space we will be by investing in a non-content-procedural evaluation, where the pleasure of learning and teaching is not hampered by fear of a measurement based on real development and not procedural.

Keywords: *play, higher education, teacher training, teaching-learning.*

1. Introduction

We have knowledge of legal documents and Brazilian curricula that speak of the importance of play in learning. We teach and our students learn that the play area is constitutional in what we call a human being.

Far from being Homo sapiens, at our essence and origin we are Ludens, i.e., the one who plays in order to give different meanings to life in this article we want to defend the playful and creative possibility in teaching, reference methodology in Child Education but that vanishes along the long path forged in Homo Academicus. We ended up giving up core that sustains the process of teaching and learning, the playful, the bond with the desire to want to come to know. Just in the immediate employment, graduation, Lesson Plan, we ended up forgetting that the other side of teaching can only be learning and that this means, as Winnicott said, in his book “Everything begins at home” in “SUM: I am ‘basically’ I know because I have lived.”...

But we also know that if I say I know or I learned this needs to be on the other side someone that taught me. At this point we come to the question: How can the teacher be playful in its formation if there was almost no space for this practice could be experienced? What would be, in teacher education, a playful methodology? These questions are the basis of a larger research developed by Create and Play group: the ludic in the learning process - LUPEA, called “The ludic in Higher education: a practice (im)possible?”, which the two authors are researchers.

The central problem here is that we bring here is: The playful space has in Higher Education? The ludic space “fits” in Higher Education, adult site, since they are the ones who will lead the process of teaching and learning forward when trained in Basic Education?

2. Design

This research is of type case study, since empirical research fits in qualitative study, in that it looks an individual or a group of people considering their specificities. According to Yin (2001), the case study is a research method that uses, while at the same time, qualitative data, collected from actual episodes, in order to clarify, discuss, explore, present current events inserted in their proper context.

3. Objective

How can the teacher be playful in its formation if there was almost no space for that this practice could be experienced? What would be, in teacher education, a playful methodology? What would be, in teacher education, a playful methodology? The central problem that we bring here is: The playful has space in Higher Education? The ludic space "fits" in Higher Education, location of adults, since they are the ones who will lead the process of teaching and learning forward when trained in Basic Education?
For both the overall objective of this research was to discuss the importance of ludic space in Higher Education, specifically in teacher training course from the Federal University of Rio de Janeiro
Specific goals of this unfolding, were discussing whether prospective teachers in pedagogy course at the Federal University of Rio de Janeiro see the play as a factor in learning; realize what future the teachers think about this practice and investigate whether the experience of a playful practice in Higher Education resulted in no or playful practices of these teachers (in their jobs, internships).

4. Methods

Were chosen two techniques of data collection: observation and questionnaire, so that we could give voice and image to prospective teachers.

The questionnaire was composed of five questions semi-structured and were sent by e-mail at the beginning of the month of March of 2014, because many students have changed their turn, already have graduated, abandoned the course, making it difficult to personally administer the questionnaire. We obtained from the 35 questionnaires sent to answer of 28 students.

The location chosen for data collection was the Faculty of Education of the Federal University of Rio de Janeiro at the beginning of the semester 2014.1 .

These subjects were selected from a group of pedagogy students at UFRJ, who attended compulsory subject Conceptions and Practices of Early Childhood Education of the diurnal course. The choice of this class was because one of the authors participated in the same as a student and as an observer of this course in daytime.

In this research were chosen two techniques of data collection: observation and questionnaire. The observation took place in the second half of the year 2011, the 4TH period of Pedagogy The questionnaire, semi-structured, was composed of five questions, all multiple choice, and with a space for comments.

5. Discussion

The first question was: “How do you perceive the proposal of playful practice?”. 71.4% of the respondents replied that they perceive the practice entertaining “excellent”, 25% think this practice as “good”, 3.6% think “reasonable” and 0% “very bad”.

The second question was: “Do you believe in the importance of this practice entertaining in Higher Education?” All 28 respondents believe that the playful practice in Higher Education is important, that is 100 %.

The third question was: “Do you realize that throughout your training the playful practice was present? When?”. Although 64.3% of respondents say yes, their comments showed that the playful practice was present in very few moments of your training and not along the same; 17.9% answered that the playful practice was not present along of their training and 17.9% did not mark options, but gave other answers such as "rarely, more or less, rare, very little, almost was not present.

The fourth question of the questionnaire was: “Do you believe that having lived some experience to practice playful throughout your scholarship, this fact influenced you to repeat it when professional?”. Only one respondent said that the exposure to playful practice not caused or would have changes in their teaching practice. 96.4% of the respondents marked *yes* and 3.6% marked that *do not*.

The last question of the questionnaire was: “This methodology has helped you in your teaching-learning process?”. The aim of this question was to discuss if the future teachers of the course of Education at the Federal University of Rio de Janeiro perceive the playful as a factor of learning. In the

same way as the previous question, only one interviewee believes that this methodology has not helped in their teaching-learning process. In this way, 96.4% of the respondents pointed out that this methodology has helped them in the process of teaching-learning and 3.6% pointed out that not

From the quantitative survey of responses, we can already deduce that students, mostly, see how important the playful experience in the disciplines to their teaching practice, no matter which thread will work. In addition, all future teachers interviewed believe in the importance of playful practice in Higher Education. We realize also that almost all believe that they did not have enough experience in the playful context so that they could say that such moments or activities would be able to modify your look to what is learned. Exposed at the University to the same method which until then was submitted, students resent the lack of an allied practice to theory, mainly an assessment that took into account the process and not only the content. Despite the fact that 64.3% of the respondents report that the playful practice was present throughout his training, the vast majority reported that this occurred in a very short period, or only to the disciplines related to Psychology or only as a specific professor. Thus, although they marked yes, their speeches show that the playful practice was not present throughout his training, i.e., a continuous practice. We could also see that the 28 future teachers interviewed, 27 of them believe that the exposure that they had to practice playful influenced them to repeat it when professionals or in their internships, and jobs and experiences within the classroom. Although only one interviewee has had pointed out that no, this demonstrated throughout the questionnaire that perceives the playful practice as good and believe in its importance in Higher Education

6. Conclusion

From what has already been picked up in the survey, we can conclude that the playful "fits" yes in Higher Education, location of adults .But, despite being recognized by students / future teachers as an essential and important practice in the course of training of teachers, unfortunately the playful still does not have a teaching space fully recognized in this segment of education. We defend and bet the playful practice. As regards the specific objectives, the playful is seen as a factor in learning for students who are completing the pedagogy course at the Federal University of Rio de Janeiro.

During the course, we saw the students comfortable in the room, sitting on the floor, participating and taking attendance. In each work, the students showed willingness to improve to be creative, invent and be original. These features were present throughout the semester and the students learned independent of a final grade recorded from a proof. It is essential that the classroom is an enabling space for an enjoyable and meaningful learning, and for that to happen, it is of great importance that the teacher consider the importance of play. We also conclude that the experience of a methodology and play practice in higher education can both lead to future playful practices in future teachers, but also has influenced students who are already teachers and trainees. This can be seen from the reports of the students to be able develop the theories studied through demonstrating the application of these in practice and also consider, mostly playful methodology as excellent and good, as they had also by objective search it after.

It is extremely important that the pedagogy course, that form the future teachers, provide to students during their training and experience the benefits of this playful practice, since it is not used just for the kids. Thus, we break with common sense, which is still present in most classrooms to classify the playful practice as irrelevant to the construction of knowledge. The classroom environment usual was transformed by adults sitting on the floor, wallets in the back, materials such as crayon, clay, ink, cardstock, brushes, crayons, glue and clippings. The room reserved for the Higher Education was full of color and vibrancy, and students perceived that the playful and the play were no longer something restricted to a certain age. This proved that the graduate has the ability to form in its undergraduates to a pedagogical practice agile and challenging, to break with the traditional paradigms and to lead students to learn in a real way and also enjoyable.

Having a playful practice is a daily challenge, as it seeks new ways of teaching and learning, so it is important that the teacher has had a base and a prior playful practice in their training course. From this base as important, students reflected on their future practices in the classroom as teachers. We affirm and reflect as Carlos Drummond de Andrade: "Playing with kids is not to waste time, is to earn it; it is sad to see children without school, sadder still see them sitting queued in rooms without air, sterile exercises without value for the formation of human being."

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THE LUDIC AS STRATEGY FOR PROPITIATE THE LEARNING IN EJA: INFANTILIZATION OR SPACE FOR CREATION?

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Abstract

This work came from the need of investigating if playful could be used with Adults and Young People Education without infantilizing them. The research, a qualitative study and analyzed as an action research, was made in two groups of Adults and Young People Education Project, at a public school in Rio de Janeiro – RJ, by Priscilla Frazão. In both of them there are some students with disabilities coping with the students named as "regular". In order to collect data, four playful activities (games) were developed with these groups and photos were also taken in order to illustrate the process. This research was developed during the year of 2012 and is currently in progress, as part of the author's monograph. The goal of the analysis of the data collected is to evaluate how these playful activities allow the learning process to happen, without infantilizing the aimed group. We all know that the government must guarantee the right of the education to all citizens; however is our duty, especially ours (teachers), to allow a warm education dealing with the differences that make us one. This is our challenge and the challenge of this work: to bring to life what we can only see in the darkness in the internship.

Keywords: *playful, inclusion, adults and young adults education.*

1. Introduction

This work arose from the need to investigate whether the playful could be used for the Education of Young People and Adults without treating them as children. At the end of 2012, the Research Group Create & Play - the playful in the teaching-learning process (LUPEA) started to include in their discussions and studies not only the playful in Higher Education as well as in the education of Young People and Adults (EJA). We believe that in the Education of Young People and Adults there is space for different educational proposals, among them the recreational activities such a way to include in the literacy process of these students, that are adults but often seen as children by the fact of not knowing how to read and write. With this approach, we continue to seek, through the creation of games, the return of the pleasure of learning of these students that, many times, did not feel the slightest desire to be in the environment of the school. We realized that the facts analyzed by the Research Group Create & Play should be transformed into a specific research within the main theme: the playful in the teaching-learning process. This research was carried out in the course of 2012 until March 2013, as part of the monograph at the end of the course of one of the authors, Priscilla Frazão.

Considering the view that a subject is constituted by their social relations, these being marked since the beginning of life by the playful (HUIZINGA, 2010), we believe that is duty of the educator to provide their students a learning enjoyable and meaningful. From this theoretical basis, we believe that the proposed subject of study has a unique importance as it brings to the scene the question of ludic space as a key place of learning and also, learning difficulties, linking this with the learning of adults. The ludic space, establishing in child and human being the space where culture and symbol inhabit (Winnicott, 1975), is often used as the primary place of learning in kindergarten, being the games and playing their more important instruments. In studies conducted in the research group Create & Play, we saw that this space of play should be kept within the school setting, no matter what segment of schooling, since this is the origin of the space of learning (MAIA, 2012). So the question motivating this research is: Can we use the play as a methodological strategy of education without those students feel infantilized?

2. Design

This research, a qualitative one, taking the methodological profile of action research, was conducted in two classes of the Project Youth and Adult Education (PEJA) in a Municipal School in Rio de Janeiro City. For data collecting, initially we observed the classes and then the performance of ludic activities in classrooms, finally we photographed the activities. The observation with group A began in June 2012 and the observation with group B began in March 2013, and they are still in progress. Data analysis was performed to evaluate how the playful activities enabled the students learning without infantilizing them.

3. Objectives

The main objective of this research was to demonstrate that the playful could be used in the Education of Youth and Adults without infantilizing students. We also investigated the importance of ludic activities and how it may or may not facilitate learning in Education for Youth and Adults.

4. Methods

The survey was conducted in two classes of the Education Program of Adult and Youth (Blocks 1 and 2) in the municipality of Rio de Janeiro, with students without disabilities and others who have different disabilities. To collect the data, initially we observed the work of teachers, in order to know how the Education of Youth and Adults has worked in the municipality of Rio de Janeiro. Then we registered the ludic activities in the classes (A and B), making use of photographs and personal notes. Photoethnography was used as the basis for reading data (BONI and MORESCHI, 2007), in order to prove the importance and credibility of playfulness in Education for Youth and Adults. In our research four activities were created. Two of them, “Romero Britto - Life and Work” and “Alfabetic Labels”, were continuously photographic recorded. The other two, called “Let's Go Shopping” and “Can you write the number?” were partly photographed. For data analysis we choose as reference the proposed content analysis of Bardin (2011). We decided to use all the material collected, both the continuous and the partly photographed, because the field was not modified, i.e., we work all the time with two groups already described above. With this photographic and observational material we tried to answer our main question: Can we use the playful in educating of young people and adults without infantilizing them?

5. Discussion

In the discussion of the results, we will present them divided by activities developed with classes. In class A: “Can you write numbers?”, “Let's go shopping”, and “Romero Brito - life and work”. In class B “the alphabetic labels”.

Activity 1 – “Can you write numbers? (Class A). We conducted this activity because we realized that the students face some difficulties in writing which they spoke, mainly numbers. Students until then not understand that number could be written. At the end of the activity, they realized that each symbol has a different nomenclature and also had contact with numbers that do not yet know how to pronounce them or recognize them, especially the large numbers, with three or more digits (400, 500 etc). Students also learned that numbers could be written, and made it clear in their speeches: *“I really enjoyed this activity, now I know the numbers, the amount and their names, it is important to me because I work with trade”*, Claudio said. *“I did not know that number had lyrics like our name”*, said Manoela.

Activity 2 – “Let's go shopping?” (Class A). Next to the school there are two supermarkets and we observed that, when leaving the class, students always go through them to check prices and buy some things. Thus, seeking a closer relationship between the daily lives of students and what they learned in school, we developed an activity with the purpose of providing the identification of the value of the products and comparing with other products, simulating a trip to the supermarket. The teachers gave to students the supermarkets ads and shopping lists and they were identifying the products from the list in the booklet given to them. The products they did not understand the writing could be asked and then they began to pick up the products from their lists. We observed motivation and attention seeking for the products and commitment to bring the activity to its end. We believe this occurred because the playful proposal created a cheerful and pleasant environment. Upon completion of this activity, the students were able to understand the dynamics of a purchase in the supermarket check the value and calculate the total of their purchases. This is clear in the statements recorded: “Teacher, that was great, now I understand how to make calculations with numbers and I will pay more attention to prices”, Carmen said. “I do it

almost every day, but I never thought that the account of the school were the same of the market", said Alda.

Activity 3 – "Romero Britto - Life and Work" (Class A). This activity was due to the fact that, in the curriculum PEJA 1 Block 1, there is a lack of discipline of Arts. Thus, students have little or no contact with this kind of activities. Using this ludic activity we found a way to contemplate Arts in a enjoyable and meaningful way to the learner. We chose the artist Romero Britto in order to provide a cultural identification, since in Class A has many students from the Brazilian Northeast region, the same of the artist. The objectives of this activity were to present the biography of Romero Britto to build student interest in visual arts and provide a reflection on the theme from the stimulation of the process of student's creativity. It was proposed that each student made his painting from a reading of the work of the artist. Once the activity has been given, the first reaction was the same, the students did not want to participate in the activity, said they did not know how to draw, *"I cannot draw, ask another thing teacher, it is very difficult",* Claudio said. Because of the students' reaction, it was made a work of personal growth with each of them, leading them to believe they could make their own creation. Soon after this conversation with the class, they accepted develop activity. For Winnicott (1975, p.88), *"It is in playing, and perhaps only in playing, that the child or adult can live their freedom of creation."* At this moment we can suggest that students experienced their freedom of creation, and we could discuss about the patterns of beautiful and ugly. Where did we lose the genuine and proper play of primary creativity that embraces the spontaneous gesture of the other and gives it a social recognition?

Activity 4 – "Alfabetic Labels" (Class B). During the classes, we perform an activity of "who comes first and who comes after" with the letters of the alphabet, since we realized that the students found great difficulty in understanding the sequence of letters. The main purpose of this activity was to promote the recognition of letters by students in the products used and known by them, bringing the closeness of his life outside of school into the room. By the reaction of the students of Class B, we noted that they learned with joy and pleasure, and realized that they already could read. *"I did not know this product (referring to Chinezinho brand) was written in this way, I always buy the products of this brand, I know its name, but could not write its name, so in this way is easier",* said Mirtes. *"This rice (Tia Belinha) has the same name as my cousin, her name is Isabella, but we call Belinha",* said Edgar.

6. Conclusion

Who's afraid of use playful when teaching? We can say with certainty that most teachers observed in this study. They repeat what they have learned in their schooling process until his qualification in teaching. In teaching training they review what they experienced and learned in school and college. "Crayons are kid´s stuff, colored gum, my God! What will they think about me? Draw to learn to read? Is this a way of teaching adults?" But if we dare try in a long process to break down the barriers of this formal learning, we realize a methodological freedom, even if we have much more work to prepare each lesson. At this moment we dare play. We are not saying with this that we should have a game every class. We defend, instead, the playful as a space of creation and also authorship and autonomy of thought. Reflecting on the Education of Youth and Adults is a challenge to build an emancipatory education that considers the human being as a whole. In this sense, the playful activities present a new way to achieve a more humane, joyful and liberating pedagogy.

In this research, we concluded that the teacher needs to understand the power of transformation that the playful education can promote. For this, it is necessary to rethink about our practices, adapting to promote citizenship and also understanding that the classroom constitutes an environment with varied experiences that can be leveraged to encourage students to improve learning. The challenge of working with the playful in Education of Young People and Adults is not only in its inclusion, but how to understand the specifics that this method requires. It is noteworthy that we understand the importance of lectures in order to improve knowledge, however these must be associated with practice, in order to ensure a meaningful and enjoyable learning.

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PROACTIVE COPING AMONG ORGANIZATIONAL NEWCOMERS[i]

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Abstract

The main goal of the study was to analyse the coping process during the first phase of organizational entrance. It was assumed that newcomer pre-entry experiences (e.g. previous unemployment) can influence adaptation process and outcomes. Therefore the different groups of organizational newcomers (reemployed, school-leavers and after turnover) have been compared. Since demographic characteristics may also represent life experiences relevant to the work adaptation, previous job experience, age, education, and gender were included as control variables. This study analyse the psychosocial factors of work adaptation outcomes in the distinguished groups of participants (n=56). In opposite to previous assumptions, the results showed reemployed as being high proactive copers and in follow, suffering less during the first period of new employment than others.

Keywords: *proactive coping, work adaptation outcomes, organizational newcomers.*

1. Introduction

The permanent rise of employee's turnover makes that movement from being organizational outsider towards organizational insider becomes one of the vital topics. According to Bauer and Erdogan (2011; Bureau of Labor Statistics, 2005), individuals will change their jobs approximately every two years. Careers are likely to involve not only lateral movements across organizations but also increased instability, and periods of unemployment for most workers rather than stability, vertical progression and job security, as it was in the past. One of the consequences for the organization is loss of time and resources because of the need to restart the recruitment and selection cycle, whereas employees suffer from lack of job satisfaction, embeddedness and organizational commitment (Bauer & Erdogan, 2011). Organizational turnover is often highest among new employees. In the face of uncertainty and barriers, e.g. unmet expectations or perceived costs of reemployment, newcomers consider leaving the organization (Allen, 2006), thus the proactive coping and proper adaptation to a new environment become an important topic. Proactive coping theory shows a person as being determined by individual factors and claim responsibility for changing his/her situation. Proactive individual chooses the goals regarded as challenges and consequently try to attain them. Coping becomes in this case a *goal* management rather than *risk* management (Greenglass, 2002; Schwarzer & Taubert, 2002). Proactive coping causes that people perceive difficulties as challenges. Although they see risk, demands and opportunities in the future, they do not appraise them as threat, harm, or loss (Greenglass, 2002; Schwarzer & Taubert, 2002; Greenglass & Fiksenbaum, 2009). Thus, proactive copers should better adapt to a new work environment.

2. Objective

Newcomer pre-entry experiences (e.g. previous unemployment) can influence adaptation processes and outcomes, e.g. newcomers with previous experience in the same industry might experience less reality shock and have an easier time of adaptation. Since unemployment influence a person in a specific manner organizational adaptation could be particularly difficult for newcomers previously unemployed. The need of understanding how people cope and adapt to a new workplace seems to be crucial in this field. Therefore the reemployed individuals have been compared with other organizational newcomers (school-leavers and after turnover).

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3. Method

3.1. Participants

The sample comprised the 56 organizational newcomers who have voluntary agreed to participate in the study. 54% of the sample was male subjects what reflects the real workforce population. The mean age was 29 years (SD=5.85; range = 20-42). Before getting actual job the respondents were mostly employed in another organization (61.7%). 29.8% of the sample was previously unemployed and the average length of unemployment was 5 months. Only ~10% of participants have been classified as school-leavers.

3.2. Measures

The measures consisted of several psychometric scales referred to coping, personal and social resources, adaptation stress, adaptation outcomes and demographics:

SCALES USED IN THE SURVEY	
1.	Proactive Coping Inventory (PCI; Greenglass, E., Schwarzer, R., Taubert, S., 1999)
2.	Intentions to turn-over*
3.	General Self-Efficacy Scale (GSE; Jerusalem, M., Schwarzer, R., 1981)
4.	Adapting Self-Efficacy*
5.	Emotional Costs*
6.	Job satisfaction*
7	Work orientation*
8.	Perceived Stress Scale (Cohen, S., Kamarck, T., and Mermelstein, R.,1983)
9.	Personal/demographic data

* scales developed for this study.

4. Results

The descriptive statistics show the level of proactive coping strategies used by organizational newcomers in the new workplace (see Table 1).

Table 1. Proactive coping strategies – descriptive statistics.

	Max	Range	M	SD
Proactive Coping in general	220	68 -128	99,81	15,58
Proactive coping	70	17 - 41	28	5,92
Reflective coping	44	6 - 29	19,96	4,09
Strategic planning	16	2 - 12	6,81	2,07
Preventive coping	40	9 - 28	18,45	3,98
Instrumental support seeking	36	4 - 20	11,92	3,65
Emotional support seeking	20	3 - 14	8,2	2,9
Avoidance coping	12	0 - 7	2,54	1,64

Table 2 presents the mean scores on the difference between organizational newcomers, who previously were: 1. unemployed, 2. working for another organization, and 3. students (school-leavers). The mean scores were calculated on each of the instrument used. The analyzed samples was not equal, however the obtained results illustrated some tendencies evinced by the new workers.

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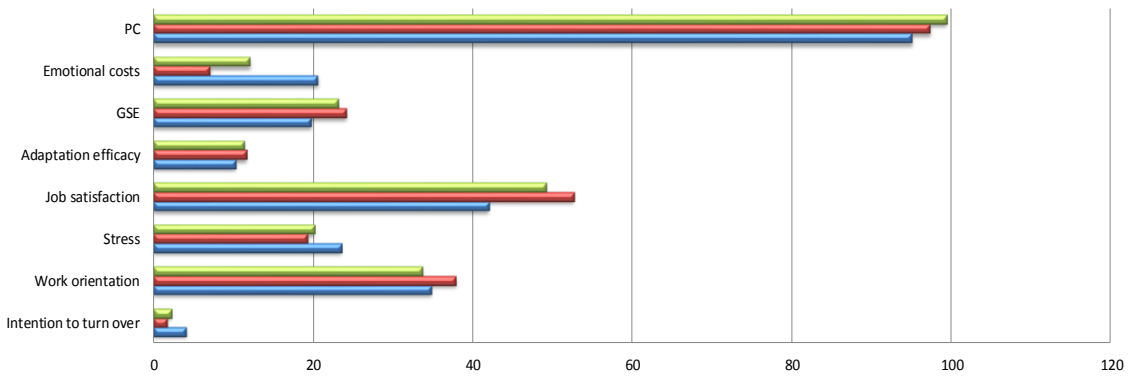
Figure 1. The mean scores on the difference between previously unemployed, employed and school-leavers.



	Intention to turn over	Work orientation	Stress	Job satisfaction	Adaptation efficacy	GSE	Emotional costs	PC
Employed	2,2	33,68	20,1	49,15	11,34	23,13	12	99,37
Unemployed	1,71	37,85	19,28	52,67	11,64	24,07	7	97,28
School-leavers	4	34,75	23,5	42	10,25	19,75	20,5	95

As can be seen on a Figure 1, organizational newcomers, who were previously unemployed, evinced the lowest tendency to proactive coping, efficacy beliefs, work orientation and job satisfaction. They also experienced higher emotional costs, stress and have stronger intentions to turn over. The preliminary assumption of lower well-being and poorer coping ability among the reemployed has been not confirmed. The Figure 1 depicts higher tendency to proactive coping, better job satisfaction and work orientation, and higher efficacy beliefs in the focal group. Previously unemployed individuals experienced also lower emotional costs and stress in the new workplace and have lower intentions to change the job.

5. Discussion

The descriptive statistics indicated average level of proactive coping among organizational newcomers. This tendency can be seen especially among the group of school-leavers and could cause lower well-being at work and adaptation outcomes: work orientation and job satisfaction. In consequence it could increase their intentions to turn over.

It was hypothesized that adaptation to a new workplace would be particularly difficult for the reemployed. Previously unemployed newcomers have been described as worse proactive copers than other groups analyzed in the study. The influence of unemployment could lead them also to lower adaptation outcomes. The findings of this study show however higher – in comparison to other groups - PC, efficacy beliefs, and well-being among previously unemployed organizational newcomers. One of the possible explanations for the higher PC and GSE among the reemployed could be seen in the job search process. Considering all negative effects of joblessness on a person, it could be expected that especially those, who have better coping and personal resources, get a new job. Better adaptation outcomes achieving in this group could be explain as a result of higher coping skills. Also the expectations about the job conditions could be verifying and decreasing during the job search process.

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UNDERGRADUATE STUDENTS' LIFE SATISFACTION BETWEEN EMPLOYABILITY AND CAREER CAPABILITIES

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Abstract

Background: Assessment of life satisfaction (LS) is an important issue in the overall preparation of undergraduates towards an employment outcome. The aim of our study is to analyze the associations between LS and socio-demographic factors, career attitudes, employability soft skills, academic work satisfaction and quality of life autonomy. *Methods:* Undergraduate students were invited to complete a paper pencil questionnaire exploring: Life satisfaction (LS), Dynamic Career Attitudes (DCA), Employability Soft-Skills (ESS-Short), academic Work Satisfaction (WS), Quality Life of Autonomy (QoLA) and socio-demographic characteristics (age, gender, educational field, year of study, work experience (less vs. more than 6 months and actual employment). Data were analyzed using correlation and multiple linear regression models. *Results:* 124 volunteers (22.6 years) had LS of 75.4/100. Majority were women, in the first year of Bachelor, and in applied management. Most of them had six months or less of job experiences and were unemployed. Higher the DCA, ESS-Short, QoLA and WS better was the students LS. *Conclusions:* LS is an indicator related with employability and career capabilities. Supporting students through wellness and career activities program in autonomy-supportive environment, to cope with their stressful period and to enhance their generic employment and career capabilities may allow to the undergraduates to maintain their LS.

Keywords: *life satisfaction, academic work satisfaction, career attitudes, employability skills.*

1. Introduction

Regarding the preparation of undergraduates toward labor market, life satisfaction (LS) in the academic environment has become an import component in overall assessment of students' wellbeing. University life often involves many challenges that may have an impact on students' mental health (Samaranayake et al, 2014). Indeed, students who were satisfied with their overall life possessed lower stress, had greater levels of hope and a stronger sense of personal control (Gilman & Huebner 2006). Although, students' LS has a great influence in better preparation toward the employment outcome, the question may be raised if higher generic employment capabilities (i.e. employability soft skills) and active career orientation are related to greater life satisfaction of undergraduates? First, employability was related to career and greater autonomy perception (Karavdic et al, 2014). Students' with higher employability soft-skills could better control and plan their career, which in turn could be relate to their well-being (Fugate, Kinicki, & Ashforth, 2004). Second, individuals who are confident of their employability are likely to perceive job seeking as less threatening (Berntson & Marklund, 2007). It may prevent the development of negative experiences and enhance favorable beliefs about future employment prospects and consecutively may enhance LS. Thus, people who have developed active career attitudes may increasingly feel able to manage and control themselves in important aspects of their lives and be more likely to be satisfied with their achievement (Judge, 2009). As LS reflects cognitive individual's judgment of the extent to which basic needs are met and the extent to which a variety of other goals are viewed as attainable (Bradley & Corwyn, 2004) it can be argued that students with higher generic skills for employment and an dynamic career approach may perceive greater achievement in the pursuit of their career aspiration and so would consequently show better life satisfaction. In this context, the aim of the study is to determine the associations between life satisfaction and socio-demographic factors, career attitudes, generic employment capabilities, academic work satisfaction and quality of life autonomy domain among Bachelor students.

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2. Methods

University of Luxembourg undergraduate students in social sciences, engineering, and applied management were asked to complete a self-administered paper pencil questionnaire via an anonymous process assessing: **a) Life Satisfaction (LS)**: was based on a single-item (1 to 10 = very satisfied) used in European Survey Eurofounds (2012); **b) Socio-demographic characteristics** assesses via age, gender, work experience (less vs. more than 6 months), educational field (social sciences, engineering, and applied management), year of bachelor (1st, 2ed, 3th) and actual employment (yes/no); **c) Generic employment capabilities: Employability Soft-Skills scale** (ESS short-14 items) exploring key skills and personal qualities such as: self- management, team working, problem solving and knowledge of working practices (1 to 5=perfectly capable); **d) Dynamic Career Attitudes scale** (DCA-13 items) assesses career competences (adaptability, optimism, planning and career-related knowledge) identified to be important to secure a suitable position in the job market (1 to 5=strongly agree); **e) Quality of Life Autonomy:** (QoLA-4 items) Whoqol domain evaluates the ability to live independently and to make necessary decisions on your own (1 to 5=strongly); **f) Academic Work satisfaction (WS)** was based on a single items (1 to 10 = very satisfied) assessing students' general academic work satisfaction.

3. Statistical Analysis

Scores on 100 were calculated for each scale, so that a higher score represented a better/higher level. Bivariate test and correlations were used for association analyses between the variables. Only significant relationships ($p<0.05$) were used in the linear multiple model.

4. Results

Socio demographic characteristics. Out of 278 registered undergraduates, 124 were volunteer participants. The LS of the students (mean age 22.6 years) was 75.4/100. Majority were female, and one-third came from third year and two-fifth from the second year of the bachelor. Most were enrolled in the applied management degree, unemployed and had less than 6 months of work experience (Table 1).

Table 1.Socioeconomic characteristics of students mean (standard deviation) or %.

Variables		N=124 – Mean (SD) or %
Life satisfaction (LS)	[0 -100]	75.4 (21.8)
Age		22.6 (4.533)
Gender	Women	51.9
Bachelors in	Social Sciences	16.9
	Engineering	25.0
	Applied Management	58.1
Year of Study	1st year	41.9
	2ed year	23.4
	3rd year	34.7
Work experience	Less than 6 months	64.2
Actual employment	Yes	24.7
Employability Soft Skills (ESS-Short)	[1 -100]	68.1 (13.1)
Dynamic Career Attitudes (DCA)	[1 -100]	66.5 (11.7)
Quality Life Autonomy domain (QoLA)	[1 -100]	68.1 (17.6)
academic Work Satisfaction (WS)	[1 -100]	66.6 (20.6)

Relations between life satisfaction and others factors. ESS-short, DCA, QoLA and WS were positively linked to LS score. Oppositely, no socio demographical characteristics (age, gender, and education field, year of study, work experience and actual employment) were significantly related to LS (Table 2).

Table 2.Socioeconomic characteristics of students mean (standard deviation) or %.

	Life Satisfaction [0 – 100)*	
Variables	**Correlation coefficient[3]**	**p- value[2]**
Employability Soft Skills (ESS-Short)	0.602	**0.000*** **
Dynamic Career Attitudes (DCA)	0.382	**0.000*** **
Quality Life Autonomy domain (QoLA)	0.544	**0.000*** **
academic Work Satisfaction (WS)	0.602	**0.000*** **

*Only significant relation were presented in the table; [1]Significant p-value: *: p<.05; **: p<.01; ***: p<.001; [2] Pearson's correlation.

Impact of other factors on Life satisfaction. The multiple regression model explained 56.3% of variance (adjusted R-Square). Higher were the ESS-short, DCA, QoLA and WS, better was the LS score (Table 3).

Table 3. Associations of psycho-educational factors on Life satisfaction by undergraduate students- regression coefficient - Standard error- (SE).

	Life Satisfaction [0 –100)				
Variables	**b**	**L95[4]**	**U95[4]**	**SE[3]**	**p[1]**
Employability Soft Skills (ESS-Short)	1.022	0.595	1.450	0.216	0.000***
Dynamic Career Attitudes (DCA)	0.826	0.409	1.244	0.211	0.000***
Quality Life Autonomy domain (QoLA)	0.292	0.084	0.500	0.105	0.006**
academic Work Satisfaction (WS)	0.431	0.285	0.578	0.074	0.000***

Adjusted R Squared =56.3%; F (4. 119) = 38.932; [1]Significant p-value: *: p<.05; **: p<.01; ***: p<.001 ; [3]Std.Error; [4]Confidence Intervals.

5. Discussion

Better was the students' LS, higher were the Employability Soft Skills, Dynamic Career Attitudes, Quality Life Autonomy and academic Work Satisfaction. Their LS was similar to the national youth (74.7/100) (Statec, 2013) and better than in the European Survey Eurofounds (2012) for the same age category 18 to 24 (71.1/100). In this context, the acquisition of employment capabilities and an active career attitude may be seen as guaranteeing factors in the pursuit and attainment of students' future career objectives. A proactive approach for managing of one's own career may deliver positive psychological outcomes such as LS (King, 2004) and so a student's attempt to gain control over career outcomes through autonomy could be accomplished by developing skills. As successful Bachelors have to fulfill a set of criteria in order to graduate and be prosperous in multiple life domains university wellness and career activities programs may support and empower individuals to live a mindful life, keeping their own optimal level of LS, by creating strategies to cope with their stressful period within university and extra academic settings.

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COMMUNICATION SKILLS AND STRESS AT WORKPLACE

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Abstract

This study examined the relationship between communication skills at workplace and job related stressors, psychological stress reactions. Subjects were 133 university students (who have experienced part-time jobs before, 96 males and 37 females). Their communication skills with the co-workers and with the boss, their job stressors, and psychological stress reactions were measured. As a result of factor analysis to the communication skills items, 4 factors were extracted: Conversation skill, Problem solving skill, Adjustment of relationship skill, and Support skill. Job stressors include 4 factors: Excessive pressure, Job role indistinctness, Lack of ability, and Excessive burden. Psychological stress reactions include 6 factors: Anger, Disorder of the cardiovascular system, Interpersonal strain, Fatigue, Excessive sensibility, and Depression. First, I examined the relationship between communication skills with the co-workers and stress. According to the multiple regression analysis, problem solving skill and adjustment of relationship skill had a significant inhibition effect on lack of ability. In addition, conversation skill and problem solving skill had a significant inhibition effect on interpersonal strain and depression. Support skill tended to reduce disorder of the cardiovascular system. Second, I examined the relationship between communication skills with the boss and stress. According to the multiple regression analysis, conversation skill and adjustment of relationship skill had a significant inhibition effect on job role indistinctness. And adjustment of relationship skill was negatively related to lack of ability. In addition, conversation skill tended to reduce interpersonal strain and depression. And adjustment of relationship skill tended to reduce anger and fatigue.

Keywords: *communication skills, job stressors, psychological stress reactions, psychological stress process, university students.*

1. Introduction

Communication skills are a part of social skills, which are work more directly to interpersonal relationship. Makino (2010) have researched on communication skills of junior-school students and communication skills training for them in Japan. Makino (2012) examined the association between communication skills and friendship, their mental health. According to Makino (2012), as the person who had high communication skills for the same-sex, the friend relations were good and the mental health state was good. However, these studies were limited to the communication skills for the friend in the college life. When a student become a member of society, the communication skills with a co-worker and the boss are necessary. Therefore I examined association with communication skills and the mental health at workplace in this study.

2. Objectives

The purpose of this study was to investigate the relationships between communication skills at workplace and job related stressors, psychological stress reactions. Most of Japanese university students have experienced part-time jobs during their school days. They work as part-time workers, but they might feel some stressors, or take some psychological stress reactions. This study examined if communication skills with co-workers and the boss would help to reduce job stressors or psychological stress reactions at workplace or not. And if some skills work to help, this study tried to find which skill work to reduce stressors or stress reactions. This research will make a substantial contribution to industrial stress study if it becomes clear that which skill is useful for stress reduction.

3. Methods

3.1. Participants

The participants were 133 university students (who have experienced part-time job(s) before, 96 males and 37 females; M_{age} =19.38), enrolled in different departments of two Japanese universities. Most of them were freshmen.

3.2. Procedure

Participants completed a questionnaire in the classrooms. They received course credit for completing the questionnaire. The questionnaire was presented as a study about daily life among university students. They were told to answer the questions without discussing them with others.

3.3. Measures

The questionnaire was made up of six scales (and three scales were not analyzed in this study) plus demographic items. It took about 15 minutes to complete.

Communication skills with the co-workers. The communication skills with co-workers self-report scale was arranged from Kiss18 (Kikuchi, 2004) and Makino (2012). It included 18 items that were rated on a five-point scale (1=strongly disagree, 5=strongly agree). Examples of those items were "I talk with a co-worker and am the one where many conversations do not break off." and "I can be reconciled very well with the co-worker who quarreled".

Communication skills with the boss. The communication skills with boss self-report scale was arranged from Kiss18(Kikuchi, 2004) and Makino(2012). It included 18 items that were rated on a five-point scale (1=strongly disagree, 5=strongly agree). Examples of those items were "I can help the boss well." and "Even if a trouble happens with my boss, I can handle it well". The expressions of the items were the same as the scale with co-workers but the difference is with the co-workers or with the boss.

Job stressors, job stress reactions scales. The Job stress scale self-report scale (some items were selected from JSS-R, Kosugi, Tanaka, Otsuka, Taneichi, Takada, Kasai, Sato, Shimazu, Shimazu, Shirai, Suzuki, Yamate, & Yonehara, 2004) included 49 items that were rated on a five-point scale (1=strongly disagree, 5=strongly agree). Job stressor scales were comprised of 4 factors, and job stress reactions scales were comprised of 6 factors, these were the same as Kosugi et al. (2004).

4. Results

4.1. Factor analysis of communication skills with co-workers and with the boss

As a result of factor analysis to the communication skills items, 4 factors were extracted: Conversation skill, Problem solving skill, Adjustment of relationship skill, and Support skill. The communication skill is a technique to be able to talk well and to have many topics to talk. The problem solving problem skill is a technique that can solve the troubles when they happen with the person of the circumference. The adjustment of relationship skill is a technique to coordinate the relations with the co-workers or the boss well. And the support skill is a technique to help your co-workers or boss with work.

4.2. The relationship between communication skills with the co-workers and stress at workplace

Figure 1 and Figure 2 present the results of the multiple regression analysis. Problem solving and adjustment of relationship skill had a significant inhibition effect on lack of ability. And, conversation skill and problem solving skill had a significant inhibition effect on interpersonal strain and depression. Support skill tended to reduce disorder of the cardiovascular system.

Figure 1. Path model of the relationship between communication skills with the co-workers and job stressors.

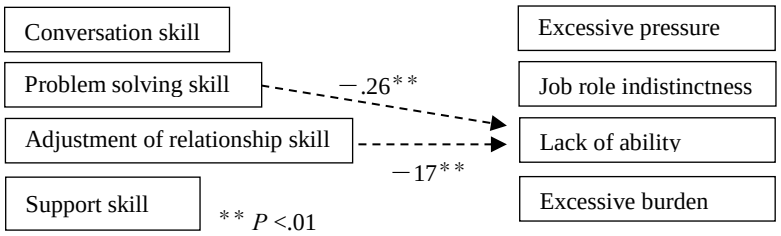

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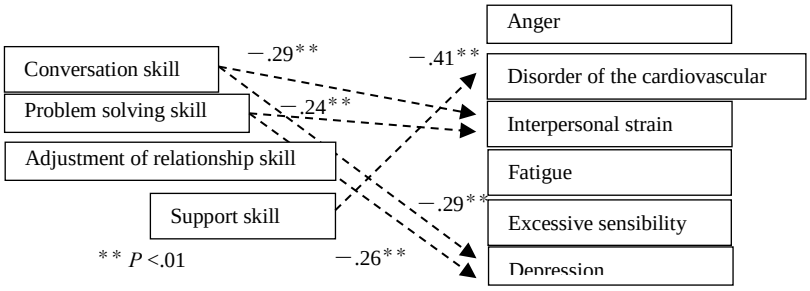
Figure 2. Path model of the relationship between communication skills with the co-workers and job stress reactions.



