

CONTEMPORARY PSYCHOLOGY AND PRACTICE
International Thematic Proceedia



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INTRODUCTION

Publication titled „Contemporary psychology and practice” is thematic proceedings from the twelfth International Conference “Days of Applied Psychology” held in 2016 at the Faculty of Philosophy, University of Niš, Serbia, which is traditionally organized every year by the Department of Psychology. The first conference was held in 2005. Over time, it developed and acquired conditions to reach the international conference level both by number and composition of the Program and Organizing Committee of experts, as well as by number of participants and papers from foreign countries. In a certain sense, development of the conference reflects growth and development of the Department of Psychology of the University of Nis.

International thematic proceedings “*Contemporary psychology and practice*” comprise 29 scientific papers, organized into four thematic sections: 1. Developmental Psychology and Foster Care, 2. Clinical psychology and Health psychology, 3. Social psychology and Psychology of creativity, 4. Educational Psychology & Individual Differences.

Proceedings begin with two plenary lectures – with the lecture of Lectures are the reflection of Bernadette Buhl-Nielsen “Has the Baby been given Back? Insights from the Mirror Interview”, which present the procedure of the Mirror interview, technique designed to test the hypothesis that the mirror functions as a symbol of the mother. The mirror interview consists in asking the subjects to stand looking at themselves in front of a full-length mirror whilst they are asked questions designed to elicit information about their attitudes and understanding of themselves. The interviewer stands so as not to be seen either directly or by reflection in the mirror. The procedure is videotaped and takes about 20 minutes. The mirror interview is analysed both verbally and non- verbally. Verbal analysis is carried out on the content of what is said and non-verbal analysis is divided into four main categories; quality of voice, movement, eye contact and affect. Clinical material is then presented describing the mirror behaviour of two adolescents one from a normative control group and one with severe psychopathology.

According to the lecture of Gordana Keresteš, titled “Examining Child Foster Care from a Developmental Perspective: A Case Study from Croatia” , foster care is one of the leading alternative care systems. It provides children unable to live with their biological parents a family context, rather than rearing in institutions. This paper analyzes the child foster care system in Croatia from the perspective of developmental science, in order to identify areas for improvement. It reviews international research findings on foster care, in order to identify possible mechanisms of change. It is argued that foster care staff and policymakers should be continuously trained and informed regarding the latest research in developmental science, in order to enhance children’s developmental outcomes. It is also pointed out that child foster care effects should be systematically evaluated, allowing this intervention to become evidence-based.

Thematic proceedings „Contemporary psychology and practice” discuss complex problem of relation the knowledge that researchers have with the knowledge and abilities which are needed by practitioners. Papers deal with current psychological topics and different problems from various fields of psychology. Precisely, papers related to the field of Developmental Psychology & Foster care were presented within the first thematic unit. These papers deal with the preparedness of youth leaving alternative care, disorganized attachment, relations between sexual behavior and self-concept, relation between attachment Styles and assertiveness and self-handicapping behaviour, adult romantic attachment, relations between attachment and resilience with style of humor, adult attachment and moral reasoning, attachment and self concept relations, attachment to different figures and sexual concept, about modern theoretical approach to adulthood, new lifestyles of the adult population and empathy and interpersonal orientation of social workers who are engaged as family mediators. Papers referring to the second thematic unit - Clinical Psychology & Health psychology are dealing with differences in anxiety and depression between the people with schizophrenia and the nonclinical subsample, stress and well-being and at finally-learned helplessness and noise in urban living environment. Within the third thematic were presented five papers related to the field of Social Psychology & Psychology of creativity. These papers deal with growing up of the famous creators; authentic dance movement: connotative dimension of meaning; social networks and sociolinguistic aspect of personality; sociodemographic determinants of attitudes towards reality shows and finally-motivation of youth in Serbia for political determination and action. Papers referring to the Educational Psychology & Individual Differences were presented within the fourth unit. They deal with bullying prevention and intervention action of the school; the link between personality traits and the readiness to change of employees in primary schools; personal characteristics, visual merchandising and impulse buying; prosocial orientation of students of different professional choices; personality traits and empathy as predictors of humor styles; predicting burnout among employees in Gerontology center on the basis of personality traits, coping strategies and the type of work. The last paper is about the relations between Irrational Beliefs and Self-Esteem in student.

All papers have been individually reviewed, and proceedings as a whole, by three foreign reviewers. On this occasion we would like to express our thankfulness to the reviewers who, with their expert opinions and relevant assessments, contributed to the quality of the publication.

Niš, August 2017

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Developmental psychology and Foster care

HAS THE BABY BEEN GIVEN BACK? INSIGHTS FROM THE MIRROR INTERVIEW (PLENARY LECTURE)

Abstract

The use of a mirror as a metaphor has had wide appeal in psychoanalytic literature. Winnicott described the mother as mirror for her infant. P. Kernberg speculated that the mirror may also function as a symbol of the mother. An interview was designed to be conducted in front of a mirror. This paper describes results of the interview as a case study of two adolescents. The extent to which the mirror functions as a symbol of the mother is discussed with respect to key functions of the attachment relationship; security, self esteem and reflective function.

Key words: Personality disorder, Attachment, Adolescents, Mirror, body image

Introduction

Kernberg described the mother's mirror-role in the development of self-awareness and self-recognition in children (Kernberg, 1984) and found that mirror behaviour in children was related to the quality of mother-child interaction (Kernberg, 1987). She hypothesised that the mirror could be understood as a symbol of the mother and that the mother becomes a symbol of the mirror. The Kernberg-Buhl-Nielsen Mirror Interview was designed to investigate the role of mirror behaviour as a function of attachment and psychopathology (P. F. Kernberg, Buhl-Nielsen, & Normandin, 2006). Use of the mirror in a pilot study of adolescents with personality disorder revealed problems with body image and sense of self. The sense of self being split into self-as-felt and self-as-seen (Buhl Nielsen, 2006).

This interview is now being used in a research project designed to test the hypothesis that the mirror functions as a symbol of the mother. The actual mirror is not understood as the physical mirror but refers more accurately to the functional status of the mirror which is relational; a reflecting surface in which the subject can see him or herself and relate to that image. In the same way the mother is not the historical mother but is defined by the mirroring or reflective function she had in relationship with her infant as experienced by the infant.