4.3. The relationship between communication skills with the boss and stress at workplace

Figure 3 and Figure 4 present the results of the multiple regression analysis. Conversation skill and adjustment of relationship skill had a significant inhibition effect on job role indistinctness. And adjustment of relationship skill was negatively related to lack of ability.

Figure 3. Path model of the relationship between communication skills with the boss and job stressors.

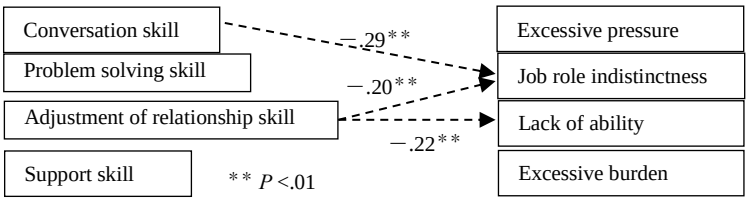
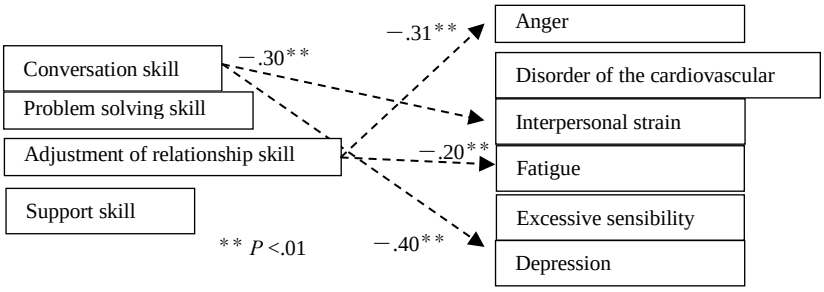


Figure 4. Path model of the relationship between communication skills with the boss and job stress reactions.



5. Conclusions

As for co-workers, problem solving skill and adjustment of relationship skill are very important for workers to reduce lack of ability. And students with higher conversation skill and problem solving skill had a lower tendency for interpersonal strain and depression. As for the boss, conversation skill and adjustment of relationship skill are very important. And students with higher conversation skill and adjustment of relationship skill had lower stress reactions.

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RESILIENCE, ACCESSIBILITY OF ALCOHOL AND ALCOHOL REFUSAL SKILLS AMONG ADOLESCENTS

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Abstract

Objectives: This study aimed to explore the relationships between resilience (Novelty seeking, Emotional regulation, Positive future orientation), accessibility of alcohol and alcohol refusal skills among adolescents. *Methods:* The study sample consisted of 1298 adolescents (53.3% girls, age M=11.72 years, SD=0.67 years, project APVV-0253-11). Binary logistic regression was used for the analysis which was carried out separately for boys and girls, with alcohol refusal skills as the dependent variable. *Design:* A cross-sectional design was used. *Findings:* The models showed that for boys there were significant associations between Novelty seeking ($p<0.05$), alcohol accessibility ($p<0.01$) and alcohol refusal skills. For girls significant associations were found between Emotional regulation ($p<0.05$), alcohol accessibility ($p<0.001$) and alcohol refusal skills. Boys with a higher level of Novelty seeking had the tendency to report fewer alcohol refusal skills. Girls with a higher level of Emotional regulation showed a higher level of alcohol refusal skills. Finally, accessibility of alcohol affected alcohol refusal skills negatively for both genders. *Conclusions:* We suggest that there could be a specific function of resilience regarding alcohol refusal skills, although with respect to gender differences. We further stress the general importance of the role of public health policy concerning the issue of accessibility of alcohol for this specific group of young students

Keywords: *resilience, accessibility of alcohol, alcohol refusal skills.*

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1. Introduction

While there is consistent evidence that early initiation of alcohol consumption and frequency of teenage drinking are associated with a whole range of future negative outcomes, relatively little attention is directed on alcohol use and alcohol refusal skills among young adolescents (10–12 years old) (Patric, Schulenberg, 2014).

2. Design

A cross-sectional design was used.

3. Objectives

This study aimed to explore the relationships between resilience (novelty seeking, emotional regulation and positive future orientation), accessibility of alcohol and alcohol refusal skills among adolescents.

4. Methods

4.1. Sample

The study sample consisted of 1298 adolescents (53.3% girls, age M=11.72 years, SD=0.67 years, project APVV-0253-11). The data were collected in 2013 in 60 elementary schools.

4.2. Measures

The Adolescent Resilience Scale (Oshio et al., 2003) consisting of the subscales: novelty seeking (7 items), emotional regulation (9 items) and positive future orientation (5 items) was used in this study.

Respondents were asked to choose a rating on a scale with possibilities 1 = definitely no to 5 = definitely yes. A higher score indicated a higher level in each factor.

To measure accessibility of alcohol the following question was used: If you wanted, would it be difficult or easy for you to obtain alcohol - with response options 1-impossible, 5-very easy and 6 - I don´t no.

Alcohol refusal skills were assessed with the question concerning the ability to refuse alcohol in a situation when it is available (alcohol refusal yes = 0, = 56.4% boys, girls = 75.5%).

4.3. Statistical analysis

Binary logistic regression was used for the analysis which was carried out separately for boys and girls. The model consisted of four independent variables (novelty seeking, emotional regulation, positive future orientation and availability of alcohol. Alcohol refusal skills were used as the dependent variable.

5. Findings

Regarding the resilience factors, significant gender differences in emotional regulation were found (Tab 1). The complete models containing all predictors were statistically significant for males (χ^2 =18.16, 78; p<0.01 and females (χ^2=16.37; p<0.001) and distinguished between students who reported and did not report alcohol refusal skills explaining 7-9 % (males) and 5-7% (females) of the variance.

The models (Tab 2) showed that for boys there were significant associations between novelty seeking (p<0.05), alcohol accessibility (p<0.01) and alcohol refusal skills. For girls, significant associations were found between emotional regulation (p<0.05), alcohol accessibility (p<0.001) and alcohol refusal skills (Tab 3). Boys with a higher level of novelty seeking had the tendency to report fewer alcohol refusal skills. Girls with a higher level of emotional regulation showed a higher level of alcohol refusal skills. Finally, accessibility of alcohol affected alcohol refusal skills negatively for both genders.

Table 1. Descriptive statistics (possible score range, mean and standard deviation) for the novelty seeking, emotional regulation, positive future orientation, accessibility of alcohol, separately for males and females.

		males		females		
	score range	mean	SD	mean	SD	p value (t-test)
novelty seeking	7-35	24.23	3.95	24.31	3.72	.747
emotional regulation	9-45	30.13	4.64	29.40	4.77	**.021**
positive future orientation	5-25	18.68	4.42	18.76	4.25	.779
accessibility of alcohol	1-6	2.46	1.88	2.39	1.90	.506

Table 2. The association between novelty seeking, emotional regulation, positive future orientation and accessibility of alcohol among males.

	B	S.E.	Exp(B)	95% C.I.for EXP(B)		Sig
				Lower	Upper	
novelty seeking	.094	.037	1.098	1.021	1.181	**.012**
emotional regulation	-.007	.027	.993	.943	1.047	.804
positive future orientation	.000	.033	1.000	.938	1.066	.995
accessibility of alcohol	.184	.063	1.202	1.061	1.361	**.004**

Table 3. The association between novelty seeking, emotional regulation, positive future orientation and accessibility of alcohol among females.

	B	S.E.	Exp(B)	95% C.I.for EXP(B)		Sig
				Lower	Upper	
novelty seeking	.035	.038	1.035	.962	1.114	.352
emotional regulation	-.049	.025	.953	.907	1.000	**.050**
positive future orientation	-.020	.032	.981	.921	1.045	.543
accessibility of alcohol	.177	.055	1.194	1.072	1.330	**.001**

6. Discussion

Underage drinking continues to be an important public health problem and a challenge to the substance abuse for the prevention science and prevention professionals (Fleweling et al., 2013). In our study, the accessibility of alcohol was found to be a risk factor which affected the alcohol refusal skills negatively for both genders. Findings of Fleweling et al. (2013) suggest that an intensive implementation of underage drinking law enforcement can reduce underage drinking. The resilience model (Zimmerman, 2013) posits that individual factors may reduce sensitivity to adverse environmental factors, such as alcohol accessibility. In our study, it was found that a lower level of emotional regulation was associated with a decrease in alcohol refusal skills among girls and a higher level of novelty was associated with a decrease in alcohol refusal skills among boys. These result are consistent with previous research regarding alcohol use, alcohol refusal skills and protective mechanisms of young adolescents (Ehret, Ghaidarov & LaBrie, 2013).

7. Conclusion

This study supports the importance of a specific function of resilience regarding alcohol refusal skills, although with respect to gender differences. We stress the general importance of the role of public health policy concerning the issue of accessibility of alcohol for this specific group of young students.

Acknowledgments

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TYPES OF VOCATIONAL IDENTITY STATUS IN POPULATION OF SLOVAK HIGH SCHOOL STUDENTS[i]

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Abstract

The paper deals with the construct of vocational identity status in population of Slovak high school students. Establishing a vocational identity is one of the most central aspects of the transition from adolescence to adulthood. Vocational Identity Status Assessment (VISA) is composed of three dimensions. The career commitment dimension measures sense of certainty about a choice. The career exploration dimension is indicated by the in-depth and in-breadth career exploration, that lead to crystallizing preferences for occupations or to specifying an occupational choice. The career reconsideration dimension is indicated by openness to changes in occupation or how much we feel uncertain regarding career planning. The pilot study applies method of k-means cluster analysis, which author of the scale suggested. We examine suitability of using VISA for population of Slovak adolescents via comparison with results of cluster analysis conducted on American students. The survey was completed by 136 high school students of standard type of grammar school. The sample was composed of 50% men and 50% women with a mean age of 17.7 years (SD=0.64). We found that character of six types of vocational identity (achieved identity status, confirming moratorium, moratorium, foreclosed, diffused and undifferentiated status) is highly similar to the original American sample. Despite of this similarity, differences occur in searching moratorium, foreclosed and undifferentiated identity status. Comparison of representation of individual statuses of American and Slovak sample shows, that Slovak sample consists of larger percentage of students with foreclosed status (19.1%) than American sample (7.9%). Percentual representation also shows, that achieved status in Slovak sample is also higher (18.4%) than representation in American sample (12%). Larger percentage of American sample than Slovak sample occurs in states of moratorium and also diffusion. In conclusions we suggest using VISA in our country as good assessment tool for finding vocational identity status of Slovak adolescents. Findings can be beneficial for next research, mainly in the area of career counselling.

Keywords: *vocational identity status assessment, cluster analysis, Slovak high school students.*

1. Introduction

1.1. Vocational identity

Research activities in the area of career counseling in Slovakia have been underestimated over a long time (Lepeňová, 2006). The second directional choice is the main choice in life of many high school students. Career counseling for high school students is important not only for choice of next education, but also for successful school-to-work transition (Ihnacík, 2005 in Lučanská, Hanulík 2007). Career counseling process with high school students mostly contains diagnostics of abilities, personality and interests (Gallová, 2013; Ihnacík, 2013). In Slovakia it is not usual to deal with such psychological construct as vocational identity, which is according to many holistic theories key construct in process of career counseling. The reason of deeper exploring mentioned psychological construct is our research on using new constructs as an important part of interventions in the area of career counseling at high schools.

Vocational identity is a term, which is unknown in research area and practice in Slovakia. Mentioned construct evolved from concept of ego identity. The newest model of vocational identity is based on three components: career commitment, career exploration and career reconsideration. Adolescents with mature career identity have great mental health. The main problem of adolescence is an

[i] This research was supported by research grant APVV-0540-12- Psychometric quality of psychological diagnosis methods in career counselling

inability to form mature career identity. The mature career identity reduces stress of career decision-making and facilitates smooth transition to adulthood (Malanchuk et al., 2010). The questionnaire we focused on can distinguish six types of vocational identity statuses: achieved, searching moratorium, moratorium, foreclosed, diffused and undifferentiated status of vocational identity.

1.2. Research problem and objectives

We focused on construct, which is not used in research and nor in practice in our country. Because of this fact, this type of research is pilot study. We suggest deeper insight into construct, which can be helpful for our next research activities. The main question is: what is the composition of vocational identity statuses in the population of Slovak high school students? Is it possible to use mentioned typology of vocational identity statuses as in the case of original American sample? What types fit best and what types can differ from typology of the original sample?

2. Methods

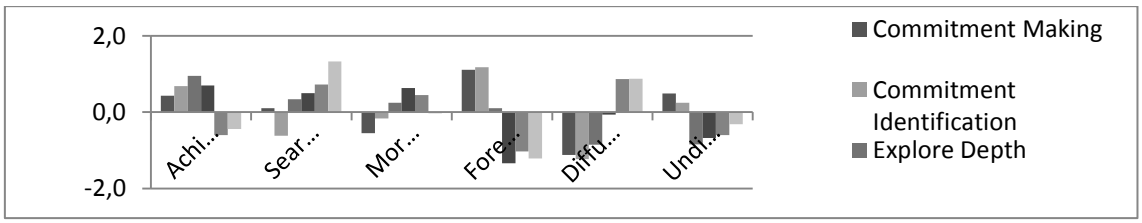
The research was conducted on 136 high school students of standard type of grammar school. The sample was composed of 50% men and 50% women with a mean age of 17.7 years (SD=0.64). We used *Vocational Identity Status Assessment* (Porfeli, 2011) - questionnaire measures dimensions of career commitment, career reconsideration and career exploration. The VISA consists of 30 items. Answers on the questions are constructed by 5-point Likert style of scale. Participants respond according to how much they agree with particular statement. The VISA can distinguishes six types of vocational identity statuses- achieved identity, moratorium, searching moratorium, foreclosed identity, diffused and undifferentiated identity.

Statistical method used was k-means cluster analysis, which was recommended by author of VISA. K-means cluster analysis finds, what is the composition of clusters in particular sample and what clusters questionnaire can distinguish. Porfeli´s (2011) sample was American high school and also later university students. Students were randomly sampled from a mix of seven suburban and urban high schools. The number of participants was 432, 74.6% women. Average age of participants was 16.5 years, SD=0.99 (Porfeli et al., 2011).

3. Results

We found that character of six types of vocational identity (achieved identity status, confirming moratorium, moratorium, foreclosed, diffused and undifferentiated status) is highly similar as in the original American sample. Despite of this similarity, differences occur in searching moratorium, foreclosed and undifferentiated identity status. Comparison representation of individual statuses of American and Slovak sample shows, that Slovak sample consist of larger percentage of students with foreclosed status (19.1%) than American sample (7.9%). Percentual representation also shows, that achieved status in Slovak sample is also higher (18.4%) than representation in American sample (12%). Larger percentage of American sample than Slovak sample occurs in states of moratorium and also diffusion. We present results also by graphic form, which is more comprehensive (Figure 1, 2).

Figure 1. Cluster analysis of Vocational Identity Status Assessment conducted on Slovak high school student.



16.2% 12.5% 23.5% 16.2% 17.6% 14.0%

Legend: *Achiev. - Achieved identity, Search. - Searching Moratorium, Morat. - Moratorium, Forecl. - Foreclosed identity, Diffused - Diffused identity, Undiff. - Undifferentiated identity*

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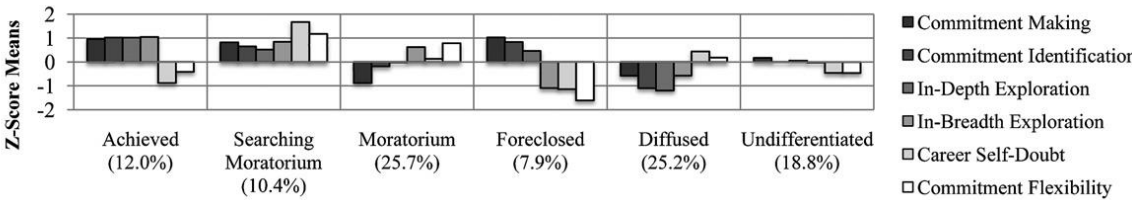
Figure 2. Cluster analysis of Vocational Identity Status Assessment conducted on American high school student.



Legend: *Achiev. - Achieved identity, Search. - Searching Moratorium, Morat. - Moratorium, Forecl. - Foreclosed identity, Diffused - Diffused identity, Undiff. - Undifferentiated identity*

4. Discussion

The biggest difference between the two compared samples was found in foreclosed status. Slovak high school students have larger percentage of foreclosed identity status. It is status, which is the second adaptive vocational identity status of all six types of statuses, because there are only one disadvantage - less in - breadth exploration and focusing only on the one chosen possibility of career choice. Also, the achieved identity status percentage of Slovak sample is larger than American sample. On the other hand, Slovak sample had larger percentage in non-adaptive vocational identity statuses-moratorium and diffused status. According to our reflexions, it seems, that Slovak sample contains larger pertentage of more integrated vocational identity statuses, but also with less integrative identity statuses than American sample.

Pilot study helped us to carry on with activities, which lead to practical intervention in the area of career counseling. According to results we recommend using Vocational Identity Status Assessment for research and also for practical purposes, especially in the area of career counseling. Despite this recommendation, using VISA as a measurement tool means also to take into account the differences occurred in specific types of vocational identity, which clusters subtly differ from clusters of the original sample.

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VALUES AND CAREER MOTIVATION IN THE CONTEXT OF VOCATIONAL IDENTITY[i]

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Abstract

Vocational identity is one of core component of identity construction in adolescence. The newest theories of vocational identity discuss three dimensions of vocational identity: career commitment, exploration and reconsideration. Career motivation and values are also key constructs in many theories of holistic approach to career counseling. Slovak counseling centers mostly use only diagnostic methods in the area of skills, personality traits and interests. Assessment of psychological concepts likes motivation or values are unusual in our country. Our paper describes relations between mentioned psychological constructs and explores how they can contribute to clarifying each other. We used three measures in this study- VISA (Vocational Identity Status Assessment), Career motivational questionnaire and PVQ (Portrait Values Questionnaire). The research was conducted on 136 high school students of standard type of grammar school. The sample was composed of 50% men and 50% women with a mean age of 17.7 years (SD=0.64). Main results show statistically significant positive correlations between intrinsic motivation and dimension of career commitment of vocational identity status- career commitment making r=.55 (p <.01), r^2=.30 and identification with career commitment r=.43 (p <.01), r^2=.18. We also found statistically significant (η^2 = .24) differences in the level of intrinsic motivation among six groups with different state of vocational identity. Group with foreclosed vocational identity status had the highest median of all groups (Mdn=49.5), conversely, group with diffused identity status had the lowest level of intrinsic motivation (Mdn=41). We also find statistically significant differences between mentioned six groups in level of achievement value (with moderate magnitude; η^2 =.08). Group with diffused identity and group with type identity called- moratorium had lower value of achievement. Concepts of intrinsic motivation and values could partially clarify type of vocational identity status. According to results of our research, we suggest more research and practical activities in our country, in the frame of mentioned psychological constructs, which can be helpful in the field of career counseling.

Keywords: *vocational identity status, career motivation, values, high school students.*

1. Introduction

1.1. Basic examined psychological constructs connected with area of career counseling in population of Slovakian high school students

Research activities in the area of career counseling in Slovakia have been underestimated over a long time (Lepeňová, 2006). The second directional choice is the main choice in life of many high school students. Career counseling for high school students is important not only for next career choice, but also for successful school-to-work transition (Ihnacík, 2005 as cited in Lučanská & Hanulík 2007). Process of career counseling with high school students mostly contains diagnostics of abilities, personality and interests (Gallová, 2013; Ihnacík, 2013). In Slovakia it is not usual to deal with such psychological constructs as values, career identity or vocational identity, which are according to many holistic theories in career counseling key constructs in process of career counseling. In the study we clarify relations between mentioned psychological constructs. The reason of exploring relations is next research activities, which are connected with using this constructs as an important part of interventions in area of career counseling on high schools. We will briefly introduce mentioned psychological constructs.

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According to found information it is not usual to diagnose value type and value orientation of students (Gallová, 2013; Ihnacík, 2013). Despite this fact, according to many authors of basic theories in the area of career counseling, values is a basic filed, which is connected with all career choices in individual´s life (Parsons, in Sharf, 2009; Bengts, Finsén, 1994, in Nilsson, Å-kerblom, 2001).

Finding a career motivation in career counselling process is mostly rare. But as in the case of value orientation, many foreign authors consider career motivation important concept in career counselling process (Buddeberg-Fischer et al., 2008; Barbuto, Sholl, 1998).

Vocational identity is term, which is unknown in research area, but even also in practice in Slovakia. Vocational identity is based on three components: career commitment, career exploration and career reconsideration. Adolescents with mature career identity have great mental health. The main problem of adolescence is an inability to form mature career identity. The mature career identity reduces stress of career decision - making and facilitates smooth transition to adulthood (Malanchuk et al., 2010).

1.2. Research problem and objectives

Because of the fact, research activities are neglected in area of career counseling, we considered to analyze another important psychological constructs connected to career counseling. We would like to suggest deeper insight into psychological constructs often mentioned in foreign research. We focused on constructs, which are not used in research and nor in practice. Do the type of career motivation and preference of values relate to type of vocational identity status? Our main aim of the research is to describe how they can relate to each other and how can career motivation and values clarify the vocational identity status.

2. Methods

The research was conducted on 136 high school students of standard type of grammar school. The sample was composed of 50% men and 50% women with a mean age of 17.7 years (SD=0.64). Our research design is based on correlations and comparisons. We used following methods: *Career Motivation Questionnaire* (Abele et al., 1994) - the scale contains three subscales about intrinsic, extrinsic and extraprofessional career motivation. *Portrait Value Questionnaire* (Schwartz et al., 2001) contains short portraits, statements about different people. It measures individual value structure. *Vocational Identity Status Assessment* (Porfeli, 2011) - questionnaire measures dimension of career commitment, career reconsideration and career exploration. The VISA can distinguish six types of vocational identity statuses- achieved identity, moratorium, searching moratorium, foreclosed identity, diffused and undifferentiated identity.

3. Results

In consideration of voluminousness of results we present only main and significant results. Main results point to statistically significant positive correlations between intrinsic motivation and dimension of career commitment of vocational identity status- correlation with career commitment making $r=.55$ ($p<.01$), $r^2=.30$ and correlation with identification with career commitment $r=.43$ ($p<.01$), $r^2=.18$.

We also compared several populations and we used nonparametric statistics- Kruskal – Wallis test. We found statistically significant differences in level of intrinsic motivation between groups of students with different vocational identity status. Students with foreclosed vocational identity status had the highest value of median of intrinsic motivation (Mdn=49.5). On the contrary, students with diffused vocational identity had the least median (Mdn=41.0). The substantive significance is on relatively big level $\eta^2 = .24$.

We also find statistically significant differences between mentioned six groups in level of achievement value. While substantive significance is moderate ($\eta^2 =.08$). Groups with diffused identity and group with type identity called- moratorium have lower value of achievement.

We also found relations between intrinsic motivation and value of self - determination ($r=.32$) and intrinsic motivation and value of achievement ($r=.34$). Middle strength of correlation we also found between extrinsic motivation and value of power ($r=.33$).

4. Discussion

Extrinsic and intrinsic motivations contribute to explanation of dimension of career commitment, which contributes to comprehensive career identity. Mentioned types of motivation could also clarify dimension of career reconsideration, which is characterized by career self – doubt and flexibility about career choice (Porfeli et al., 2011).

According to results we can consider, lack of intrinsic or extrinsic motivation could explain less integrated status of career identity - diffused identity status and reversely, more intrinsic or extrinsic motivation can be connected with more integrated vocational identity status.

We also found significant differences in the case of students with achieved and diffused vocational identity in achievement value. According to the results we consider, achievement value can have important role within vocational identity status.

Found relationships between intrinsic career motivation and value of self – determination and achievement can describe individual, which is motivated by inner forces and his inner dynamic expresses in creation and goals determination (as Shwartz, 2012, characterized self – determination).

Extrinsic motivation is connected with value of power. We can see connection with statement of Domene et al. (2011). He states, that students with high level of extrinsic motivation fulfill the academic duties, because of holding values of society and this is nature of value of power (Schwarz, 2012). According to our results and reflexions, concepts of intrinsic motivation and values could partially clarify type of vocational identity status.

We suggest more research and practical activities in Slovakia is needed, within mentioned psychological constructs, which can be helpful in the field of career counseling.

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SOCIAL SUPPORT PLAYS A DIFFERENT ROLE IN SEXUAL RISK SEXUAL BEHAVIOUR: A LONGITUDINAL COMPARISON OF YOUNG ADULTS FROM THE CZECH REPUBLIC, HUNGARY, LITHUANIA AND SLOVAKIA[i]

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Abstract

Only a few studies have explored the associations between social support (SS) and sexual risk behaviour in an international and longitudinal comparative design. The aim of this study is to explore the associations between three types of perceived SS (family, friends, others) and sexual risk behaviour among young adults in the Czech Republic, Hungary, Lithuania and Slovakia. The data were collected online from 861 first year university students (75.5% females; M=21.9; SD=2.7) in four countries (22,3% CZ; 21,7% HU; 28,5% LT; 27,5% SK) at T1 and T2 with a one year follow up. Students were asked regarding three types of perceived social support (family, friends, significant others) and sexual risk behaviour. A binary logistic regression model was performed to explore whether sexual risk behaviour at T2 was associated with the three types of SS at T1. Sexual risk behaviour was associated with SS but these associations differed according to the specific type of SS. Higher levels of SS from family and others were associated with lower rates of sexual risk behaviour. However, higher perceived SS from friends was associated with higher levels of inconsistent condom use, multiple sexual partners and having sex under the influence of alcohol or drugs. These results indicate that during the period of young adulthood, the specific sources of perceived SS may have the opposite effect on sexual risk behaviour. In particular, peers and friends seem to be crucial regarding behavioural change. The identification of students with their peers and friends with perceived social norms may explain this.

Keywords: *perceived social support, sexual risk behaviour, young adults.*

1. Introduction

Studies which were focused on prevention of risk behaviour among adolescents and young adults have found that quality of social relationships may significantly shape health behaviour in protective and negative way as well. The social support (SS) is one of the key components for mutually beneficial relationships.

According by Berkman and Breslow (1983) those individuals with more developed social relations described their own physical and mental health better than those without developed relations. Other studies on chronic diseases (e.g. cardiovascular, depression, arthritis etc.) propose that SS in terms of positive social relations may stimulate coping strategies (Kebza, 2005). Social relations may be also important source for self-identity, positive evaluation of reality, social competence and self-efficacy (Bandura, 1989).

In context of sexual risk behaviour (SRB) of adolescents and young adults several psycho-social factors has been identified. According to socio-ecological model of protective and risk factors of sexually transmitted diseases (DiClemente, Salazar, Crosby, & Rosenthal, 2005) some psychological and social characteristics made individuals more likely to behave risky. For example the period of adolescence is characterized by steep increase of emotional problems, personal uncertainty or depression (Stevens, Brice, Ale, & Morris, 2011), what may increase health risky behaviour and sexual risk behaviour as well (Paxton & Robinson, 2008). Another factors such as self-esteem and social support has been explored

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towards SRB on individual and family level (Kalina et al., 2013). Lakshmi (2007) found that adolescent girls with higher perceived social support from their peers were more likely to report sexual transmitted disease (STD). Similarly Kalina (2011) also found that those adolescents with higher social support from friends but low support from family were more likely to behave sexually risky. However other studies (e.g. Gao & Chen, 2011) showed protective role of social support on health risky behaviours. These inconsistencies may be interpreted by different approach to social support. Therefore the aim of this study is to explore the associations between three types of perceived SS (family, friends, others) and SRB among young adults from Czech Republic, Hungary, Lithuania and Slovakia.

2. Methods

2.1. Sample

Participants were recruited from the Student Life Cohort in Europe (http://www.slice-study.eu), a European study among first year university students. This longitudinal analysis (one year follow up) is based on the data from 861 (75.5% females; mean age = 21.9; SD=2.7) first year university students in Czech Republic (22.3%), Hungary (21.7%), Lithuania (28.5%) and Slovakia (27.5%) which completed online questionnaire at T1 and T2.

2.2 Measures

Social support was assessed using Perceived Social Support Scale (12 items) (Zimet, Dahlem & Farley, 1988) which contains three subscales of perceived social support (family, friends and significant others). Each subscale has 4 items with 7 point response scale, higher score indicates higher SS. C-alpha varied from 0.85-0.92.

Regarding sexual risk behaviour students were asked: if they using condom during first sex with new partner (always/ sometimes, never); how many sexual partners they had in last 12 months (2 and less/ 3 and more); and whether they have had sex under influence of drug or alcohol (yes/no).

2.3. Statistical analyses

Firstly we selected only those respondents which reported sexual intercourse. After that we dichotomized three outcome variables (as indicated in method section). Those students which reported inconsistent condom use, had 3 and more sexual partners and have had sex under influence of alcohol or drugs were categorized as risk group. Three binary logistic regression models were performed for each outcome variable to explore whether sexual risk behaviour at T2 was associated with the three types of SS at T1. Different types of social support were entered together in each model as continuous variables. All models were adjusted for gender and SRB in T1.

3. Results

Regarding sexual experience more than 80% of students in all countries except Lithuania (62%) reported sexual intercourse. Other descriptive characteristics are presented in Table 1. Sexual risk behaviour was associated with SS but these associations differed according to the specific type of SS (Table 2). Higher levels of SS from family and others were associated with lower rates of sexual risk behaviour. However, higher perceived SS from friends was associated with higher levels of inconsistent condom use, multiple sexual partners and having sex under the influence of alcohol or drugs.

4. Discussion and Conclusion

These results indicate that during the period of young adulthood, the specific sources of perceived SS may have the opposite effect on sexual risk behaviour. In particular, peers and friends seem to be crucial regarding behavioural change. The identification of students with their peers and friends with perceived social norms may explain this.

Table 1. Descriptive characteristics of sexual risk behaviour by country.

	Ever had sex (yes)		**Condom use (inconsistent)**		**Number of sexual partners (3 and more)**		**Alcohol or drug influence (yes)**	
	%		%		%		%	
	T1	T2	T1	T2	T1	T2	T1	T2
Czech Republic (n=192)	82.0	83.8	46.4	42.2	15.0	9.9	18.8	19.3
Hungary (n=187)	75.8	80.7	25.9	21.4	16.7	10.2	7.0	10.2
Lithuania (n=245)	50.5	62.4	22.3	23.8	9.8	11.9	9.8	22.4
Slovakia (n=237)	60.0	65.8	28.9	29.7	8.8	12.8	12.1	14.7

Only valid percentages are presented

Table 2. Associations between different sources of SS and three types of sexual risk behaviour by country.

	Three and more sexual partners (T2)		**Having sex under drug or alcohol influence (T2)**		**Without condom during first sex with new partner (T2)**	
SS at T1	OR	CI (95%)	OR	CI (95%)	OR	CI (95%)
Czech Republic						
SS family	0.95	***0.90-1.00**	0.92	****0.87-0.97**	0.95	0.90-1.01
SS friends	1.11	***1.02-1.18**	1.13	****1.13-1.44**	1.10	***1.01-1.21**
SS others	0.96	0.90-1.03	0.84	****0.76-0.93**	0.89	****0.82-0.97**
Hungary						
SS family	1.04	(0.95-1.15)	1.02	(0.93-1.13)	0.97	(0.89-1.05)
SS friends	1.21	****(1.17-1.22)**	1.15	***(1.10-1.38)**	1.00	(0.98-1.01)
SS others	0.86	****(0.88-0.92)**	0.90	***(0.91-0.98)**	0,95	(0,91-1,05)
Lithuania						
SS family	1.05	(0.93-1.18)	1.00	(0.91-1.10)	0.98	(0.89-1.07)
SS friends	1.04	****(1.12-1.26)**	0.98	(0.96-1.05)	1.07	***(1.05-1.20)**
SS others	0.97	****(0.94-0.99)**	0.98	(0.96-1.05)	0.98	(0.96-1.01)
Slovakia						
SS family	0.97	(0.90-1.04)	0.98	(0.92-1.05)	1.03	(0.97-1.09)
SS friends	1.17	***(1.09-1.25)**	1.10	****(1.11-1.35)**	0.97	(0.97-1.01)
SS others	0.98	***(0.96-0.99)**	0.97	****(0.95-0.98)**	0.97	(0.97-1.01)

*p< .05; **p < .01; statistically significant odds ratios (p<.05) are in bold; the model is adjusted for gender and SRB in T1

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OCCUPATIONAL MENTAL HEALTH: PREVENTION AND TREATMENT IN FRANCE AND SWEDEN

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Abstract

This research is a comparative qualitative study related to theories and practice in the treatment and prevention of occupational mental illness in Sweden and France. The study has three components. The first is to elucidate theoretical and conceptual frameworks present in Sweden and France related to occupational illness. This involves a comparison between the theories most prominent in Sweden, highly influenced by biopsychosocial- and stress-models and the scientific tradition in France, influenced by « psychodynamics of work ». The second is to identify differences in practice of prevention and treatment related to occupational wellbeing. The third component is to explore how the connections between work and mental health can be improved. The methodology involved surveys among staff-members in institutions specialized in occupational wellbeing, located in France and Sweden. The surveys aims to explore different methods and practices recognized as most efficient among the staff members of the surveyed institutions. The interpretation of the results — which is currently carried out — reveals advantages and disadvantages of the practices in each country.

Keywords: *occupational, stress, psychodynamics, work, rehabilitation.*

1. Introduction

Sweden and France are countries playing an important role in the area of occupational mental health. In France, there is a scientific tradition influenced by psychodynamics of work, which has a theoretical framework related to comprehensive sociology, phenomenology, psychoanalysis and law (Dejours, 1997; Dejours 2014). This tradition is influencing the methods used by local actors involved in the treatment of occupational health issues. However, in Sweden the theoretical framework is mainly colored by physiological- and psychosocial stress models, in connection to research and rehabilitation methods related to occupational health (Theorell, 2006). Furthermore, the practice of the rehabilitation methods in Sweden are characterized by:

- A tradition of prevention and rehabilitation in terms of workers' security.
- Improvement of health in working life as being one of the main aims, as reported by The Swedish -National Institute of Public Health (Linell, Richardson & Wamala, 2013).
- The presence of several institutions, such as the Institute of Stressmedecin in Gothenburg region and Stockholm Stress Center in the capital city, dedicated to research and rehabilitation of disorders related to occupational settings.
- Dedication to the development of several tools related to diagnostic of symptoms related to stress and burn-out, such as the Karolinska Exhaution Disorder Scale (Sabonchi, Perski & Grossi, 2012) and Karolinska Exhaustion Scale (Besèr et al. 2014).
- Being one of the geographical regions publishing the vast majority of articles related to occupational stress (François, 2002).

2. Design

The research area in France is located in the Paris region and is constituted by a network of different actors involved in the treatment of mental disorders related to occupational settings. The practitioners have all received training in the theory and methods of psychodynamics of work and are operating either in hospital settings, in non-governmental organizations and in private practice. The research area in Sweden is divided between Stockholm and Gothenburg. The practitioners included

in the study are affiliated directly or indirectly, to the Institute of Stressmedecin and Stockholm Stress Center. These two institutes conduct research and are involved in rehabilitation of patients with stress induced disorders, mainly related to occupational settings.

3. Methodology and Objectives

Semi-structured interviews are carried out with different actors involved in treatment, rehabilitation and prevention of mental disorders related to occupational environments. The practitioners included in the study are mainly psychologists. Included in the sample are also psychiatrists, occupational health physicians, physiotherapists and organizational consultants. The interviews aim to discern:

- the theoretical frameworks of the practicians;
- the methodology utilized by the actors;
- the difficulties and the resistances of each actor and how these difficulties are tackled.

4. Discussion

A main difference between the methods utilized in each country is the aim striving towards different objectives. In France the aim is often driven towards reparation through comprehension both on an organizational- and intra-psychic level. Another objective is very often to insert the patient in a network of different practitioners coordinating and cooperating with each other, in order to avoid the patient to be isolated and wander between different practitioners. In Sweden, the emphasis is on rehabilitation and Cognitive Behavioral Therapy (CBT) methods, with the intent to reduce the sick-and disability leave.

While the French network is striving to enhance the patient to take an active part in the treatment method, the research-and rehabilitation programs in Sweden emphasize rehabilitating the patients by educating them on biological reactions of stress and providing them with coping skills. The underlying reasons for the differences between the countries may not only be theoretical but also political. The Swedish institutions dedicated to action-research related to rehabilitation are receiving public funding aiming to reduce the amount of long-term sick-and disability leave, which represent a significant financial cost for the Swedish state (Hogstedt et al. 2004). A major attention is dedicated to prevention of Exhaustion Disorder, which is recognized by the Swedish National Board of Health and Welfare as a formal justification for sick-and disability leave.

However, even though important differences are perceived between the underlying theory of the applied approaches in the different countries, the practice is not always that clear-cut. In Sweden, CBT is recognized by the National Board of Health and Welfare (NBHW) as an evidence based method and tends to be the preferred method rather than a psychodynamic approach (Hägglund et al. 2014). However, some actors in Sweden may sometimes focus on the narrative aspects of the patient, which is closely related to the work method utilized by practitioners in France. Also, some actors in the French network may sometimes have an educational approach with clear instructions provided to the practitioner with a pragmatic «solution» oriented approach, more closely related to psycho-educative methods and CBT.

5. Conclusions

Both approaches have in common to include the person in a network of different actors in order to put the person in a context of coherence and of sense of usefulness to prevent alienation. However, whereas the Swedish institutions are more colored by psychoeducative means, the practitioners in France are more influenced by a psychodynamic approach with an emphasis of the narrative experience of the patient. The theoretical framework is very different between the two networks and the process applied often varies among the countries. However, the main gap is more perceivable in theory than in practice, at the level of the patient-practitioner interaction.

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SUBJECTIVE HEALTH PROBLEMS IN THE CONTEXT OF PERSONALITY CHARACTERISTICS AND HEALTH-RELATED BEHAVIOR IN CZECH ADOLESCENTS

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Abstract

This study presents partial results of an extensive research project called Health-Enhancing and Health-Threatening Behaviour: Determinants, Models, and Consequences (GA13-19808S). The study explores selected factors of health-promoting behavior in adolescents. The variance in the level of activity that the current population of adolescents invests in taking care of their health, cognitive evaluation and perception of their own health has been examined. The role of personality characteristics in relation to maintenance, loss or restoration of one‘s health has been explored as well. The data from the following instruments was utilized in this study: Health-Related Behavior Scale (Dosedlová et al., 2013); Subjective Health Problems Inventory (modified version of the inventory by Osecká et al., 1998), and the Big Five Inventory (O.P. John, E.M. Donahue, R.L. Kentle, 1991). The research sample consisted of 835 adolescents (47,4% women and 52,6% men) aged 12-19 years (35,3% in the period of early and middle adolescence and 64,7% in the period of late adolescence). The principal component analysis of the items of the Health-Related Behavior Scale yielded five factors (healthy eating habits, exercise and lifestyle, avoidance of addictive substances and other risks, regular daily routine and emotional well-being). To predict the score of the subjective health problems, we used the hierarchical regression analysis with personality characteristics and demographic variables entering in the first block and health-related behavior factors entering in the second block. The results were similar to the ones in the adult population: girls compared to boys scored higher in the subjective health problems scale; among personality characteristics, neuroticism was the strongest predictor of the incidence of subjective health problems.

Keywords: *subjective health problems, health-related behavior, personality, adolescence.*

1. Introduction

The presented partial results of the extensive study discussed above attest to the closer interconnections found between components of health-related behavior of adolescents during a key stage of their development, when a number of desirable habits and attitudes towards their own health are being formed. We focused mainly on the role of personality characteristics in securing, losing, improving and maintaining good health, using models based on the concept of “etiological traits” (Kantz & Hedges, 1987 and others), models describing personality as the agent mediating health-beneficial or health-risk behavior (Smith & Williams, 1992 and others), as well as models based on the subjective perception and evaluation of health/illness (Wiebe & Fortenberry, 2006). In our opinion, the key idea here is the concept of Kaptein and Weinman (2004), which recognizes two health-related behaviors: health-risk behavior (behavior, which by its intensity or frequency increases the risk of health problems or injury) and health-enhancement behavior (activities, which can prevent possible health difficulties, help identify illnesses in their early stages, support and maintain health or decrease the risk of injury).