The aim of this paper is to describe the mother's mirroring functions with respect to her infant and from a theoretical point of view to identify parameters that

one could expect to see reflected in the mirror behaviour of adolescents. Clinical material is then presented describing the mirror behaviour of two adolescents one from a normative control group and one with severe psychopathology. The feasibility of using the above mentioned parameters to distinguish between them is examined.

Theoretical Background

Winnicott wondered what the baby saw when looking at the mother's face and came to the conclusion that the baby saw him or herself, in that when the mother looks at the baby "what she looks like is related to what she sees." A normal function of mirroring therefore consists, in the words of Winnicott's famous quote, in "giving back to the baby the baby's own self". If this is accomplished the individual can come to the conclusion that: "When I look I am seen, so I exist." Winnicott describes existence as the joyful and interested exploration of the self. (Winnicott, 1971). Winnicott's statement will be examined in the light of attachment theory in order to get a clearer idea of what is involved in the process of looking, being seen and in the feeling of existing.

Before the presentation and discussion of clinical material, some of the functions and mechanisms involved in the attachment system are described in order to identify aspects of the mirroring relationship in infancy that may be relevant for the development of this relationship to the self and which could be looked for in mirror behaviour.

It is postulated that factors of importance in the quality of mirroring in infancy will be discernable in the mirror behaviour of adolescents and in this sense that the mirror can be understood as functioning as a symbol of the mother and vice versa.

Functions of the attachment system

Attachment was originally described by Bowlby as a behavioural system capable of adapting to the environment depending on the ways in which innate needs were met by the environment. Self and object representations are formed and become organised around the extent to which the child comes to expect the caregiver's availability and the complementary representation of his or her own acceptability in the eyes of the caregiver (Bowlby 1969). Bowlby postulated that these self and object representations became organised in systems which he termed Internal Working Models (IWM) and were used as models for the prediction of future action. He wrote that these IWM's were "non other" than the self and object representations of psychoanalytic theory (Bowlby, 1969). The functions of the attachment system have undergone revision since Bowlby, selected aspects are briefly presented.

1) The availability of the caregiver or sense of security.

Attachment was described by Bowlby as a behavioural system with the inherent goal of physical proximity to a caregiver. The attachment system interacted with other behavioural systems such as the exploratory system and the fear system; if the child had fulfilled the primary behavioural goal of attachment, physical proximity to the

caregiver, then the child was free to explore his or her surroundings. If a sign of danger activated the fear system or if physical proximity to the caregiver was threatened, the child would break of exploration and seek out his or her caregiver.

One function of the attachment system can thus be understood as enabling the individual to explore the environment confident in the expectation that the caregiver would be available if the need arose. In early childhood this is achieved by physical proximity to the mother resulting in the gradual construction of internal self and object representations that later permits an internalised or more abstract sense of security (Sroufe et al., 1977).

2) Acceptability or sense of self-esteem

Acceptability is complementary to availability; the available caregiver who understands the child's need for both protection and exploration will help the child to experience him or herself as acceptable in the eyes of the caregiver. The child sees him or herself through the eyes of the caregiver as an individual who is worth protecting and who is afforded the opportunity to explore and develop.

In order to feel acceptable, the child must be able to regulate and maintain positive feelings of self-esteem and also to modulate and tolerate negative affect. The regulation of affect can be understood as an important function of the attachment relationship in that the quality of interaction between mother and child helps the child to regulate his or her own internal states or affects and to internalise particular styles of regulation (Sroufe & Waters 1977).

Seen in this light, Internal Working Models in Bowlby's terms or self and object representations in more traditional psychoanalytic terms, could be organised around a pleasure- pain axis. However, pleasure and pain are not so much organised around the extent to which needs and desires are fulfilled but are crystallized around the experience of being protected and a corresponding feeling of self worth.

3) Reflective Function

One of the beneficial consequences of secure attachment in infancy and early childhood was the development of what Bowlby termed the goal-directed partnership. A child with favourable attachment experiences would be able to enter into a mutual partnership with the mother, taking account of her plans and wishes.

Fonagy has described the importance of the attachment relationship as lying not in attachment per se but in the opportunity it affords for the development of reflective function (Fonagy et al., 1997). Reflective function is the ability to take the intentional stance and to understand one's own and other peoples' behaviour in terms of intentional states such as beliefs and desires. Development of reflective function confers significant evolutionary and psychological advantages, as an adequate prediction of one's own and other peoples behaviour depends on being able to understand why people behave as they do (Dennet, 1987). Fonagy uses the term Interpersonal Interpretive Mechanism (IIM) to describe a genetically determined property that can develop in response to environmental factors such as the quality of relationships and be instrumental in the development of reflective function (Fonagy 2001).

Mechanisms involved in mirroring - contingency detection

In biological terms the importance of the attachment relationship lies in the opportunity it affords for the regulation of physiological processes. Research on rat pups suggests that the attachment system is crucial for the development of a wide range of regulatory systems (Myron and Hofer). In the same vein, infant research points to the crucial importance of mirroring in the development of the ability to self-regulate both affects and attentional bias (Cohn et al., 1989; Trevarthen et al., 2001; Stern, 1985; Weinberg et al., 1994)

An essential mechanism in mirroring consists in the infant's ability for contingency detection (Gergely et al., 1996). Contingency detection consists in the ability to work out by trial and error whether or not a given stimulus has been caused by the infant or not (Watson, 1972). If for example a piece of string is tied to an infant's leg such that a stimulus for example light or sound is elicited when the infant kicks, the child will be able to work out which leg to kick in order to produce the stimulus. He or she can also work out that the stimulus is only elicited on every second kick, in other words the infant can recognize imperfect contingency responses (Watson, 1979; Watson, 1994)

By means of contingency detection and biofeedback the infant is potentially able to coordinate signals or data about internal bodily state with external perceptions or signals (Gergely & Watson, 1996). This allows the infant to develop a sense of control or predictability with respect to the environment, to distinguish between self and object representations (Beebe & Lachmann, 1988) and to elaborate self representations or in Winnicott's terms find him or herself.

Mirroring, attentional bias and a sense of security

According to the "flickering switch" hypothesis (Koos et al., 2001), disturbances in early interaction may affect the infant's confidence and expectations regarding a sense of control of the social environment and therefore of a sense of security. The "flickering switch" hypothesis postulates that infants up until the age of about three months have an innate attentional bias to perfectly contingent responses, they prefer looking at their own movements in the mirror as these are perfectly contingent. After this age their attentional bias shifts to a preference for high but imperfect contingent responses, they prefer looking at movements in the mirror, which have a time lag in comparison to their own movements. Koos and Gergely suggest that this presents the infant with an opportunity of being able, for the first three months to direct attention primarily to the build up of bodily representations for thereafter to devote attention to an environment in which responses are highly but imperfectly contingent. In such an environment the infant experiences a certain degree of predictability and control over the environment.

A deviant contingency environment would consist in the caretaker's inability to provide high but imperfect levels of mirroring, resulting in the infants failure to build up a series of expectations regarding some degree of control over the social environment. Deviant contingency environments are hypothesized to "reset" the

contingency switch such that faced with a loss of control over the social environment, the infant will reactivate earlier reliance on perfect contingency and attention will be redirected to self-related, perfect contingency. With repeated experiences of loss of control, the attentional system will become dysfunctional, flickering between self and other orientation.

Mirroring, affect regulation and a sense of self-esteem

Affects can be understood as internal states with physiological, behavioural and psychological correlates. Darwin pointed to an important behavioural, external correlation of affect, facial expression (Darwin 1872) and described universal features of facial expression in both humans and animals, arguing that this was a reflection of innate or universal emotional states. Contingency detection plays a role in the regulation of affect states in that a child who is content and relaxed, will emit certain signals such as gurgling or kicking his legs, a mother who is able to attune to her infant's signals will react by smiling back and possibly include other modalities such as talking or touching the infant in a way that complements and reinforces the positive affective state. As a result of contingency detection, the infant will spontaneously monitor his or her own body state to find out what it was that resulted in such welcome attention. The same principle holds true of negative affect states. For example, an infant in a state of anxiety will signal this anxiety vocally and behaviourally. The mother understands the signals of her infant as indicating anxiety and mirrors this understanding back to the infant whose affect state resonates with the communicative signals by the mother and so gradually becomes aware of his own affect state.

It is obviously of the utmost importance that the infant learns to associate internal signals with appropriate external signals. There is always a danger that the infant will connect the mother's own signals with the infant's own internal state. Normally mothers will automatically help their children to discern which facial expressions mirror the child's internal state and which expressions belong to the mother. Mothers accomplish this according to Gergely by maximisation; they tend to exaggerate facial expression when in the mirroring mode. This is also seen in language use, people tend speak differently when interacting with infants, a communication form dubbed "motherese".

Another mechanism whereby mothers help their infants to distinguish what belongs to them and what doesn't is by a certain amount of discrepant mirroring. Fonagy et al. who examined the way in which mothers' soothed their infants following an injection found that the mothers who were most successful at soothing their infants were those who mirrored the affect state of the infant, anxiety, but who at the same time mixed this affect state with others such as mock displays or redirecting the infants attention to something else

Implications

The importance of Winnicott's statement, "when I look I am seen so I exist" is confirmed by attachment theory and infant research. The internal state of the infant must be recognised by the mother and reflected in her communication back to the infant in order for the infant to be able to coordinate internal state with external perception. The coordination of internal state with external perception forms the basis of the subject being able to feeling real or feel that they exist and forms the basis for the ability to regulate attentional bias and affect. Adequate regulation of attentional bias and affect sets the stage for the construction of a sense of security and self-esteem.

Winnicott's definition of "I exist" as consisting in the joyful and interested exploration of the self fits in with the expectations of attachment theory. Joyful and interested exploration can only take place if the subject has a sense of security and a certain amount of self-esteem.

The mirror interview is particularly well suited to exploration of the extent to which internal state is coordinated and integrated with external perception as it confronts the subject directly with self as felt and self as seen. The coordination of internal state with external perception should manifest itself in the subject feeling not only that they exist but also in a feeling of authenticity, that they feel real. It should also result in the clear distinction of me and not me, in self-representations being separate from object-representations. Furthermore the subject should be capable of engaging in joyful and interested exploration of themselves including recognition of limitations. There should be signs of the ability to focus attention in answering questions and in an adequate regulation of affect

It is predicted that mirror behaviour in normal adolescents should differ when compared to mirror behaviour in adolescents with severe psychopathology with respect to the following parameters:

The mirror interview

The mirror interview consists in asking the subjects to stand looking at themselves in front of a full-length mirror whilst they are asked questions designed to elicit information about their attitudes and understanding of themselves. The interviewer stands so as not to be seen either directly or by reflection in the mirror. The procedure is videotaped and takes about 20 minutes.

The mirror interview is analysed both verbally and non-verbally, in the following two cases this is done on a qualitative basis. Verbal analysis is carried out on the content of what is said and an example is presented here as excerpts of the mirror interview for both participants, the excerpts being from the same parts of the interview. Non-verbal analysis is divided into four main categories; quality of voice, movement, eye contact and affect. After the interview excerpts a short description of the non-verbal aspects of the interview will be described.

Clinical Material

Case 1. The subject is a 14-year old girl in the control group. She is dressed in dark jeans and a long sleeved shirt with narrow pink and white stripes.

1. Interviewer: Do you like looking at yourself in the mirror?

Subject: Yes, I do

I: Can you tell me a bit more?

S: Umm, I've got some really great clothes and really nice hair. I don't know really, It's like, I'm pretty satisfied with myself, so..

2. I: What do you like about the way you look?

S: Umm, I really like my eyes and my clothes.

I: Is there anything else about your face that you like?

S: (laughs) Well, I've got really red cheeks, I don't know, sometimes it's nice other times it can be a bit irritating, so, umm.

I: And what do you like about your body?

S: Well, I think I have very nice shins (laughs), that sounds a bit odd! But, umm, I've got very nice hands and feet.

3. I: You have already touched on the next question, which is what do you like about what you are wearing?

S: Umm, well, I really like my shoes and my trousers, the clothes I've got on are new, except for my shoes, but I am really happy about my trousers, my clothes are bit special, not something that everybody has, I like that.

4. I: What don't you like about the way you look?

S: Yeah, umm, my vampire teeth (laughs), no, my pointy teeth, I'm not too happy about them, but they will disappear bit by bit, at least that's what my dentist says, and umm, I think I could do with losing a bit of weight, just a few kilos, umm, umm, and my nose, I think it looks like a ski hop, mostly just from the side, but umm, they are just umm, small things.

I: Just small things?

S: Yeah, not anything important, not that important.

5. I: Is there anything about the way you look that reminds you of your mother?

S: Yeah, my clothes style, my, umm, I look a lot like my mother....