In spite of the evidence that adolescents differ in the level of activity they invest in caring for their health as well as in their subjective experiencing and evaluating of their own health condition, the research of healthy lifestyle and broader health condition issues in adolescence is often isolated, without taking into account the complex view of the entire problem area. Therefore, the presented study’s goal is to examine the mutual relationships between subjectively experienced health issues, select personality characteristics and health-related behavior components, in order to create the pillars of a model of health-beneficial behavior.

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2. Objectives and Design

The primary aim of the study was to examine, using a given sample of participants, the relationship between subjectively experienced health issues, select personality characteristics and health-related behavior components. In addition, we also aimed to study possible developmental trend of the above-mentioned correlates during adolescence. In this research study, we administered a one-time questionnaire, using a combination of self-report questionnaire methods, within the framework of a quantitative research design.

2.1. Methods

The subjects participating in the above-described broad research project were administered an extensive battery of tests, and as part of the presented study, the descriptive data concerning the subjects' age and sex, the Health-Related Behavior Scale (Dosedlová et al., 2013), the Subjective Health Problems Inventory (modified version of the inventory by Osecká et al., 1998) and the Big Five Inventory (O.P. Donahue, R.I. Kentle, 1991) were all used.

2.2. Research Sample

The research sample consisted of 835 adolescents (47,4% women and 52,6% men) aged 12-19 years (35,3 % in the period of early and middle adolescence and 64,7% in the period of late adolescence).

3. Results

In view of the extent of this contribution, we are presenting only the key results of this study. To begin with, for the entire research sample we determined the mean using the method, which determines the level of health issues (the one-dimensionality of the scale was verified using factor analysis; Cronbach's Alpha=0.867). Based on the factor analysis of the items from the Health-Related Behavior Scale (Principal Component Analysis with Varimax rotation), we subsequently, using the main components method, determined five factors of health-related behavior, which were further analyzed. It concerned the following factors: 1. Healthy eating habits; 2. Exercise and lifestyle; 3. Avoiding addictive substances and other risks; 4. Regular daily routine; and 5. Emotional well-being. All these correspond to our previous research results with a university student population.

The most interesting results were revealed by the complex analysis of the prediction of subjective health issues by means of the regression analysis method. We used hierarchical regression with 3 blocks of variables, with the predicted variable being the measure of subjective health issues, operationalized as the total score of the Health Issues Inventory. The first block of predictors included basic demographic variables of gender and age, the second block had personality characteristics determined using the BFI and the last block included factor scores representing the measure of various aspects of health-related behavior.

Gender and age (1st block) explained 5.8% of the differences in the health issues claimed by the subjects ($F(2, 473)=14.485$, $p<0.01$), personality variables (2nd block) along with demographic data explained 24.2% of these differences ($F(7, 468)=21.297$, $p<0.01$) and health-beneficial behavior (3rd block) explained additional more than 7% of this difference, which represents almost a third of the differences, i.e. 31.8% ($F(12, 463)=17.969$, $p<0.01$), that we are able to explain. Among all the models, we found a statistically significant increase in the explained dispersion for model 2 ($F(5, 468)=22.693$, $p<0.01$) and for model 3 ($F(5, 463)=10.336$, $p<0.01$).

Within the framework of the entire health-enhancing behavior model, we found the following predictors: neuroticism ($\beta=0.249$) and conscientiousness ($\beta=-0.207$) among personality characteristics, emotional well-being ($\beta=-0.207$), regular daily routine ($\beta=-0.161$) and healthy eating habits ($\beta=-0.144$) among health-enhancing behavior, and gender ($\beta=0.142$) among the demographic data, women claiming to have significantly more health issues. All the above coefficients were statistically significant, at 1% significance level.

4. Discussion

Using regression analysis, we have attempted to create the best regression model that would encompass the correlation between the level of the participants' subjectively experienced health issues and gender and age, select personality characteristics as well as select components of health-related behavior. The study proves the key importance of personality characteristics and gender, as significant predictors of the participants' subjective health problems. The same conclusion has been reached by a number of studies, which have examined the relationship between personality traits and various aspects of

a healthy lifestyle (Hudek-Knezevič &Kardum, 2009; Wen, Tchong &Ching, 2015, and others). In these studies, neuroticism is most consistently connected with poor subjective health results.

The results presented here, are very suitable for the application in the creation of specific intervention programs focused on health-enhancing behavior, while taking into account age and personality specifics of adolescents. Special focus should be placed on the importance of emotional well-being and regular daily routine, which are very significant variables, shown to be independent of personality characteristics. The importance of strategies differentiation, by means of which it will be possible to support the development of health-enhancing behavior among various age groups, has been pointed out by several authors, who have been researching this subject for a long time (see Becker & Arnold, 2004, and others). They found that individuals who exhibit active health-enhancing behavior perceive their own health in a more positive way and attain higher life satisfaction (Becker, Glascoff, Mitchel, Durham & Arnold, 2007).

5. Conclusions

The results of the study have confirmed the correctness of the current complex approach to health and illness, which emphasizes the importance of the lifestyle of each individual, since it contributes significantly to his/her physical and emotional health. Among personality characteristics, neuroticism proved to be unequivocally the strongest predictor of a person's health condition: the lower the measures of neuroticism the lower number of health issues. Therefore, in addition to other important predictors, neuroticism can be perceived as a significant disposition factor reflected in numerous processes affecting subjective evaluation of one's health condition.

Acknowledgment

Health-Enhancing and Health-Threatening Behaviour: Determinants, Models, and Consequences (GA13-19808S)

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MEDIA COMPETENCE AND POLITICAL PERCEPTION IN MODERN RUSSIAN SOCIETY

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Abstract

Features of perception of media information can have a significant influence on the forming of political images and ideas. This is particularly important in the era of information technology. Growth of mass media compels the person to develop new skills and abilities. Research of influence of new information technologies on political behavior began to take a special place in political psychology. In our paper we consider media competence of Russian voters and it relation to political perception. We present the results of empirical research, which purpose is to study the structure of political images and ideas of current Russian voters with different level of media competence. In our research we used the following methods: semantic differential, personal differential and author questionnaires. The study involved 230 residents of St. Petersburg at the aged from 19 to 67 years. The results of the study indicate that there is the correlation between the image of the state and the image of average Russian. The higher the voters assess the current level of development, achievements and the political situation in the state, the more positive assessment they give to average Russian. Also we identify various methods of representation of political categories in the minds of citizens. The main results of research allow us to conclude that there is a correlation between media competence and the forming of political images, representation of political categories in the minds of Russian voters.

Keywords: *political perception, media competence, political categories, image of Russia, image of Russians.*

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1. Introduction

Features of formation of political images and ideas are the basis of many political phenomena. Because of that the study of political perception has always been a priority range in political psychology. Nowadays, a process of political communication has undergone significant changes due to the development of information technology. A modern voter can search, select and compare the necessary political information. Such changes in the process of political communication can produce two opposite trends. On the one hand, the images of a states, political leaders, parties, formed in the voters mind, have a broader base now. On the other hand, the probability of the "glut" of political information and loss of interest in politics increase, and can result in the form of political apathy. Thus, features of the perception of media information can have a significant influence on the formation of political images and ideas, which in its turn can lead to the manifestation of various forms of political behavior.

In recent years the term "media competence" has been used to describe the features of media perception. As a summary of the existing approaches to understanding of this term (Winterhoff-Spurk, 1989; Tyner, 1998), we offer a new definition: "Media competence is a set of knowledge, skills and abilities required for the qualitative interaction with the media sphere." We identify three main components in the structure of media competence: *Affective* (features of the perception of the media, the degree of emotional involvement in the interaction with the media), *Cognitive* (the ability to analyze, interpret and evaluate media information) and an *Operational* (the ability to search, to choose, to discuss and to apply the necessary information). In this study, we wonder how the above-described abilities can affect the formation of political images and understanding of political categories in the media perception process.

Modern studies of the Russian audience reflect the predominance of negative traits in the image of Russia as well as in the image of the average Russian (Cvetkova, 2013; Shestopal, 2008). Such data may point to low assessment of quality of social relations in modern Russia. In order to understand the nature of many social and political problems, we need to investigate the background and reasons for the

formation of a negative image of Russian. So, we should start the qualitative study of the political perception with a scrutiny of the internal relationships in the system of political images and ideas, because the images system is a holistic formation.

2. Objectives

The aim of the study is to investigate the structure of political images and ideas of modern Russian voters with different levels of media competence. Due to the fact that we can see a formed negative image of the country and its citizens in modern Russian society, the second aim of our study is to investigate the internal relationships in the Russian voters' political images system.

The subjects of the study are political images, features of the understanding of political categories, media competence and features of the political behavior of modern Russian voters.

3. Methods

During the study, we conducted a survey, in which we involved 230 residents of St. Petersburg (56.5% - women, 43.5% - men; Average age - 30 years ± 10,5). The following methods were used:

(1) Semantic Differential method. Semantic Differential by V. Petrenko (2005) was used to evaluate the image of the country. This method allows to identify the main characteristics of the evaluation of the country and to analyze the image of Russia generally.

(2) Personal Differential (Fetiskin, Kozlov, Manujlov, 2002). This method was used to determine the image of the average Russian citizen, formed in the voters mind. This method allows estimating the average citizen of Russia by three scales: assessment, force, activity.

(3) "Definition" Task. Respondents were asked to give their own definition of four political categories: "President", "State", "Power" and "Opposition". Data processing was performed using content analysis.

(4) Author's 3-scale questionnaire aimed at determining the level of media competence. The questionnaire is based on three factors of media competence (cognitive, affective, and operational), which were defined from the analysis of theoretical data.

(5) Author's questionnaire aimed at determining the form and activity of political participation. The questionnaire consists of three parts. Each part measures the degree of activity of one form of political participation (electoral, practical, virtual).

4. Results and discussion

According to the results of the factor analysis 5 factors of the image of the state were defined. These factors were named as follows: Political Assessment, Objective Achievements, Subjective Relation, Economic Assessment, and Cultural Assessment. Correlation analysis (r-Pearson) of the factors of assessments of the state and of the citizen of Russia identified a number of interrelations. The rates of the factor of personal differential "Assessment" correlated ($p \leq 0.05$, $r > 0$) with rates of the assessment factors of the image of the state "political assessment", "objective achievements", and "subjective relation". Thus, voters who assess the current achievements of the country, the political situation in the country, and a generally positively toward it, perceive the average resident of Russia as a bearer of positive, socially desirable characteristics.

Assessment of Russian citizen by a factor of "Force" is correlated ($p \leq 0.01$, $r > 0$) with the assessment of the state on the factors "political assessment", "objective achievement", "cultural assessment". Therefore, the better the respondents assess the political, cultural and socio-economic level of development of the state, the more strong, independent and strong-willed person they conceive a resident of Russia.

The correlation analysis also demonstrates a statistically significant ($p \leq 0.01$, $r > 0$) correlations between the assessments of the state by the semantic differential factors "subjective relation", "cultural assessment" and assessment of the Russian citizen by the personal differential factor "Activity". Therefore, the better the voters assess the cultural development of the country, the more active and impulsive they conceive a resident of Russia.

We used content analysis to investigate the features of voters' interpretation of political categories. The subjects of the content analysis were respondents' determinations of political categories. As a result, 5 different ways to interpret each of the 4 categories were defined.

Respondents defined the "Power" category using the following concepts: "leadership", "influence", "suppression", "social characteristics", "political machine" (political apparatus). The results of ANOVA revealed to us the statistically significant ($p \leq 0.05$) differences in the levels of media

competence in groups of voters, who in different ways define the “Power” category. The findings suggest that voters with the highest level of media competence (M = 50.3, SD = 3.2) understand the "power" category as some political structure, or the administrative apparatus. The voters with the low level of media competence (M = 41.7, SD = 2.6) define "power" category through the description of social characteristics, underlying “power”. These characteristics, according to respondents, are: strength, responsibility, attention to the needs of the people, intellectual and volitional capacity and others.

Voters described "State" category using such characteristics as "territory", "society", "political institution", "management tool", "power". Statistically significant differences in the levels of media competence in groups of voters, with different comprehension of the “state” category are not found.

Respondents described "President" category using such terms as "Head of State", "political institution", "person", "specific person", and "the supreme Commander". The results ANOVA reflect a statistically significant ($p \leq 0.05$) differences in the level of media competence among voters with different definitions of "president" category. In two groups of voters the level of media competence is significantly higher (M = 56.8, SD = 5.3), (M = 48.2, SD = 7.4). One of these groups includes voters who are describing a specific person to determine the "President" category. It should be noted that all respondents included in this group described Vladimir Putin as such specific person. The second group of voters investing in comprehension of “president” category the military sense, described abilities and duties necessary for the military leadership.

Voters defined "opposition" category with such concepts as "confrontation", "competition", "social skills", "political power", and "counterbalance". There were found statistically significant differences in the level of media competence ($p \leq 0.05$) and the level of political participation ($p \leq 0.05$) in the groups of voters with different ways of defining "opposition" category. The voters, who believe that the basis of the concept of “opposition” is the principles of competition, have higher levels of media competence (M = 61.6, SD = 7.2) and political participation (M = 42.1, SD = 6.7). Voters with the low level of media competence (M = 40.2, SD = 2.6) and political participation (M = 21.3, SD = 2.5) consider the "opposition" as a political force, or counterbalance, required for the development of the political system.

5. Conclusions

To sum up the study we can conclude that the assessment of Russia and its citizens have similar trends. The higher the voters assess the current level of development, achievements and the political situation in the country, the more positive assessment they give to the people of Russia. Russian voters’ representations of the content of political categories are significantly different depending on their level of media competence. In our opinion, an interesting result of the study is that voters with the low level of media competence put the social characteristics in determining the political categories. Activity of political participation of voters is related to their understanding of the "opposition" category. Those who believe that the opposition is a form of competition for power are the most active in the political life of the country (regardless of political preferences).

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ESTIMATION OF VIOLENCE PHENOMENOLOGY IN PUPILS OF HIGH SCHOOL IN EDUCATIONAL SYSTEM

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Abstract

In modern psychology the great attention is given to research of phenomenology of violence which defines its occurrence and displays, and also can help with the organization of the preventive procedures reducing level of violence in an education system. Studying of perception of presentations of violence in the educational environment as complete phenomenon at pupils of high school was the purpose of this study. The method of data gathering was the questionnaire «Estimation of violence in school and at home in the pupils» (authors Kovrov, Kozhukhar, Oganesyan). As base of research 17 schools of Moscow have acted (324 girls and 338 boys; 7th - 10th grades). The questionnaire included gathering of the social-demographic data, and also 21 questions directed on revealing of representations of pupils that occurs in two basic spheres of life: in family relations and in educational institution (Likert scale; Cronbach's alpha = 0.738). Correlation, regression and factor analysis were used. In total 133 correlations between answers were revealed. Perceptions of violence in a family, at school and a class, and also representation about intensity of the educational actions at school were revealed as mutual predictors. The factorial analysis has allowed finding out three base factors, defining representations about violence in pupils: 1) safety of environment as low level of violence; 2) educational work, unity, violence preventive maintenance; 3) a class, age, authority of teachers. Unfortunately, results of our poll have shown that with the years (class), the authority of teachers on representations of pupils sharply decreases.

Keywords: *violence, high school, educational system.*

1. Introduction

Nowadays the process of child upbringing and protection from negative environmental influences (advertisement, the media, including the Internet, destructive communities and movements) has become much more complicated. However, educational activities focused on student personality, on humanistic values and ideals, on the heroic past and present serve as a certain filter to this negative influence. Such education contributes to better protection of the child from political manipulations, leads to lower aggression level and helps in self-realization in pro social activity. The process of upbringing has dynamic structure, which makes it possible to conclude that in this process the threats and risks for psychological safety are a priori lowered and even eliminated. To study student's image of the quality of relations at school and in class, in context of the problem of educational safety, interviewing was held. We understand safety of educational environment as the one having no violence in any form together with measures preventing violence and cruelty of student's interactions in educational settings. We based our work on the researches devoted to various types of violence in the different circumstances (Hopkins, Taylor, Bowen, Wood, 2013; Olweus, 2011; Lösel & Bender, 2011). Also we integrated of the ideas of Russian psychologists about psychological and pedagogical safety of educational environment (Baeva, 2007).

2. Design and Objectives

The participants were 662 high school children (from 7th to 10th form), which included 324 girls and 338 boys from 17 different educational institutions (schools, boarding schools, military schools, orphanages) of 10 Moscow districts. All the data was gathered with the help of teacher-psychologists. Studying of perception of presentations of violence in the educational environment as complete phenomenon at pupils of high school was the purpose of this study. We investigated the connection between estimation of several characteristics of psychological violence and representations about intensity of the educational actions at school in students.

3. Methods

As a main method of research, the questionnaire "Evaluation of violence at school and at home in pupils" by Kovrov, Kozhukhar, and Oganesyan was used (Kozhukhar & Kovrov, 2013). The questionnaire included social demographic data, and also 32 questions about 2 main spheres of their lives: family and educational institution, in particular school as the macro system and class as the micro system. The statistical analysis included only answers to those questions that were made using Likert scale (21 questions). Questions presupposing qualitative answers that cannot be ranged were excluded from the statistics and were analysed using percentage and qualitative analysis. For data processing Excel and SPSS v. 21.0 were used (Cronbach's alpha = 0.738.). To study the content relations between answers in the questionnaire Spearman's correlation analysis was used. To narrow the number of results Factor analysis was used.

4. Findings

It was found out that most of the subjects that took part in the questionnaire feel safe and comfortably at school (83%), sometimes or rarely feel safe and comfortably (15%), never feel that (3%). 86% of pupils have close relations with their school teachers. There were found 133 correlations between answers (39 correlations are significant at the 0,05 level; 94 correlations are significant at the 0,01 level). This big number of correlations can be explained by the fact that students perceive their school life as a whole, and by multiple connections between their idea of safety and educational activities and measures. We will study only the most important correlations serving as factors of violence prevention measures and creation of safe educational environment. Those children who saw systematic work with students expressing violence or bullying, thought violence to be a serious problem (r=-0,105). They see relations as calm and friendly (r=0,084 and $p \leq 0,05$), and teachers never humiliate or insult students (r=0,165). Also these students knew that students self-governing organizations work well (r=-0,219). Besides they were connected with different class activities: they were either active participants and initiated the activities, or participants who did not organise the activities but took part in them (r=0,174). These participants were sure that extracurricular activities are socially oriented (r=-0,165) and contribute to class cohesion and conflicts prevention (r=-0,227). Those children who did not believe that different activities lead to class cohesion and conflicts prevention rarely felt safe and comfortably at school (r=0,154), and with none of the teachers they have close relations (r=0,131). They think that there has never been any correction work done with students expressing violence, aggression or bullying at school (r=-0,227). These children estimate their relations with classmates as full of conflicts, scandals and fights (r=-0,179). According to them, teachers in class often (almost every day) humiliate and insult students (r=-0,130), use corporal punishment (r=-0,144), as often as that they also have to experience peer insults and mockery (r=-0,158), or money extortion (r=-0,100). Thus the estimation of school violence as low turned to be connected with systematic activities, aimed at those expressing violence and aggression; with students self-governing organizations; with perceiving relations as calm and friendly; with activities for group cohesion and conflict prevention. Besides, the results proved the existence of significant interconnections between student's estimation of the quality of their family relations, trustworthy and comfort relations at school, in class, their safety with those pro social measures and activities students could take part in.
To reduce the number of various characteristics into several simple and independent factors, that underlie the result, factor analysis was used (principal component analysis, Varimax rotation method with Kaiser Normalization). Three main factors were found (see Table1).

Table1. Rotated component matrix.

Characterisctics of students' activity	Component		
	1	2	3
Peer violence	0,688		
Teachers violence in class	0,624		
Corporal punishment	0,616		
Class and family relations	0,606		
Money extortion	0,528		
Family violence	-0,475		
Teacher violence at school	-0,461		
Violence from other pupils	-0,450		
Family relations	-0,409		
School safety and comfort	-0,375		
Confidence at school	-0,249		

Wish to change school	0,182		
Educational activities		-0,575	
Group cohesion and conflict resolution		0,519	
Discussion of incidents in detail		-0,486	
Students self-governing organizations		0,482	
Violence as a problem		0,439	
Taking part in group activities		-0,432	
Socially oriented class activity		0,427	
Discussion of violence at school		-0,412	
Sex		0,188	
Number of school years		-0,160	
Class			0,873
Age			0,859
Teachers' authority			0,445
Rotation converged in 4 iterations.			

The first, bipolar factor included 12 indices of environmental safety depending on different forms of violence (from peers, teachers, at school, at home, in class) and Olson relations with classmates, at school and in the family. The description of peer violence got the highest factorial loading (0,688), which proves high importance of this factor for all school children, despite their sex, age and grade. We called this factor "Safety of relations and different manifestations of violence". The second factor, single-polar, included 8 characteristics of student's activity which can be defined as organization of pro social activities at school (the highest factor loading is -0,575). This work is connected with student's self-governing organizations and with a positive estimation of pro social class activities by students. The activities include the discussion of cases of school violence, detailed analysis of these cases, teaching students to treat violence as a serious problem. All this leads to group cohesion, and students become able to resolve conflicts productively. This factor was called "Educational measures against violence". The third factor included only three parameters: students' grade and age, and teacher authority. The grade got the highest factor loading (0,873). We see age and grade in close connection with the level of students development, which is why this factor was called "The development of students and the authority of teachers".

5. Discussion and Conclusion

For *discussion* we would like to call three main limits of our study: unequal samples of students from various types' educational institutions; using only one questionnaire in this study; also we have not carried out the comparative analysis by criteria of a sex, age and year of training at school and absence of the comparative analysis of students with the different sex, age and year of training at the school. We found out that perceptions of various violence characteristics in a family, at school and a class, and also representation about quantity and quality of the educational actions at school were revealed as mutual predictors. The results of the study showed that the main factors that can describe all the peculiarities of students activity in the context of family and educational safety/threat are: safety of family, school and class relations, together with low levels of violence; regular measures preventing violence; level of students development and teachers authority as a factor contributing to safe and good relations in educational settings.

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PSYCHOLOGICAL BASIS OF FEMALE CRIMINAL BEHAVIOR

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Abstract

According to our analysis of the crime statistics about the last 18 years (1993-2011) we have identify that female crimes increase 185% in Azerbaijan. Referring to this fact it was interesting for us to study the psychological characteristics of female offender's personality and psychological basis of her criminal behavior. The purpose of this study is to identify relationships between the early and current abuse fact, self-actualization of personality (assertiveness, self-actualization), criminal choosing and female criminal behavior for preventing female crimes. The study was conducted among 300 female prisoners and 300 female non-prisoners. Stanley Phelps and Nancy Austin's assertiveness test, Schwartz's values test, Shostrom's self actualization test were used in this research. The result of the research verifies that three main factors impact to formulating female criminal behavior: early or current abuse, self actualization and choice. Female criminal behavior is the result of her choice, and these choices are formulated by early and current environment (macro, mezo, micro levels of abuse) conditions. Environment conditions (physical, sexual, emotional and economic violence) is the basis of the future choises. In addition to the abuse fact, low level of most important components of self-actualization such as assertiveness and moral values are suitable factors for choices of criminal behavior. In other words, female offender choise criminal behavior because of the early or the current environmental conditions (macro, mezo, micro levels of abuse), and low level of major components of self-actualization such as assertiveness and moral values. It is important to improve self-actualization for the change of the criminal behavior. The findings may be useful in treating and re-socialization of female offenders.

Keywords: *self-actualization, moral values, assertiveness, choice, abuse.*

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1. Introduction

There is an important role of women in society. Although men are considered as the stronger sex than women, review women's tasks at their own environment proves their importance in society. Women's life is more complicated. Women does not only take care of own personal life, also as mother, as wife she has responsibility for her children, family members. Married women's life is more stressful than men. The integration of women in society increases her tension about family concerns. They do not struggle only with family problems in micro level, as well as have to coping with society pressure on mezzo and macro level. All these problems prevented the development of women personality, major components of self-actualization.

2. Design

An experimental study of the psychological characteristics of women criminals was conducted under the Women Jail No. 4, Ministry of Justice, in Azerbaijan from April 2014 to July 2014. 300 female criminals and non-criminals were involved to research. After initial interview 169 female prisoners were selected for participating in the study. All 169 summed up 3 groups, including 33 people in the 1st group of women who have committed crimes against the person, the 2nd group of 100 women who have committed crimes against property and the 3rd group of 36 people who have committed crimes against morality.The first stage of the study was dedicated to the study that defined the current and early abuse facts againists female criminals. At this stage was conducted psychological diagnosis, which include the study of the phenomenon of abuse against women:

1. Interview. The facts of exposure to violence before female criminals commited crimes, their social and economical status, marital status, level of education defined by the interviews;
2. Questionnaire which is detecting level of abuse.

3. Projective methods for the defining abuse facts. Along with the above mentioned, projective tests also was used for the detecting some individual psychological characteristics of female criminals, confirming the facts of exposure them to violence, defining their self-assessment and aqresiya levels.

We marked 3 levels of the fact of exposure to the violence of female criminals:

I level - micro. It means there was domestic violense and all decisions made under the control of the of the power of man in the family.

II level - mezo. It includes the idea that men is owner of women and cultural norms assosiating by punishment to the woman or child were dominating in the community where female criminals live.

III level - macro. This level is designed both first and second levels together. Women in both individual and community level are exposed to violence.

98,2% of female criminals who partcipicated in the study were expossure to the violence. Thus, according to the new psychosocial approach to female personality we woluld argue that female criminal behavior are formed under impacts of three factors: abusing enviorment, choice, pathology level of self-actualization. As we mentioned, besides the abuse fact, pathology of major components of self-actuazlization such as assertiveness and morality are suitable factors for criminal behavior choice.
Therefore, the second stage of the experiment deticating to the study of major components of self-actualization of female criminals. In this stage were conducted psychological diagnosis of major components of self-actualization of female criminals bu the following methods:

1. Interview;
2. Stanley Phelps and Nancy Austin's assertiveness test;
3. Shostrom's self actualization test.

3. Objectives

To define the socio-psychological characteristics that affects to the formation of the personality of female criminals.

4. Methods

1. Self-actualization components of female criminals such as assertiveness, morali values were observed during a productive environment. During the study also were carried out individual interviews, group discussions and group tests.

2. Non-standart interviews were carried out with female criminals in the first stage of the study. Standart interviews, which defined social and economic status, marital status, level of education of female criminals also were conducted.

3. Questionnaire which is detecting level of abuse.

4. Psychological tests were conducted for defining verbal and non-verbal diagnosis and identifing emotional condition:

Stanley Phelps and Nancy Austin's assertiveness test

- Shostrom's self actualization test
- Projective methods

5. Discussion

Net advantage theory of crime is based on conditioning principles and adds individual differences to account for the outcome of conditioning. People are differentially responsive to rewards and punishment, and they differ in what they find to be rewarding or punishing. People who are impulsive, have learning difficulties, and have not developed an adequate conscience focus on immediate rewards from crime without concern for the hurt they cause others while discounting punishment for them. Lifestyle theory views criminal behavior as a lifestyle rather than just another form of behavior. The lifestyle begins with biological and environmental conditions that lead criminals to make certain choices, which in turn lead to criminal cognitions. The theory focuses on these cognitions, or "thinking errors." Thinking errors lead criminals into behavioral patterns that virtually guarantee criminality. The theory was devised primarily to assist correctional counselors to change criminal thinking patterns. Our theory can noted as the mix of net advantaged and life style theory. Differentiations with our theory and net advantage theory is that our theory based on self-actualization aspects of personality, but as net advantage theory we support that people who are not developed some personality characteristics have not developed an adequate conscience focus on immediate rewards from crime without concern for the hurt they cause others while discounting punishment for them. Differentiations with our theory and lifestyle theory is that our theory does not based on thinking "errors", we think pathological level of

self-actualization aspects of personality define criminal choice, but as life style theory we support that biological and environmental conditions that lead criminals to make certain choices, which in turn lead to criminal behavior.

6. Conclusions

According to the result of our research the fact of exposure to the violence 98,2% throw female criminals, high level of morality component was not dedicated throw female offenders, higher level of assertiveness was not dedicated between female criminals too. We prepared the psychological characteristics of female criminals based on crime type classification:

1. Psychological characteristics of female criminals who commited crimes againist personality: Female criminals who belonged to this group all exposure to the violence. We determine that 100% of them were non-assertiveness and could not realized moral values in their behavior. Non of them posses to higher self-actualization level. Pathological level on behavior scale in this group is higher than other groups. It means that they could not realize moral values in their behavior.

2. Psychological characteristics of female criminals who commited crimes againist morality: Female criminals who belonged to this group all exposure to the violence. We determine that 100% of them were non-assertiveness and 94,4% of them could not realized moral values in their behavior. 94,5% of them did not posses to higher self-actualization level. Pathological level on support scale in this group is higher than other groups. I means that they are more non-assertive than others.

3. Psychological characteristics of female criminals who commited crimes againist properity: Female criminals who belonged to this group 97% of them exposure to the violence. We determine that 100% of them were non-assertiveness and 94,4% of them could not realized moral values in their behavior. 100% of them did not posses to higher self-actualization level. Pathological level on time scale in this group is higher than other groups. It means that detecting inter potential weaker than other groups.

4. Psychological characteristics of non-criminals female: Female criminals who belonged to this group non of them exposure to the violence. We determine that 99% of them were assertiveness and 98% of them could realized moral values in their behavior. 80% of them posses to higher self-actualization level. Pathological level on time scale in this group is higher than other groups. It means that detecting inter potential weaker than other groups.

Thus, we analyzed our three dimension female criminal behavior model which based on psychosocial explanation. These results can be basis female criminal psychotherapy model for the resocialization of female criminal personality.

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ON THE PERCEPTION OF STALKING BY WOMEN

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Abstract

Stalking is a very actual topic and its perception is relevant to define appropriate prevention strategies. It is hence necessary to analyze to which extent people are able to identify stalking and distinguish it from other forms of violence. In this study we analyze how the perception of the phenomenon varies depending on socio-cultural factors. In particular, the focus of our research is on the evaluation of women's stalking perception along the following categories: pervasiveness, impact on private life, ability to identify the phenomenon with respect to other forms of violence, degree of information on stalking and degree of information on prevention measures. The study has involved 174 italian women aged between 18 and 60, all of them below normative scores on the Holmes-Rahe Life Stress Inventory (1967). The sample completed a subjective multiple response questionnaire on stalking perception (Corradini, 2014) and on the Socio Economic Status Schedule (Hollingshead, 1975). The sample was stratified with respect to the following variables: age (ranges 18-40 and 41-60); Marital status; Employment Status; Level of education. Analyses were conducted using qualitative and quantitative statistical analysis to identify cluster of people with different perception profiles and their possible correlations and dissimilarities. The clustering analysis with object scores method was used to identify three groups (effect size η^2=.033) sharing similar characteristics within each of the two relevant dimensions ("degree of knowledge" and "prevention strategies") identified by the MCA analysis (Multiple Correspondence Analysis). This result is important for the definition of prevention measures targeted to specific groups.

Keywords: *stalking, women's perception, prevention, private life.*

1. Introduction

In recent years, stalking is becoming a serious phenomenon for which it's necessary to work on prevention. The definitions used to describe stalking are multiple (Zona et al., 1993; Goode, 1995; Meloy & Gothard, 1995; Pathè & Mullen, 1997) and there is not always consensus.

Generally, stalking can be defined as "the willful, malicious, and repeated following or harassing of another person that threatens his or her safety" (Meloy & Gothard, 1995, p. 258).

However, beyond focalizations of different orientations, the unquestionable element that characterizes stalking is represented by the reactions of the annoyed victims to the stalker's unpleasant and threatening intrusions.

It is important for the victim to counter with immediate protection strategies to interrupt the persecution's chain. Impact of stalking on her private and working life can conduct victims to review and change their way of life. Hence, it is necessary to work on information strategies to develop awareness in potential victims.

In order to make prevention it is therefore relevant to investigate people's level awareness on stalking. This is the aim of this pilot study. The sample, in this phase, is represented only by women. In the literature women are the main victims of stalking phenomenon, as reported in Spitzberg and Cupach meta-analysis (2007).

2. Methods

2.1. Participants

Participants initially included 183 woman between 18 and 60 years old, but only 174 were included in the final sample since the remaining ones were below normative scores on the Holmes-Rahe Life Stress Inventory (1967).

Data were collected using a self-administered and anonymous questionnaire consisting of demographic questions and a 16-item multiple-choice stalking perception (Corradini, 2014), and the Socio Economic Status Schedule (Hollingshead, 1975).

The woman were middle-to upper-middle class, with a mean Hollingshead index of 50.11 (most female had either college or post college education). For analytical purposes age was treated as a categorical variable by classifying participants into two groups: I group (18 to 40 years old) and II Group (41 to 60 years old).

3. Findings

Questionnaire (Corradini, 2014) elicited demographic information concerning Marital Status (Married/Unmarried Couple, Divorced/Separated, Widowed, and Never Married), Employment Status (Employed, Out of Work, Unable to Work, and Other), Levels of Education (Some High School or Less, High School Graduate, and College Graduate), SES (Socioeconomic Status: high, middle and low), and assessed stalking perception (Stalking Perception, Corradini, 2014).

We carried out a comparative quantitative statistical analysis of the multiple response questions processing the data with SPSS (Statistical Package for Social Sciences, version 17.0), using MCA analysis (Multiple Correspondence Analysis), Multivariate Tests and cluster analysis with a p-value of < 0.05. on collapsed variables [age (18-40 years old = 96 subjects and 41-60 years old =78 subjects); Marital status (Married= 53 subjects; Never Married=103 subjects; Divorced=18 subjects); Employment status (Employed =81 subjects and Out of Work= 93 subjects); Level of education (dichotomous recoded variables in High= 37 subjects and Low= 137 subjects)].

In particular, the focus of our research is on the evaluation of women's stalking perception along the following categories: pervasiveness, impact on private life, ability to identify the phenomenon with respect to other forms of violence, degree of information on stalking and degree of information on prevention measures.

From the MCA analysis, a two-dimension MCA solution was considered the most adequate: we have called these dimensions "degree of knowledge" (I dimension: eigenvalue, 2.74; inertia, 0.153; and Cronbach's alpha, 0.593) and "prevention strategies" (II dimension: eigenvalue 1.765; inertia 0.141; and Cronbach's alpha 0.521). The Multivariate Tests showed only significant main effects for the indipendent variables (p-value of < 0.05). The clustering analysis with object scores method was used to identify three groups (effect size η_*^2=.033) sharing similar characteristics within each of two dimensions identified by the MCA analysis.

The final Clusters are composed as following:

I) younger woman, middle educational level and employed. They have a "higher" stalking perception and propose "further checks of law enforcement" and "rehabilitation of offenders" as prevention strategies;

II) younger woman, middle educational level and out of work. They have a "high" stalking perception and propose "tougher laws" and "increasing in local services dedicated" as prevention strategies;

III) older woman, higher educational level and employed. They have an "average" stalking perception and propose "the rehabilitation of offenders" as prevention strategies.

4. Discussion and Conclusion

In our study we have found that two dimensions are relevant for evaluating women stalking's perception, namely the degree of knowledge of the phenomenon and the proposal of prevention strategies. The authors think this aspect is interesting for designing prevention interventions (Breiding et al., 2014).

Our results show three separate clusters compared to the two dimensions identified. Women in the sample have different stalking's perception and suggest different prevention strategies depending on age, education level and employment status.

Since our findings derives from the analysis of a small sample they need to be validated by larger samples. This the goal of our future studies.

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ATTACHMENT AND MENTALIZATION IN CONTEXT OF SCHOOL VIOLENCE

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Abstract

The purpose of this paper is testing the model of school violence constructed by Twemlow and Sacco. According the authors in the understanding of school violence it is essential to take into account two important factors. The first one is the role of bystander (beside the role of bully and victim). The second one is the school community: its ability to function as mentalizing community. A mentalizing community is able to provide safety and security to its members, and to increase their facility for reading people's internal states and controlling their emotions, that is, to form its members' ability for mentalization. The mentalization based on secure attachment experiences has a fundamental importance in reduction of school violence. Empirical study was conducted to examine the basic forms of behaviors in situations of school violence (bully, victim, and helpful, bully, and victim bystanders). We investigated the patterns of attachment, mentalization and self-esteem which are connected with these forms of behavior. Our research was carried out in Hungarian high schools (N=360). The results suggest that the different forms of behavior have specific characteristics from our research perspective. The most significant differences were fund between the different forms of bystanders, which confirms the model of Twemlow and Sacco.

Keywords: *school violence, attachment, mentalization, self-esteem, anxiety.*

1. Introduction

The phenomenon of school violence are connected with characteristics of community life in model of Twemlow és Sacco (2012). They called their own approach community psychoanalysis, because they use the principles of psychodynamics for explanation of social processes (e. g. school violence), and take on as primary task of treatment to change the group climate.

They see the violence as a theatre performance. In addition to role of bully and victim the role of bystander has central importance, too. The bystanders are interested in aggression, they are considered as the public. There are several bystanders. In triadic process of school violence the *bully bystanders* authorize bullies for aggression. The authorization includes the permission of blocking capacity for mentalization, so bully role, in most cases, are connected with the absence of mentalization. However, the bullies without authorization cannot help looking into their victims eyes and take victims' mental states as objects of thought. This „encounter" usually prevents aggression. Consequently, there also are *helpful bystanders*. Twemlow and Sacco (2012) called the helpful community mentalizing community. School personell has decisive role in creating mentalizing community and peacful climate. They can contribute to develop a secure school environment which enables the students' secure attachment and ability for mentalization ((Fonagy et al, 2002; Twemlow, 2007).

Finally, there are a third form of bystanders: the *victim bystanders*. They are the closest to become victim.

2. Objectives

The aim of this study was testing the model of school violence developed by Twemlow and Sacco (2012). We investigated the roles of bully, victim, and bystanders. We tried to identify these roles by scales developed for violence audit, and studied their characteristics as regards some key concepts of Twemlow and Sacco's model (attachment, mentalization, self-esteem, and the perception of adults' behavior).

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3. Methods

3.1. Participants

Hungarian high school students were ask to fill self-administered questionnaires and to write a five-minute story to the first (violin) TAT card in their classroom. We asked for parental informed consent to paticipation. The high schools taken part in our study were common (in Hungary) as regards school violence.

3.2. Measures

Mentalization (social causality). The concept of mentalization is closely related to such concepts as perspective taking, empathy, emotional intelligence, complexity of mental representations, and understanding of social causality (Westen et. al., 2008). Considering that in school violence there is of special importance of attribution processes, we have measured the ability of mentalization as understanding of social causaltiy. This scale is a part of the SCORS developed for coding TAT-stories. It „measures the extent to which attributions of the causes of people's actions, thoughts, and feelings are logical, accurate, complex, and psychologically-minded" (Westen et al, 1990, 14). The TAT-stories told the partizipantz were coded on 5-point Likert scale.

Scales for measurement of roles in violence (Violence Audit). We used the Violence Audit (consist of 51 items) developed by Twemlow and Sacco (2012) for measurement of school violence. There are 7 subscales in this questionnaire: the bully scale (9 items), victim scale (9 items), helpful bystander scale (5 items), bully bystander scale (5 items), victim bystander scale (5 items), the acceptance of aggression scale (13 items), and the adults responses scale (5 items). These 5 point Likert scales measure the extent to which responder are involved in different roles in violence, accept the aggression, and perceive the adults (school personell) as helpful persons.

Self-esteem. In our study the Rosenberg Global Self-Esteem Scale (RSES) were used to explore the self-esteem of high school student (Rosenberg, 1965).

Attachment. Attachment was measured by the *Attachment Style Questionnaire* (Feeney et al, 1994). This tool consists of five scales (Confidence in relating to others, Discomfort with closeness, Need for approval, Preoccupation with relationships, Relationships as secondary)

4. Results

4.1. Internal consistency of scales

We have found that all scales used in our study have acceptable internal consistency (Cronbach's alpha). The scale of „Adults responses" has the lowest alpha value (0,62), and the Rosenberg"s Self-esteem has the highest one (0,88).