6. I: Do you feel that others find you attractive?

S: Yeah, I think, I think that most people do, I don't know anybody who doesn't like me. I think, that people think I look good, but I don't think I'm like a super model, but I think that a lot of people like me because I'm usually in a good mood, happy, and I say what I think, I think that's good.

7. I: Do you feel that the image in the mirror reflects who you are?

S: Yeah, yeah, I do, it's not like it's another person, my clothes reflect that I'm relaxed but have got some style, yeah, in some ways it does, it reflects some aspects, probably not all aspects, not my irritable side, but yeah, yeah, I think it's a good thing

that you sort of have to get to know a person before you know what that person is really like.

8. I: Do you feel that the image in the mirror doesn't have anything to do with you?

S: Er, No! That's the way I look!

Non-verbal aspects:

The subject speaks in a clear robust voice that is easily audible and readily understandable, there is no tendency to mumble and prosody of speech is normal. She stands in a relaxed position, oriented frontally to the mirror without turning round to look at the interviewer. Her movements are harmonious and natural with no tendency either to fidgety restless movements or to fixed rigid positions. She has good eye contact in that the interview is characterised by gaze focused on her face and eyes but not transfixed or staring. She explores her mirror image when invited to do so and breaks off eye contact whilst considering answers to questions. When she has broken off eye contact, she re-establishes it directly without a wandering gaze pattern. Her affect is characterised by being positive, she looks happy and cheerful, she smiles warmly to herself in the mirror and her comments are delivered without any trace of smugness or arrogance. Her affects fit with the content of what she is saying, they are varied, well modulated and readily understandable.

Discussion of Case 1

Question 1 invites subjects to volunteer information on whether they like looking at themselves. This subject spontaneously comments on the extent to which she feels her mirror image is acceptable to her "I'm pretty satisfied with myself". In questions 2 and 3 she is probed, to see what assumptions her self-image rests on. She is able to explain what she likes about her appearance in a way that seems authentic. This impression is confirmed when non-verbal parameters are compared to verbal ones; she looks at herself, stands naturally and smiles warmly whilst explaining what she likes. In question 4 her ability to tolerate negative aspects of her appearance is tested. Here she demonstrates the ability to explore negative aspects of her self whilst maintaining both focus and self-esteem, she explores them freely but they do not dominate her attention.

In question 6 she is invited to explore how acceptable she feels in the eyes of others. She feels highly acceptable in the eyes of others with perhaps some degree of over-confidence or immaturity; "I don't know anyone who doesn't like me". She has a number of reasons as to why others like her, showing that it is something she has thought about. She feels that others are attracted by her appearance but she seems to prioritise both her dominant mood, which is happy and her authenticity; "I say what I think, I think that's good." In question 5 the organisation of object representations is tested. The question is not designed to test whether the subject feels they look

like their parents or not but more to see whether there is a readiness to explore the possibility and make a reasonably realistic assessment.

The response to these first six questions gives the impression of a subject with a high level of security. This is inferred partly from the absence of fearful, tense or anxious affect and partly from the freedom to explore aspects of self and other. This high level of security goes hand in hand with the impression of high levels of self-esteem, which is assessed by the presence of positive affect and again both the freedom and the positive motivation to explore aspects of herself and others.

The last two questions are somewhat different; here the subject is invited to explore who they are, to what extent they feel this can be reflected or seen and whether they feel their mirror image has anything to do with them.

Question 7 “Do you feel that the image in the mirror reflects who you are?” could be re-stated in Winnicott’s terminology “Do you feel that you can be seen?” or in attachment terms “Is the most important part of you made up non physical (intentional) elements?” In case 1, the subject shows that she is aware that she has abstract features of her personality that can be more or less apparent, “... it reflects some aspects, probably not all aspects, not my irritable side”. This entails recognition of the fact that there is “something” and that the “something” still exists even if it cannot be seen, in other words a certain “object constancy” towards intentions, thoughts or feelings. This subject is therefore able to understand herself as an intentional being. She also illustrates a lively interest and pleasure in finding out about other intentional beings; “I think it’s a good thing that you sort of have to get to know a person before you know what that person is really like.”

In question 8 the subject is asked whether she feels that the image in the mirror doesn’t have anything to do with her. The question tests whether the subject is able to coordinate an image of herself as she feels it with an image of herself as she sees it. Most subjects take a little time to work out that the “correct” answer is “no”. The way in which this subject reacts is typical of the control group; there is surprise and disbelief at such a seemingly obvious and rather ridiculous question.

Case 2. The subject is a 15-year old patient with a preliminary diagnosis of severe personality disorder. She is slim, blonde, and attractive. She is wearing heavy eye make up and is dressed in black trousers, platform shoes and a beige top.

1. I: Do you like looking at yourself in the mirror?

S: No.....not particularly.

I: Can you tell me why?

S: I’m not satisfied with myself.

2. I: Is there anything you do like about the way you look?

S: No

I: Anything about your face?

S: No, my head is too big, ugly, too many spots. (difficult to hear)

I: You think your head is too big?

S: Yeah, and my eyes turn down (points).

I: Is there anything you do like?

S: There's my teeth, that's the only thing, but they are too big.

I: Is there anything you like about your body?

S: No

I: Nothing at all?

S: I don't know, I think I've got ugly legs, I've got an ugly stomach, ugly arms, on the whole I'm very ugly (Smiles intermittently whilst answering).

3. I: What do you like about what you are wearing?

S: Mmmm, it's not as colourful as what others might put on.

I: And what is it that you like about that?

S: Well, I'm not the sort of person that likes being in the middle, in the centre all the time.

I: What about make up?

S: I never show myself without make up.

I: Why not?

S: I'm too ugly. I'm ugly anyway, but even uglier without make up.

4. I: You have touched on this before, but what don't you like about the way you look?

S: I think I'm fat, too fat and then my legs are too short, arms too fat.....that's that and then I've got too many spots.

5. I: Is there anything about the way you look that reminds you of your mother?

S: Yes, her ugly eyes ...and..... my father's ugly nose and yes..... that's that... ..I think.

6. I: Do feel that others find you attractive?

S: No.

I: Can you say a bit more about why you feel that others don't find you attractive?

S: Well, they always take the others that have colourful clothes and are different than me. But it doesn't matter.....it doesn't matter.....(sad, almost desperate facial expression)

I: Do you have any idea of why that happens?