4.2. Cluster analysis

We performed k-means cluster analysis on scales of violence audit, except the adults responses. Three clusters have appeared. They can be considered three roles in violence: victim bystander, helpful bystander and non-helpful bsytander. The differences between clusters seems to be originated from scales of helpful bystander (most important), victim bystander and acceptance of aggression (Table 1).

Table 1. Mean and standard deviation of scales used in claster analysis and final cluster centers.

	Full sample (N=358)		Final cluster centers		
	mean	standard deviation	„victim bystanders" (N=74)	„non-helpful bystanders" (N=143)	„helpful bystanders" (N=141)
Bully scale (mean)	1,35	0,39	1,56	1,29	1,31
Victim scale (mean)	1,21	0,29	1,17	1,30	1,14
Helpful bystander scale (mean)	3,14	1,08	***3,64***	**2,04**	**3,98**
Bully bystander scale (mean)	1,19	0,37	1,10	1,26	1,17
Victim bystander scale (mean)	1,66	0,78	**2,93**	1,31	1,37
Acceptance of aggression scale (mean)	2,05	0,56	2,02	***2,23***	1,88

4.3. ANOVA between roles in violence (clusters) (Figure 1)

Relationships as secondary: (F=6,66; p=0,001). Victim bystanders and non-helpful bystanders have higher scores than helpful bystanders, but don't differ from each others.

Need for approval: (F=17,36; p=0,000). Helpful bystanders and non-helpful bystanders have lower scores than victim bystanders, but don't differ from each others.

Discomf. with closeness: (F=9,99; p=0,000). Helpful bystanders and non-helpful bystanders have lower scores than victim bystanders, but don't differ from each others.

Preoccupation with relationships: (F=21,75; p=0,000). Helpful bystanders and non-helpful bystanders have lower scores than victim bystanders, but don't differ from each others.

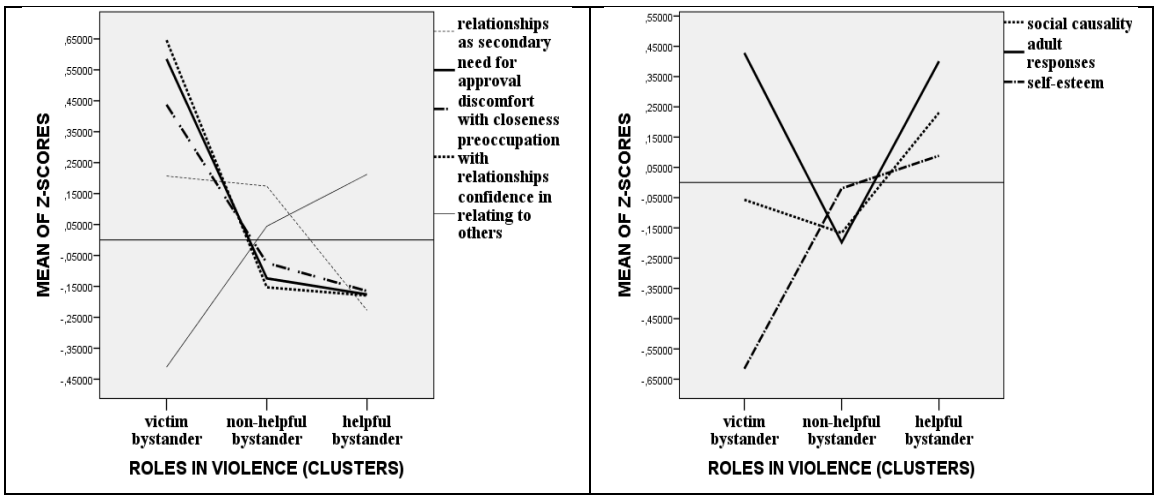
Confidence in relating to others: (F=21,75; p=0,000). Helpful bystanders and non-helpful bystanders have higher scores than victim bystanders, but don't differ from each others.

Social causality: We haven't found significant differences between clusters (Welch Stat.=2,18; p=0,118).

Adults responses: (F=13,83; p=0,000). Victim bystanders and helpful bystanders perceive adults more helpful than non-helpful bystanders, but don't differ from each others.

Self-esteem: (F=15,11; p=0,000). Helpful bystanders and non-helpful bystanders have higher scores than victim bystanders, but don't differ from each others.

Figure 1. Z-score means of ASQ scales, social causality, adult responses, and self-esteem in roles of violence.



5. Discussion

The scales developed for measure bully- and victim behaviour directly and the bully bystander scale have proven to be neutral in separating clusters. Probably these very direct instruments are less suitable for measurement bullying. However, it seems to be an appropriate method to understand violence through the roles of different bystanders. Our results show that students who don't able to be helpful bystanders in their community perceive adults (school personell) as persons who accept agression (as bully bystanders), that is their school environment is less safe, thus they aren't able to use their full capacity for mentalization. In turn, the helpful bystanders (who are similar to non-helpful bystanders as regards of their attachment) see adults as helpful people. We have also found that the three groups of bystanders don't differ from each other as regards the capacity for mentalization (measured by SCORS), so the difference between them may come from the school environment. Finally, it was found that victim bystanderds may become victim because of their lower self-esteem and more insecure attachment.

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"NORMALITY" AT A FUNERAL IN EAST ASIA: FOCUSING ON THE NEED FOR UNIQUENESS

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Abstract

The purpose of this study was to investigate the "normality" and affective reactions in East Asia, especially Japan and South Korea, focusing on the intervening effect of the individual difference. Experimental questionnaire research was conducted in Japan and South Korea. 202 Japanese university students and 179 South Korean university students participated in this research. The questionnaire asked respondents to rate their sense of normality and affects, imaging a given situation: when one conformed/derogated a norm, others confirmed/derogated the norm at a funeral. The situation that one (i.e. respondent himself/herself) and/or others conformed a norm was the story described to wear in black at a funeral. In contrast, the story in derogation condition was the situation that one and/or others wear in flashy cloths at a funeral. Also, all participants completed the need for uniqueness scale to measure the individual difference. As a result, both cultures showed the same pattern about the sense of normality. Japanese and South Korean reported higher sense of normality, when they imagined that they got line with those around them even if they themselves derogated from a social norm. On the other hand, there were different patterns about the affective reactions. It was indicated that Japanese affects were influenced by behaviors of those around them. South Korean, however, was emotionally affected by whether they confirmed to the social norms or not. It was suggested that these tendencies of normality and affective reactions should be less influenced by whether the need for uniqueness was high or low.

Keywords: *normality, affective reactions, culture, individual difference.*

1. Introduction

This study investigated the effects of injunctive norms (i.e. the social rules we have to comply) and descriptive norms (i.e. the perceptions of actual behavior showed by almost all people) on the sense of normality and affective reactions between Japan and South Korea, focusing on the intervening effect of the individual difference. It is said that Japanese usually pay attention to those around one and feel relief while they are similar in behavior. On the other hand, South Korean values their blood relationship and a shared territorial bond. Also, it is said that South Korean care about people who are close to them. According to these cultural differences, this study predicted that a descriptive norm would be important for Japanese, while an injunctive norm would have an impact on South Korean. In addition, the individual difference in need for uniqueness would influence these patterns.

2. Methods

Experimental questionnaire research was conducted in Japan and South Korea. Self3(confirm, do not conform, derogate)×Other3(confirm, do not conform, derogate) between-subject factorial design was used in this study. The questionnaire asked the respondents to their anticipated sense of normality (9 items, the scale which was made by Sano et al., 2010) and affective reactions (positive affect, negative affect, calmness, the scale were made by Ogawa et al., 2000) when they imagined themselves in the funeral settings. A story which respondents imagined was the situation attending a funeral. In "confirm" condition, self/other wear black clothes in the funeral. In "do not confirm" condition, self/other wear plain clothes in the funeral. In "derogate" condition, self/other wear flashy clothes in the funeral. First, respondents read one of the stories and rated their sense of normality and affective reactions. Second, they completed the need for uniqueness scale (Snyder & Fromkin, 1977) as individual difference factor.

Finally, they were asked about injunctive norm in the funeral (i.e. “Do you think that black cloths should be worn in the funeral?”). All items were rated by 5 point Likert scale.

3. Results

202(male 95, female 107; mean age was 19.67, *SD*=1.50) Japanese university students and 179(male 72, female 105, other 2; mean age was 19.67, *SD*=1.50) South Korean university students participated in this research.

Almost all respondents in both cultures considered that black cloth should be worn in the funeral. Since the need for uniqueness had less effect on sense of normality and affective reactions in both cultures, individual difference factor was collapsed in subsequent analysis. Sense of normality and affective reactions are shown in Figure 1, 2, 3, 4. Self (3)×Other (3) ANOVAs were performed on sense of normality and affective reactions.

In Japanese, effects of interaction were found in sense of normality and affective reactions which meant, only when others conformed the injunctive norm, participants considered themselves as normal and reported lower negative affects and higher calmness (Fs (4,196)>15.25, p<.001). South Korean participants showed the effects of interaction which were similar patterns as Japanese (Fs(4,170)>4.65, p<.01).

Figure 1. Means of sense of normality.

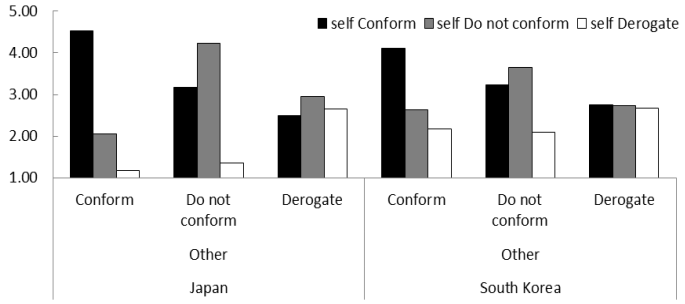

Figure 2. Means of positive affect.

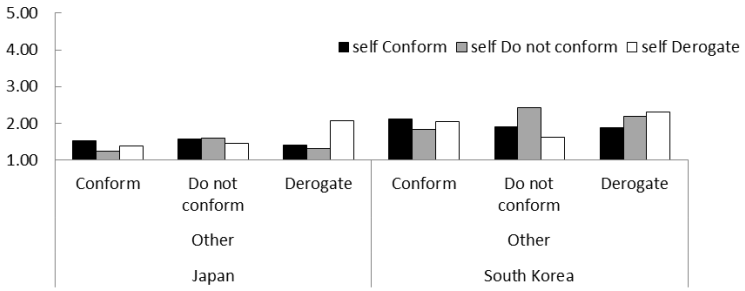

Figure 3. Means of negative affect.

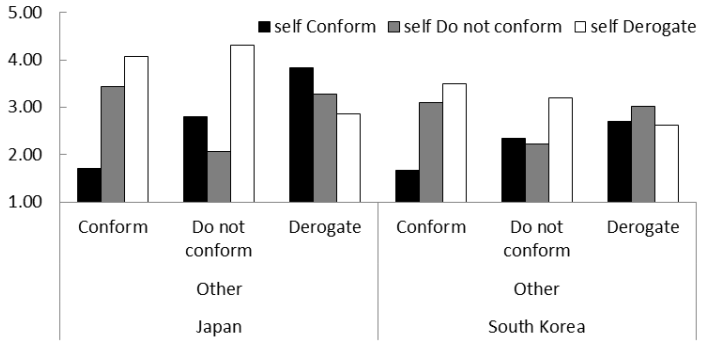

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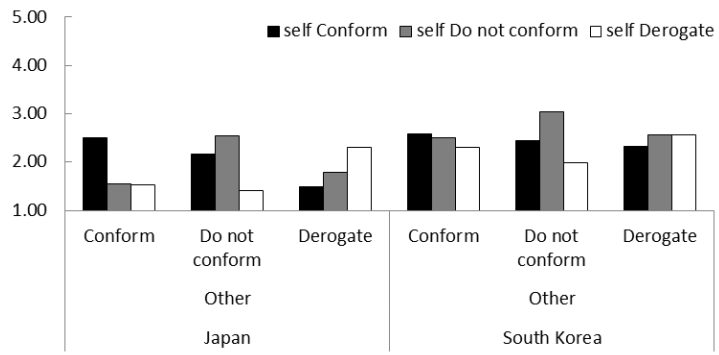
Figure 4. Means of calmness.



4. Discussion

As a result, both cultures showed similar patterns in general. People think themselves as "normal" when they get into line with others around, especially when others did conform to an injunctive norm. In addition, it was suggested that taking the same behavior as others around had effects on affective reactions. When people behave in a similar manner, they tend to feel comfortable and report lower negative emotion. These tendencies did not influenced by individual difference factor (i.e. the need for uniqueness), which meant that the effects of injunctive/ descriptive norms on sense of normality and affective reactions were robust regardless of individual factor. It is necessary to investigate effects of injunctive/descriptive norms among Western culture.

Acknowledgment

We are deeply grateful to Prof. Jae H. Park (Yeungnam University) who was willing to help us to collect the data in South Korea.

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"NORMALITY" AT A SOCIAL COMPARISON IN EAST ASIA: FOCUSING ON INDIVIDUALISM/COLLECTIVISM

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Abstract

This study explored how social norms influence affects. Cialdini et al. (1990) distinguished social norms into two types. Descriptive norm is decided by what most people do in a particular situation, which may bring about perceived typicality. On the other hand, injunctive norm is defined by moral rules, which reflects what people approve/disapprove. This study designed situations with different degrees of descriptive and injunctive norms, and measured the participants' affective reactions as to the situations. In addition, the intervening effects of individualism/collectivism as an individual difference were analyzed. 371 university students from Japan and South Korea (n=197; n=174, respectively) participated in a questionnaire experiment, which included an imaginary story containing a situation inducing social comparison. Descriptive and injunctive norms were indicated by the performance of the protagonist and the surrounding others. Each participant was asked to suppose he/she was the protagonist of the story, and to estimate affective reactions in that situation. ANOVAs revealed similar patterns in the two countries. Positive affects were influenced by the injunctive norm, whereas negative affects were determined by the descriptive norm. The higher one performed in a social comparison, the more positive affects he/she reported. On the other hand, negative affects were the lowest when his/her performance was the same level as surrounding others. In addition, individual difference had an effect on the relationship between the relative performance and the positive affects. These results suggest that "normality" might vary with individualistic/collectivistic tendencies.

Keywords: *sense of normality, injunctive/descriptive norm, affective reactions, individualism/collectivism.*

1. Introduction

Social norms influence an individual's behaviors. According to Cialdini et al. (1991), social norms can be distinguished into two types. Descriptive norm is decided by what most people do in a particular situation, which may bring about perceived typicality. On the other hand, injunctive norm is defined by moral rules, which reflects what people approve/disapprove. These types of norms Descriptive norms usually agree with each other. People recognize thieving as a misdeed, and many people do not engage in such behaviors. In some situations, descriptive norms can conflict with injunctive norms. Although people think they should not litter in public places, littering on the ground may indicate the descriptive norm that they really do. When the two types of norms are disparate, the descriptive norms have greater effects on individuals' behaviors than the injunctive norms (Cialdini et al., 1990).

Japan and South Korea in East Asia are well-known as collectivistic countries (Triandis, 1995). In Collectivistic culture, conformity and consensus are regarded to be valuable rather than diversity and creative opinions. Collectivists emphasize relationship and harmony with others, and prefer being the same as surrounding others to being unique. Previous research tried to reveal the relation between the relative performance and affective reactions at a social comparison situation. For example, Sano et al. (2010) examined Japanese sample, and showed the robust tendencies that Japanese people feel calmer and have less negative affects when they perform at the similar level as the rest members of their group.

This study investigated the effects of injunctive and descriptive norms on affective reactions. Our hypothesis was that descriptive norms should be more influential in East Asia. In addition, individualism/ collectivism predicted to have intervening effects on these relationships.

2. Methods

Procedure. This study applied questionnaire survey with an experimental design. Each participant read an imaginary story containing a social comparison, and was asked to identify him/herself

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as the protagonist of it. The performance of the protagonist in comparison with surrounding others was manipulated for the experimental conditions. The participants were randomly assigned to one of the five conditions. The imaginary story used in this study was showed in Table 1.

Table 1. Linguistic versions of the imaginary stories used in this study.

Language	Content
English*	You sold some cookies with four friends of your classmates, in a certain event. All five went to sell them all day. You compared your sales with each other on close of the day. While the sales of other members were 50-60 sets, your sales were 103 sets／73 sets／54 sets／37 sets／8 sets.
Japanese	あなたは，あるイベントで，クラスメイトの友人4人と一緒にクッキー売りをすることになりました。5人は1日中クッキーを売り歩いた結果，その日の終わりに友人たちとお互いに売り上げを比べ合ったところ，友人たちの売り上げは50～60セットだったのに対して，あなたの売り上げは103セット／73セット／54セット／37セット／8セットでした。
Korean	당신은 어떤 이벤트에서 클래스 메이트 4명과 함께 쿠키를 팔게 되었습니다. 5명은 하루종일 쿠키를 걸어 다니며 팔았고 그 결과, 그 날의 마지막에 친구들과 서로 매상을 서로 비교한 결과, 친구들의 매상은 50~60 세트였는데 비하여, 당신의 매상은 103 세트／73 세트／54 세트／37 세트／8 세트 였습니다.

* English version was not used in this study.

Participants. The participants in this study were 371 university students; 197 Japanese (112 females, 83 males; aged M=19.6, SD=1.47), and 174 South Koreans (108 females; 64 males; aged M=22.4, SD=2.65).

Measures. After reading the story, the participants were asked to estimate how much they would feel in the situation, by using the General Affects Scale (Ogawa et al. 2000). This scale consisted of 3 subscales; Positive affects, negative affects, and calmness. The participants also completed 9 items measuring to what extent they would perceive themselves to be normal if in the described situation (the Sense of "Normality" Scale: Sano et al., 2010). In addition, the individual differences on the Horizontal/Vertical-Individualism/Collectivism Scale (Singelis et al., 1995) were assessed. Japanese version of this scale was delivered by Ohashi (2006). The Japanese version was translated into Korean language by professional translators through back-translation method.

3. Results

Preliminary Analysis. The participants could concretely visualize the scene of the presented story (M=1.0, SD=0.91; t(370)=21.37, p<.001). They also recognize achieving high performance at the social comparison to be injunctively normative (M=1.1, SD=0.93; t(370)=22.02, p<.001). For the purpose of simplifying the analysis, the 4 scores of the Horizontal/Vertical-Individualism/Collectivism Scale were collapsed into a binomial variable by clustering participants. Cluster 1 (N=191; M_{VI}=2.3, M_{VC}=0.7, M_{HI}=3.1, M_{HC}=2.6) showed higher scores than Cluster 2 (N=180; M_{VI}=-0.6, M_{VC}=0.0, M_{HI}=1.5, M_{HC}=1.6) on all of the 4 subscales (ts(370)>4.84, ps<.001).

Design. A 5 x 2 x 2 between-subjects ANOVA was used to determine whether the relative performance (highest, higher, middle, lower, lowest conditions), nationality (Japan, Korea), or individualistic/ collectivistic tendencies (Cluster 1, Cluster 2) influenced on the affective reactions. The dependent variables were sense of "normality" cognition, positive affects, negative affects, and calmness (see Figure 1 and 2 for affective reactions).

Figure 1. Means of emotional reactions by nationalities.

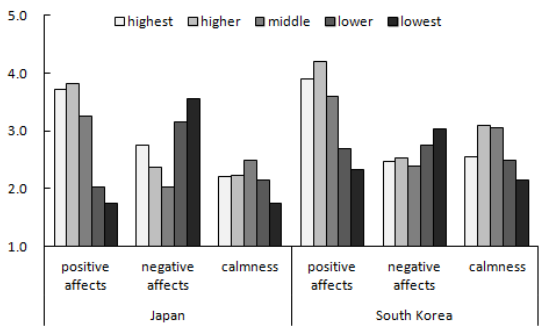
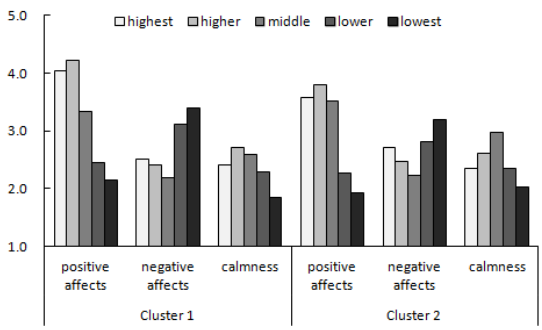


Figure 2.Means of emotional reactions by ind/col clusters.



Sense of "normality". A 3-way ANOVA yielded the significant effect for the relative performance ($F(4,351)=45.92$, $p<.001$). Main comparisons suggested that all the difference other than between highest and middle conditions were significant, and the sense of "normality" were strongly affected by the relative performance. 2-way interaction of the relative performance and nationality was also significant ($F(4,351)=4.50$, $p<.01$). In the lower condition, Koreans felt they were more normal than Japanese.

Positive affects. The main effect of the relative performance was significant ($F(4,351)=100.26$, $p<.001$). Multiple comparisons suggested that participants who performed higher than the middle felt positive affects more than in the other 3 conditions, and again middle performers felt more positive than the lower performers. More important, South Korean felt positive affects more than Japanese ($F(1,351)=27.21$, $p<.001$), and the participants included in Cluster 2 felt more positive than the ones in Cluster 1 ($F(1,351)=7.30$, $p<.01$).

Negative affects. Significant effect of the relative performance was obtained ($F(4,351)=23.39$, $p<.001$). The middle performer felt negative affects the least among all conditions. 2-way interaction of the relative performance and nationality was also significant ($F(4,351)=4.61$, $p<.01$). Japanese felt less negative in the middle condition, and more negative when they performed lower than the middle, in comparison with Koreans.

Calmness. Significant effect was found for the relative performance ($F(4,351)=13.55$, $p<.001$). The middle performer felt calm the most among all conditions. In addition, South Korean felt calmness more than Japanese ($F(1,351)=37.80$, $p<.001$).

4. Discussion

Both Japanese and Korean participants felt less negative affects and more calmness when they achieved in the middle compared to when over- or under-achieved. These convergent patterns indicate that people from East Asia prefer to behaving similar to others, which can lead to harmony with the surrounding others. Japanese and Koreans, however, differ in a significant way. Japanese participants felt more negative when they under-achieved than Korean participants did. Consistently, Japanese participants felt they were less "normal" at the lower condition in contrast to Koreans. These results suggest that Japanese might more sensitive to be deviant from others.

In Addition, individualistic/collectivistic tendencies had an effect on positive affects. Cultural differences might have an impact on positive affects according to the relative performance, which reflect the injunctive norms. Further cross-cultural examinations are necessary to reveal definite explanation of cultural differences, not only with East Asian countries, but including western countries with individualistic cultures.

Acknowledgement

The authors thank Prof. Jae H. Park from Yeungnam University in Korea for his data collection support.

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LUMINANCE ADJUSTMENT: NEVER FEAR AGAIN

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Abstract

The control of experimental variables is a crucial step in methodological research planning. In experimental psychology one can use stimuli to promote behavioral and physiological responses. The analysis of the physiological responses implies that the generation of the stimuli must be particularly careful. Certain physical properties of stimuli can override the psychological properties that are being evaluated, for that reason it is important to ensure their constancy. In particular, the measurement of the pupil diameter of the human eye under a visual stimulus gives an indicator of the sympathetic nervous system activation. To carry out such measurements it is necessary to guarantee that the luminance level of the visual stimulus must be kept constant. In general, a large set of visual stimuli has to be considered and the procedure for the luminance adjustments is a real time consuming task since the luminance level of the final stimulus is important for the activity of the pupil. In this paper is presented and described the developed methodology to make such luminance adjustments easier.

Keywords: *visual stimuli, luminance level, contrast.*

1. Introduction

The control of experimental variables is a crucial step in methodological research planning. In experimental psychology one can use stimuli to promote behavioral and physiological responses. The analysis of the physiological responses implies that the generation of the stimuli must be particularly careful (Christensen & Waraczynski, 1988; Sowden, Rose, & Davies, 2002; Johannes, Münte, Heinze, & Mangun, 1995). Certain physical properties of stimuli can override the psychological properties that are being evaluated, for that reason it is important to ensure their constancy (Sowden et al., 2002; Johannes et al., 1995). In this paper is presented and described the developed methodology to control the luminance adjustments of the visual stimuli that will be used to monitor the activation of the human sympathetic nervous system through the measurement of the pupil diameter of the eye to identify false memories.

2. Objective

The main objective of this work was the development of a methodology to easily control the luminance adjustments of visual stimuli for later use to monitor the pupil diameter of the human eye to identify false memories. The measurement of the pupil diameter of the eye under a visual stimulus gives an indicator of the sympathetic nervous system activation. To carry out such measurements it is necessary to guarantee that the luminance level of the visual stimulus must be kept constant. In general, a large set of visual stimuli has to be considered and the procedure for the luminance adjustments is a real time consuming task since the luminance level of the final stimulus is important for the activity of the pupil.

3. Methods

The set of visual stimuli is composed by 34 gray scale images (format bitmap 8 bits) where a gray centered circle (Lipsman & Rosenberg, 2006; Hecht, 1987) (intensity level 100) is displayed on a black background (intensity level 0). On each circle was typed in white a single word (intensity level 255). The size of the circle covers a 4.3 degrees field of view, which corresponds to the parafoveal area of the retina in the human eye, to be visualized at a distance of 1.0 meter. In such way it is ensured a retina stimulation spanning the foveal region (Osterberg, 1935; Hecht, 1987).

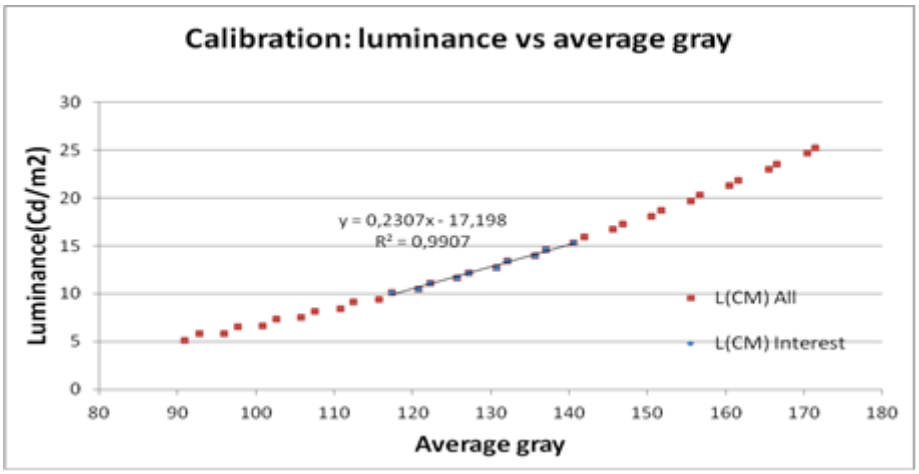
Those images were then displayed on a calibrated and stabilized CRT monitor (Sony GDM-F520) driven by a visual stimulus generator card (Cambridge Research System ViSaGe) installed on a computer. The measurements of the luminance level over the area of the entire circle of the stimulus were then carried out using a spectroradiometer (PhotoResearch Inc. PR650 SpectraScan). Within the list of the 34 words, which have been chosen from a DRM experimental paradigm, 2 words were selected that correspond to the smallest and biggest number of character in order to establish the luminance calibration curves. For each of the 34 images the average gray level (*agl*), the number of pixels in the circle (*nopc*), the number of pixels in the words (*nopw*), the total number of pixels (*tnop*) in interest were calculated, and the corresponding luminance level (*ll*) was also measured.

Assuming the linearity of the calibration curves within the range of interest when those were computed, a model predicts the optimal relationship between the gray and white intensities in order to achieve the intended luminance (*l*) keeping the contrast. The gray circle with different words varied in intensity from 90 to 170 in the range [0-255]. The characters of the words had their intensity level corrected in order to maintain contrast constant at a defined value of 110 in the range [0-255]. The luminance level to be produced by all the images was set to 13.3 cdm^{-2}, to accomplish the photopic condition ensuring the stimulation of photoreceptors (cones) in the retina. The maximum measured difference between the luminance of the target and the luminance of the stimuli was fixed to 1.0 cdm^{-2}, which is within the limits of the measurement error of the system used. An application written in MATLAB performed all the calculations to create a new set of 34 images that, when displayed on the monitor, exhibit the same luminance level.

4. Discussion and Conclusions

The average gray level in a particular image, which is expressed by Equation 1, represents the overall intensity of the stimulus that is being evaluated. From the graph depicted in Figure 1 one can observe that when the average gray level increases the luminance level increases. Considering the desired luminance of 13.3 cdm^2 a linear calibration function in the range [10,15] cdm^{-2} was established based on the obtained curve. The function can be expressed by a straight line according the Equation 2 with $R^2 = 0.99$. From that, 72 images have been adjusted and the corresponding luminance level measurements shown an average value of 13.0 ± 0.1 cdm^{-2}, which is also within the error of the equipment.

Figure 1. Variation of the luminance level as a function of average gray level measured for the displayed images. The red dots represent the totality of the data collected. The blue dots represent the region that was considered relevant for desired setting.



The luminance level adjustment can be carried out in an automated manner ensuring that the viewing conditions are defined for the desired experimental setting, being computed the background gray level (*bggl*) using Equation 3, and the intensity of the word pixels (*iowp*) using Equation 4.

$$agl = \frac{\sum_{k=level} k \times (nopc - nopw)}{nopc} \tag{1}$$

$$l = 0.2307 \times agl - 17.198 \tag{2}$$

$$bggl = \frac{13.3 \times tnop + 17.198 \times tnop - 0.2307 \times npow \times 110}{0.2307 \times tnop} \tag{3}$$

$$iowp = 110 - bggl \tag{4}$$

The measurement of all the images after these adjustments stated that the mean luminance was 13.02 cdm^{-2} with a standard deviation of 0.107. Factoring the experimental error of the equipment one could say that all stimuli had the same luminance and the same contrast.

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THE ROLE OF DECISION-MAKING STYLES AND SELFREGULATION IN MENTAL HEALTH

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Abstract

The main aim of the present research was to investigate the role of decision making styles and self-regulation in well-being and perceived stress. 157 university students (89% females) filled in the General Decision Making Style (Scott, Bruce, 1995) and the Short Self-Regulation Questionnaire (Neal, Carey, 2005) as part of the SLiCE (Student Life Cohort in Europe) study. The WHO Well-being index was used to assess well-being. Perceived stress was assessed by the short version of the Perceived Stress Scale (Cohen et al., 1983). Multiple linear regressions were used to predict well-being and stress by gender, decision making styles and self-regulation as well as by their interaction. Two decision making styles were found to be in significantly relate with the total score in well-being and perceived stress. A higher score in the avoidant decision making style is connected with a lower level of mental health, while a higher score in the intuitive style with the higher level of mental health. While higher self-regulation increased well-being, the interaction of independent variables was not significant. Gender differences in mental health were not found.

Keywords: *decision-making styles, self-regulation, mental health, well-being, stress.*

1. Introduction

Decision-making (DM) styles are defined as "the learned habitual response pattern exhibited by an individual when confronted with a decision situation. It is not a personality trait, but a habit-based propensity to react in a certain way in a specific decision context." (Scott & Bruce, 1995, p. 820). The two terms - DM styles and cognitive styles - are often used synonymously. However, DM styles are a more specific way of information processing in decision-making problems. The key differences between various styles are in the amount of information considered during a decision-making process and the number of identified alternatives (Driver et al., 1993). In a similar way to personality traits, styles generally represent likelihoods of behaviour across situations and domains (Leykin & DeRubeis, 2010).

Five DM styles have been identified as a result of a project based on four separate populations and described in behavioural terms (Scott & Bruce, 1995). The first of them, the rational style, is characterized by the search for and logical evaluation of alternatives. The intuitive style is characterized by attention to detail and a tendency to rely on feeling while the dependent one is characterized by the search for and reliance on the advice of others. The avoidant style is the tendency to avoid decisions whenever possible and the spontaneous style is characterized by a sense of immediacy and desire to complete the DM process as soon as possible.

Yilmaz et al. (2013) found medium or low correlations in a university student sample between subjective well-being and all four investigated DM styles – positive with vigilance and negative with buck passing, procrastination and hyper vigilance. In another study which looked at Turkish adolescents a positive correlation of subjective well-being with vigilance was found while negative associations with panic, complacency and cop-out were reported (Cenksven et al., 2013). In addition, a significant relationship of the DM styles from the Melbourne Decision-Making Questionnaire was found with coping with stress and life events (Deniz, 2006). The avoidant DM style was found to be negatively related to well-being. Salo & Alwood (2011) found that the avoidant style was related to distress not only after, but even before a decision in Swedish military officers sample.

This current study also investigated the role of self-regulation in mental health. Automatic and controlled aspects of self-regulation have been distinguished (Derryberry & Rothbart, 1997). The first

ones correspond to the reaction of the motivation system by a relevant stimulus (seeing a computer or thinking about using it) that is likely to modulate approach behaviour. Controlled aspects of self-regulation are connected with the executive processes (e.g. inhibition of responses, shifting) occurring during an individual's attempt to influence his or her thoughts, behaviour, and emotions.

2. Objectives

The main aim of the present research was to investigate the role of decision making styles and self-regulation in well-being and perceived stress. Two polynomial linear regression models were used to assess the effect of decision-making styles, self-regulation and the interactions between decision-making styles and self-regulation on reported well-being and stress.

3. Methods

3.1. Sample

The sample consisted of 157 university students who completed the online versions of selected questionnaires in the Slice (Student Life Cohort in Europe) study. The age of participants was between 20 and 28 (mean age = 21.9 (SD = 3.72)), 89% females.

3.2. Measures

The General Decision Making Style (Scott, Bruce, 1995) was used to examine five decision making styles – rational, intuitive, dependent, avoidant and spontaneous. 25 items were used with five items for each style. Self-regulation was assessed by the Short Self-Regulation Questionnaire (Neal, Carey, 2005) with 31 items rated on the same 5-point scale (some items needed to be rescaled). Five questions from the World Health Organization Well-being index (1998) were used to identify psychological well-being. Stress was assessed by a short (4-items) version of the Perceived Stress Scale (Cohen et al., 1983).

4. Results

Two polynomial hierarchical regression models were created to explain well-being (Table 1) and perceived stress (Table 2) with decision-making styles and self-regulation as well as by their interaction as predictors. We expected similar results as the correlation between well-being and stress was high (-.55).

Table 1. Hierarchical linear regression predicting reported well-being.

Predictor	model 1	model 2	model 3	r
rational DM style	.02	-.05	-.56	.11
intuitive DM style	.23**	.14	.33	.25
dependent DM style	.-03	-.02	.67	-.03
avoidant DM style	-.26**	-.06	-.01	-.26
spontaneous DM style	.04	.06	-.48	.00
selfregulation (SR)		.36***	.32	.40
SR*rational DM style			.74	
SR*intuitive DM style			-.27	
SR*dependent DM style			-.79	
SR*avoidant DM style			-.05	
SR*spontaneous DM style			.53	
F	6.11***	8.15***	4.64***	
adjusted R^2	.11	.17	.16	

*p < 0.05, **p < 0.01, ***p < 0.001

Table 2. Hierarchical linear regression predicting perceived stress.

Predictor	model 1	model 2	model 3	r
rational DM style	-.10	-.01	.25	-.20
intuitive DM style	-.23**	-.12	-.56	-.27
dependent DM style	.01	.00	-.16	.00
avoidant DM style	.30**	.06	.52	.32
spontaneous DM style	-.04	-.07	.00	.05
selfregulation (SR)		-.45***	-.44	-.51
SR*rational DM style			-.40	
SR*intuitive DM style			.63	
SR*dependent DM style			.18	
SR*avoidant DM style			-.38	
SR*spontaneous DM style			-.08	
F	2.98***	5.61***	3.21***	
adjusted R^2	.16	.26	.25	

*p < 0.05, **p < 0.01, ***p < 0.001

A similar pattern is visible in both tables. The intuitive and avoidant style were significant predictors in the first model. While the intuitive style predicted mental health in a positive way, the avoidant style did in the negative way. It was not the case in the second model, when only self-regulation was a significant predictor. Adding interactions did not increase the explained variance in the mental health indicators. The differences between the first and the second model can be explained by the colinearity of decision-making styles and self-regulation, as the partial correlations between decision-making styles and mental health indicators decreased substantially when compared with the original ones.

5. Discussion

The intuitive and avoidant decision-making style were recognized as significant predictors of mental health. The reported use of the intuitive style is associated with better mental health, but using the avoidant style is related to lower well-being and higher stress. As these two styles were not important after adding self-regulation, it can be concluded that this variable is more important than decision-making styles.

Acknowledgments

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A NEW PARADIGM FOR INVESTIGATING HUMAN DECISION STRATEGY

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Abstract

We can divide the decision-making process into two components: 1) the mechanism and neural machinery by which an event is triggered, and 2) the strategy by which the mechanism is employed to solve behavioural/cognitive decision problems. Most of the decision-making models proposed in the past few decades have conflated these two components by assuming that the mechanism constrains and determines behavioural outcomes (RT distributions etc.), as exemplified by the diffusion model. Only more recently has a strategic view been considered (such as maximizing rate or reward). In this work we explore an alternative way to study the strategy component in human decision-making. We introduce a novel paradigm in which a participant is asked to make a decision and gain reward by responding to a task which does not contain any perceptual cue (such as a stimulus onset in a typical RT experiment). We ran several experiments and explored decision strategies proposed in the literature (Bayes Risk, Reward Rate, Reward/Accuracy). We found that participants were appearing to optimize reward rate. We explain some individual differences among participants by referring to a modified reward rate strategy. We also discuss the connection between this task and some classic perceptual tasks. We conclude that focusing on the decision mechanism per se is not enough to understand human decision making, and that a strategic view is necessary.

Keywords: *optimization, reward rate, speed-accuracy trade-off.*

1. Introduction

Human decision making is one of the most studied processes in the field of human science, and has drawn attention from many fields: psychology, neuroscience, computer science, mathematics, biology and economics. Most work has focused on answering one or more of the following questions: what are the components of a decision making process? If the decision process is driven by a maximization mechanism (as is usually assumed), what is the objective function that is maximized? Given a certain optimization mechanism and a certain objective function, how good are human in reaching the optimum strategy? In this study, we introduce a new approach to answering these questions.

The most common experimental approach has been the cued choice reaction time paradigm, where a participant is instructed to make a choice among multiple alternatives (usually 2) after the onset of stimulus trial cues. This has led to several models based on three fundamental assumptions: (a) evidence favouring each alternative is integrated over time, (b) the decision is made when enough evidence has accumulated, and (c) the process is stochastic (Bogacz et al., 2006). It is important, however, to distinguish between the decision mechanism and the decision goal. The decision mechanism is the way the perceptual information is gathered and used by the observer (e.g. the rise to threshold mechanism), and the decision goal is the aim of such process (e.g. maximizing reward). Only assumption (b) is related to the decision goal. Indeed, the traditional diffusion model and its variants (Ratcliff and Smith, 2004) have focused on the underlying mechanism, and only recently has the decision goal been considered (Simen et al., 2009; Bogacz et al., 2010). In our view, the distinction between mechanism and goal has been neglected for far too long, mostly because the cued choice reaction time paradigm confounds the two. We propose a new experimental paradigm where the decision goal can be investigated without making any assumption about the underlying mechanism.