S: Because I don't look nice.

7. I: Do you feel that the image in the mirror reflects who you are?

S: No.

I: Can you say a bit more about that?

S: I don't know, I can't really explain... because my thoughts are like nothing.

I: Your thoughts are like nothing?

S: Mmm.

I: How do you mean?

S: I don't know..... I can't explain..... I don't understand myself (irritable).

I: I would like to try to see if I can understand...

S: My thoughts are nothing.....it's like saying that I shouldn't be anything.... and like that....

8. I: Do you feel that the image in the mirror doesn't have anything to do with you?

S: No

I: You feel the image in the mirror has something to do with you?

S: NO! (in an irritated voice)

I: Okay, you feel the image in the mirror doesn't have anything to do with you. Can you tell me a bit more about what you mean?

S: I mean that I can't recognize that person. My thoughts have another (points to her head) my thoughts think differently about myself

I: What do your thoughts think about yourself?

S: I don't know, it's like it isn't right, when I see myself in the mirror it's not right.

Non- verbal aspects:

The subject speaks in a very low voice, mumbles and speaks indistinctly making it difficult to catch what she says. Her prosody of speech is short and clipped. She stands in a rigid position initially oriented frontally to the mirror but turns her head away during most of the interview and frequently looks over her shoulder at the interviewer. There are no restless movements. She appears frozen. She has very little direct eye contact spending most of the interview staring at the floor. There is some tendency for her gaze to wander but this is not characteristic. When she does establish eye contact it is staring and transfixed. There are no signs of positive affect; she smiles occasionally but this not congruent with what is being said, giving her smiles a somewhat bizarre quality. She appears very sad, in fact painfully so and conveys an impression of tense anxiety. Her affects are disjointed and unpredictable.

Discussion of case 2.

In questions 1, 2, 3 and 6, all of which deal with how acceptable the subject feels both with respect to herself and others, this subject feels herself to be highly unacceptable with a very low level of self-esteem. Her verbal account is strikingly negative and reinforced by her major affects, which are also negative. The only signs of positive affect are uncoordinated and un-integrated smiles, which appear totally out of place. The subject has little pleasurable motivation in exploring either herself or her attachment figures. Her lack of self-esteem is paralleled by her lack of a sense of security, which is inferred from her tense, anxious and fearful affects. Nonverbal parameters are important in this assessment. She holds her body stiffly as if not daring to move and avoids looking at herself. She has difficulty in turning her attention to positive aspects of herself and is seemingly absorbed in negative aspects.

Object representations are at least partially confused with self-representations as witnessed by the switching of pronouns in the response "her ugly eyes" which should have been "my ugly eyes" in the answer to question 5.

As an answer to question 7 the subject states that her thoughts are like nothing. She equates the abstract with the concrete in concluding that because her thoughts are

like nothing, she should be nothing. She doesn't feel that her thoughts have substance; her intentions, beliefs and desires are nothing, they do not exist and therefore the mirror cannot reflect them, she cannot be seen. She does seem to have a rudimentary idea of the importance of intentions and thoughts in that she is deeply disturbed by the fact that her thoughts are like nothing. In doing so she indirectly expresses how important the sense of abstract qualities such as intentions and desires actually are to the normal sense of self; "If I don't have thoughts (or intentions), I am nothing."

In question 8, the subject answers "no" in response to the question "do you feel that the image in the mirror doesn't have anything to do with you", when logic dictates that the correct answer for her was "yes". There is however no doubt about the fact that she does indeed feel that the mirror image doesn't have anything to do with her. Her striking statement "I can't recognise that person" goes straight to the heart of the mirroring function of attachment; she cannot correlate what she sees with how she feels. Her internal state or perceptions are not coordinated with her external perception of herself, when she looks in the mirror it doesn't feel right. In view of the fact that she sees her intentions as being irrelevant it is perhaps little wonder that she doesn't recognise herself. Her lack of recognition of her image in the mirror seems to be connected to feelings of not being real or not really existing as predicted by Winnicott. This can be seen in her explanation "my thoughts are nothing.....it's like saying I should be nothing"

Conclusion

A pedestrian summary of Winnicott's poetic description of the mirror-role can be stated thus; In order to feel real and be creative, the infant must have experienced being seen and understood by another, the real self cannot be experienced unless it has been recognised by another. Benjamin makes the point that a full recognition of the self entails the realisation of limitations and that there exists a constant tension between asserting the self and recognising dependency on the other.

Creativity as understood by Winnicott includes the capacity for joyful and interested exploration of the self. Joyful and interested exploration of the self can be seen as related to attachment concepts of security and self-esteem and the underlying capacity for regulation of attention and affect. It is concluded from the clinical material that there are large differences in the way in which attention and affect are regulated and that this profoundly influences the joy and interest with which the self is explored. This has major consequences for the recognition of self and for the sense of feeling real.

Perhaps the most novel aspect of the mirror interview is the opportunity it presents for the assessment of the negotiation of the me-not me paradox. Mirror behaviour doesn't look so much at the relationship of the subject to an object as at the subject's own relationship to him or herself. The subjects in this case study reveal whether or not they can coordinate and integrate their feelings of self as seen

with their external perception of themselves. Subject 1 can coordinate these two perspectives showing that she appreciates differences in the physical and abstract sense of self and understands herself as an intentional being. Subject 2 isn't convinced of the existence of abstract aspects of the self, her thoughts seem as nothing and this leads to puzzlement about her physical existence, it doesn't feel right. When she looks she isn't seen and doesn't feel that she exists. The baby, in Winnicott's terms has not been given back to the baby.

The use of attachment theory brings the thorny problem of external reality full centre stage, in that Bowlby insisted that the development of the representational system is influenced by the environment and therefore real life events, rather than being solely a product of fantasy. Fonagy argues that attachment is important because attachment related experience ("reality") shapes the development of the mechanism whereby real life events are experienced, evaluated and incorporated in fantasy (Fonagy, 2001). Kirschner adopts a similar position in the consideration of historical and psychic reality arguing that the two realities cannot be separated; the child's historic reality constituted by the behaviour of the mother, is a product of the mother's psychic reality (Kirschner, 1993).

Thus although fantasy cannot be considered as a reflection of reality, it is not entirely independent of it. Infant research has demonstrated the importance of attunement or mutuality in the mother-infant relationship, which can be considered as intersubjective reality. The behavioural and affective correlates of a mother and infant engaged in sharing feelings are observable phenomena, (Stern, 1985; Beebe et al., 1988) as is the lack of attunement or shared feeling between mother and infant. What is obviously not directly observable are the fantasies to which these experiences give rise.