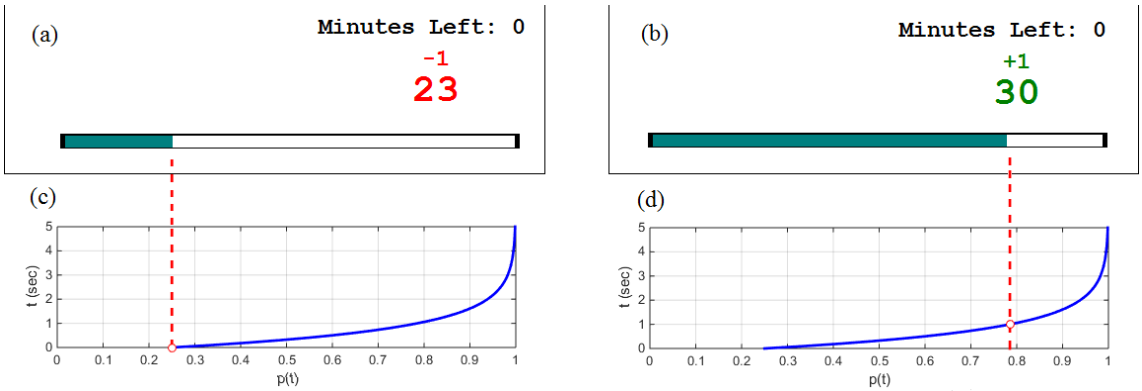
2. The Paradigm

In a cued RT experiment, a speed-accuracy trade-off emerges (Heitz, 2014): the longer a participant waits before responding, the more likely the response is correct. We can define this by a function p(t), which is the probability that a response made at time t is correct. A speed-accuracy trade-off implies that p(t) is a monotonically increasing function, and has often been construed as a Bayesian accumulation of evidence. However, it is difficult to disentangle how p(t) depends on the perceptual process (anticipatory and post-cue) and how it is used strategically to determine the actual time of response (and hence the probability of being correct). If we want to understand when "enough information is enough" without making any assumption about the process that collects information, we need to hard-code the information sampling mechanism in the experimental design. The rationale is as follows: instead of showing two or more stimuli and having the participant choose the correct one by an endogenous accumulation of information and subsequent increase of p(t), we present p(t) directly to the participant in a well-defined manner. The advantage of this approach is that we have a known p(t), instead of estimating it based on some assumed perceptual model, and it opens up the possibility of manipulating p(t) in a controllable way to understand the decision goal.

To present p(t) directly to the participant, a horizontal gauge is displayed. There are no separate visual cue targets. During a trial the position of the gauge level is moved to the right corresponding to an increasing p(t) predetermined by the experimenter. Zero probability (no reward) corresponds to an empty gauge, and unit probability (reward certain) corresponds to a full gauge. At the beginning of the trial the gauge starts at p(0) (not necessarily zero), and at the end of the trial (t=T), the gauge is at p(T) (Figure 1).

The participant is fully informed of this relationship, and instructed to press a response button at some chosen time, t, to receive a reward with probability given by the position of the gauge, p(t). We can examine which value of p(t) is chosen by participants.

Figure 1. (a,b) Example of the experimental design used to implement the suggested paradigm, showing how the gauge represents exactly the probability at time t assuming a starting point at 25%. On top there are two instances of the screen shown to the participants. The small red -1 or green +1 is the feedback for the previous trial (point earned or lost). The bigger numbers represent the total score for that condition. The "minutes left" refers to the minutes left for that condition (each condition lasts 3 minutes) (a) the screen at the very beginning of the trial (t=0), (b) after one second (t=1). (c,d)On the bottom there are the p(t) functions and the point corresponding to the probability of being correct at that time, at the beginning of the trial (c) or after 1 second (d).



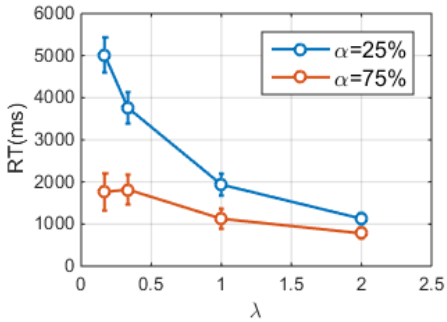
3. Method and Results

To illustrate this new paradigm, we carried out a simple experiment. We defined p(t) to be a monotonically increasing function that asymptotically approached unity according to $p(t)=1-(1-\alpha)\exp(-\lambda t)$, where λ is a parameter that controls ease/difficulty of the trial (increasing λ will make the function steeper, meaning that less time is needed to reach a high probability of correct response), α is the value at t=0 (that is, the probability of getting a correct response at the beginning of the trial). We used 2x4 conditions: two starting points (α=0.25,0.75) and four different speeds of growing of the gauge (λ=0.166, 0.33, 1, 2, higher values indicates faster growing). There was a delay of 0.5s between trials, and each condition lasted 3 minutes regardless of the participants' responses. Twenty participants took part, and were given a training session to familiarise the task. Participants started with 25 points for each condition were instructed to gain as many points as possible.

We averaged the response times across the 20 participants for each of the 2x4=8 conditions and plotted in Figure 2. Clearly, for α =0.25, the participants were faster with increasing λ ($F(136,3)=32.48$,

p<0.0001), as expected. The participants were slower when the starting point is lower (effect of α: F(136,1)=65.42, p<0.0001)). We fitted the data to 4 different models according to Bogacz et al.'s (2006) classification: Bayes Risk, Reward/Accuracy, Reward Rate, Modified Reward Rate (Harris et al., 2014), and found that the modified Reward Rate provided the best fit.

Figure 2. Mean Reaction Time for all the 20 participants for the two starting point conditions (α) and the four gauge speed conditions (λ).Error bars are ± 1 standard error.



4. Discussion

The participants adjusted their mean response times according to the values of λ and α, and in a way that was consistent with the decision strategy of maximizing reward rate. In varying the parameter λ for α =0.25, the responses were similar to that observed in typical reaction time experiments. For α =0.75, the dependence on λ was much shallower with a local maximum at λ =0.33. To our knowledge, this shape has never been observed in a force choice reaction time experiment, but is consistent with the Modified Reward Rate model (Harris et al., 2014). For the classic choice reaction time paradigm, this suggests that under some conditions (e.g. high α), the expected speed-accuracy trade-off will not be observed. We are now exploring this testable prediction.

In conclusion, we propose a new paradigm in order to investigate human decision making without relying on perceptual accumulation of information models. We have shown that participants were responsive to this new paradigm, and that we can make reasonable and novel inferences about the decision goal. This paradigm can be applied to a great variety of experiments to investigate human decision making, and the results can be easily verified and generalized to more classic studies.

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DIRECTIONALITY EFFECTS IN THE COMPREHENSION OF "IF THEN" AND "EVEN IF" SENTENCES

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Abstract

Relational statements such as "if A then B" are represented with the antecedent "A" in first place, and then with the consequent "B" (Oberauer & Wilhelm, 2000). Even when people read "B if A" they tend to represent "A" first, and that acts as a reference (or "relatum" term) for integrating the information that follows. However, with other expressions, such as "B only if A", this rule does not apply and "B" acts as the reference term. This fact suggests that the "inherent directionality" depends on the specific meaning of each statement and not on syntactic factors such as the antecedent/consequent structure in conditional statements. Counterfactual conditional statements such as "even if A had happened, B would have happened" require considering not only conjectured possibilities (*A* and *B* happened), as occurs with factual conditionals, but also a presupposed fact (Actually, *A* did not happen and *B* happened). If the "inherent directionality" depends on the meaning of the expressions, then the presupposed facts could work as a reference context (relatum) in the same way as the antecedent plays this role for "if A then B". In the present experiment, a sentence-picture verification task was administered in order to evaluate this hypothesis for semifactual "even if A, B" statements. Thus, "if then" and "even if" statements were displayed before some logical cases that were shown in congruent order (first A, then B) and incongruent order (first B, then A). Participants were asked to determine the truth-value of the statements according to the cases. The pattern of responses obtained is consistent with the semantic inherent directionality for counterfactual statements.

Keywords: *comprehension task, directionality effects, inherent directionality hypothesis, conditional statements, semifactual statements.*

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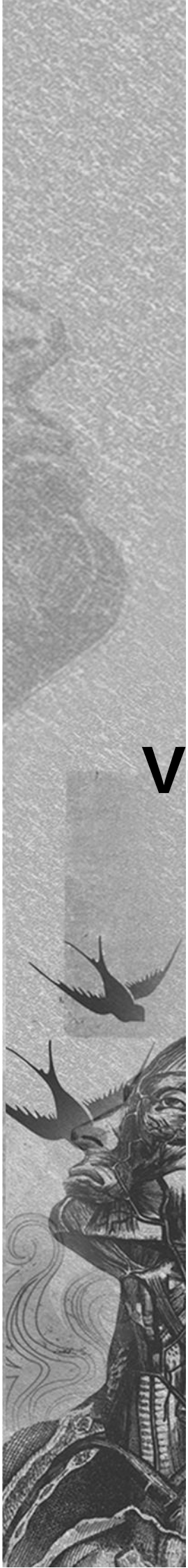

VIRTUAL PRESENTATIONS

EMOTION DYS/REGULATION AND SELF-ESTEEM

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Abstract

The present paper aims to study the association between emotion regulation and a personality trait such as self-esteem. In fact the empirical literature evidenced that both emotion regulation and self- esteem may be protective factors for our psychological and emotional health and well-being. 150 Italian subjects completed two tools, one about emotion regulation (DERS, Gratz & Roemer, 2004) and the other about self-esteem (Basic SE, Forsman et al., 2003). Findings indicate that a low level of self-esteem is related to difficulties in some emotion regulation strategies; and that there are gender differences about this association. The authors suggest further research improvements taking into account their findings.

Keywords: *emotion regulation, emotion dysregulation, self-esteem, well-being, risk factors.*

1. Introduction

Emotion regulation and dysregulation are both protective and risk factors for individual and social well-being. Emotion dys-regulation seems associated with some psychopathological disorders and alexithymia (Taylor, 2000; Dubey, Pandey & Mishra, 2010), and the emotion regulation contributes to important outcomes such as decreased risk for depression (Davison, Pizzagalli, Nitschke & Putnam, 2002) and improves psychological development (Dodge, 1989). Some researches have found that positive emotion regulation strategies can generate positive feelings that may increase individual well-being (Gross & Jhon, 2003; Nezlek & Kuppens, 2008).

The self-esteem seems to be a protective factor for individual well-being, too (Baumeister, Campbell, Krueger & Vohs, 2003). In fact low self-esteem is related to negative outcomes, like depression, victimization, delinquency, and low happiness (Pelkonen, 2003; Palmer, 2004; Furnham & Cheng, 2000).

Some studies have shown gender differences in the tendency to use specific emotion regulation strategies that may influence individual well-being (Fischer & Manstead, 2000; Barrett & Bliss-Moreau, 2009). While women are considered as the more emotional sex with the greater tendencies to experience and express their emotions, men are viewed as tending to avoid or suppress them. Regarding in particular the emotion regulation strategies, women reported more use of rumination, seeking social support, reappraisal, problem-solving and acceptance than men (Tamres, Janicki & Helgeson, 2002; Broderick & Korteland, 2002; Nolen-Hoeksema & Aldao, 2011). On the other hand, anger rumination and aggressive feelings, thoughts and behaviors are more present in males (Knobloch-Westerwick & Alter, 2006).

2. Design

This is a cross-sectional study. Participants are 120 Italian people both men and women. Data were gathered in individual sessions. Two tools were completed, one about emotion regulation (DERS, Gratz & Roemer, 2004) and the other about self-esteem (Basic SE, Forsman et al., 2003). Descriptive and bivariate correlations are employed.

3. Objectives

The present paper aims to explore:

1. the association between emotion regulation and a personality trait such as self-esteem;
2. the possible relation between specific emotion regulation strategies and self-esteem;
3. the gender differences about these correlations.

4. Method

120 people of Italian nationality completed a personal data form and two tools about emotion regulation (DERS, Gratz & Roemer, 2004) and self-esteem (Basic SE, Forsman et al., 2003). The DERS is composed by 33 items referred to the following dimensions: non acceptance of emotional responses, difficulty engaging in goal-direct behavior, impulse control difficulties, lack of emotional awareness and clarity, limited access to emotional regulation strategies. The Basic SE is composed by 22 items referred to high or low self-esteem situations.

5. Discussion

Bivariate correlation analysis indicates that a low level of self-esteem is related to difficulties in emotion regulation (cfr. Tab. 1). In particular we found evidence that a low level of self-esteem is associated to specific dimensions of emotion regulation problems such as non-acceptance of emotional responses (r Pearson= .539, p < .001), difficulty in goals (r Pearson= 0,481, p < .001), impulse control difficulties (r Pearson= 0,464, p < .001), limited strategies (r Pearson= 0,684, p < .001) and lack of emotional clarity (r Pearson= 0,544, p < .001).

Furthermore there are some gender differences regarding the emotion regulation difficulties and the level of self-esteem. First of all, the comparison between means of self-esteem shows that men (M = 14.17; DS = 4.77) have higher self-esteem than women (M = 13.48; DS = 4.99). Regarding the association between emotion regulation strategies and self-esteem we found some gender differences. In fact, while men with high self-esteem seem to have no difficulties in emotion regulation and those with low self-esteem have difficulties in the impulse strategy, women with low self-esteem seem to have some difficulties regarding all the categories of emotion regulation (p < .001), except in the lack of emotional awareness strategy.

Table 1. Bivariate correlation analysis between self-esteem and emotive regulation strategies.

		NonAccept	Goals	Impulse	Awareness	Strategies	Clarity
Hight SE	R Pearson	-.622**	-.444**	-.519**	-.267**	-.696**	-.658**
	Sign.	.000	.000	.000	.003	.000	.000
Low SE	R Pearson	.539**	.481**	.464**	.130	.684**	.544**
	Sign.	.000	.000	.000	.133	.000	.000
Low SE-Men	R Pearson	.462**	.332**	.221	.262*	.602**	.510**
	Sign.	.001	.011	.095	.047	.000	.000
Low SE-Women	R Pearson	.569**	.442**	.571**	.124	.715**	.576**
	Sign.	.000	.000	.000	.338	.000	.000

6. Conclusions

The findings of our research permit to answer to our initial questions.

First they confirm that self-esteem is a personality trait correlated to individual emotion regulation. Then it emerged that specific emotion regulation strategies are differently associated with low and high self-esteem. Third, there are gender differences between the level of self-esteem and the specific strategies employed in dealing with emotions.

Although the results obtained are encouraging, further studies with a longitudinal design are necessary both to understand the direction of the association between self-esteem and emotion regulation and to clarify the role of self-esteem as a vulnerability factor for emotive regulation strategies.

Future researches will be important to increase knowledge on this topic and to improve the efficacy of any intervention aimed to the health's educational and prevention and to the psychosocial well-being promotion. These interventions should be focused in particular on all needy people facing the risk or the negative consequences of dysfunctional emotion regulation strategies. Also in clinical contexts the knowledge of the direction of this association may be useful to realize targeted interventions.

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SEX DIFFERENCES IN THE PERCEPTION OF LOVE AND SEX AMONG POLISH YOUNG ADULTS

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Abstract

Objective: The aim of the study was to investigate sex differences in the perception of love and sex among Polish young adults. Basing on the study performed by Hendrick and Hendrick (2002), it was hypothesized that women and men would not differ in perception of love and sex. *Design:* The study design comprised of correlational study in which participants were asked to fill in the questionnaires. *Methods:* Perception of Love and Sex Scale (Hendrick & Hendrick, 2002) was administered to the sample of 494 young adults (327 females and 167 males) aged 20-28 years, with the average age of participants being 21.30 (SD = 1.93). The questionnaire was distributed across different courses. A one-way ANOVA was used to analyse the data. *Findings:* The results indicated that women reported lower level of Love is Most Important, $F(1, 492) = 6.50$, $p = .011$, lower level of Sex Demonstrates Love, $F(1, 492) = 8.20$, $p = .004$, and lower level of Love Comes Before Sex, $F(1, 492) = 20.55$, $p = .000$ than men did. *Conclusion:* The current study revealed significant sex differences in the perception of love and sex among young women and men in Poland. These differences are not congruent with results obtained in the original study performed by Hendrick and Hendrick (2002).

Keywords: *perception of sex, perception of love, sex differences, young adults.*

1. Introduction

Sexuality is recognized to play an important role in dating relationships, and, for instance, sexual activity is perceived as an integral example of the development stage of a relationship (Regan, 2000). From the perspective of social sciences, the relationship between love and sexuality can be divided into five approaches as Aron and Aron (1991) proposed. These approaches are as follows: (1) theories of sexuality that ignore love or consider love as a result of sexuality; (2) theories that emphasize sexuality, considering love to be a minor or subservient part of sexuality; (3) theories considering love and sexuality to be separated; (4) theories that emphasize love, considering sexuality to be a minor or subservient part of love; and (5) theories ignoring sexuality or considering sexuality to be a result of love.

Alongside the scholar inquiry into the relationship between love and sex, people in their romantic relationships link love with sex (Hendrick & Hendrick, 2002). In their study on the development of Perception of Love and Sex scale, Hendrick and Hendrick (2002) distinguished four ways in which people typically link love with sex. These ways are as follows: (1) Love is Most Important, i.e., love is the primary entity, (2) Sex Demonstrates Love, i.e. sex is an important element of a romantic relationship but in some ways subsumed by love, (3) Love Comes Before Sex, i.e., love comes first, and (4) Sex is Declining, i.e., sex is no longer as much a part of the relationship. These scales showed significant associations with relationship variables such as love and sex attitudes, relationship satisfaction, and romantic beliefs (Hendrick & Hendrick, 2002).

Evolutionary psychologists point out that women and men are characterised by different reproductive strategies. Men's aim is to impregnate the highest number of partners, whereas women's goal is to find one man who will take care of their offspring (Buss, 2001). Regan and Bersceid (1996) showed in their research that women, more often than men, state that the aim of accomplishment of their sexual desire is expressing love for partner, intimacy and involvement in the relationship. For men, in turn, much more often than for women, the goal for achievement their sexual desire is only the sexual activity. These differences between the representatives of both sexes in terms reproductive strategies, which are connected with evolution, can be the reason why women and men present different views on sex and love.

2. Design

The study design comprised of correlational study in which participants were asked to fill in the questionnaires.

3. Objectives

This study examines sex differences in the perception of love and sex. Although multiple studies have examined sexual and love attitudes, to the best of our knowledge, to date scant research has examined sex differences in this area in Poland. The present study is part of a larger longitudinal study aimed at investigating marital, love and sex attitudes as predictors of relationship status in young adulthood.

The study addressed the following research question: Do women and men differ in regard to perception of love and sex?

4. Methods

4.1. Materials

The questionnaire package presented to the study participants was comprised of the following instruments:

Demographic Questionnaire. This questionnaire was designed to obtain general descriptive information about participants' background such as age, gender, education, and current relationship status.

Perception of Love and Sex Scale (PLSS; Hendrick & Hendrick, 2002) (Polish adaptation – Adamczyk, 2013). The PLSS is a 17-item measure of how people view the link between love and sex in their romantic relationships. Respondents are asked to answer each item using a 5-point scale, ranging from strongly agree to strongly disagree. The PLSS consists of four subscales: Love is Most Important, Sex Demonstrates Love, Love Comes Before Sex, and Sex is Declining, with acceptable psychometric properties (Hendrick & Hendrick 2002). The internal consistency for the subscales in the original study by Hendrick and Hendrick (2002) was as follows: $\alpha = .67$, $\alpha = .80$, $\alpha = .78$, $\alpha = .62$ for Love is Most Important, Sex Demonstrates Love, Love Comes Before Sex, and Sex is Declining, respectively. In the present study, the internal consistency for the subscales was the following: $\alpha = .73$, $\alpha = .75$, $\alpha = .83$, $\alpha = .67$ for Love is Most Important, Sex Demonstrates Love, Love Comes Before Sex, and Sex is Declining, respectively.

4.2. Participants and Procedure

The study was carried out on a sample of university students from different faculties at a Polish university and non-students. Nine hundred questionnaires were originally distributed. A total of 640 students and non-students returned the questionnaires (71% response rate). 146 participants were removed because they were married, divorced, widowed, separated, or due to incomplete data, giving a final sample of 494 participants. University students constituted 70% of the total sample ($n = 346$), while non-student participants with higher education level constituted 30% of the total sample ($n = 148$). The age of participants ranged from 20 to 28 years old, with the average being 21.30, and standard deviation of 1.93. Participants resided in a large Polish city with a population exceeding 500,000 inhabitants. Women represented 66.20% ($n = 327$) and men 33.80% of the sample ($n = 167$).

The first author distributed the questionnaire to the students across different courses with the instruction to hand it out to their friends. The questionnaire packages were distributed in classrooms to groups of 20 to 30 students at a time and participation was voluntary. Participants were provided with an explanation as to the purpose of the study along with an assurance that all collected information would remain anonymous and confidential.

5. Results

In order to examine the possible mean differences in the area of perception of love and sex between women and men, a one-way ANOVA was used.

The performed analysis revealed that women scored lower on Love is Most Important, $F(1, 492) = 6.50$, $p < .05$, on Sex Demonstrates Love, $F(1, 492) = 8.20$, $p < .01$, and on Love Comes Before Sex, $F(1, 492) = 20.55$, $p < .001$ than men did. In other words, women were less convinced that love is the primary entity (i.e., Love is Most Important), that sex is an important element of a romantic

relationship but in some ways subsumed by love (i.e., Sex Demonstrates Love), and that love comes first (i.e., Love Comes Before Sex).

6. Discussion

The primary goal of this study was to examine in a sample Polish participants, sex differences in the area of perception of love and sex. The current study found evidence of the existence of differences between women and men in regard to perception of love and sex. In particular, women were less convinced that love is the primary entity, that sex is an important element of a romantic relationship but in some ways subsumed by love, and that love comes first.

These results do not corroborate with findings obtained in other studies, for example in the study performed by Hendrick and Hendrick (2002). Hendrick and Hendrick (2002) found no sex differences in perception of love and sex. The authors explain this with the justification that differences between women and men are becoming blurred and the distance between the representatives of both sexes in the social structure is becoming smaller. What is more, they state that different opinions regarding sex and love between women and men, possible to be observed in different study samples, depend on particular group of people. Such differences between women and men in terms of some beliefs have revealed in our research. It is worth pointing out that Hendrick and Hendrick (2002) research was conducted in the USA, whereas the current one was carried out in Poland. These are still culturally different societies. It is true that these differences between women and men are becoming blurred in Polish society as well, but this process is not at the same stage as it is in the USA. Research (CBOS, 2005) shows that Polish people are still traditional society valuing traditional standards and beliefs and traditional division of social roles among women and men.

There are several limitations of the present study. Major limitation is the lack of other factors which could, alongside sex, affect perception of love and sex, for example relationship history or personality. Second, even though the current study conducted on a sample of the Polish individuals expands the generalizability of the results, further research of cross-cultural nature is needed. Poland is still a country of traditional values, predominantly Catholic, which can significantly affect sexual attitudes and the perception of the link between love and sex

Despite these limitations, the present study contributes to a better understanding of the sex differences in the domain of perception of love and sex in a Polish population.

7. Conclusions

The present study contributes to recognition of how women and men in Poland perceive the link of love and sex in romantic relationships. However, there is still the need of conducting next research which will show the reasons for differences that have been observed among Polish young adults.

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SEX DIFFERENCES IN POLISH UNIVERSITY STUDENTS' MENTAL HEALTH

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Abstract

Objective: The aim of the study was to investigate the possible sex differences in the mental health among Polish university students. Based on prior research (e.g., Rymaszewska, Adamowski, Pawłowski & Kiejna, 2005), it was hypothesized that women would report higher level of mental health problems than men would. *Design:* The study design comprised of a correlational study in which participants were asked to fill in questionnaires. *Methods:* The General Health Questionnaire-28 (GHQ-28; Goldberg & Hillier 1979) was administered to a sample of 429 university students (327 females and 102 males) aged 19-25 years, with the average age being 21.79 (SD = 1.72). The questionnaire was distributed across different courses. A Student t test was used to analyse the data. *Findings:* The results indicated that women reported higher level of somatic symptoms than did men, $t(195.24) = 3.51$, $p = .001$, and higher level of anxiety than men did, $t(427) = 3.17$, $p = .002$. Women also reported higher level of total mental health problems than men did, $t(427) = 2.80$, $p = .005$. *Conclusions:* The current study revealed significant sex differences in the total mental health problems and in the domain of somatic symptoms and anxiety in Polish university students. This pattern of results may be related to gender roles and different styles of coping with stress, or it can also be connected with social expectations formulated towards women and men or with sex stereotypes.

Keywords: *sex differences, mental health, sex stereotypes, university students.*

1. Introduction

Increasing percentage of people suffering from mental problems can be observed recently. What is more, it has been observed that students constitute much bigger part of this group. High indicators of mental disorders in this social group are confirmed in numerous studies. (e.g. MacCall and others., 2001; Baran, Teul, & Lorkowski, 2012). It turns out that the period of growing up and adolescence is connected with a high risk of occurrence of different types of mental illnesses and disorders. Skalski (www.konferencja.dareproject.eu) states, for example, that the beginning of suffering from schizophrenia falls between the 20 and 25 age of life. Neurotic disorders also appear for the first time in this period of life. The reason for this may be the system of studying, which being the source of strong stressful factors, can cause different types of mental problems among more vulnerable people. Mental problems make studying process much more difficult (difficulties with concentrating, memorizing, lack of motivation) causing that people suffering from them achieve worse results than their peers and the results that do not reflect their real abilities and knowledge (www.abcd.edu.pl). In connection with the above it is crucial to analyze mental health of students from particular universities and pay attention to different variables which can influence differences in terms of mental health. One of such variables is sex which is the subject of the current study.

Differences between women and men exceed far beyond the physiology and carnality sphere. They can be observed, for example, in the sphere of cognitive functioning (Herman-Jeglińska, 1999) or interpersonal behaviours and ways of communicating (Tannen, 1995) as well as in terms of mental health as research shows (e.g., Rymaszewska, Adamowski, Pawłowski, & Kiejna, 2005). Depression is the most frequent mental disorder nowadays (Mandal, 2004). It is claimed that women, twice more often than men, suffer from depression in many cultures (Brannon, 2002). These differences can be noticed in the period of growing up (Ranzetti & Curan, 2008). Phobias such us social phobia or animal phobia also afflict women more often than men (Seligman, 2003). Social phobia appears in young age and its symptoms can be visible even in childhood (Hirschfeld, 1996). The percentage of men in comparison to women is higher when it comes to alcohol addiction, panic attacks without agoraphobia or paraphilias (Brannon,

2002). Taking the above into account we assume that female students of Adam Mickiewicz University in Poznan will report more problems of mental nature than male students of this university.

2. Design

The study design comprised of correlational study in which participants were asked to fill in the questionnaires. The questionnaires were administered via university web page (on-line survey).

3. Objectives

The aim of the study was to investigate the possible sex differences in the mental health among Polish university students. To the best of our knowledge, to date scant research has examined sex differences in this area in Poland. The study addressed the following research question: Do women and men differ in regard to mental health?

4. Methods

4.1. Materials

The questionnaire package presented to the study participants was comprised of the following instruments:

Demographic Questionnaire. This questionnaire was designed to obtain general descriptive information about participants' background such as age, gender, education, and current relationship status.

General Health Questionnaire-28 (GHQ-28; Goldberg & Hillier, 1979) (Polish adaptation – Goldberg, Williams, Makowska & Merecz, 2001). The General Health Questionnaire measures symptoms of non-psychotic psychiatric disorders (Goldberg & Hillier, 1979). GHQ-28 consists of four 7-item scales: somatic symptoms, anxiety and insomnia, social dysfunction, and severe depression. Respondent are asked to compare their recent psychological state with their usual state on a 4-point (1 = not at all, 2 = no more than usual, 3 = rather more than usual, 4 = much more than usual). In the current study the bimodal scoring procedure (0, 0, 1, 1) is applied. Using the conventional bimodal GHQ scoring method there is a range of 0–28 with a score above a threshold of 4 indicative of psychiatric disorder. In the present study the internal consistency for the subscales was $\alpha = .80$, $\alpha = .84$, $\alpha = .69$, $\alpha = .90$, and $\alpha = .91$ for Somatic symptoms, Anxiety, Social dysfunction, Severe depression, and for the Total scale, respectively.

4.2. Participants and Procedure

The study was carried out on a sample of 429 university students (327 females and 102 males) aged 19-25 years old, with the average age being 21.79 (SD = 1.72) from different faculties at Adam Mickiewicz Polish University in Poznań, in Poland.

The study was performed in the form of online survey. In order to invite students to participate in the study a special link with invitation was sent to students. The participation was voluntary. The instructions were read aloud. An explanation as to the purpose of the study was given as was an assurance that the information provided would remain anonymous and confidential. Participants were also informed that they could resign from the study at any time.

5. Results

In order to examine the possible mean differences in the area of mental health between women and men a Student t test was used.

The analysis performed revealed that women reported higher level of somatic symptoms than did men, $t(195.24) = 3.51$, $p = .001$, and higher level of anxiety than men did, $t(427) = 3.17$, $p = .002$. Women also reported higher level of total mental health problems than men did, $t(427) = 2.80$, $p = .005$.

6. Discussion

The primary goal of this study was to examine sex differences in mental health among Polish university students. The current study found evidence of the existence of differences between women and men in regard to somatic symptoms, anxiety and total mental health problems. In particular, women reported higher level of somatic symptoms, higher level of anxiety and higher level of total mental health

problems in comparison to men. These results confirm previously conducted research (e.g. Białkowska and others, 2014), indicating that it is very important and big problem and there is still the need to investigate this subject thoroughly.

These results can be explained by taking into account the ways of overcoming stress and women and men's susceptibility to stress. As it was mentioned in the introduction, studying process is connected with various and often strong stressful factors influencing young people. Research shows that women react to challenges and negative incidents differently than men (Russo, Green, 2002). Women react more emotionally, tend to blame themselves which is in contrast to men who present more active strategies concentrated on solving the problem and use external attributions (Mandal, 2004). These different reactions to negative incidents among women and men have their sources in childhood when girls and boys are taught different ways of coping difficult situations in the course of socialization (Brannon, 2002). At the same time, women can, more often than men, feel various physical and somatic symptoms or be allowed to report these on such social occasions as questionnaire research. It is possible that the problem of sex differences is not connected with different level of health but with different ways of experiencing things, openness in communication (compare Mirowsky, Ross, 1995) or communicating body reactions (compare e.g. van Wijk, Kolk, 1997). In the current studies differences are limited to such spheres of mental health which are connected with physical experience.

There were several limitations of the present study. Major limitation was the lack of other factors such as gender roles and differences and living conditions connected to them (e.g. violence or poverty) (Wojciszke, 2002), ethnicity, marital status, social class, education and more (Marczak, 2011) which could, alongside sex, affect mental health. Second important limitation was a small number of males in the sample. In the future studies more balanced number of men and women should be assured. Third, there is still a problem with correct interpretation of differences in somatic symptoms and anxiety in the light of theoretical analysis as well as possible future research.

Despite these limitations, the present study contributes to a better understanding of sex differences in the area of mental health in a Polish population of university students.

7. Conclusions

The present study contributes to deeper understanding of the topic raised. However, there is a need to conduct further research regarding the concept, especially when it comes to other reasons of differences observed than only stressful system of higher education.

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"SALUTE ALLO SPECCHIO": A COMPLEMENTARY THERAPY FOR FEMALE CANCER PATIENTS

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Abstract

Introduction & Aim: "Salute allo Specchio" is a psychological program for female cancer patients. It was born in June 2013 with the aim to improve patients' well-being through the realization of group sessions during which a team of fashion and aesthetic consultants illustrates strategies to manage the effects of the disease and its treatments. Psychological variables such as depression, anxiety, quality of life were considered. A preliminary research evaluated variables' levels before the beginning of the program (t_0). The present study shows how they vary during time, particularly at the conclusion of the project (t_1) and after three months (t_2). *Method:* Up to now, 39 patients took part to the project. The following questionnaires were administrated: STAI-Y (anxiety), BDI-II (depression), EORTC QLQ-30 (quality of life). *Results*: A significant decrease ($p<0.05$) in depression and anxiety levels was found betweent_0 and t_1. Such differences maintained their significance even after 3 months from the conclusion of the project (t_2), reflecting the non-transience of the observed effects. BDI-II mean scores are also influenced by the presence of metastasis; moreover, being subjected to chemotherapy and radiotherapy simultaneously seems to negatively impact on quality of life. *Conclusions*: The present study seems to confirm that taking part to "Salute allo Specchio" leads to a stable improvement in variables considered. It also suggests the importance of introducing support interventions beside conventional medical therapies, in order to promote a better adaptation to the disease and to improve the quality of life of the patients.

Keywords: *psychoncology, female cancer, oncology esthetic, quality of life, body image perception.*

1. Introduction and Object

Among the many aspects affected in the experience of cancer, the body plays the leading role being affected by the main effects of the treatments. The consequences of chemo, radiotherapy and surgery not only represent an unpleasant alteration of one's own body image, but also the evidence of illness. As highlighted by researches, these changes can have significant consequences on the quality of life (Erol, Can, & Aydiner, 2012), generating shame and fear of social non-acceptance. Furthermore, the problems concerning body image are one of the factors most greatly involved in the genesis of issues such as depression or anxiety (Grassi, Biondi, Costantini, 2003). "Salute allo Specchio", a psychological program for female cancer patients, was born in June 2013. It aims to improve patients' well-being through the realization of group sessions during which a team of fashion and aesthetic consultants illustrates strategies to manage the effects of the disease and its treatments. The present study aims to evaluate the program's impact on psychological variables of depression, anxiety and quality of life.

2. Methods

All patients involved in the program were recruited at San Raffaele Hospital. They were assessed before the beginning of group sessions (t_0), at the end of the program (t_1) and after 3 months (t_2) through the following questionnaires: a specific Self-Report Questionnaire (about socio-demographic and clinical characteristics), the State-Trait Anxiety Inventory (STAI-Y) (Spielberger, Gorsuch, & Lushene, 1970), the Beck Depression Inventory–Revised (BDI-II) (Beck, Brown, & Steer, 1996) and the European Organization on Research and Treatment of Cancer QLQ-C30 (EORTC QLQ-C30) (Aaronson et al., 1993).

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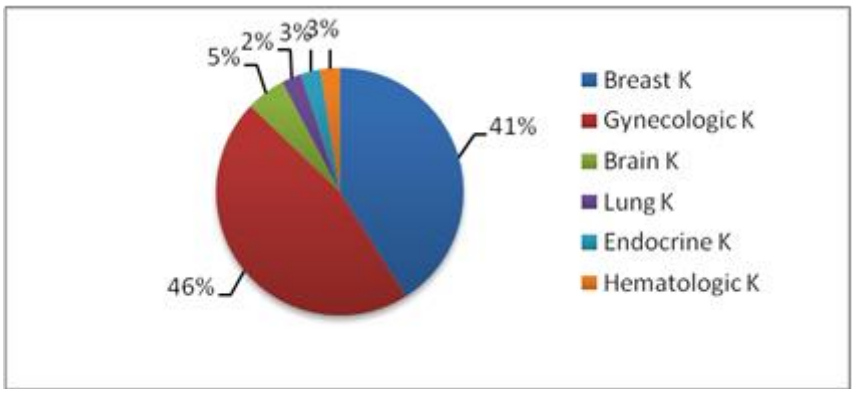
3. Results

3.1. Sample Characteristics

Up to now, 39 women took part to the program. Only 24 of them completed the 3rd evaluation. The mean age of the patients is 52,54 years (sd: 11; range: 20-74). Time elapsed since diagnosis is on average 38,5 months (sd: 33,91; range: 1-150). All patients are treated with chemotherapy; 8 of them are also treated with radiotherapy (21%). Diagnosis is distributed as follow:

Figure 1. Diagnosis distribution.



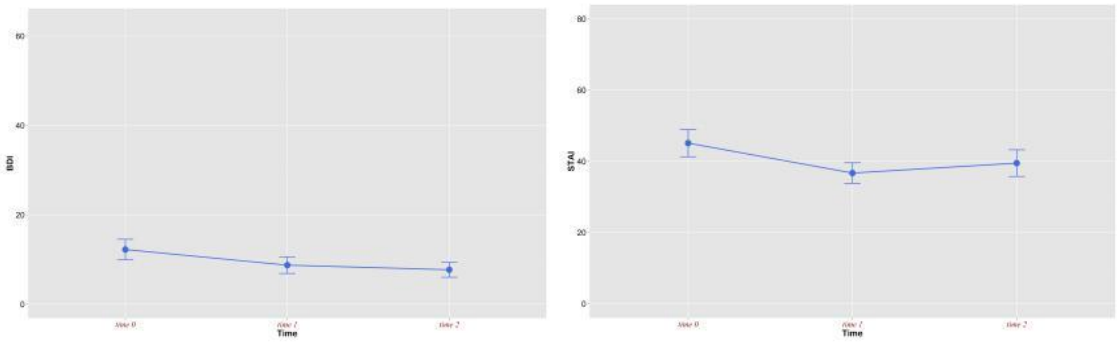
3.2. Clinical variables

A significant decrease ($p<0.05$) in depression and anxiety levels (state anxiety) was found between t_0 and t_1. Such differences maintained their significance even after 3 months from the conclusion of the project (t_2), reflecting the non-transience of the observed effects.

Table 1. STAI-Y and BDI-II mean score differences at t_0, t_1, t_2.

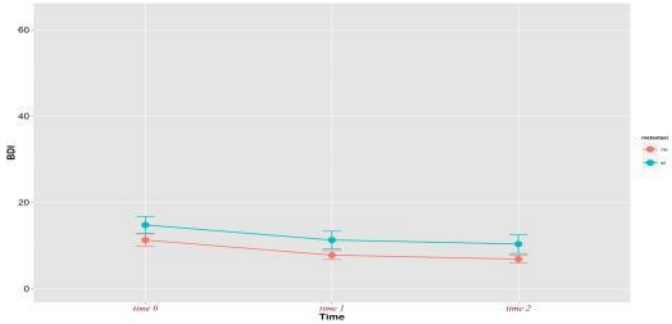
BDI-II									STAI-Y STATE								
t0 – t1			t1 – t2			t0 – t2			t0 – t1			t1 – t2			t0 – t2		
M	DS	P	M	DS	P	M	DS	P	M	DS	P	M	DS	P	M	DS	P
-3,49	0,99	<**0,001**	0,56	1,176	0,637	-4,04	1,18	**0,001**	-8,41	1,89	<**0,001**	3,57	2,23	0,115	-4,84	2,23	**0,034**

Figure 2. STAI-Y and BDI-II mean scores at t_0, t_1, t_2.



BDI-II mean scores are also influenced by the presence of metastasis.

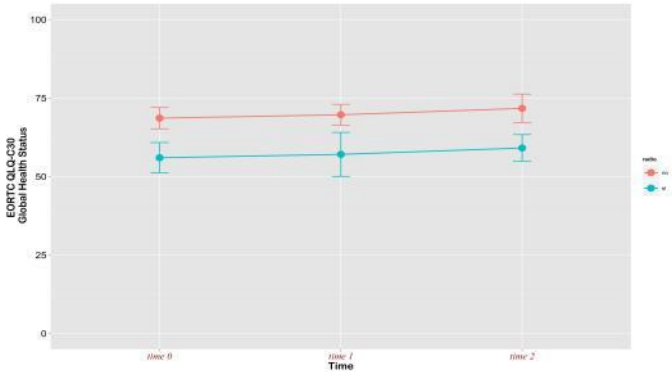
Figure 3. BDI-II mean scores in patients with and without metastasis at t_0, t_1, t_2.
Table 2. BDI-II mean score difference in patients with and without metastasis.



	Metastasis – No metastasis		
	M	DS	P
BDI-II	3,72	1,83	**0,049**

Moreover, being subjected to chemotherapy and radiotherapy simultaneously seems to negatively impact on quality of life.

Figure 4.EORTC QLQ-C30mean scores in patients who are undertaking radiotherapy and who are not at t_0, t_1, t_2.
Table 3. EORTC QLQ-C30mean score difference in patients who are undertaking radiotherapy and who are not.



	Radiotherapy– No Radiotherapy		
	M	DS	P
EORTC	-12,7	5,80	**0,034**

4. Discussion and Conclusion

The study results seem to confirm the still limited evidence currently present in the literature on the issue: the participation to "Salute allo Specchio" program has a positive impact on patients' general well-being, reducing psychological symptomatology of depression and anxiety and improving the global health status. The small number of patients (especially the ones who completed the third assessment, n=24) makes it hard to do any conclusion about scales' trend in a longer period of time (3 months). However, it seems important to associate support interventions to conventional medical therapies in order to promote a better adaptation to the disease and treatment and to facilitate the development of individual resources for a better quality of life.

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HOW DO HOME ENVIRONMENTS CONTRIBUTE TO THE MENTAL HEALTH: CASE OF RUSSIAN ADOLESCENTS[i]

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Abstract

One of the most crucial problems of contemporary clinical psychology and psychotherapy is searching for ecological resources of well-being and mental health. Based on the environmental psychology researches (Coolen, 2011; Edgerton, 2014; Kyttä, 2004; Nartova-Bochaver et al., 2015; Nordström, 2014) we assumed the friendliness of home environment to be an important predictor of its inhabitants' well-being. We define friendliness of home environment (FHE) as extent of how much it satisfies the inhabitants' needs. FHE combines number of affordances providing by home to its inhabitants and its conformity to their personalities. Our tools were: developed by authors Functionality of Home Environment Questionnaire (2015), The Personal Relevance of Home Environment (2015), Authenticity Scale (Wood et al., 2008), Warwick-Edinburgh Mental Well-being Scale (Tennant et al., 2007). Participants were 124 adolescents (M_{age}=14.1, 58 males, 66 females), living in Moscow and rural area in various social contexts (regular school, gymnasium, orphanage, village home). In total, 15 variables were investigated. We have found that: 1) Well-being is stronger predicted by the personal relevance of home than by its functionality; 2) Girls are more sensitive to home friendliness than boys; 3) Moscow school students are more sensitive to anti-predictors than to predictors of well-being. Hypothesis is partly confirmed. In discussion, we consider gender differences and specificity of life plans among adolescents from different social contexts.

Keywords: *home environment, well-being, authenticity, inhabitants, friendliness, social context.*

1. Introduction

The world and the way of life style have changed, as well as personal needs and opportunities, but the desire to return home as soon as possible from work, business trip, school and other places remains unchanged. It represents the value of a home as a significant environmental and social resource maintaining psychological well-being, helping to overcome difficult life situations and preventing from the stresses. It is proposed to study home environment based on its socio-psychological functions in human life. The analysis is conducted from two positions – from the objective opportunities, affordances (activities promoted by the environment) and from subjective suitability (how this environment suits to the subject).

The theoretical ground of our study is a number of classical and contemporary researches in the environmental and personality psychology (Nordström, 2014; Ritchie L., Edgerton E., 2014; Seligman, 2007). First, we could refer to the substantive theories describing the relationship between man and environment. To sum up the main idea of this approach, people maintain some emotional reactions (place attachment, sense of place, feeling at home) and attitudes toward their homes (home dependence and identity), and, if these relations are positive, home is becoming a resource of people's mental sustainability and flourishing (Nartova-Bochaver, 2008). The second theoretical area that supports our research is the Theory of affordances that reveals the actual individual abilities in particular environment and the ideal functionality model of environment (Kyttä et al., 2004). A wide range of individual characteristics, social and cultural norms, and practices are regulated by affordances. Third, our theoretical framework included the concept of environmental friendliness. Friendly environment is characterized by satisfying human needs, stimulating and compensating inhabitants' development, encouraging self-actualization, personal growth and sense of self-usefulness in people, e.g. a congruity

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between objective features of the residential environment and their subjective meanings (Coolen, 2011; Horelli, 2007). The congruity/discrepancy between the environmental content and the personal needs satisfaction shows the level of personal friendliness of this environment.

2. Objectives

The relationship between the attitudes towards home, on the one hand, and well-being and authenticity, on the other hand, in Russian adolescents living in different social contexts we attempted to reveal in our confirmatory research. First, the key constructs require to be operationalized. Friendliness of home environment is determined by congruity between objective features of the residential home environment and subjective meanings and needs. We understand psychological well-being as a synonym for mental health in the current study. Psychological well-being covers positive affect (feeling happy, dignity), psychological functioning (autonomy, competence, self-acceptance, and personal growth), self-realization, and interpersonal relationships (Tennant, 2007). Authenticity is considered as the most fundamental aspect of well-being that implies the authorship and sovereignty of person's own being, which is manifested in the experience and social interaction. Following the person-centered psychology, we consider the structure of authenticity as consisting of three aspects: 1) self-alienation between conscious awareness and the true self; 2) authentic living which determines the congruence between behavior and expressing emotions (that is reflected in accordance with one's lifestyle and his/her values and beliefs); 3) accepting external influence is the extent to which an individual is influenced by other people and strives to meet the expectations of others (Wood et al., 2008).

3. Design

We have formulated the following research hypotheses. 1) Well-being and authenticity are predicted by the personal relevance of home, and by its functionality; 2) the level of home environment friendliness has gender specificity. Participants were 124 adolescents (M_{age}=14.1, 58 males, 66 females), living in Moscow and rural area in various social contexts (regular school, gymnasium, orphanage, village home). Respondents were asked to complete the questionnaires and to provide information on age, sex, and residence place. The survey was voluntary, intrapersonal, and interactive and was conducted in one stage for 40-60 minutes.

4. Methods

In our study, friendliness of home environment was an independent variable; mental health was a dependent one. To measure the friendliness of home environment, we have developed a tool set consisting of two scales ('Functionality of Home Environment Questionnaire' (FHEQ) and 'The Personal Relevance of Home Environment' (PRHE)). These questionnaires included constructs associating with a specific need or affordance of home environment (Nartova-Bochaver et al., 2015). Authenticity and mental well-being assessed by Authenticity Scale (A.M. Wood et al., 2008) and The Warwick-Edinburgh Mental Well-being Scale (WEMWBS) (Tennant, 2007) were the indicators of mental health .

The FHE-Questionnaire consists of 55 statements with the Likert scale for each item from 1 to 7, it has the 4-factory structure, and it finds the individual's relationship to the ideal home environment. The scales are following. 1) *Usability* (25 items) includes the description of those simple everyday functions without which home becomes inconvenient. 2) *Development* (12 items) describes the properties of home environment which stimulate personal development (e.g. supply sensory, cognitive, social information or maintaining the inhabitant's identity). 3) *Stability* (7 items) reveals providing psychological and physical stability and predictability, home recognition by living space. 4) *Security* (11 items) is associated with successful social interaction; it reflects needs of self-presentation, presentation of resident's status and power, and aesthetic needs.

The PRHE questionnaire contains 54 constructs (e.g. needs for privacy, for self-presentation, for storage, etc.). Each construct is given by two statements; there are 108 items in total. The Likert scale represents a score for each item from 1 to 5. This questionnaire is designed to explore views about the actual (real) model of home environment. The questionnaire includes 7 scales. 1) *Home environment management* (27 items) describes the possibility of controlling and predicting the environmental context. 2) *Resource* (19 items) includes constructs associated with home supporting and stability. 3) *Self-presentation* (17 items) is associated with the inhabitants' possibility to personalize their own space and to signify individual and social characteristics of dwellers through the home environment. 4) *Ergonomics* (17 items) is associated with the views on the home environment usability and on aesthetic needs satisfaction. 5) *Home alienation* (12 items) concerns with the reasons of home estrangement, loss of

home attachment and sense of belonging. This scale includes statements related to discomfort, anxiety, low functionality of living space, and to the lack of social cohesion and of the purpose to return home. 6) *Flexibility scale* (9 items) determines the ability of home environment to be dynamic and to respond to the variable resident's needs. 7) *Historicity scale* (7 items) reflects the home links with personal, family, and general past.

5. Results

5.1. FHE and social contexts

The regression analysis confirmed our suggestion that home environment is an important resource of psychological well-being and authenticity, as the very essence of well-being and healthy functioning (Table 1). According to our expectations, flexibility of home environment is the predictor of well-being, while home alienation isn't. Home alienation is the predictor of self-alienation and the anti-predictor of authentic living; this is especially true for the adolescents from orphanages. For village adolescents, home environment resources are the anti-predictors of authentic living; but flexibility and usability predict accepting external influence. In adolescents from gymnasium, flexibility, stability, and self-presentation prevent self-alienation, while ergonomics and home environment management factors don't. We can see that gymnasium students are more sensitive to features of home environment, and this influence is more favorable in comparison with other groups. In the group of adolescents from regular school, accepting external influence is predicted by home alienation.

Table 1. Significant (p < .05) Standardized Multiple Regression Weights of FHE and PRHEs as Predictors of the Well-being and Authenticity in teenagers from different social contexts.

β	Well-being	Authentic living	Accepting external influence	Self-alienation
The whole sample (N=124)				
Flexibility	.245			
Home alienation	-.20	-.31		.416
Village home (N=29)				
Resource		-.98		
Flexibility			.733	
Usability			1.09	
Orphanages (N=30)				
Home alienation		-.57		.727
Regular school (N=31)				
Home alienation			-.46	
Gymnasium (N=34)				
Flexibility			-.49	-.50
Stability				-.72
Ergonomics				.939
Self-presentation				-.51
Home environment management				.54

5.2. FHE and gender

The analysis of gender specificity and FHE shows that girls are more sensitive to home friendliness than boys; for girls, more psychological constructs (affordances) are personally meaningful (Table 2).

Table 2. Significant (p < .05) Standardized Multiple Regression Weights of FHE and PRHEs as Predictors of the Well-being and Authenticity depending on sex.

β	Well-being	Authentic living	Accepting external influence	Self-alienation
Males (N=58)				
Security	-.51			
Resource	.50			
Home alienation		-.34		.444
Females (N=66)				
Development	.396			
Stability	-.42			
Flexibility	.386			
Home alienation		-.27		.360

Development and flexibility that are necessary to change and shape home environment are the predictors of well-being in the female group. In the group of boys, home resource predicts well-being in the male group. Desire for stability of the ideal living space in girls and security in boys have a negative impact on their current mental health; teenagers who need home stability and desire for it are not very well. Thus, not the home environment features themselves are most important, but the congruity between adolescents' representations about the ideal home environment and the actual environment where they live. If the discrepancy between real and ideal models of home environment is considerable, it has a strong negative influence on mental health and on stress resistance at present.

6. Discussion

Our study has shown that mental health and home environment have the fairly clear interrelation. The inability of a living space to meet the adolescent' specific needs may contribute to teenager's dissatisfaction with quality of life and loss of personal sovereignty (Moser, 2009). Often, it leads to the emergence of deviant behavior – runaways from home, homelessness and so on. Also it is important to pay attention to the life context and life plans of an adolescents (Dmitrieva, 2014). We assume that for example the low level of personal importance of home environment in the group of rural adolescents may be associated with the specificity of their life plans: they plan moving from rural to urban areas, therefore, they do not consider their homes as a resource. The orphans are very sensitive to home alienation: it may be explained by their inability to keep their own identity through the home environment and to implement one's plans and life projects (Reznichenko, 2014Noteworthy, that relatively 'disadvantaged' groups of respondents show higher rate in different scales, which may indicate a greater need to 'improve' their home environments as compared with the respondents from regular school and gymnasium. The social contexts play an important role in these differences. There are also gender-specific relationships of adolescents to their home. Girls are more focused on the development of the internal space of home environment, while boys learn the external relations with the outside world. It is important to know for parents and practitioners that even if a boy doesn't show obvious home attachment, he still needs to put effort in designing a friendly dwelling.

7. Conclusion

Our study represents the initial attempt to explore mental health of young people from the perspective of environmental friendliness. Despite the necessity of additional systematization, the obtained data may be of interest to various fields of applied psychology, sociology, and architecture. Our research confirms the idea that the study of home environment and of its impact on mental health should not rely on separate assessments of certain affordances of the environment, but should take into account the congruence between desired and ideal environments.

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PSYCHOLOGICAL DISTRESS AND COPING STRATEGIES AMONG WOMEN WHO UNDERGO CANCER GENETIC TESTING

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Abstract

Carriers of BRCA mutations (BRCA1 and BRCA2) have a higher risk for breast and ovarian cancer. Despite cancer genetic testing is an effective instrument for cancer prevention, little is known about its psychological impact. The aim of the present study is to investigate the effect of coping strategies on the prediction of psychological distress among women who decided to undergo cancer genetic testing distinguishing them on the reasons for genetic testing. The study included three groups of women: breast and/or ovarian cancer patients (N = 33), breast and/or ovarian cancer survivors (N = 22) and people with strong family histories of breast and/or ovarian cancer (N = 10). All cancer patients (in remission or not) were affected by breast or ovarian cancer. Assessment of psychological distress and coping strategies were respectively obtained with the administration of the SCL-90-R and the COPE-NVI. ANOVA and multiple regression models were run. Groups of participants significantly differ in relation to somatization, depressive symptoms and hostility. In all cases, the use of avoidance coping strategies predicted higher levels of psychological distress. Results from the present study suggested the importance of the coping strategies on the prediction of psychological distress, helping psychologists to draw up appropriate intervention strategies during the cancer genetic testing.

Keywords: *cancer, genetic counseling, hostility, coping.*

1. Introduction

The genetic basis of the Hereditary Breast and Ovarian Cancer (HBOC) syndrome is in most cases a germline inherited mutation in either the BRCA1 or BRCA2 genes. Carriers of BRCA mutations show a higher risk of developing breast (60-70%) and ovarian (10-40%) cancer (Antoniou et al., 2003). Despite cancer genetic testing is an effective instrument for cancer prevention, little is known about its psychological impact. Indeed, people being tested may experience some psychological distress during testing process or after receiving test results, owing to the individual and familial implications of carrying a BRCA mutation.

2. Design

This is an explorative study focused on the psychological adaptation of patients to cancer genetic counseling for BRCA genes test. Subjects who requested counseling were referred by their physician or came spontaneously to the Cancer Genetic Counseling Unit of San Raffaele Hospital (Milan), between 2012 and 2014. Participants were 65 women > 18 years of age who provide written informed consent before undergoing genetic counseling and testing.

We distinguish between three subsamples: breast and/or ovarian cancer patients (N = 33), breast and/or ovarian cancer survivors (N = 22) and people with strong family histories of breast and/or ovarian cancer (N = 10).

3. Objectives

Based on these premises, the objective of this study was to assess the sample's psychological vulnerability experienced in the context of genetic counseling.

Furthermore, the present study evaluated the existence of differences in distress and coping strategies between the three subsamples previously introduced.

In order to identify users who experience cancer genetic counseling as more stressful and to program a possible intervention of personalized psychological support, the ultimate goal of this study is to investigate the effect of the coping strategies on the prediction of psychological distress among women who decided to undergo BRCA testing.

4. Methods

4.1. Procedures

Before meeting the geneticist, participants had a psychological interview of 45 minutes, consisting of three stages. First, it assessed demographics, patient's resources, individual and family cancer history. Then, psychologist explained the genetic counseling process and its implications; finally, subjects completed two questionnaires, evaluating psychological distress (SCL-90-R; Derogatis, 1994) and coping strategies (COPE-NVI; Sica et al., 2008).

4.2. Statistical analysis

Descriptive statistics were generated to characterize the total sample and the three subsamples in terms of demographics, resources, cancer history and psychological factors.

To evaluate the presence of statistically significant differences between the three subsamples about distress and coping strategies, the Kruskal-Wallis test and, subsequently, the Mann-Whitney test for independent samples were used.

Finally, ANOVA and multiple regression models were run.

5. Discussion

The statistical analysis showed that 7.7% of the total sample experienced a clinically significant level of psychological distress.

Groups of participants significantly differed in relation to somatization (Fig. 1), depressive symptoms (Fig. 2) and hostility (Fig. 3). In particular, breast and/or ovarian cancer survivors would present a higher vulnerability to feelings and thoughts of a state of anger, significantly higher in comparison to the other subsamples.

The regression analysis identified those who use the coping strategy of avoidance, predictive of an increase in symptoms of depression, anxiety and somatization, as the most vulnerable to psychological distress.

6. Conclusions

The results of this research confirm the findings in the literature. The literature shows that abnormal psychological reactions to cancer genetic counseling seem to be infrequent: in most cases, BRCA genes test and its positive result temporarily changes the levels of psychological distress (Graves et al., 2012). Only a minority of patients (< 10%) experiences a clinically significant level of psychological distress which persists over time (Coyne, Benazon, Gaba, Calzone, & Weber, 2000; Schwartz et al., 2002).

The high level of hostility in the subsample of cancer survivors would be explained by the fear of relapse again in the state of illness. As a consequence, it would be desirable to refer cancer survivors to genetic counseling at the beginning of the course of disease and treatment.

People using avoidance coping strategies seem to be more vulnerable to psychological distress in comparison to those who use problem-oriented ones, since they are hypothetically inclined to deny the mutation risk condition.

Figure 1. Somatization.

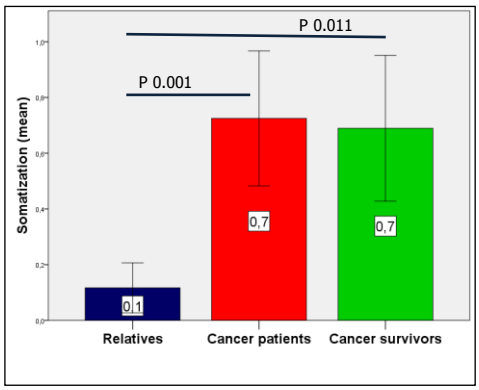


Figure 2. Depressive symptoms.

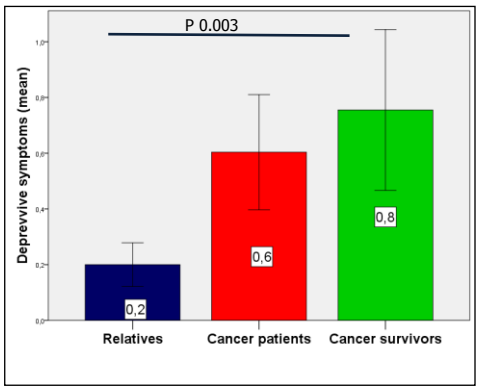
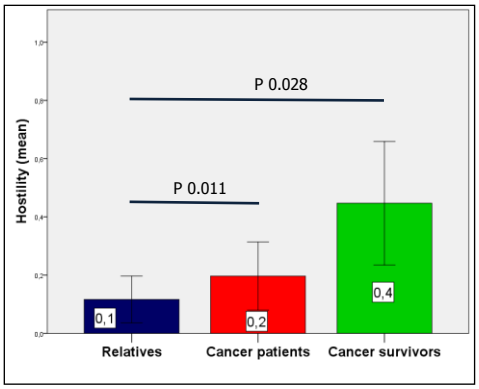


Figure 2. Hostility.



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PSYCHOLOGICAL ASPECTS OF MOTHERHOOD AFTER CANCER

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Abstract

The aims of a presentation include: 1) a literature review on being a mother after the experience of cancer, 2) the implications for further research. In the first part we would like to discuss the most recent research results in the above field. Moreover, we intend to present a multidimensional tool which measures concerns related to fertility and parenthood for young adult female cancer survivors, the Reproductive Concerns After Cancer Scale designed by Jessica Gorman and researchers from the University of California. Research shows that the experience of cancer can impede the natural development and disturb the fulfilment of developmental tasks of early adulthood (Magelssen, 2008; Pivetta, 2011; Syse, 2007; Cvancarova, 2009; Langeveld, 2002; Stam, 2005; Gurney, 2009; Green, 2009). Women after cancer have less chance for giving birth, although the factors which have influence on this situation are unclear, determined both by biological and psychosocial conditions. Simultaneously, the ability to have children is an important part of quality of life. The second part will be devoted to such implications for further research as: establishing the relationship between concerns about motherhood after the experience of cancer and survivors' decisions, finding factors which differentiate between those concerns and checking the differences between young mothers and those young women who do not have children.

Keywords: *motherhood, cancer, pregnancy.*

1. Introduction

According to R. Havighurst (1981) developmental tasks in early adulthood include: choosing a partner, learning to live with a partner, starting one's own family and rearing children. A positive solution causes happiness and allows to succeed in solving future tasks, whereas, a failure leads to negative feelings, criticism of the community, and problems with next challenges (Gurba, 2000). Moreover, giving birth to the first child is characteristic of early adulthood when people go through intimacy-isolation crisis. The aim is to establish lasting emotional ties with another person without losing sense of identity. The ability to engage into reciprocal intimate relationship means developing love virtue. The inability to solve this crisis, on the other hand, constitutes a danger of isolation (Erikson, 1997). In every critical stage a person faces a developmental challenge which requires learning new abilities to tackle a specific problem. The way people solve the crisis in a given phase depends on their vital energy sources and current developmental potential. After coming through each critical phase, an individual develops a basic virtue, such a mental characteristic which defines a person and determines effective developmental tasks realisation (Bakiera, 2013).

2. Cancer and early adulthood

The statistical data shows a high incidence of cancer among young adults and increased population of cancer survivors in reproductive age. Moreover, the time of starting a family is delayed (Schover, 2005; Bleyer, 2006). As a result, the experience of parenthood more frequently is disturbed by cancer. Research shows that the experience of cancer can impede the natural development and interfere with fulfilling developmental tasks of early adulthood i.e.:

- Lower percentage of married couples and biological parenthood among young cancer survivors in comparison with their peers can be observed. Among women diagnosed between 15 and 44 years old, pregnancy rates within ten years post diagnosis were under half compared to general population (Magelssen, 2008; Pivetta, 2011; Syse, 2007; Cvancarova, 2009; Langeveld, 2002; Stam, 2005; Gurney, 2009; Green, 2009).

- Around half of young cancer survivors experience the fear of infertility and temporary or permanent infertility (Carpentier, 2010).
- Women after cancer have less chance for giving birth, although the factors which have influence on this situation are unclear, determined both by biological and psychosocial conditions (Syse, 2007; Schover, 2005; Schover, 2009).

Research conducted in the area of cancer survivors' quality of life indicates that the ability to have children is an important part of this quality. For a number of cancer survivors, parenthood constitutes the confirmation of recovery, normality, a proof that the illness has not taken everything. There is also a connection between women's unmet medical and informational needs regarding the influence of cancer treatment on fertility and lower quality of life during survivorship (Letourneau, 2012; Beckjord, 2008; Kent, 2012; Canada, 2012; Gorman, 2010; Wenzel, 2005; Howard-Anderson, 2012; Ganz, 2003).

3. Barriers for motherhood after cancer

3.1. Cancer treatment and fertility

The risk of infertility is related to applied medicines, the length of treatment and patient's age. Research results on interrelation between treatment and fertility are presented in Table 1.

Table 1. The influence of cancer treatment on fertility.

Research	Results
Seli,2013; Bines, Oleske, Cobleigh, 1996; Walshe, Denduluri, Swain, 2006; Byrne, Fears, Gail i in., 1992; Coccia, Altman, Bhatia i in, 2012; Litwiniuk, 2007	Gonadotoxic treatment: chemotherapy and radiotherapy increase the risk of infertility and premature ovarian failure.
	Long-lasting endocrine therapy, although not directly gonadotoxic requires postponing pregnancy and as a result diminishes chances for a biological child.
Letourneau, Ebbel, Katz i in, 2012; Gorman, Bailey, Pierce, Su, 2012; Thewes, Meiser, Taylor i in., 2005; Zebrack, 2008; Zebrack, Casillas, Nohr i in., 2004	Fertility preservation methods before cancer treatment are used by less than 5% female cancer patients. As a result, many women after completing cancer treatment are left with doubts and concerns about their fertility.

3.2. Emotional barriers to motherhood after cancer

Emotional obstacles for motherhood after the experience of cancer are related to:

- Uncertainty about one's own health, fear of cancer recurrence, fear of death and deserting children, uncertainty about the effectiveness of treatment and fertility preservation after treatment (Gorman, 2012; Thewes, 2005; Zebrack, 2008; Zebrack, 2004, Dunn, 2000; Schover, 1999; Gorman, 2011; Partridge, 2004).
- Uncertainty about child's health, fear of giving birth to an ill child as a consequence of cancer treatment, fear of giving birth to a child with susceptibility to cancer (Gorman, 2012;Thewes, 2005; Zebrack, 2008; Zebrack, 2004, Dunn, 2000; Schover, 1999; Gorman, 2011; Partridge, 2004).

3.3. Practical barriers to motherhood after cancer

Practical obstacles to motherhood are connected to:

- Financial costs women after cancer predict planning parenthood (costs related to possible infertility treatment, child's treatment).
- Need for financial stability (costs related to medical care after the end of treatment, pregnancy with complications, a child with health problems).
- Potentially shorter fertility period as a result of cancer treatment (Gorman, 2012; Canada, 2012; Schover, 1999; Syse, 2007; Schover, 2009).

4. The Reproductive Concerns After Cancer Scale

The Reproductive Concerns After Cancer Scale is a multidimensional tool which measures concerns related to fertility and parenthood for young adult female cancer survivors, designed by

J. Gorman, I. Su, J. Pierce, S. Roberts, S. Dominick and V. Malcarne (2013). The scale is divided into 6 dimensions:

- fertility potential (α=0.91)
- partner disclosure (α=0.88)
- child's health (α=0.88)
- personal health (α=0.83)
- acceptance (α=0.82)
- becoming pregnant (α=0.78)

During the first phase seven focus groups were conducted in order to explore young cancer survivors' fertility and motherhood experiences. The scale has been shown to have strong psychometric properties, alpha coefficient, α=0.82. Test-retest reliability is not known. The scale enables to capture unique fertility and parenthood needs of young female cancer survivors to better identify and address them. The tool was used among women who have survived cancer (age 18-35 years) and were diagnosed at least one year prior to the survey.

The scale has moderate to low correlations with social support, health-related quality of life, where higher scores indicate poor quality of life, satisfaction with life, and depression (Gorman, 2013).

5. Implications for further research

It is worth to investigate which factors differentiate between reproductive concerns among young adult female cancer survivors. Moreover, it is worth to see if there is a connection between these concerns and cancer survivors' decisions about motherhood and decisions about treatment. What young female cancer survivors make their motherhood and treatment decisions dependent on? On the basis of the literature (Gorman, 2012;Thewes, 2005; Zebrack, 2008; Zebrack, 2004, Dunn, 2000; Schover, 1999; Gorman, 2011; Partridge, 2004) factors which can differentiate between reproductive concerns were distinguished: coping with stress, quality of life, type of cancer, type of treatment, length of treatment, motherhood experience (the number of children), reproductive history, social support, age at diagnosis, relationship, age, education and financial situation.

6. Conclusions

Research on reproductive concerns among young female cancer survivors is crucial for developing educational and supportive interventions for young women who have survived the disease.

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THE BODY SELF AND ANOREXIA READINESS SYNDROME

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Abstract

Objective: The aim of the study was to answer the question whether disturbances in the body self-observed among anorexia nervosa patients also characterize participants diagnosed with anorexia readiness syndrome (ARS). *Methods*: The study included 98 girls and women (aged 17 – 21) among whom 35 were diagnosed with anorexia readiness syndrome. The participants completed two questionnaires: the questionnaire of individual eating attitude (*Kwestionariusz do badania indywidualnego stosunku do jedzenia*) assessing anorexia readiness by PhD Beata Ziółkowska and the body self questionnaire (*Kwestionariusz Ja cielesnego*) assessing anomalies in the body self by PhD Olga Sakson – Obada. *Results*: We can observe anomalies in some of self body aspects among people diagnosed with ARS. However, they do not form a homogenous group – three clusters significantly different in terms of the self body scales were identified. *Conclusion*: The data can arouse concern since about 35% of the sample of questioned young women was diagnosed with ARS. The negative emotions about one's body – which characterize the women with ARS – are said to be the predictor of eating disorders so it is important to offer the prevention programs focused on developing positive attitude towards one's body in the early school years.

Keywords: *anorexia readiness syndrome (ARS), body self.*

1. Introduction

Anorexia nervosa is one of three the most frequently diagnosed chronic diseases among girls and women (Halse et al, 2008, Lwow et al, 2007). This severe psychopathology afflicts approximately 1,4 – 4,3% of the population but percentage of people who don't manifest all of the diagnostic criteria remains considerably higher. This percentage can exceed even by tenfold the percentage of people diagnosed with *anorexia nervosa* (Halse et al, 2008). About 10 to 30% of women in late adolescence is influenced by Eating Disorders risk factors (Franko et al, 2005). In Mintz's study (Franko et al, 2005) 4% of first year college students suffered from eating disorders and 19% of first year college students engaged in disturbed eating behaviors. In accordance with another study (Lwow et al, 2007) anorexia nervosa can be diagnosed among 10% of women in the age of 16 – 25 years. The data that shows that about 40% adolescent girls diet to reduce their body mass (Nicholls & Viner, 2005) should arouse concern because disturbed eating behaviors can be treated as symptom as well as risk factor of Eating Disorders.

Taking into consideration these coverages, it is vital to mention relatively new construct – *anorexia readiness syndrome* (ARS) which was proposed in Poland in late '90 by PhD Beata Ziółkowska. However more and more scientists who are interested in Eating Disorders phenomenon explore the prevalence of ARS (Kostulski et al, 2005; Lwow et al, 2007; Chytra-Gędek & Kobierecka, 2008). There are several reasons for studying this topic. One of them is popularization of unrealistic model of beauty. This factor doesn't remain in simple cause and effect relationship towards the development of Eating Disorders but empirical studies confirm that children are susceptible to mass media influences (Jung & Peterson, 2007) and the dissatisfaction with one's body appears among younger children (e.g. Pine, 2001; Birbeck & Drummond, 2006; Heron et al., 2013; Micali et al, 2013; Jongenelis et al, 2014).

Anorexia readiness syndrome can be defined as complex of symptoms which arouse suspicions of anomaly within the scope of satisfying food need and attitude towards one's body. This complex is conditioned by psychological, social and cultural factors (Ziółkowska, 2001). The adolescence is the critical period for the onset of anorexic behaviors which are considered as the indicators of ARS. Adolescent girls have critical attitude towards their bodies and often their body image is distorted. As a result they start dieting to lose some weight. In the book "*Inside anorexia: the experiences of girls and their families"* Christine Halse et al. (2008) debate whether Eating Disorders can be treated as a

continuum of anomalies in satisfying food need. Such perspective steers our attention to the group of individuals who manifest subclinical form of *anorexia nervosa*, so-called *anorexia nervosa syndrome*.

Eating Disorders constitute such form of psychopathology that the anomalies in experiencing corporeality can be perceived as one of the main psychological characteristics in clinical picture of ED. Poor interoceptive awareness is often diagnosed as a key feature among *anorexia nervosa* patients. Interoceptive awareness concerns the ability to recognize the stimuli that comes from the body and to react to them (Izydorczyk, 2011). Multiple studies have proved that *anorexia nervosa* patients encounter difficulties in identification, recognition and description of emotions that they experience. It can indicate the phenomenon of alexithymia among individuals diagnosed with ED (Nowakowski et al, 2013). They also have problems in distinguishing the feeling of hunger from the feeling of satiety as well as problems in tiredness, cold and weakness recognition (Izydorczyk & Czekaj, 2006; Brytek-Matera, 2010). To control their bodies they restrict food, vomit, purge or practice sport. Body sensations make patients feel anxious, embarrassed as they are afraid of intense emotional agitation and loss of control of their body.

Taking into consideration all of these characteristics it seems vital to verify if individuals who can be classified as having *anorexia nervosa syndrome* experience similar problems in the area of corporeality.

2. Objectives

The primary aim of this study was to determine whether disturbances in the body self observed among *anorexia nervosa* patients also characterize individuals with subclinical form of Eating Disorders such as *anorexia readiness syndrome*.

3. Methods

3.1. Participants

The study was conducted in 2014. Participants were recruited from upper secondary school (second classes) in Poznań and from Adam Mickiewicz University in Poznań (1-2 year of study). 48 girls from upper secondary school and 49 students took part in this study. Participants were asked to complete self-report questionnaires - the questionnaire that verifies individual eating attitude and body self questionnaire. Surveying took place with the help of the school psychologist (in upper secondary school).

3.2. Materials

Data were collected using the following instruments:

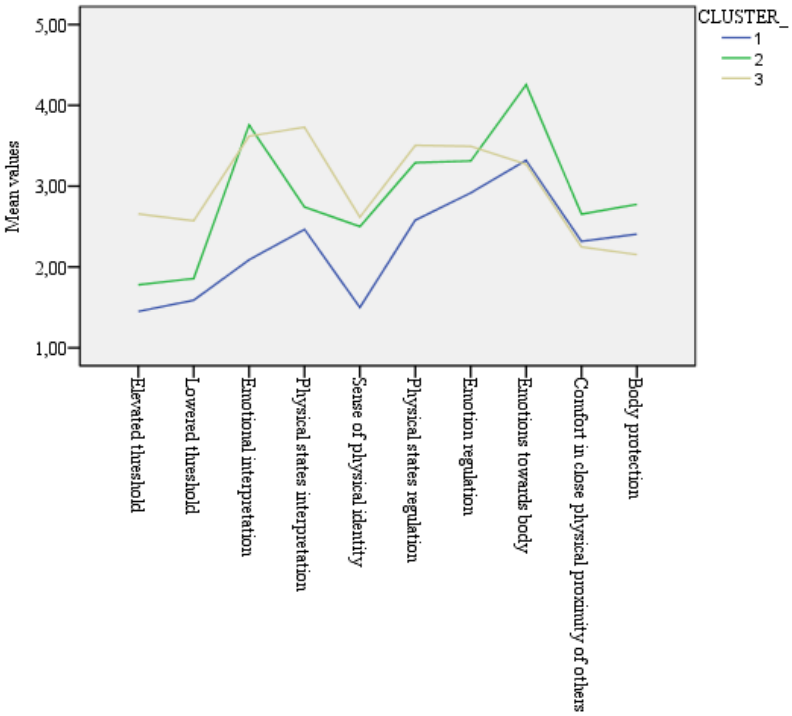
a) Anorexia readiness syndrome was evaluated using *The Individual Eating Attitude Questionnaire (Kwestionariusz do badania indywidualnego stosunku do jedzenia)* by PhD Beata Ziółkowska. This questionnaire consists of 20 items. Participants have to choose ‘yes’ or ‘no’ response.
b) Body self was evaluated using *Body Self Questionnaire* (*Kwestionariusz Ja cielesnego*) by PhD Olga Sakson-Obada. This measure is composed of 90 items which form ten subscales: (1) Elevated threshold, (2) Lowered threshold, (3) Emotional interpretation, (4) Physical state interpretation, (5) Sense of physical identity, (6) Physical states regulation, (7) Emotion regulation, (8) Emotions towards body, (9) Comfort in close physical proximity of others, (10) Body protection. Each subscale can be valued from 1 to 5 points. The higher the value is, the more anomalies in this area are experienced by the individual.

4. Results

On the basis of the conducted research a profile of body self among women diagnosed with *anorexia readiness syndrome* was constructed. The analysis of the data of *The Individual Eating Attitude Questionnaire* showed that 35 from 98 participants meet anorexia readiness criteria (12-20 points).

K-means analysis was conducted to specify the diversification within the scope of body self among women diagnosed with ARS. Three clusters were distinguished: Cluster 1 was composed of 16 participants, Cluster 2 – 10 participants, Cluster 3 – 9 participants. Then ANOVA analysis and appropriate *post hoc* tests (Bonferronie test, T3 Dunnett test) enabled to observe the characteristics of each cluster. It was found that differences between three clusters are expressed in the following areas: Elevated threshold, Lowered threshold, Emotional interpretation, Physical state interpretation, Sense of physical identity, Physical states regulation, Emotion regulation, Emotions towards body, Body protection. Only the values in the Comfort in close physical proximity of others subscale does not differentiate the clusters [$F(2,32)=1,747$, $p > 0,05$].

Figure 1. Profiles of three clusters according to body self subscales.



Women from Cluster 1 can be characterized by the lowest scores (lack of anomalies or anomalies in small intensity) in the following body self subscales: Elevated threshold (M=1,45), Lowered threshold (M=1,58), Emotional interpretation (M=2,09), Physical state interpretation (M=2,46), Sense of physical identity (M=1,50), Physical states regulation (M=2,58), Emotion regulation (M=2,92), Emotions towards body (M=3,32).

Women from Cluster 2 experience anomalies in emotional interpretation (Emotional interpretation, M=3,76), physical states regulation (Physical states regulation, M=3,29), emotions regulation (Emotion regulation, M=3,31) and emotional attitude towards their bodies (Emotions towards body, M=4,26).

In comparison to Cluster 1 and Cluster 2, women from Cluster 3 manifest more anomalies in the area of Elevated threshold (M=2,65), Lowered threshold (M=2,57), Physical state interpretation (M=3,73), Sense of physical identity (M=2,62). In addition, women from Cluster 3 got the lowest values in Body protection subscale (M=2,15).

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Table 1. Mean values of aspects of body self in three clusters and Anova analysis.

Body self	Cluster			ANOVA		*post hoc tests*
	1 (N=16)	2 (N=10)	3 (N=9)			
	M	*M*	*M*	*F*	*p*	
Elevated threshold	1,45	1,78	2,65	33,31	,000*	1:2 1:3* 2:3*
Lowered threshold	1,58	1,85	2,57	14,97	,000*	1:2 1:3* 2:3*
Emotional interpretation	2,09	3,76	3,62	36,59	,000*	1:2* 1:3* 2:3
Physical states interpretation	2,46	2,74	3,73	15,21	,000*	1:2 1:3* 2:3*
Sense of physical identity	1,50	2,50	2,62	15,97	,000*	1:2* 1:3* 2:3
Physical states regulation	2,58	3,29	3,51	15,93	,000*	1:2* 1:3* 2:3
Emotion regulation	2,92	3,31	3,49	4,76	,016*	1:2 1:3* 2:3
Emotions towards body	3,32	4,26	3,27	4,41	,020*	1:2* 1:3 2:3
Comfort in close physical proximity of others	2,32	2,65	2,25	1,75	,190	1:2 1:3 2:3
Body protection	2,41	2,78	2,15	4,50	,019*	1:2 1:3 2:3*

5. Discussion

Analysis has proved that the anomalies observed among *anorexia nervosa* patients also concern individuals with subclinical form of *anorexia nervosa*. Three clusters which vary in scope of body self were distinguished. The most numerous cluster (1) includes individuals who do not manifest problems in the area of stimuli experiencing and in sense of physical identity. Young women from Cluster 2 experience the most intense negative emotions towards their bodies in comparison to women from Cluster 1 and Cluster 3. In addition they have difficulties in the emotional interpretation and regulation as well as in physical states regulation. The problems in emotional functioning indicate perhaps the phenomenon of alexithymia which is diagnosed among individuals suffering from *anorexia nervosa*. In turn young women from Cluster 3 were the only ones who seem to experience anomalies in stimuli experiencing what can be treated as a sign of interception deficits.

Perhaps we can formulate a hypothesis that individuals from Cluster 3 are at the greatest risk of developing the clinical form of ED because they manifest many anomalies in body self observed among *anorexia nervosa* patients (Izydorczyk, 2011; Mioduchowska, 2012). However very high values in the Emotions towards body subscale among young women in Cluster 2 should also arouse concerns because it is a sign of intense negative emotions which in turn is considered as the main predictor of ED. Perhaps individuals from Cluster 1 whose values in particular body self subscales are rather low - apart from high values in Emotions towards body subscale – follow the omnipresent ideal of very thin silhouette and restricted eating or intense sport practicing are the ways of achieving this unrealistic ideal.

6. Conclusions

The body self seems to be a construct which can enable to understand - to a greater extent than the body image - the experiences of one's body among Eating Disorders patients. Thanks to this study there is evidence that anomalies in body self concern not only patients suffering from ED but also individuals with subclinical ED symptomology. The data can arouse concern since about 35% of the

sample of questioned young women was diagnosed with *anorexia readiness syndrome*. It is vital to bear in mind that today we can observed more and more unhealthy body images in mass media and perhaps the attitude towards eating and one's body (e.g. dieting, negative emotional attitude towards one's body) which was described as distorted few years ago has become the norm among adolescents and young women today. However the negative emotions about one's body – which characterize the women with ARS – are said to be the predictor of Eating Disorders so it is important to offer the prevention programs focused on developing positive attitude towards one's body starting in the early school years. It seems that the researchers should focus on the topic of subclinical forms of Eating Disorders particularly among children in the onset of adolescence because as the studies show (Pine, 2001; Birbeck & Drummond, 2006; Heron et al, 2013) the negative emotions towards one's body and activities aimed at reducing body mass are diagnosed even among 6-year-old girls.