The relationship of fantasy to reality has certain features in common with the "me - not me" paradox. In discussing the development of the recognition of "me" or the self, Benjamin points out that the experience of mutuality forms the basis for the recognition and assertion of the self but also leads to the realisation of the limitations of the otherwise omnipotent self as a dependent self (Benjamin, 1995). The recognition of the self through mutuality demands the simultaneous recognition of the other not only as "not me" but also as an independent centre of subjectivity.

In other words the infant needs the mother to share feelings and function as a mirror in order to recognize him or herself as an independent, intrapsychic being but will only succeed in this endeavour if he or she also recognizes the mother intersubjectively, as not only a mirror.

The mirror can be said to represent a "potential space", the image in the mirror is both me and not me, it is neither just fantasy nor fully real. The mirror thus represents the mother not as an object but as an inherently paradoxical relationship. The negotiation of the me-not me paradox is crucial to the outcome of the developmental process affecting not only relationships with others but also the quality of the relationship with the self. Mirror behaviour could be expected to reflect aspects of the way in which this paradox has been negotiated earlier by throwing some light on this "intra-subjective" relationship.

Infant research on the mirroring process in development can be said to support Winnicott's insights by illustrating how the infant uses contingency detection to coordinate interoceptive and exteroceptive data in an emergent process that enhances the infant's understanding of him or herself and facilitates the discovery of other minds.

On a qualitative level the mirror can be said to function as a symbol of the mother in that it is plausible that derivatives of factors that are important in the mirroring function of the mother are recognisable in the mirror behaviour of adolescents. Specifically, it is postulated that the mechanisms involved in the regulation of attention and affect in infancy can be traced in derivative form during the MIA by the assessment of a sense of security, self-esteem, reflective function and the extent to which the subject "feels real". The mirror can also be understood as a symbol of the mother in that the way in which a given individual negotiates the me - not me paradox is an indication of the way in which reality is experienced as being shared.

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Bernadette Buhl-Nielsen

DA LI BEBI BIVA VRAĆENO? UVIDI NA OSNOVU INTERVJUA ISPRED OGLEDALA

Apstrakt

Upotreba ogledala kao metafore ima široku privlačnost u psihoanalitičkoj literaturi. Winnicott opisuje majku kao ogledalo za svoje dete. P. Kernberg je pretpostavila da ogledalo može takođe funkcionisati kao simbol majke. Intervju je dizajniran da se sprovede ispred ogledala. Ovaj rad opisuje rezultate intervjuja kao studiju slučaja dva adolescenta. Obim u kome ogledalo funkcionise kao simbol majke razmatra se u odnosu na ključne funkcije afektivnog vezivanja: sigurnosti, samopoštovanja i refleksivne funkcije.

Ključne reči: Poremećaj ličnosti, Afektivna vezanost, Adolescenti, Ogledalo, Slika tela

**EXAMINING CHILD FOSTER CARE FROM
A DEVELOPMENTAL PERSPECTIVE: A CASE STUDY
FROM CROATIA
(plenary lecture)**

Abstract

According to the United Nations Convention on the Rights of the Child, State Parties should ensure alternative care for children who are unable to live with their biological parents. Foster care is one of the leading alternative care systems. It provides children unable to live with their biological parents a family context, rather than rearing in institutions. This paper analyzes the child foster care system in Croatia from the perspective of developmental science, in order to identify areas for improvement. It reviews international research findings on foster care, in order to identify possible mechanisms of change. It is argued that foster care staff and policymakers should be continuously trained and informed regarding the latest research in developmental science, in order to enhance children's developmental outcomes. It is also pointed out that child foster care effects should be systematically evaluated, allowing this intervention to become evidence-based.

Keywords: foster care, children, theories of child development, scientifically based psychosocial interventions

Introduction

Although family types today are much more diverse than they were ever before in the history of humankind (Howe, 2011), a vast majority of children still live with one or both of their biological parents. However, there is a small percentage of highly vulnerable children who are deprived of biological parents or in whose own best interests is not to live in their biological family. Prior to removal from the biological family, these children experienced multiple stressors and were severely traumatized (Ajduković et al., 2005b). Most frequently, they were neglected and abused, witnessed family violence, and lived in extreme poverty; some have parents with serious mental or physical illness, or substance abuse problems, and others experienced death of a parent (Ajduković et al., 2005b; Brajša-Žganec & Raboteg-Šarić, 2011). The transition

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from biological to foster family is a highly traumatic experience itself (Žižak et al., 2012).

According to the United Nations Convention on the Rights of the Child, irrespective of the reasons for growing up deprived of biological parents, State Parties should ensure alternative care for these children (The United Nations, 1989, Article 20). Foster care is one of the leading alternative care systems. It provides care and protection for children who are temporarily or permanently deprived of their biological parents within a context of another, kinship or non-kinship, family. Child foster care has probably been provided since the very beginning of humankind, but modern child fostering policy and practice began to develop most intensively after the World War II, when many children were left without their biological parents (Laklija, 2011). Improved scientific knowledge on child development, along with political movements aimed at protecting children's rights, have jointly contributed to development of modern child foster care.

The aim of this paper is to analyze child foster care from the perspective of theories of child development in order to demonstrate their utility in building high-quality, scientifically based foster care system. It also reviews empirical evidence showing that high-quality child foster care, based on implementation of developmental science, is an effective psychosocial intervention that has a protective role in the development of children growing up deprived of biological parents. Data on the development and improvement of the Croatian child foster care system over the past twenty years are analyzed, too. It is argued that an improved understanding of the scientific basis of child foster care may contribute to further refinement and enhancement of this important psychosocial intervention. It is also pointed out that foster care effects should be systematically evaluated, allowing this intervention to become evidence-based. Empirical review, as well as Croatian experiences, are presented illustratively, not exhaustively.