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CONSTRUCTIVE AND APPARENT NON-CONFORMISTS IN SCHOOL

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Abstract

While non-conformity as a dimension of personality has not yet been unambiguously defined, the knowledge collected so far indicates that this is a relatively permanent tendency of human beings to contradict opinions, judgements, social pressure, and opinions of others. Non-conformity denotes independence and autonomy in thinking, judging, and acting, which stem from an autonomous system of values. Non-conformists are not particularly sensitive to social norms, nor excessively geared towards breaking them. However, if need be, they are set to defend their point of view. Non-conformism has many faces. It may function as a creative force, thus fuelling creativity. What constructive non-conformists clothe in timelessness, apparent ones will express through over-advertised, kitschy and scandalising improvisation. *Objectives:* The aim of present study was to determine the occurrence of constructive and apparent conformity among students of middle schools, secondary schools, and undergraduate schools. *Material and Methods:* Studies performed on 2239 school students in Poland employed the Creative Behaviour Questionnaire KANH III (Bernacka, 2009) as a modified version of the KANH I is based concept of creative attitude formulated by Popek (1989). *Results:* There is a preponderance of constructive non-conformists over apparent ones on all three levels of education. Non-conformists are predominant in middle schools, and there are more constructive non-conformists among girls than boys. *Conclusions:* The study has shown that personality non-conformity, notably on the middle school level is mechanism if motivation and emotion which stimulates the conduct and mental functioning of adolescent students. The knowledge acquired can be used to diagnose and to develop the student psychological potential with a view to capitalising on the non-conformity.

Keywords: *non-conformity, personality, school, student, gender.*

1. Introduction

The notion of non-conformity appeared in the context of personality in studies by the Institute of Personality Assessment and Research in Berkeley aimed at determining characteristic personality traits of creative people. Non-conformity in this context referred to an independent stance (Barron, 1963; MacKinnon, 1975). S Popek's (1989/2000) original theory of a human creative attitude and the development of the KANH questionnaire KANH for diagnostic purposes triggered studies on non-conformity as a dimension of human personality.

While non-conformity as a dimension of personality has not yet been unambiguously defined, the knowledge collected so far indicates that this is a relatively permanent tendency of human beings to contradict opinions, judgements, social pressure, and opinions of others. Non-conformity denotes independence and autonomy in thinking, judging, and acting, which stem from an autonomous system of values. Non-conformists are not particularly sensitive to social norms, nor excessively geared towards breaking them. However, if need be, they are set to defend their point of view. Being faithful to their statements, expressions, and deeds to the axiological "I" is the source and the highest priority of all non-conformists; consequently, they live in agreement with their identity (Popek, 2001; Bernacka, 2008; Niemczuk, 2008).

Based on a systemic approach to the human being and the interaction paradigm, Popek (1989/2001) claims that conformity v non-conformity perceived through the dimension of personality plays an important role in shaping a creative attitude. At the base of a non-conformist positive activation, understood as the personality-related core of creativity lie such traits as high self-esteem, activeness, courage, resilience and perseverance, independence, and tolerance (Bernacka, 2008). Non-conformity as a set of inter-related traits constitutes a specific personality energy which liberates, organises, and determines the direction of activity. This energy is key in expressing (realising) the human capacity for self-actualisation. Non-conformityin personality is an emotion-shaping and motivation-building attribute of highly creative people, since it substantially increases the chances for an effective and constructive use

of their large cognitive potential, defence of their creative works, and a capacity to convince others of their value.The progress of civilisation would not be possible if it were not for constructive non-conformity. Studies into the differences between constructive and apparent non-conformists, albeit merely at an initial stage, have already provided valuable information confirming that apparent non-conformists think along algorithms and hold social values in the highest regard (Karwowski, Bernacka, 2008; Bernacka, 2013). Apparent non-conformity is a feature of those who feel that their self-esteem is threatened, since they do not have an autonomous system of values and identity (Niemczuk, 2008).

An individual's drive towards non-conformity is largely conditioned by his/her personality subjected to social pressure in the form of social norms, customs, and idealistic, religious or political values (Popek, 2004). In today's world apparent non-conformist behaviour is an object of a particular social interest, a means with which to make a professional careerand to improve one's material status. Thus, apparent non-conformity is quite attractive to the young generation geared towards consumption.

According to the concept of sensitive periods in development (Bornstein, 1989) in certain periods in life, individuals are prone to specific factors which determine the development of personality traits (Baterson, Hinde, 1987). Personality acquires its almost final shape in people aged 21-30. At the age of 30, personality is finally formed and three fifths of all personality traits remain on the same level (Costa, McCrae, 1994). It is worth bearing in mind that in line with the theoretical knowledge on the distribution of personality traits, personality non-conformists personality account for 10-15% in the analysed group (Bernacka, 2008).

Personality non-conformity is, to some extent, shaped by the execution of important aims in the social and cultural milieu of human beings. Young Poles know that in each community is peopled by conformists and those who steer towards changes, those for whom stability is a source of frustration and a sense of lack of self-actualisation. In order to combat this frustration, they aim at destroying the existing order in a certain area of activity. On the one hand, young Poles are aware of the significance of non-conformity in developing their creative and cognitive capacity to act. On the other, they are subjected to the effect of the schooling system.

School in its social and cultural dimension has the biggest effect on personality shaping processes and a personality-related non-conformist attitude. The results of studies indicate that at school students are expected to be students. Little wonder that those who demonstrate a high level of creative capabilities do not feel welcome there (Turska, 2006).Operating through its hidden curriculum (Janowski, 1995), the schooling system exerts a strong influence on students. In this environment, students are expected to be useful for and obedient to the institution. The hidden curriculum encourages students to conformity showing that non-conformist behaviour does not prove useful. Scholars agree that in a regular schooling institution a student's creative potential is insignificant at best and even detrimental (Białkowski, 1996; Lemke, 2004; Turska, 2006). Under such circumstances, students have no incentive to develop their non-conformist personalities. A question arises whether the distribution of non-conformists differs in terms of numbers depending on the level of education, and, by extension, the age of the analysed groups of students. The need for social acceptance is particularly strong during adolescence, which may have an effect on shaping one's identity on the basis of personal adequacy and recognition of those who matter a lot (Brzezińska, 2000). Equally pertinent are socially accepted expectations relating to gender, which are manifested in the hidden curriculum. The school is ready to repay for irreproachable conduct of well-behaved students, in line with the principles that govern the conduct of girls. While minor infringements of discipline by girls are corrected with determination, misdeeds on the part of boys largely go unpunished. Non-conformist girls may subjectively feel that their attitude "may cost too much", since their non-conformity can be perceived as socially unacceptable (Turska, 2006). Although a more creative gender does not exist, the results of studies clearly point out that girls tend to underestimate their creative effectiveness (Karwowski, 2009, 2011). This assertions leads to a question whether non-conformists differ quantitatively in terms of their gender.

Constructive and apparent non-conformity on the three level of school education has not been the object of in-depth analyses so far. A short overview of important factors that shape the personality of non-conformists in the context of school sensitivity leads to formulating the following research hypotheses:

1. Schooling is likely to translate into quantitative differences between constrictive and apparent non-conformists.
2. Gender may be a distinguishing factor relating to the occurrence of constructive and apparent non-conformists.

2. Material and method

The analysed group comprised 2239 persons including 745 middle school students (aged 15-16), 760 secondary comprehensive school students (aged 17-19), and 734 undergraduate students (aged

20-22). The studies, conducted in Polish schools, also took into account the quantitative balance between boys and girls. The participants were duly informed that the data collected would be anonymous, and that they were used for research purposes only**.** The studies employed the Creative Behaviour Questionnaire KANH III (Bernacka, 2009) as a modified version of the KANH I, a concept of creative attitude formulated by Popek (1989). The KANH includes two subscales: Conformity - Non-conformity, which relates to the sphere of personality, and Algorithmic Behaviour - Heuristic Behaviour, which belongs to the cognitive sphere. Each subscale controls 13 traits distributed dichotomously, as continuous traits (continuum). The Questionnaire comprises 26 statements, all in the form of declarative sentences.

The studied person takes a stance with respect to the statements by choosing the following answers: A "yes" B "rather yes", C"I don't know," D "rather no", E "no". The test–retest reliability of the scales is in the range 0.60–0.80. Reliability assessed with Cronbach's Alpha for the Conformity- Non-conformism scale is 0.69 and for the Algorithmic Behaviour – Heuristic Behaviour is 0.65. The norms are prepared in the sten scale for the age brackets ranging from 15 to 60 years of age including gender on the Conformity-Non-conformity scale and without gender on the Algorithmic Behaviour – Heuristic Behaviour scale heuristic. Constructive non-conformists obtain high scores on both KANH scales. Apparent non-conformists score high on the Conformity – Non–conformity scale and score low on the Algorithmic Behaviour – Heuristic Behaviour scale. The application of such a procedure yielded 282 non-conformists out of 2239 persons analysed.

3. Results

In order to verify the hypothesis under which the stage of schooling makes a qualitative distinction between constructive and apparent non-conformists, a statistical analysis was performed (*Tables 1 and 2*).

Table 1. Constructive and apparent non-conformists on different stages of education.

Middle school			
Non-conformity	Observed N	Expected N	Residual
constructive	107	62	45
apparent	17	62	-45
	Secondary school		
constructive	68	37,5	29,5
apparent	7	37,5	-29,5
	Undergraduate school		
constructive	70	40	30
apparent	10	40	-30

Table 2. Chi-Square for constructive and apparent non-conformists on three stages of education.

Schooling stage	Middle school	Secondary school	Undergraduate school
Chi-Square	65.323[a]	46.413	45.000
df	1	1	1
Asymp. Sig.	.000	.000	.000

The results of the chi-square test (Table 2) indicate that there are significant differences on each schooling stage between the observed and expected distribution of constructive and apparent non-conformists. Constructive non-conformists are more frequent than apparent non-conformists on each schooling stage, with the biggest number of non-conformists in middle schools. Consequently, the hypothesis which assumes a quantitative diversity of personality non-conformists depending on the schooling stage is deemed to have been confirmed. In order to verify the hypothesis under which gender is likely to be a distinguishing factor with respect to the occurrence of constructive and apparent non-conformists, a statistical analysis was performed (*Tables 3 and 4*).

Table 3. Chi-Square for gender and constructive and apparent non-conformists.

Stage	middle school	middle school	secondary school	secondary school	undergraduate school	undergraduate school
Non-conformists girls-boys	constructive	apparent	constructive	apparent	constructive	apparent
Chi^2-	4.121	2.882	1.806	2.000	0.514	0.400
df	1	1	1	1	1	1
Asymp. Sig.	0.042	0.900	0.171	0.157	0.473	0.527

Table 4. Constructive and apparent non-conformistsin middle schools (in numbers).

Constructive non-conformists in middle schools			
Gender	Observed N	Expected N	Residual
girls	64	53.5	10.5
boys	43	53.5	-10.5
Apparent non-conformists in middle schools			
girls	5	8.5	-3.5
boys	12	8.5	3.5

The results of the chi-square test (Table 3) indicate that significant differences between the observed and expected distribution of constructive non-conformists in terms of gender occur only on the middle school level. Constructive non-conformity is more frequently observed among girls than among boys. Consequently, the hypothesis which assumes that gender is a distinguishing factor relating to the occurrence of constructive and apparent non-conformists is deemed to have been confirmed only on the middle school stage.

4. Discussion

The studies aimed at determining the occurrence of constructive and apparent conformity among students of middle schools, secondary schools, and undergraduate schools. The studies confirmed the hypothesis which assumes that a quantitative diversity of personality non-conformists depends on the schooling stage. Non Constructive non-conformists are more frequent than apparent non-conformists on each schooling stage, with the biggest number of non-conformists in middle schools. The hypothesis which assumes that gender is a distinguishing factor relating to the occurrence of constructive and apparent non-conformists is deemed to have been confirmed only on the middle school stage.

Constructive non-conformists are more frequently found among girls than among boys.

The studies conducted provide the first data on the occurrence of personality non-conformity among students. The conclusions drawn are optimistic, since constructive non-conformity dominates over apparent non-conformity on each schooling stage under analysis. The middle school stage is particularly important in shaping a non-conformist stance. Equally important is the fact that constructive non-conformity is more frequently reported among middle school girls.

The results obtained may be justified by referring to the standard development course of the early adolescence (Oleszkowicz, 1995; Brzezińska, 2000). Non-conformity is an integral element of shaping the identity of a teenage on the middle school level. This is a fairly strong process, since the school as a system of culture operating through its hidden curriculum ranks second in the student hierarchy of importance. In the subjective opinion of middle school students, non-conformity is a tool with which to seek their own identity. And while high self-esteem, activeness, courage, resilience, perseverance, independence, and tolerance are the traits of mature identity, it is the personality-related energy created by these traits that liberates, organises, and shows the direction of activity for adolescents. Middle school students are filled with non-conformist energy to the full, and it is this energy that determines their functioning. It is worth pointing out that girls outclass boys in the process of shaping their personality. Apparent non-conformity occurs more frequently among boys. A temptation to build one's identity on the basis of social approval appeals more to boys than girls, and this can be attributed to a greater degree of tolerance for immature behaviour demonstrated by the community at large (Oleszkowicz, 1995). Consequently, the shaping of non-conformist personality among middle school boys should be carefully monitored.

5. Conclusions

A diagnostic analysis of personality-related constructive and apparent non-conformity among students on three educational stages has led to the following conclusions:

1. Constructive non-conformists outnumber apparent non-conformists.
2. The biggest group of non-conformists is found on the middle-school level. On this level of education, the psychological mechanism of personality development is stronger than the role of social and cultural factors.
3. Middle school education is a particularly sensitive stage for the shaping of personality non-conformity among boys because they may end up as apparent non-conformists.

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HOW DO FUTURE TEACHERS HANDLE FEEDBACK REGARDING THEIR TEACHING SKILLS?

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Abstract

The presented study deals with the attitudes towards and the handling of feedback in the context of German teacher training and education. During their teacher traineeship, future teachers already work at school and are furthermore accompanied by educators focusing on the enhancement of their didactical and methodological teacher skills (Kolbe & Combe, 2008). The traineeship is furthermore accompanied by theoretical seminars led by skilled supervisors. Regular classroom observations take place which are intensively supervised. There is an individual feedback opportunity after each classroom observation which is meant to foster learning and teaching improvement. Research has found that how trainee teachers are treated by their supervisors seems to be an area of critique and discontent (Ulich, 1996). Furthermore, supervisors seem to evaluate the lessons without using standardized criteria (Strietholt & Terhart, 2009). Additionally, the role of the supervisors as evaluator and counselor seems to be critical (Meyerhöfer & Rienits, 2006). In a quantitative study (N = 116 trainee teachers), we investigated, based on the state of the art, how trainee teachers evaluate the feedback which they receive by their supervisors and we analyzed via correlation analysis which character traits define, how well they receive it or whether they dismiss it. Our results show that feedback is generally accepted and seen as a good preparation for the teacher profession, but that there a several factors which hinder a greater acceptance. Also, some risk groups could be identified. Results and consequences are discussed from a social psychological point of view. Creating the practical and psychological precondition that feedback can be seen as a good and valuable learning opportunity is very important, since a negative attitude concerning feedback may lead to its rejection and may therefore hinder professional development.

Keywords: *teacher education, feedback, rejection of feedback, character traits.*

1. Introduction

Finding the right way of educating successful teachers who are ready to face the challenges of the 21st century is currently an extensively discussed topic all over Germany. The ongoing discussions have already led to many improvements and alterations regarding the education of teachers. This is true for their education at university on the one hand, but also for the 'practical' education of trainee teachers, when those already work directly at schools.

2. Objectives

The objectives of this study were to gain a deeper understanding on the question why some trainee teachers are able to use the feedback they obtain in order to improve their teaching skills and why others are not.

Furthermore, as mentioned above, the school system in Germany still very often operates behind 'closed doors' and does not offer many feedback opportunities for teachers. This basically means that the time of the teacher training is one of the only opportunities to receive extensive feedback from professionals other than students or parents.

Hattie & Timperley (2007) refer to feedback as "one of the most powerful influences on learning and achievement", but on the other hand they also state that "this impact can be either positive or negative." (p. 81). Therefore, being able to receive feedback and handle it professionally, use it as means and possibility to develop seems to be an important ability for individuals nowadays, not only for trainee teachers. On the other hand, Hattie & Timperley (2007) also hint to the fact that the ability to accept and use feedback is not easily achieved. Moreover, feedback interactions may lead to a number of psychological processes such as the causing of psychological reactance, cognitive dissonance or self-worth related problems (Bitan, 2014; Behnke, 2015).

Therefore, the objectives of this study were to find out what differentiates the trainee teachers that deal rationally and positively with feedback, even with negative one, from those who reject feedback and dismiss feedback interactions. Are there character traits that make a difference?

3. Design

In a quantitative study (*N* = 116 trainee teachers), we investigated, based on the state of the art, how trainee teachers evaluate the feedback which they receive by their supervisors and we analyzed via correlation analysis which character traits define how well they receive it or whether they dismiss it.

The questionnaire consisted of six scales measuring personality traits, namely the teacher trainees' self-presentation, achievement motivation, emotional stability, sensitivity, control beliefs and self-confidence (Hossiep & Paschen, 2003; Kanning, Herrmann & Böttcher, 2011).

Five feedback related scales measured the trainee teachers' attitude and the handling of feedback (Bitan, 2014).

4. Results

In the following, selected results will shortly be presented in this section.

4.1. Correlations

Table 1. Correlation analysis of feedback scales and personality trait scales: Male trainee teachers (cp. Behnke, 2015).

	Handling FB negative	Handling FB	Attitude FB	Educator FB	Usage of FB
SD	**,36***	,32	**,36***	,30	,26
LM	,27	,30	**,43***	,02	,13
ES	,28	,21	,16	,06	-,05
SEN	,22	,20	,25	-,00	,02
KE	**,46****	**,50****	**,42***	**,42***	,21
SE	**,50****	**,50****	,26	,28	,31

*= $p < 0,05$; ** = $p < 0,01$
FB = Feedback,
Educator FB = Scale measuring the assessment of the feedback received by the educators.
SD = Self-presentation,
LM = Achievement motivation,
ES = Emotional stability,
SEN = Sensitivity,
KE = Control beliefs,
SE = Self-confidence.

When comparing the two tables, it is obvious that some differences occur in the correlations when it comes to male and female trainee teachers. One interesting result is the high importance of control beliefs for both male and female trainee teachers in nearly every area of feedback usage.

Table 2. Correlation analysis of feedback scales and personality trait scales: Female trainee teachers (cp. Behnke, 2015).

	Handling FB negative	Handling FB	Attitude FB	Educator FB	Usage of FB
SD	-,08	-,11	,12	-,21	-,10
LM	-,14	,01	,09	-,11	-,05
ES	**,53****	,19	**,25***	,07	,19
SEN	**,27***	**,28***	**,35****	,08	-,01
KE	**,39****	**,30****	**,27***	**,24***	**,32****
SE	**,54****	**,29****	**,42****	,06	,19

*= $p < 0,05$; ** = $p < 0,01$
FB = Feedback,
Educator FB = Scale measuring the assessment of the feedback received by the educators,
SD = Self-presentation,
LM = Achievement motivation,
ES = Emotional stability,
SEN = Sensitivity,
KE = Control beliefs,
SE = Self-confidence.

4.2. Multivariate Analysis

Figure 1 displays the multivariate analysis of the correlation between the handling of negative feedback and the control beliefs of the trainee teachers (F (1, 112) = 12,66, p < .00). Group 1 (M Umgang negatives Feedback <= 1,88) which indicates to have a positive handling of negative feedback scores lower values regarding the personality trait control beliefs (M = 2,1, SD = ,63). This means that this group disposes of higher control beliefs. Group 2 (M Umgang negatives Feedback > 1,88) which indicates to have a more negative handling of negative feedback scores higher values regarding the personality trait control beliefs (M = 2,5, SD = ,58).

Figure 1. Control beliefs and handling of feedback (cp. Behnke, 2015).

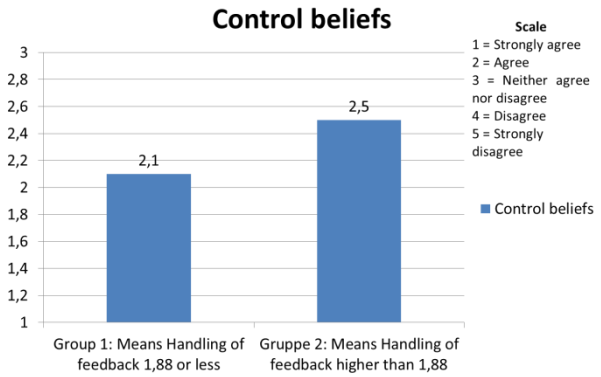
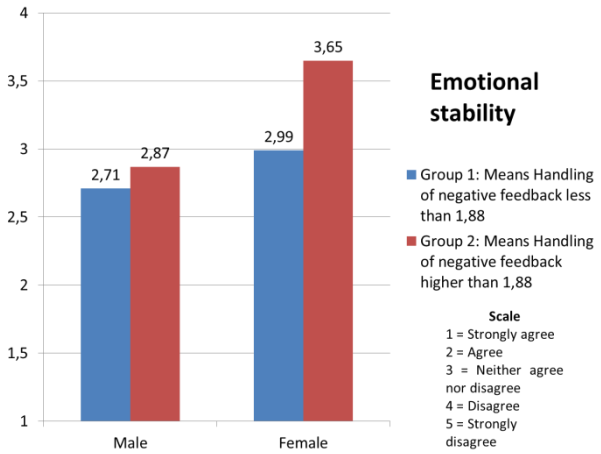


Figure 2 displays the multivariate analysis of the correlation between the handling of negative feedback, the sex and the personality trait emotional stability (F (1, 99) = 4,01, p < .05). Both male groups do not differ much from each other (Group 1 (M Handling of negative feedback <= 1,88): M = 2,71; SD = ,56; group 2 (M Handling of negative feedback <= 1,88): M = 2,87; SD = ,50). But a very obvious difference can be found with the female trainee teachers (Group 1 (M Handling of negative feedback <= 1,88): M = 2,99; SD = ,57; group 2 (M Handling of negative feedback > 1,88): M = 3,65; SD = ,56.

Figure 2. Emotional stability and handling of negative feedback (cp. Behnke, 2015).



5. Discussion

The above presented results show some interesting tendencies in the handling of feedback by trainee teachers in general. Moreover, some interesting differences between the male and female trainee teachers occurred in this study.

It seems as if the personality trait of control beliefs plays a crucial role for individuals in the feedback process. Not only do control beliefs positively correlate with a better handling of feedback. Additionally, positive correlations could be found that link control beliefs to a more positive attitude

towards feedback and a higher usage. Trainee teachers who scored higher values on the control belief scale furthermore evaluate the feedback received by their educators more positively.

6. Conclusions

Since this study could only deal with a limited number of trainee teachers, definitely more research is needed in how this interesting group of individuals deals with feedback and how this is linked to personality traits.

Although the results hint at different character traits as being linked to and important for the feedback process in male and female trainee teachers, for both control beliefs seem to play a fundamental role for a positive feedback interaction.

This result is in line with theories and research indicating the high value and importance of processes of self-regulation in interaction (Ellis, 1980, 2008; Ellis & Hoellen, 2004; Behnke, 2015; Zimmermann, 2000, 2002).

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BEFORE AND AFTER INSPECTION: ATTITUDES OF HEADMASTERS TOWARDS EXTERNAL EVALUATIONS

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Abstract

School inspections have been widely discussed on an international level within the last years (Van Ackeren, 2007). In contrast to European countries such as England or the Netherlands, who already have a long inspection history, school inspections are a rather new phenomenon in Germany. Since schools have been working quite independently and without official external control before, the implementation of an external evaluation instrument may lead to a number of psychological effects (Bitan, 2014; Behnke, 2015; Steins, 2009). Studies on school inspections report a number of undesired side effects, stress, fear and negative attitudes towards school inspections (Brimblecombe, Shaw & Ormston, 1996; De Wolf & Janssens, 2007; Ehren & Visscher, 2006; Ouston, Fidler & Earley, 1997). This study presents results from a longitudinal qualitative research design, investigating the attitudes of headmasters of the German Federal State North Rhine-Westphalia (NRW) before and after school inspection between 2009 and 2013. N = 50 headmasters were interviewed in T1 using loosely structured focused interviews as method of data collection. Interviews were transcribed, coded and then analyzed globally based on Grounded Theory and qualitative content analysis (cp. Bortz & Döring, 2006). Due to an organizational slow-down of school inspection in NRW, only N = 20 headmasters could be interviewed in T2. Our results indicate that headmasters experience more positive attitudes towards school inspection after they experienced it. Results and explanations will be discussed from a social psychological point of view. From our study, several implications for the future conduction of evaluations and inspections can be drawn from a psychological viewpoint.

Keywords: *evaluation, school inspection, headmasters, attitude change.*

1. Introduction

In the course of the rapidly enhancing and developing challenges which the educational systems in many (European) countries are facing since the end of the 20th century, school inspections have been introduced in a number of countries in order to measure the quality of schools and enhance and govern their work.

Internationally, the introduction of instruments of accountability has widely led to discussions (Van Ackeren, 2007). Especially in countries, which have a rather long inspection history, lots of research has been carried out in order to find out which effects can be achieved by school inspections (Ball, 1997; Chapman, 2000, 2001; Ehren & Visscher, 2006; Janssens & Van Amelsvoort, 2008; Ouston, Fidler & Earley, 1997; Plowright, 2007; Russell, 1996; Willis, 2010), whether the inspections influence pupils' results (Luginbuhl, Webbink & De Wolf, 2009) and which intended and unintended side-effects of inspections occur (De Wolf & Janssens, 2007).

Although more substantial research on an international level is needed concerning the effects of school inspections (Van Ackeren, 2007) and the consequences of the feedback the schools are receiving and the subsequent actions following this feedback (Husfeldt, 2011), some aspects could already be clarified by existing research.

For example, international studies show that the time before school inspections actually take place brings a lot of stress for the teachers involved (Brimblecombe, Ormston & Shaw, 1995). Also, a tendency could be found showing that individuals who have higher positions in schools are more likely to regard school inspections positively and to initiate changes according to the received feedback (Brimblecombe, Shaw & Ormston, 1996).

The presented study has been conducted between 2009 and 2013 in the German Federal State of North Rhine-Westphalia (NRW), which has introduced school inspections in 2006. Before the

introduction of the so-called Quality Analysis (QA), schools had been working quite independently and without official external control such as an external school evaluation.

2. Objectives

The aim of this study was to find out how school principals from the German Federal State of North Rhine-Westphalia (NRW) react to the implementation of school inspections and the actual visits of the inspection at their schools.

The implementation of an external evaluation instrument may lead to a number of psychological effects. Studies on school inspections report a number of undesired side effects, stress, fear and negative attitudes towards school inspections (Brimblecombe, Shaw &Ormston, 1996; De Wolf & Janssens, 2007; Ehren und Visscher, 2006; Ouston, Fidler & Earley 1997).

From a social psychological point of view, school principals are in a position of leadership and therefore likely to influence teachers of a school with a rather positive or negative attitude towards school inspections (Bitan, Haep & Steins, 2014).

3. Design and Methods

N = 50 principals from NRW were interviewed about their attitude towards Quality Analysis at the first point of measurement (Bitan et al., 2014). The participating schools were drawn randomly from all schools which up to the start of the study had not experienced the external school inspection yet.
We drew an almost even number of schools from each school type. The schools were then contacted, first in writing and then via phone, in order to ask for their agreement to participate in the study. The procedure remained the same at both points of measurement.

In order to assess the attitudes of the principals in a positive atmosphere without any pressure and to ensure them total anonymity, a loosely structured focused interview was chosen as the main method of collecting the data (Bortz & Döring, 2006; Merton & Kendall, 1979). By using this method, it could be ensured that the principals would have enough possibilities to express their attitudes towards Quality Analysis openly and honestly.

Only *N* = 20 principals could be included in the longitudinal study and were therefore interviewed a second time. The main reason for the reduction of the interview partners at the second point of measurement was an organizational slow-down and change in the procedure of the school inspection Quality Analysis in NRW.

The sample that was investigated in the longitudinal study therefore consisted of *N* = 14 (70%) male principals and *N* = 6 (30%) female principals. This distribution can be compared to the one at the first point of measurement with *N* = 32 male (64%) and *N* = 18 (36%) female principals.

All interviews took place at the principals' schools. The interviews were conducted with the support of an interview guide. In general, the interview guide was structured around the organization, the procedure and the schedule of Quality Analysis. It included questions regarding the school's preparation for the evaluation, the visiting days and measures taken after the feedback from the inspection had been received orally as well as in written form. The headmasters were furthermore shown some material which was related to the inspection, such as a Quality Tableau or an overview of the aims of the inspection. This material had already been shown to the headmasters at T1.

The interviews varied in length, from 50 min 19 s for the longest interview to 22 min 12 s for the shortest interview. The average length of the interviews at the second point of measurement exceeded the average length of the interviews at T1 by only a little more than 4 min.

All conversations were recorded with a Smart Pen (Livescribe Smartpen). This device allows the interviewer to make notes while discreetly recording the interview. It also helped avoiding the awareness of being recorded, which might have changed the interview atmosphere and the level of openness of the headmasters. All interviews were completely transcribed while at the same time granting the anonymity of the headmasters.

In order to analyze the transcribed interview material, different approaches were chosen and used interrelatedly. On the one hand, approaches from Qualitative Content Analysis were integrated in the analysis; on the other hand theoretical approaches from Grounded Theory were used (Glaser & Strauss, 1967). On the one hand, the structure of the interview guide led to a deductive coding process regarding the main topics referred to by the headmasters. Theoretical approaches from Grounded Theory were specifically used for the inductive coding of the subcategories. The core category consisted of the principals' handling of and attitudes towards the QA and the feedback received from it.

It can be concluded, that the analysis of the interview material was conducted with both a deductive and an inductive approach, which is often the case in empirical research (Bortz & Döring,

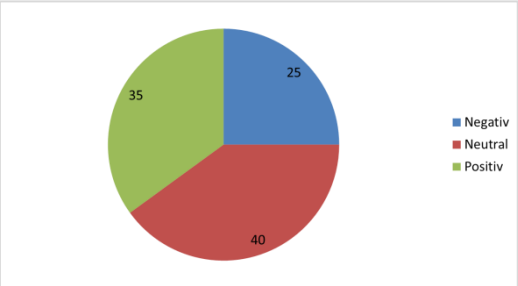
2006). Furthermore, elements from an evaluative qualitative content analysis were integrated into the coding process (Schreier, 2014). The code system was validated via argumentative validation between the first and the second coder and there was no residual category left.

Changes in the attitudes of the principles could furthermore be quantified via the frequencies of the coded statements, which were entered into a statistics program (SPSS, version 21).

4. Results

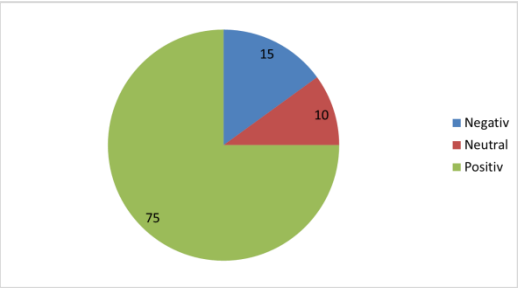
The results of the longitudinal study show a considerable shift in the attitudes of the headmasters towards the external school inspection QA. In the following, only the 20 headmasters from the longitudinal sample are being referred to due to reduction of complexity.

Figure 1. Attitudes of the headmasters towards QA: T1 in % (cp. Behnke, 2015).



At the first point of measurement, 25% of the headmasters expressed a negative attitude towards QA, whereas 40% voiced a neutral attitude.
35% of the headmasters had a positive attitude towards QA before its visit.

Figure 2. Attitudes of the headmasters towards QA: T2 in % (cp. Behnke, 2015).



At the second point of measurement, 15% of the headmasters expressed a negative attitude towards QA, whereas 10% expressed a neutral attitude.
After the QA had visited their schools, 75% of the headmasters positioned themselves positively towards the external school evaluation QA.

The main results show a shift in attitudes which is considerably positive. When analyzing the attitude change of the $N = 20$ headmasters, it becomes obvious that 20% of the headmasters have shifted into a more negative attitude than before the QA, 20% of the headmasters have remained positive and 60% of the headmasters have obtained a more positive attitude after the visit of Quality Analysis at their schools.

Another very interesting result is that the headmasters who have become more negative judge the fairness and the perception of the inspectors less positive than those headmasters who have become more positive or who remained positive.

The negative headmasters also clearly evaluate the work of the inspectors in general, their fairness, the transparency of QA and the effectiveness of QA less positive than the other two groups of headmasters.

5. Discussion

In the following, some of the reasons the headmasters voiced for their attitude shift will be discussed under a social psychological viewpoint.

5.1. The assessment of QA and the result

Our results show, that the assessment of QA and the result a school and a headmaster obtains via the external inspection most likely determines whether the attitude towards the evaluation instrument is positive or negative.

Cognitive dissonance. From a social psychological viewpoint, a negative attitude shift might derive from cognitive dissonance, for example following an unexpectedly bad result (Festinger, 1957). Those headmasters who obtained a negative result stated that their evaluation of QA had become less positive afterwards. They also stated that their self-evaluation would differ from the one of the QA.

External attributions. From a self-worth perspective, a negative feedback received by an official measurement instrument is most likely very critical for most individuals (Sedikides & Gregg, 2007, 2008). One way of coping with negative feedback of QA was found in strategies of external attribution, for example by devaluating the inspectors or the evaluation instrument.

5.2. The inspectors

Our results also show a very relevant position of the inspectors. They are praised by content headmasters and severely criticized by those who obtained a negative attitude or remained negative.

Psychological reactance. Research shows, that the way in which results or a feedback are communicated may lead to psychological reactance whenever it eliminates important freedoms (Brehm & Brehm, 1981). Therefore, a highly restricting and dominant communication style used by the inspectors was found to decrease the acceptance of the measurement instrument.

Self-worth perspective. Receiving feedback is always a critical event for individuals, no matter if they are students or headmasters (Behnke, 2015). Whenever the inspectors created a feedback atmosphere which led to a decrease in self-worth in the headmasters, those headmasters reported strategies for self-enhancement.

5.3. Control beliefs

Psychological reactance. An eliminated freedom, for example caused by a highly negative and restricting communication atmosphere, may lead to a reduced capability to feel in control of a situation (Brehm & Brehm, 1981). Our results show that a reduced control belief was one of the reasons for the headmasters to reject the external evaluation, its feedback and the inspectors.

6. Conclusions

Our results show that a number of theories taken from basic social psychological research can be useful in order to analyze and explain processes of rejection and acceptance of headmasters regarding external school evaluations.

The implications of this study are that interaction and self-regulation processes should more often be considered when measures in schools are planned. Furthermore, important persons involved in the inspection process should be thoroughly trained in order not to cause the above mentioned processes.
Nevertheless, many headmasters who were satisfied and had a positive attitude towards the school inspection QA criticized procedural and organizational aspects as well. This criticism should be taken seriously in order to further increase the acceptance of external school inspections in the Federal State of NRW as well as in the whole of Germany.

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DO SOVEREIGN PEOPLE COMMUNICATE MORE EFFICIENTLY?[i]

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Abstract

The psychological sovereignty (PS) is a person's ability to keep his/her boundaries, and to control his/her personal space – body, territory, personal belongings, etc. (Nartova-Bochaver, 2005). This trait is responsible for keeping balance between the person's needs and other people's ones. PS is important for preventing transgressions of personal boundaries including unjust treatment, it helps to respect others and protect themselves as well. The opposite pole of this trait is designated deprivedness. In our research, the connection between psychological sovereignty and interpersonal interaction specificity was investigated on a Russian sample. The hypothesis assumed that sovereignty is positively connected with harmonious interpersonal relationships. In total, 399 respondents participated in this survey, 102 males, 297 females, M_{age}=23 years. The following tools were used: The Psychological Sovereignty-2010, Attachment - Separateness scale of Five Factor Questionnaire by A. B. Khromov, The experiences in Close Relationship Scale by M. Wei et al. Two empirical studies were conducted. In study 1, it was shown that the sovereignty level is positively connected with some attachment facets (warmth, trustfulness, and respect for others). In study 2, we discovered that the sovereignty level is negatively connected with anxiety and avoidance in close relationships. The discovered connections are more pronounced in females. Outcomes mean that people who feel safer have features helping them to establish more friendly attitudes toward others than people who feel vulnerable. Moreover, they communicate more confidently and authentically. Results are of high importance for applied social psychology.

Keywords: *personal sovereignty, five factor model, communication, anxiety, avoidance.*

1. Introduction

The Personal Sovereignty can be defined in some ways: it is a person's ability of protecting his/her psychological space; a balance between the person's needs and needs of other people; and a state of personal boundaries (Nartova-Bochaver, 2008, 2011, 2012, 2013, 2014a, 2014b, 2014c, 2014d). "Sovereignty" in Russian is a specific connotation, familiar to "independence", "self-sufficiency", "self-sustainability". The opposite pole of this trait is designated Deprivedness. This is a new concept in Russian psychology, but it is connected to such terms as personal space (Sommer, 1959), privacy (Altman, 1975), authenticity (Wood et al., 2008). The psychological sovereignty as a boundaries phenomenon is the most crucial problem both of the contemporary civilization and of the modern psychology at the same time. We are living in the overpopulated and very fast environment; thus, we all are permanently forced to share and to distribute our life spaces and our time. Thus, we all try on the one hand to take into account other people, and, on the other hand, - to save own identities and authenticities. As we know a lot of interpersonal conflicts and wars have the same reasons: they are unleashed because of land, property, and values. In the everyday life, we often face the challenges from outside and have to stand them. Thus, we can assume that people who have the more strong boundaries (higher sovereignty level) are less vulnerable in communication, don't spend much energy to defense themselves, and, as a result, are more efficiently in the interpersonal interaction.

2. Theory of the Psychological Sovereignty

We have developed an original theory verified in a lot of researches. The approach is based on the following sources. 1. Classical theories of the person (James, 1991, Levin, 2000, Jung, 1993).

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2. Ethology and environmental psychology (Lorenz, 1975, Tinbergen, 1993, Lang, 1993). 3. Theory of Privacy (Altman, 1975). 4. Researches of psychological boundaries (Brown, 2006). We consider the person as a body-territorial-existential integrity. Every person can maintain attachments to places, things, people, pets and ideas. Everything of these constitutes psychological space of the person - a part of reality which is significant for a person and what the person identifies him- or herself with. Based on theoretical analysis and psychotherapeutic cases, the author has revealed six PSP dimensions maintaining person's self-confirmation: body, territory, things (belongings), regime habits, social contacts, tastes and values. Thus, every person has to communicate with other people about how to define boundaries, to distribute or to share their psychological spaces. We have created the Theory of Psychological Sovereignty generalized in four positions (Nartova-Bochaver, 2008). 1. Aims. The evolutionary and social aim of the psychological sovereignty is the maintenance of self-control by means of influences selection from outside. 2. Structure. The sovereignty is established in relation to six listed above dimensions of psychological space. 3. Dynamics. Every person aspires to keep or increase the level of personal sovereignty. 4. Phenomenology. Psychological sovereignty depends on the real environment; goes back to the territorial instinct and is the social form of biological programs. Sovereignty appears in the confidence of behaving according to his/her own desires and beliefs, in a feeling of security of personal space, and sensation of his/her relevance in the current life circumstances. The opposite pole of this construct is designated as deprivedness. Deprivedness is characterized by feeling of estrangement, self-alienation, fragmentariness of person's life, and problems with objects of identification.

3. Objectives

Whereas the connection between sovereignty and psychological well-being has been clearly brought out there is little known about whether this trait is related to the communication features or not (Nartova-Bochaver&Astanina, 2014, Nartova-Bochaver, 2014c). Our research is aimed at investigating into connection between the sovereignty level and, first, the trait "Attachment-separateness" in Russian version of Five-Factor model, and, second, the properties of close relationships, namely, anxiety and avoidance.

4. Design

Our research was conducted in two steps. In Study 1, 134 volunteers, students of Moscow universities, M_{age}= 19.8, 93 females, participated. Hypothesis: the higher is the sovereignty level the higher is the person's ability to feel attachments to other people. In Study 2, 265 volunteers, students of Moscow universities, M_{age}= 23.2, 204 females, participated. Hypothesis: the higher is the sovereignty level the lower is anxiety and avoidance level in close relationships.