Developmentally-Informed Child Foster Care

Each scientific theory of child development enhances our understanding of specificities and challenges of child development in the context of foster care and can contribute to conceptualization of high-quality, scientifically based child foster care system. However, providers of child foster care, foster parents as well as social welfare professionals, are not always aware of the theoretical background of the intervention that they implement. Therefore, providing training on practices stemming from these theories of child development could improve the quality of child foster care and enhance its positive effects on foster children's well-being and development. Theories that have the most direct implications for child foster care policy and practice are Bronfenbrenner's ecological systems theory (or bioecological theory), Bowlby's attachment theory, theories on parent-child relationship, Erikson's theory of psychosocial development, and Bandura's social-cognitive learning theory. In this section, assumptions from these theories that are relevant for foster care policy and

practice are briefly reviewed and compared with the empirical findings from research conducted in Croatia, in order to identify areas of child foster care practice that can be improved by more firm alignment with child development theories.

In *Bronfenbrenner's ecological systems or bioecological theory* (e.g., Bronfenbrenner, 1986; Bronfenbrenner & Evans, 2000), human development is viewed as an interaction of the individual and the multilevel context in which he or she is embedded. There are five nested levels or systems comprising the context of development (or environmental surroundings), which all have significant impact on an individual's behavior and development. The first system, the microsystem, includes a person's immediate environment (family, school) and his or her direct interactions with other individuals in these environments. The second level, the mesosystem, consists of interactions between microsystems (e.g., the relationship between child's friends and parents). The third level, the exosystem, is comprised of indirect influences on development, mediated through microsystems (e.g., the influence of a parent's workplace on a child). The fourth system, the macrosystem, encompasses cultural and societal values, norms, customs, laws, and resources. Finally, the fifth system, the chronosystem, refers to the time period in which an individual develops (e.g., 21st versus 20th century, or time before versus after a state has adopted a law on foster care).

When applied to the analysis of the child foster care system, bioecological theory reminds us that the fostering process is unique for each child, as both child's biological makeup and his or her environmental surroundings differ from child to child. Next, bioecological theory emphasizes that not only are both the foster and biological families two important microsystem influences on child development, but also the relationship between biological and foster families serves as an influential mesosystem for the child's development. Research in Croatia has shown that, unfortunately, interactions between biological and foster families are not always satisfying, and that foster parents do not always adequately support the foster child's relationship with their biological parents (Družić Ljubotina et al., 2005; Ivković & Žižak, 2010; Žižak et al., 2012). These findings suggest that more effort needs to be invested in enhancing foster children's contacts with their biological parents and strengthening the quality of the relationship between foster and biological family.

Bioecological theory also highlights the roles that local communities, social welfare systems, cultural attitudes, and laws (i.e., exosystem and macrosystem) play in child foster care practice. In the process of improving child foster care in Croatia during the last two decades, carried out through joint activities of developmental scientists, policymakers, and professionals from the social welfare system, significant changes at the level of macrosystem have been accomplished. An important research finding at the beginning of this process was that professionals in the social welfare system, compared to general population, had less positive attitudes toward foster care placement and more positive attitudes toward removal of the child from the biological family (Ajduković et al., 2005a). This finding suggested the need to educate professionals on the benefits of foster care for the development of children and to develop and implement programs aimed at supporting at-risk families and preventing children's removal in the first place.

The national campaign „*Every child needs a family*“, carried out by the UNICEF Office for Croatia in 2005 (Radočaj, 2008), was an important action at the macrosystem level, which contributed to more favourable perceptions among the general public regarding foster care and built a greater awareness of the child's right to live in a family context. Finally, an extremely important change at the macrosystem level in Croatia was adoption of the first Croatian Foster Care Law. The Law was adopted in 2007, and subsequently adapted in 2011 and 2012 (Official Gazette of the Republic of Croatia, Narodne novine, No. 79/2007, No. 90/2011, No. 78/2012). It is worth noting that Croatian Foster Care Law regulates not only child, but also adult foster care. However, this paper is focused on child foster care system only. In sum, this brief review shows that Bronfenbrenner's bioecological theory is very helpful in enhancing our understanding of the overall system of child foster care, from the microsystem of foster and biological families, through the mesosystem of their mutual relationships, to the exo, macro, and chrono levels.

Another influential theory of child development, *Bowlby's attachment theory* (Bowlby, 1969), has been widely used in child foster care conceptualization, research, and practice (Ajduković et al., 2007). Children who are deprived of consistent, warm, and supportive care more often have insecure attachment styles or may develop an attachment disorder (Rutter et al., 2007; Smyke et al., 2010). Due to the lack of sensitive, responsive, and consistent parenting in their biological family, they may develop cognitive schemas and beliefs that adults cannot be trusted and that they themselves are not worth others' care and protection. Relationships are seen as unpredictable, distant, cold, or even frightening. However, these internal representations of others and self (or internal working models) can be changed by sensitive, responsive, and consistent care provided by foster parents. Recent Greek longitudinal work (Vorria et al., 2015), although not conducted within the context of foster care, but adoption, has convincingly demonstrated that internal working models of children deprived of adequate care can change. The results of this study have shown that insecure internal working models became more secure over time when children were adopted out of institutional care. Moreover, there was no difference between the previously institutionalized children and the comparison group of children raised in biological families on attachment qualities in adolescence. These and similar findings implicate that it is of crucial importance that foster parents are taught methods for developing a secure attachment and are supported in providing sensitive caregiving. In Croatia, training of foster parents, which is mandatory in order to get a licence for providing foster care, stems from attachment theory (note, however, that training of foster parents in Croatia is not standardized, but varies across social welfare centers). It is thus not surprising that Croatian foster parents report strong and secure attachment relationships with their foster children (Kletečki Radović & Kregar Orešković, 2005). However, data on Croatian children's perceptions of the quality of attachment to foster parents are lacking.

The assumptions of attachment theory also point to the importance of placing siblings in the same foster family, because siblings are important attachment figures and sources of security to each other. Sibling relationships and support are especially

important when a child's relationship with biological parents is disrupted. Research in Croatia has shown that at the onset of the process of improving child foster care, only 27% of Croatian foster children who had siblings were placed in the same family with their siblings (Družić Ljubotina et al., 2005). An important lesson from the attachment theory is also that child foster care placement should be stable, because frequent changes of foster families undermine the process of forming attachment relationship between foster child and foster parents (Ajduković et al., 2007; Blakey et al., 2012; Leathers, 2006). Secure attachment to foster parents is one of the crucial mechanisms through which foster care may exert its positive effects (McLaughlin et al., 2012).