5. Methods

We used following tools. The Psychological Sovereignty Questionnaire-2010 (PSQ-2010) consists of six subscales: Sovereignty of Bode, Territory, Things and Belongings, Regime Habits, Social Contacts, and Tastes and Values Sovereignty (respectively, BS, TS, TBS, RHS, SCS, and TVS) (Nartova-Bochaver, 2014). The Attachment - Separateness scale of Five Factor Questionnaire includes five subscales: Warmth – Coolness, Cooperativeness – Competitiveness, Trustfulness – Suspiciousness, Understanding – Non-understanding, Respect for others – Self-respect (Khromov, 2000). The experiences in Close Relationship Scale consist of two subscales: Anxiety and Avoidance (Wei et al., 2007).

6. Results

6.1. Study 1

In accordance with our hypothesis, we have revealed that sovereignty is positively connected with attachment (Table 1). In women, this connection is more pronounced. In men, especially strong are relations to such facets as Cooperativeness and Respect for others, in women – to Warmth, Trustfulness, as well as Respect for others. In men, the Body sovereignty most impacts on this connection, in women – Territory and Social contacts sovereignty. On the contrast, non-sovereign people who have destroyed personal boundaries because of early psychological traumas, violence, or other negative influences, dispositionally aren't able to bond strong reliable attachments to other people, they are cool, suspicious, too much self-respectable; as a result they are doomed to experiencing unsatisfactory close relationships, loneliness and separateness.

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Table 1. Connection between the Sovereignty level and Attachment in males/females (r_s).

Scale	PSQ-2010	BS	TS	TBS	RHS	SCS	TVS
Warmth – Coolness	.	0.29 / -0.04	0.28 / 0.20*	0.15 / 0.19	0.17 / 0.21*	0.06 / 0.25*	0.30 / 0.25**
Cooperativeness – Competitiveness	0.10 / 0.02	0.44*** / -0.09	-0.14 / 0.04	0.04 / 0.10	0.04 / -0.02	-0.17 / 0.10	0.03 / 0.04
Trustfulness – Suspiciousness	0.14 /0.22*	0.05 / 0.09	0.02 / 0.29**	0.05 / 0.10	0.18 / 0.23*	0.17 / 0.25*	0.13 / 0.14
Understanding – Non-understanding	-0.11 / 0.08	-0.05 / -0.10	-0.08 / 0.07	-0.06 / 0.11	-0.12 / 0.06	-0.06 / 0.15	-0.10 / 0.19
Respect for others – Self-respect	0.32* / 0.18*	0.50*** / -0.02	0.13 / 0.14	0.24 / 0.19	0.19 / 0.18	0.10 / 0.18	0.27 / 0.22*
Attachment - Separateness	0.21 / 0.20*	0.35* / -0.05	0.07 / 0.22*	0.11 / 0.18	0.11 / 0.18	0.04 / 0.29**	0.21 / 0.23**

Note. *- p≤0.05; ** - p≤0.01; *** - p≤0.001.

6.2. Study 2

We have shown that as expected the sovereignty level is negatively connected to anxiety in close relationships in men, and to anxiety and avoidance in women (Table 2). This connection is more pronounced in female group proving that women as distinct to men depend on the safety of personal boundaries more strongly. In men, Things and Belongings Sovereignty and Tastes and Values Sovereignty give the most significant connections. In women, all the scales impact on the properties of communication in close relationships. Non-sovereign people, for one's turn, are obviously anxious because of threat of destroying their boundaries; they avoid intimacy, and, as a result, are doomed to formal non-warm relations.

Table 2. Connection between the Sovereignty level and Close relationships features in males/females (r_s).

Scale	PSQ-2010	BS	TS	TBS	RHS	SCS	TVS
Anxiety	-0.30* / -0.30**	-0.06 / -0.17**	-0.20 / -0.25***	-0.32** / -0.26***	-0.24 / -0.30***	-0.12 / -0.18**	-0.29* / -0.16*
Avoidance	0.08 / -0.19**	0.01 / -0.12	0.05 / -0.11	0.07 / -0.11	0.03 / -0.14*	0.03 / -0.10	0.05 / -0.20***

Note. * - p≤0.05; ** - p≤0.01; *** - p≤0.001.

7. Discussion

As our results show the sovereignty level is really connected with the communication features, this connection shows itself in different ways. First, sovereignty as a low order trait (facet) is related to the attachment as a trait. This means both of traits are relatively constant in the interpersonal space, and may appear together in the ontogenesis. We can speculate it could be traced to the early age of the person when a global system of the basic life trust establishes. In men, the most important parts of the Attachment are Cooperativeness and Respect to others, according to the masculine specificity of social regulation based on the rules and justice (Kohlberg, 1971). In women, Warmth and Trustfulness are very important sources of the attachment emphasizing emotional and contextual nature of the feminine social regulation (Gilligan, 1982). This result, in our opinion, helps to explain effects of the personality and early childhood on the adult attachments but in the manner distinctive from the psychoanalytic one. Second, the sovereignty is connected to the ways on the real communication in close relationships. Sovereign men aren't anxious with friends and romantic partners: the real power doesn't need evidences. Sovereign women aren't either anxious or avoiding. This means they are open to new experiences, don't spend much energy to defending their boundaries, and, as a result, can get more chances to have good friends, romantic partner, and family, in comparison with non-sovereign people. In addition, we have revealed data about gender differences in the aspects of boundaries connected to (or maybe influenced on) communication phenomena. Thus, in men the attachment as a trait is connected to Body sovereignty

showing that bodily dimension in the Dasein of boy could be considered as a main source of his boundaries safety. As for women, they are sensitive to various environmental influences and can use various "ontological" languages to maintain their personal boundaries. At the same time, women in comparison to men are more easily provoked to feel anxious in close relationships and to avoid them.

8. Conclusion

Our findings impacted on the understanding of some communication phenomena, shed light on the nature of the attachment as a personal trait, and on the features of the close relationships correlated with the high/low level of the sovereignty. The sovereign people are more self-confident; they tend to have more positive world view and are ready to communicate in the more friendly way – more warmly, trustful, respecting other people. The sovereign people don't need defending their psychological spaces too strong and can spare their energy for more creative life tasks. Thus, they have more interesting, mature, attractive personalities. They also feel safe in the close relationships, they aren't anxious or avoiding closing in. Non-sovereign people are cool, suspicious, cannot respect others; they don't admit other people to their psychological space, cannot establish and maintain close relationships. They are too anxious in relationships and don't permit others entering their privacy area at all. As a result, they often remain alone, single, without having reliable friends, romantic partners, and the family. Thus, trainings aimed at increasing communication efficiency have to take into account the statement of personal boundaries and to base correction techniques on the meaning of everyday habits and activities in the interpersonal relationships. They also should include work with the personal boundaries in their various dimensions. Limitations of this research have been caused by a not very strong statistics, the sample size, and using not specific social-psychological tools. Prospects of this research propose more detailed investigating into the moral correlates of sovereignty (tolerance, altruism, moral judgments), examination how the sovereignty depends on financial, historical, and cultural person's life circumstances.

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THE EXPERIENCES OF SURVIVORS OF HUMAN TRAFFICKING IN AUSTRALIA AND SINGAPORE

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Abstract

Human trafficking is a criminal activity and human rights violation essentially equivalent to slavery (Potocky, 2010). While it may take numerous forms, at the core of the definition of trafficking is the exploitation of an individual through the use of force, deception or coercion for the purposes of harnessing their productive potential without remuneration. While the consequences of trafficking on mental health have been documented, to the authors' knowledge, no theoretical model which comprehensively explains the development of such psychopathology has been created. In this study, semi-structured interviews were conducted with 11 trafficking survivors in Australia and Singapore. Using Grounded Theory, our interim model will suggest that, while survivors may have experienced developmental or relational trauma, their continued desire to improve their quality of life and that of their family is indicative of resilience. However, upon arrival at their destination, traffickers are able to enact a system of encapsulation that progressively undermines their sense of agency. They had their legal and identifying documentation taken, were placed under constant surveillance with no freedom of communication or movement, and were severely and arbitrarily punished for the most minor of infractions. Their complete dependence upon their traffickers and their lack of civil status was repeatedly evoked to remove any possibility to an alternative to acquiescence. This resulted in a lack of mentalization (Fonagy & Target, 1998), which prevented survivors contextualising their experiences and correctly attributing blame for their exploitation to their traffickers. Finally, the impact of different types of trafficking will be considered, with particular focus on dissociative states that are experienced by survivors of sex trafficking (Holmes et al., 2005).

Keywords: *trauma, human trafficking, mentalization, dissociation, resilience.*

1. Introduction

Human trafficking is a criminal activity and human rights violation essentially equivalent to slavery (Potocky, 2010). While it may take numerous forms, at the core of the definition of trafficking is the exploitation of an individual through the use of force, deception or coercion for the purposes of harnessing their productive potential without remuneration. Human trafficking has begun to attract the attention of the global community (Shelley, 2010). While not new phenomena, the trafficking and exploitation of children, women and men around the world have been furthered by globalization, technological and transport advances since the 1990s. Human trafficking is the fastest growing criminal enterprise in the world, and has become the second most profitable illicit trade after drugs, demanding the sustained attention of political bodies at both national and international levels (Doezema, 2002; Kelly & Regan, 2000). There is a burgeoning modern abolitionist movement, in light of which psychologists have a pivotal role to play in the treatment and rehabilitation of rescued victims. Most specifically regarding: the investigation of the factors facilitating human trafficking, and the creation of programs to enhance community awareness.

Despite increased public awareness, little psychological research into trafficking has been conducted. The physical and psychological consequences of trafficking have been documented from sources including service provider case notes (Crawford & Kaufman, 2008; Macy & Johns, 2011) and questionnaires administered to survivors themselves (eg. Tsutsumi, Izutsu, Poudyal, Kato & Marui, 2008). Trafficking has been linked to increased rates of depression, anxiety, post-traumatic stress disorder and substance abuse. However, the reliance upon non-diagnostic scales, or the subjective judgement of non-clinically-trained caseworkers, compromises the quality of findings. When survivors were actually

interviewed, questions often specifically concentrated on their experiences of post-trafficking service provision (Aron, Zweig & Newmark, 2006; Brunovskis and Surtees, 2012), not their trafficking.

Additionally, most of the research has been specific to a type of trafficking, most commonly sex trafficking (eg. Crawford & Kaufman, 2008; Yea, 2012). This lack of variety in the forms of trafficking studied has prevented comparison between the psychological impacts of various types of trafficking, and subsequent implications for recovery and treatment. None of the studies has systematically investigated how survivors view themselves as having changed during and after the trafficking period and how that impacts their post-trafficking trajectory (Yea, 2012). This can only be achieved by offering them the opportunity to contextualise these experiences within their life narrative.

This project aimed to fill these gaps in the research surrounding human trafficking, specifically the absence of direct interview about the experience of trafficking and its personal impact and the lack of comparative analysis across forms of trafficking. We aim to generate a theory which effectively encapsulates the effects of a variety of types of trafficking on men and women in Australia and Singapore that can be used to inform both their therapy and rehabilitation as well as therapist training in treatment and self-care. Up till now, mental health professionals providing support for victims of trafficking have primarily utilised generic trauma-oriented treatment. However, given the severity and complexity of the trauma uniquely experienced by victims of trafficking, a theory is needed that is specifically derived from, and contextualises their experiences.

2. Method

2.1. Participants

Participants (N = 11, 8 females and 3 males) were recruited through various non-government organisations which support survivors of trafficking in Sydney, Melbourne and Singapore. This recruitment avenue was chosen to ensure that participants had an existing support network that could be of assistance in case of subsequent distress as a result of the interview process. Multiple locations of data collection also ensured that the greatest variety of both types of trafficking and trafficking experiences was attained. Eligibility criteria included having had experiences that met the definition of trafficking described above, being currently or previously supported by one of the NGOs, and speaking a sufficient level of English to participate in an interview. The last criterion was met for all except for 3 participants, for whom Mandarin translators were organised.

2.2. Design

This qualitative, exploratory study investigated the lived experience of survivors of trafficking through the use of semi-structured interviews. A series of broad questions were asked, avoiding leading language as much as possible. General topics addressed included their memories of their family of origin, the sequence of steps leading up to their trafficking, their self-experience during trafficking, how they were rescued or escaped, and how they reflected and found meaning in their experiences. The aim was to encourage participants to reflect on their experiences and what these experiences meant to them in context. Thus interviews were conducted in a conversational manner, in line with the World Health Organisation guidelines for interviewing trafficked people (Zimmerman & Watts, 2003).

To ensure objectivity, all 11 interviews were sent for transcription (and translation in the case of the 3 interviews conducted in Mandarin) using an independent confidential transcription service. These transcripts were then compared to the original recording by the first author to confirm their accuracy. These transcripts were then emailed to participants who had indicated an interest in re-reading the transcript to ensure they were satisfied with the representation of their experiences. Only 3 requested subsequent changes, to preserve their anonymity, entailing changes to personal details such as cities of origin or names of family members mentioned.

2.3. Data Analysis

The Grounded Theory approach (Strauss & Corbin, 1990) to qualitative research was utilised, as it specifically aims to develop an understanding of human behaviour based on the lived experience and perspective of those being interviewed. Participants were assumed to be the experts of their own lives, and this approach provided an alternative to working from a predetermined theoretical perspective with specific hypotheses.

In accordance with these principles, data from the interviews were analysed closely, line-by-line. Transcripts were read repeatedly and the interviewer's memo notes were added before open-coding was used to identify key themes. Links were then made between similar themes, and described at higher levels of abstraction. To improve internal reliability and consistency, the second author also conducted open coding on all interviews. Areas of difference or dispute between the two researchers were discussed until

consensus was achieved. This process continued until saturation was reached, or the point at which no new concepts or themes were identified, (Fassinger, 2005). The iterative process of model construction then commenced, utilising the method of constant comparison (Glaser, 1965), which seeks both confirming and disconfirming evidence for the model in the data. An interim model reflecting the current stage of this process is presented in this paper.

3. Results and Discussion

3.1. Resilience

During their interviews, most participants disclosed childhood experiences punctuated by parental substance abuse, domestic violence, bereavement and poverty. While many studies have described how poverty, gender, violence and lack of education function as risk factors for trafficking (see Perry & McEwing, 2013, for a review), it was survivors' subjective experiences of these phenomena that was of particular interest to the authors. The risk factors present were viewed in an interesting light. Rather than seeing them as negative, they were perceived as additional motivation to overcome, making them more determined to "achieve upward mobility through outward mobility" (Yea, 2012, p.64). To quote one woman: "When you go through all these tough times, it makes you strong. You want to aim higher… Hard work doesn't kill." This was seen as indicative of resilience: "the characteristic ability to dynamically and progressively adapt to stress in specifically unrehearsed yet effective ways as required by existing circumstances" (Block, 2002, p.4).

However, this resilience often lead them to take on a sacrificial role, relinquishing their agency and personal aspirations in the hope of progressing not just their own lives, but those of their family. They took disproportionate risks, ignored the concerns of well-meaning others, and naively trusted deceptive agents and businessmen they had never previously met in the hope of a better future. "He told me the life is very hard, I have to work like a machine every day. It's no break – I need to work for 365 days. [Interviewer: And you still wanted to go?] My mind like, I just think, I want to just help my family."

3.2. Encapsulation

Upon arrival at their destination, survivors were then subjected to a system of encapsulation. They had their legal and identifying documentation taken, were placed under constant surveillance with no freedom of communication or movement, and were severely and arbitrarily punished for the most minor of infractions. Their complete dependence upon their traffickers and their lack of civil status was repeatedly evoked to remove any possibility to an alternative to acquiescence. The confusion this caused is reflected by one survivor, who said: "I've never lived a life like that... Like trying to, how can I do this, I'm restricted I can't, how can I do I can't, I was like just put in somewhere that you don't have any option." This allowed traffickers to act with complete impunity (Rojas, 1999), denying survivors any appeal to external truth or justice, and steadily eroded their capacity for mentalization and their confidence in their grip on reality (Fonagy & Target, 1998). "It felt like someone put you in the box where you just fit in and you cannot able to breathe properly. I feel that way, I cannot even think anything… I was going start crazy, I talked to myself - sometimes I laugh, with no reason, I laugh."

It is noteworthy though that this experience of encapsulation was somewhat mitigated by social support, which neither of the domestic servants quoted above had. Participants who could debrief with friends or colleagues, even those in the same predicament, were able to mutually reinforce the injustice of their predicament and cooperate to escape. "We are good when we are together. Since we were similarly deceived, we look after each other… When she found out about this place [the shelter] she told me." However, not all participants took advantage of the social support that was available. One man stated: "I keep in my mind only because there is no one to hear - I will say to who? If I say to my colleague also they is suffering the same thing, right?" This could indicate the influence of cultural and gender differences.

Interestingly, very few survivors blamed their traffickers for exploiting them, an indication of the degree to which traffickers succeeded with implementing their system of encapsulation. Several even went as far as expressing gratitude to them for assisting in their migration: "I felt like he brought me here in Australia. If he didn't come to India who was going to bring me here?" Those who did externalise blame attributed it to their luck or fate: "Maybe it's a bad year for me, and that's why things are not working out well." Even more detrimentally, some internalised the experience as indicative of their stupidity or badness, in the process idealising their traffickers to maintain their illusion of a benevolent interpersonal world. One woman said: "I don't know why I was so stupid. I laugh at myself, how stupid I am to come here." Another stated: "They tried their best [to take care of me]. They gave me shelter, clothing, but in life you need more than that." Such attribution styles may contribute to survivors' unwillingness to participate in legal action against their traffickers.

3.3. Dissociation

Finally, when we compared across survivors' experiences, it was those who had been victims of sex trafficking who described the most severe dissociative symptoms. Participants described repeatedly experiencing fugue-like states in which they acted out in rage or aggression. For example, one stated matter-of-factly, "I take a knife, when I get angry I don't know what I am doing. Especially I hate anything - anyone around me. He ran to the room and close the door, and I run in the street." Thus it is possible that the particularly horrific violence of sex trafficking causes greater compartmentalization in survivors (Holmes et al., 2005), and this needs greater focus therapeutically. This is consistent with quantitative research conducted in Nepal, where sex trafficking survivors displayed higher rates of post-traumatic stress disorder than those who had endured labor trafficking or domestic servitude. The disparity between the impact of these types of trafficking may be even greater due to the stigma against sex trafficking potentially causing underreporting of such experiences(Tsutsumi et al., 2008).

3.4. Limitations

This study had a number of limitations. Firstly, as with all qualitative research, the results are only generalizable to survivors in Australia and Singapore. However, an attempt was made to recruit survivors from as wide a variety of experiences as possible to increase the generalizability of results. Secondly, the NGOs who survivors were recruited through functioned as gatekeeper in this study. It is possible that these organizations effectively made the decision of non-participation for clients rather than asking and allowing them to choose for themselves, or presented their most successful cases (Brunovskis & Surtees, 2010). In this case, though, many survivors were clients of multiple NGOs, and spoke freely of the pros and cons of each. Finally, all interviews were conducted by a single male interviewer, which may have impacted the nature of the experiences disclosed, particularly by survivors of sex trafficking. However, all attempts were made to establish trust and rapport prior to commencement of the interview, and all interviews took place at a familiar location of the survivor's choosing where they felt most comfortable and secure.

4. Conclusion

Overall, it can be seen that trafficking is a very specific form of trauma. To the authors' knowledge, this is the first study to systematically examine possible causal links between survivors' subjective experiences and psychological phenomena, rather than just describe subsequent symptomology. An interim model has been presented which examines the role of resilience, encapsulation, social support and dissociation on survivors, which may, with expansion in our future research, be used to inform treatment and rehabilitation.

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WORKSHOPS

SELF DISCLOSURE IN PSYCHOTHERAPY: BUSINESS OR PERSONAL?

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Abstract

Purpose: A workshop designed to make health care professionals and therapists consider their own attitudes towards self-disclosure and a business vs. personal approach towards clients. *Background*: Self disclosure is a controversial topic in mental health care. This workshop argues that everybody should determine his own limits, but it can be rewarding to reflect on them thoroughly. It contains a mix of experiential exercises, theoretical reflections, discussion topics and a wide range of case examples to stimulate debate about the topic. *Key points*: The basic ideas on which the workshop builds are: 1) health care professionals use their own person and the therapeutic relationship as working instrument, 2) everybody has different limits, 3) self-disclosure can damage the therapeutic process and 4) self-disclosure can enhance the therapeutic process. The author has a Schematherapeutic background but integrates insights from different therapeutic schools and own experience to give a comprehensive view of different viewpoints on the issue. *Description of the participants*: All health care professionals who have direct client contact are welcome to join. Due to the interactive nature of the workshop, a maximum of 20 participants is set.

Keywords: *self-disclosure, therapeutic attitude, therapeutic relationship.*

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1. Introduction

Self-disclosure has always been a controversial topic in psychotherapy. The original Psychoanalytical/Psychodynamic view was that a therapist should be a blank screen on which a client could project. If a client obtains too much personal information about the therapist, this would interfere with the projection of the client's core object relations onto the therapist. This way these personality patterns won't appear in transference, which in turn impedes their processing within the therapeutic relationship. Therapists had to remain neutral and relatively anonymous in order to allow these necessary processes to occur.

The idea that therapist self-disclosure is damaging, persisted over time. To date the idea that self-disclosure fulfills therapist needs rather than client needs is widely accepted. It is emphasized that a therapeutic relationship is a 'professional' relationship in which the therapist has to be task-oriented and clear agreements on timing, place and cost of therapy are crucial. Mutual sharing of experiences is not considered professional and belonging to the 'friendship' domain. Thus self-disclosure is discouraged and therapists are urged to approach the subject with caution.

In modern times, these ideas have been subject to critique. Rogers (1951) introduced the concept of 'genuineness', which supposes an authentic presence of the therapist in which openness and self-disclosure are allowed. According to Rogers, genuineness along with acceptance and empathy are the three basic attitudes a therapist should adopt in order for the client to grow. The Client centered school does warn therapists about well dosed usage of the technique. Too much self-disclosure could make clients lose their respect.

More recently, work done by Yalom (1990) illustrates that therapist self-disclosure can elicit client self-disclosure. The author reports many instances of its beneficial effects on therapeutic 'work' from his and other's thoroughly documented group therapy sessions. Well timed self-disclosure almost without exception produces fruitful sessions in which clients are open about themselves. Neglecting to self-disclose at crucial moments can make a session stale and unproductive. In his view, self-disclosure should fit the phase of the therapeutic process and the corresponding therapeutic goals.

In Schematherapy (Young, 2003) self-disclosure is encouraged as part of a 'limited reparenting' therapeutic relationship. Limited reparenting is a basic therapeutic attitude in which the therapist acts as a 'good enough' parent towards the client, within the limits of the therapeutic setting. A parent needs to be

warm and open in order to fulfill a child's core emotional needs and to set a good example (modeling). Likewise a therapist should adopt this attitude towards clients. In this view it is also important to match the content and amount of self-disclosure to the client's (previously unmet) emotional needs.

In "The gift of therapy", Yalom (2001) describes three kinds of self-disclosure: (1) disclosure about the therapeutic technique, (2) disclosure about therapist feelings in the here-and-now, and (3) disclosure about the therapist's private life. For the first category general openness is encouraged. Therapist feelings should be critically reviewed on their helpfulness for clients. The pitfalls of self-disclosure of one's personal life include: entrusting a client with confidential information, triggering unprocessed issues, projecting one's own story upon the client, sharing inappropriate information, sharing information that could be abused, adopting a rescuer/accusatory/victim role towards the client. It is also important to consider which effects self-disclosure could have on the client and whether or not the therapeutic bond is strong enough to deal with possible strong emotions elicited by the disclosure.

2. Methods

This workshop is an abbreviated version of a 4 hour workshop on self-disclosure and a business versus personal style of approach. Its' major goal is to stimulate reflection on the topic of self-disclosure. The main thesis on which will be built is: Everyone should be allowed to determine their own level of openness towards patients they feel comfortable with, but it can be useful to reflect on these boundaries in order to become a more effective therapist.

The workshop starts with an experiential exercise, designed to make participants 'feel' their own attitude towards self-disclosure in a professional context. After this the theoretical framework and considerations highlighted in the introduction will be explained. Alongside the theory, questions designed to stimulate debate among participants will be posed. As far as time allows, case examples from own experience and literature will further illustrate points made in the theoretical section. It will be argued that when used correctly, self-disclosure can be a strong therapeutic tool.

The author is a Clinical Psychologist and Schematherapist. His main therapeutic work is with personality disordered patients at the medium security forensic ward of the psychiatric hospital of OPZC Rekem (Belgium). His experience as trainer includes courses and workshops on topics such as Schematherapy, self-disclosure, psychotherapy with ethnic-cultural minorities, limit setting in psychotherapy and psychotherapy with offenders. Alongside his work in the hospital, he does work in a private practice and is recently invited as guest teacher in the postgraduate course on Forensic Diagnostics and Counseling at the Thomas More College in Antwerp.

3. Participants

Any mental health care professional who has direct contact with clients/clients, is welcome to join. No previous knowledge or adherence to a therapeutic school is required. Due to the interactive nature of the workshop, a maximum of 20 participants is set.

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COMPREHENSIVE BEHAVIORAL TREATMENT FOR BODY FOCUSED REPETITIVE BEHAVIORS

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Abstract

Behavioral interventions have demonstrated good effectiveness for body focused repetitive behaviors (BFRB), such as tics, hair pulling, and compulsive skin picking. However, expertise in providing this treatment is often lackning amongst mental health professionals. This workshop will help mental health professionals develop skills in comprehensive behavioral treatment of BFRBs in children and adults. Strategies will include Habit Reversal Training, response prevention techniques, cognitive reappraisal, and stress management techniques. Pharmacological options will also be discussed briefly.

Keywords: *tics, hair pulling, compulsive skin picking, habit reversal training.*

1. Introduction

Body focused repetitive behaviors (BFRB) include tics, hair pulling, and skin picking. In general, these behaviors start early in life (childhood). For many individuals, there is an episodic nature to these behaviors, where the symptoms wax and wane. For a majority of patients, these problems tend to be chronic. BFRB cause considerable distress and impairment among patients.

Tics disorders include Tourette's Syndrome, chronic tic disorder, and transient tic disorders. Tourette's Syndrome (TS), the most well know of these, is considered to be a neurological disorder with repetitive, stereotyped, involuntary movements and vocalizations called tics. The average onset is between 3 and 9 years of age (Robertson, 2000; Hebebrand et al., 1997). TS occur in people from all ethnic groups. The prevalence is about 1%, with males diagnosed 3-4 times more often than females (Mason, Banarjee, Eapen, Zeitlin, & Robertson, 1998). Tics often start in the head and neck area. The worst symptoms typically occur in early teens, with improvement occurring in the late teens and continuing into adulthood.

Trichotillomania (TTM) has a typical onset in childhood, with the average age around 11 years (Tay, Levy, & Metry, 2004). The nature of hair-pulling varies widely, with common sites including scalp, eyelashes, and eyebrows (Christenson, Pyle, & Mitchell, 1991). After pulling, individuals often play with the hair, examine it, feel its texture, or run the hair over their face or lips. In many cases, individuals engage in oral behavior with the hair (e.g., chewing, eating). TTM can also result in repetitive motion injuries or infection at the site.

Like TS and TTM, compulsive skin picking (CSP) is often a chronic condition. However, the onset and course of CSP is more diverse. In addition, CSP can be induced or affected by many conditions, including psychosis, medications (e.g., SSRI, stimulants), dermatological conditions, auto-immune disorders, or withdrawal from substances. CSP should be assessed with careful interview and timelines. Medication-induced CSP is often dose-dependent. Even in those cases, behavioral interventions can still be helpful.

Pharmacological treatment can be somewhat effective for some BFRBs such as tics and less effective for others such as hair pulling (McGuire et al., 2014; Bloch et al, 2007). Even when it is effective, the response to medication is varied and usually partial, often with undesirable side effects. Behavioral interventions have demostrated good effectiveness for improving BFRBs, both alone or in conjuction with medication. However, comprehensive behavioral treatment for BFRBs requires expert knowledge and skills. For many patients, this level of expertise is difficult to find.

2. Habit Reversal Training

The primary behavioral intervention for BFRBs is habit reversal traning (HRT). HRT is a multi-component treatment (Azrin & Nunn, 1973) used to treat TTM, tics, and skin picking. The three main components of HRT are awareness training, competing response training, and social support. HRT is designed to force habituation to the premonitory urge and disrupt a habitual motor pattern after it has started.

- Awareness training helps patients identify when they are engaged in the target behavior or likely to do so. Awareness techniques include response description, early warning, and response detection.
- The competing response is an alternate response that "competes" with the undesired target behavior (e.g., making fists, sitting on hands, etc.). It promotes habituation to the urge while delaying or preventing the target behavior.

Social support is designed to prompt and reinforce use of the competing response. It is a reward system for effort and homework completion. It helps in setting a collaborative atmosphere and in improving motivation and cooperation from the patient while reducing conflict.

3. Other Techniques

Comprehensive behavioral treatment of BFRBs also includes other techniques in conjunction with HRT. These include:

- Cognitive reappraisal, which is designed to indentify and replace problem thoughts related to the problem behavior.
- Response prevention, which is intended to put barriers and make the target behavior less "convenient" or difficult to carry out.
- Medications. These vary in effectiveness and side effects and tolerability issues for each type of BFRB (TD, TTM, CSP, etc.)
- Life management skills, which can help minimize the negative impact of BFRBs, as well as improve quality of life.

4. Workshop

This workshop will cover implementation of evidence-based behavioral treatment for BFRBs such as tics, hair pulling, and compulsive skin picking. Strategies will include habit reversal training (HRT), response prevention techniques, cognitive reappraisal, and stress management techniques. We will also briefly discuss pharmacological options. HRT is the primary evidence-based behavioral intervention for improving BFRBs. Therefore, it will be the main focus of the workshop. However, other techniques can often improve outcomes for BFRBs in conjuction with HRT and as part of a comprehensive treatment strategy.

This workshop will be delivered by the first author, an expert in the treatment of BFRBs, with several years of specialized training and experience in researching and treating these disorders. We will also briefly discuss related ongoing research in this area currently being conducted in our center.

This workshop will be appropriate for mental health professionals (psychologists, psychiatrists, therapists, counselors, etc.) who wish to develop skills in providing comprehensive behavioral treatment for BFRBs. Maximum number will be 40.

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MEANING – ITS NATURE AND ASSESSMENT

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Abstract

The purpose is to introduce the meaning theory of Kreitler and Kreitler which provides a new way of defining the nature of meaning and exploring how it affects our cognitive and emotional functioning, our personality tendencies, and our worldview and construction of reality. It is based on a large body of empirical studies and expands previous approaches to meaning. It consists in characterizing contents in terms of the provided information and the manner of expression. The major concepts of the meaning theory are meaning system, referent, meaning value, meaning unit and meaning variables, The assessment technique enables assessing meaning of different kinds (e.g., verbal and nonverbal), and identifying meaning assignment tendencies of individuals of different ages. Applications of the meaning system include clarifying constructs, exploring the underlying dynamics and constituents of personality traits and cognitive acts, comparing worldviews of different groups and producing changes in states of consciousness.

Keywords: *meaning, assessment, cognition, emotions, worldview.*

1. Introduction

Meaning is a construct with a very long history, which has added to its complexity, variety of definitions assigned to it and its ambiguity. Psychology turned its attention to meaning initially only reluctantly, mainly because of its apparent mental character and attendant difficulties of assessment. The meaning system (Kreitler & Kreitler, 1990) is a new approach to defining and assessing meaning, which has been reached on the basis of empirical studies, inspired by four major assumptions: (a) *Meaning is communicable*. The rationale is that most of the meanings we know have been learned from others, although it is evident that some meanings may be hereditary or constructed by individuals on their own. (b) *Meaning includes a part that is interpersonally shared and another part which is more personal and private*. The interpersonally-shared part is widely shared whereas the personal part is more private and subjective. (c) *Meaning may be expressed both through verbal and non-verbal means*, such as movements, sounds, drawings and images. (d) *Meaning is a complex multi-dimensional or multi-layered* construct. This is to be expected in view of the evidence that meaning develops slowly, absorbing components from different sources, not necessarily integrating them into a coherent whole.

2. Objectives

It was the purpose of the project to construct a system of meaning based on the above-stated assumptions. It was expected that that these assumptions would enable developing a system of meaning that may be usefully applied in the framework of the behavioural and social sciences. The major domains in which meaning was assumed to play a role included cognition, personality, emotions, and communication. In all these domains performance depends on identifying stimuli and on the kind of meaning assigned to them. Thus, if two stimuli are identified as similar on the basis of meaningful features spotted in both, then it is likely that the reponse to both may be similar.

3. Design

The above stated assumptions enabled shaping the methods for collecting data in regard to meaning that have led to a new conception of meaning. The data consisted of responses of several thousands of subjects differing in gender, age (2 to over 90 years), education and cultural background who were requested to communicate the interpersonally-shared and personal meanings of a great variety of verbal and non-verbal stimuli, using any means of expression they considered adequate.

On the basis of the empirical data and theoretical considerations, meaning was defined as a referent-centered pattern of meaning values. In this definition, referent is the input, the carrier of meaning, for example, a word, an object, a situation, an event, or even a whole period, and meaning values are cognitive contents assigned to the referent for the purpose of expressing or communicating its meaning. For example, if the referent is "Computer", responses such as "serves for communication" or "comes in different sizes" or "is an indispensable tool" are three different meaning values. The referent and the meaning value together form a meaning unit (e.g., Computer – serves for communication) (Kreitler & Kreitler, 1990).

In order to fully describe a meaning unit it is necessary to identify its aspects from the points of view of contents, structural features and expressive mode, as is done in terms of the following sets of variables: (a) Meaning Dimensions, which characterize the contents of the meaning values as regards the specific information communicated about the referent, such as the referent's Sensory Qualities (e.g., Ocean – blue), Feelings and Emotions experienced (e.g., Mother – loves her baby) or evoked (e.g. Darkness – fear), Range of Inclusion (e.g., Body - the head, arms, and torso); (b) Types of Relation, which characterize the directness of the relation between the referent and the meaning value, for example, attributive (e.g., Summer - warm), comparative (e.g., Spring - warmer than winter), exemplifying instance (e.g., Country - France.); (c) Forms of Relation, which characterize the formal relation between the referent and the meaning value, in terms of its validity (positive or negative; e.g., Sweet – is not a color), quantification (absolute, partial; Apple - sometimes sour), and status (factual, desired or desirable; Law- should be obeyed, Money - I wish I had more); (d) Referent Shifts, which characterize the relation between the referent and the original or previous input, for example, the referent may be identical to the input or the previous referent, it may be its opposite, or a part of it, or even apparently unrelated to it (e.g., when the presented stimulus was "Europe" and the response was "I love Paris", the referent in the response was a part of the stimulus) ; (e) Forms of Expression, which characterize the forms of expression of the meaning units (e.g., verbal, denotation, graphic); (f) Meta-Meaning variables, which characterize the attitude toward the meaning communication that has been assumed by the respondent or is indicated for the recipients (e.g., it is incomplete, it is a quotation, it is a metaphor) (Kreitler, 2014).

Together the six sets of variables constitute the system of meaning. The list of variables is comprehensive since it includes many of the variables proposed by other investigators for the assessing or defining meaning.

As a system, meaning is characterized by certain properties which play an important role in explaining the impact of meaning and its interaction with other systems in the organism.

(a) Meaning is an operational-active system, namely, operative and functional. (b) Meaning is a complex system, with a multiplicity of aspects and levels; (c) Meaning is an open system, namely, it interacts with other systems in the organism (e.g., behavior, emotions, cognition); (d) Meaning is a developing system, namely, it undergoes development and enrichment through its activation and learning. (e) Meaning is a regressive system, namely, its elements are defined in terms of its other elements; (f) Meaning is a self-embedded system, namely, each of its parts can act as an anchor point around which the rest of the system is organized; (g) Meaning is a selective system, namely, it becomes manifest structurally and functionally mostly partially under the impact of selective principles or constraints; (h) Meaning is a dynamic system, namely, it is time variant and undergoes structural- organizational changes which may have functional implications.

Of the eight properties of the meaning system, four - complex, regressive, self-embedded and selective - are static whereas the remaining four – operational-active, open, developing and dynamic – are dynamic. These two facets represent an important aspect of meaning.

4. Methods

In assessing meaning the material is first reduced to meaning units, each of which consists of a referent and a meaning value. Then each unit is coded on one meaning dimension, one type of relation, one form of relation, one referent shift and one form of expression. The coding may include also a specification of sensory sensations and meta meaning statements if these are available. For example, when the referent is "Computer" and the meaning value is "has a screen", the coding on meaning dimensions is Range of Inclusion, on Types of Relation – attributive, on Forms of Relation - positive, on Referent Shifts - identical to input, and on Forms of Expression - verbal. Summing the codings in each set of meaning variables across all meaning units in the given meaning statement yields a profile representing the frequencies with which each meaning variable has been applied in that meaning statement. Actually, one gets first initial summaries referring to each of the sets of meaning variables separately, e.g., a summary of frequencies for meaning dimensions and for referent shifts, all of which have identical totals. In addition, there is the overall summary which includes all the meaning variables from the different sets

that have appeared in the coding across all the meaning units of the specific meaning statement (namely, all the meaning variables that have in that statement frequencies > zero). The overall summary of frequencies of meaning variables in the given statement of meaning may be called the meaning profile of that statement, which may be a story, a letter, an email, a map, a painting or any other art product.

For getting information about the characteristic tendencies of an individual to use certain meaning variables it is necessary to assess the meaning statements of the individual in response to specific pretested stimuli. The 11 standard stimuli (e.g., street, bicycle, life, to create) used for that purpose constitute the Meaning Test. There are three parallel sets of these stimuli for adults and three different sets for children (2-10 years of age). The standard instructions ask the subjects to communicate the interpersonally-shared and personal meanings of these stimuli to someone who does not know the meanings, using any means of expression they find adequate. Coding the meanings produced in this manner yields the subject's meaning profile which summarizes the frequency with which the subject used each of the meaning variables across all stimulus words in the test. Similar principles apply in regard to the meaning profiles of specific constructs or groups, defined in terms of demographic characteristics (e.g., age, gender, cultural background), attitudes and beliefs (e.g., different political ideologies, religion), health states, behaviors, or responses to questionnaires.

5. Discussion

As noted, each meaning variable represents both contents specific for that meaning variable and a process that is involved in handling those particular contents. This thesis is demonstrated in many studies which showed, for example, that subjects who in the Meaning Test use frequently a meaning dimension like Locational Qualities more readily notice perceptual cues relevant for location, show better recall of items referring to location, reach faster solutions to problems like Mazes that involve locational aspects, and have more associations referring to places than with those who use it infrequently (Kreitler, 2014). Similar relations of meaning to cognition were shown for example for planning, perception and coconsciousness (Kreitler, 1999).

Studies showed that the meaning system is involved also in the domain of personality. The paradigm consisted of administering to the same group of subjects the Meaning Test and a standard measure of some personality trait. The meaning variables that differentiated significantly between the high and low scorers on the personality measure were considered as constituting the meaning profile of that personality trait. Over 350 personality traits were correlated each with a specific set of meaning variables (Kreitler & Kreitler, 1990). For example, extraversion was correlated positively with the meaning dimension Sensory Qualities and negatively with internal sensations, which is confirmed by studies indicating that extraverts focus on external stimuli overlooking internal physical experiences (Kreitler & Kreitler, 1990). The findings support the conclusion that each personality trait corresponds to a unique pattern of meaning variables that is characterized in terms of number of variables, proportion of representation of the different sets of meaning variables, proportion of meaning variables related to the trait positively and negatively, etc. (Kreitler & Kreitler, 1990). Applying a similar research paradigm showed the involvement of the meaning system in other domains, such as defense mechanisms, values and psychopathological tendencies as well as emotions, such as anxiety, fear or anger (Kreitler, 2014).

6. Conclusions

The study of meaning exposes some psychologically intriguing paradoxes. On the one hand, meaning appears to be a major factor shaping the reality in which we live and act, so that in this sense we are the victims of meaning. Yet on the other hand, meaning is a tool to that enables human beings to shape their reality. Thus, psychological reality is a product of meaning assignment and at the same time it is also that substrate which enables the production of further meanings and is the reservoir for the new emergent meanings. Hence, meaning is constrictive and expanding, restrictive and liberating. Whichever aspect is dominant would depend on meaning.

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