Parent-child relationship theories other than attachment theory (e.g., Barber, 1996; Barber et al., 2005; Baumrind, 1971; Maccoby & Martin, 1983) are also highly relevant for building scientifically based foster care practices. In Croatia, training of foster parents and social welfare professionals, as well as monitoring foster care quality, focuses greatly on childrearing practices that enhance children's development (see, for instance, manuals and guidebooks for education of professionals and foster parents by Brajša-Žganec et al., 2005; Keresteš & Brajša-Žganec, 2009; and Žic-Grgat, 2006, published as a result of the project *Training of Experts, Professionals, and Foster Parents in the Area of Foster Care in Croatia*, carried out by Centre for Social Policy Initiatives, Zagreb, in cooperation with the Croatian Ministry of Health and Social Welfare, the University of Zagreb, the University of Göteborg, Sweden, and Swedish governmental and non-governmental organisations). Numerous empirical studies have shown that authoritative parenting, characterized by parental emotional warmth and support, clear limit setting and behavioral control, and psychological autonomy granting, best supports the child's development (e.g., Barber et al., 2005). However, despite much time devoted to enhancing adequate parenting skills during foster parent training, some foster children in Croatia still report lack of support, guidance, and monitoring by foster parents (Žižak et al., 2012). Therefore, even more effort should be invested in ensuring adequate childrearing practices by foster parents. Parenting attitudes, beliefs, and skills should be taken more closely into consideration not only in foster parent training and monitoring, but also in the process of selecting foster parents.

It is well known that the child's characteristics actively contribute to the quality of the parent-child relationship (e.g., Belsky, 1984). When applied to the context of child foster care, this knowledge, among other things, highlights the importance of providing information about the foster child to foster parents prior to child's placement. Although this requirement may seem trivial and self-evident, empirical evidence shows that, in Croatia, as much as one third of foster parents did not get information about their foster child prior to his or her placement (Ivković & Žižak, 2010). Such a practice makes the establishment of the relationship between the foster child and foster family members extremely difficult and may partly explain the abovementioned finding that, according to foster children's reports, foster parents do not always provide adequate guidance, support and monitoring (Žižak et al., 2012).

Recent empirical work in the field of parent-child relationships stresses the role of children's characteristics, including temperament, cognitive abilities, and physical

and mental health, not only as factors contributing to the quality of the parent-child relationship, but also as important moderators of the impact of parenting behavior on child development. There is increasing empirical evidence that the effects of any parenting behavior vary depending on the child's characteristics. For example, a meta-analysis by Slagt et al. (2016) synthesized the results of research with temperament as a potential moderator of the effects of parenting. The results of the meta-analysis showed that children who differ in temperament differ also in sensitivity to parenting behavior. More specifically, children with a more difficult temperament, in comparison with children with a more easy temperament, were found to be more vulnerable to negative parenting, but also more likely to profit from positive parenting. It is very important that these research results, which are in sharp contrast with „one size fits all“ parenting recommendations often promoted in popular media, are conveyed to foster parents and professionals working in child foster care system, in order to help them to better understand and form realistic expectations related to parenting behavior, its effects, and the role of child's characteristics in moderating the effects of parenting.

Erikson's theory of psychosocial development, especially the notion of identity development (Erikson, 1968; Meeus, 2011), is also highly influential in informing foster care policy and practice. Generally, identity formation is a more challenging task for children and adolescents growing up in foster families than for those growing up in biological families (Kools, 1997). However, sensitive and supportive foster parents may help foster children to achieve a positive sense of identity and become productive members of the society in spite of their unfavourable experiences with biological parents. Moreover, foster parents can help foster children to integrate their stressful and traumatic experiences into a healthy, positive identity. Thus, knowledge on identity formation should also be transmitted to foster care professionals and parents, and they should be taught how to support healthy identity development.

Finally, important lessons for conceptualizing and organizing child foster care come from *Bandura's social-cognitive learning theory* (Bandura, 1977; 1999). This theory teaches us that foster parents are important role models for foster children. Through the process of observational learning or modeling, children in foster families acquire, among other things, healthy routines and family life styles. Research on experiences and perceptions of Croatian foster children has shown that they highly value a structured life provided by foster parents (Žižak et al., 2012). Modeling also partly explains why some foster adolescents express the wish to become foster parents when they grow up (Žižak et al., 2012).

Empirical Evidence on the Effectiveness of Child Foster Care

Because institutional placement is the main alternative to foster care for children growing up without biological parents (Ajduković, 2004), the effectiveness of child foster care has been most frequently examined by comparing developmental outcomes of children growing up in foster care families and institutions. Although in the past

child institutions were considered an indicator of governmental care and protection of children (Nelson et al., 2007), empirical research has unequivocally shown that institutions are not an optimal context for child development. Indeed, growing up in institutions, especially during infancy and toddlerhood, has been found to have many negative immediate and long-term consequences on various aspects of child behavior and development (Ajduković & Sladović Franz, 2004; Almas et al., 2015; Chugani et al., 2001; Kregar, 2004; Marshal et al., 2004; Miljević-Riđički & Pavin Ivanec, 2009; Nelson et al., 2007; Radočaj, 2005; Rutter et al., 2007; Smyke et al., 2007; Zeanah et al., 2005). Therefore, modern societies have initiated a process of deinstitutionalization of public care for children, resulting in a continuous decrease of the number of children placed in institutions and a parallel increase in number of children placed in foster care (Ajduković, 2004; Brajša-Žganec & Raboteg-Šarić, 2011; Laklija, 2011). It is intended that at least 80% of children in public care are placed in foster care families, and maximally 20% in institutions (Jelavić & Žic-Grgat, 2005). Croatia has not reached that goal yet, and few years ago the ratio of children in institutions and in foster care families was approximately 40:60% (Bartoluci, 2014). Among the most important reasons for too many children still growing up in institutions is an insufficient capacity of the foster care system and underdevelopment of specialized foster care (also called therapeutic or treatment foster care). It is important to note that most children growing up outside of their biological families prefer placement in foster families over placement in an institution (Žižak et al., 2012).

Generally, there is a lack of systematic research examining the effects of foster care and its impact on the development of children. Due to ethical reasons, many studies are descriptive and correlational, disallowing causal inferencing. To date, the most methodologically sound research has been carried out within the Bucharest Early Intervention Project (BEIP), initiated in 2001, which employed a randomized control trial design. In the BEIP, Romanian children living in institutions were randomly assigned to placement in foster family or continued institutional care. A third group of never institutionalized children, that is, children living with their biological parents, was also included. Although the BEIP has been criticized on ethical grounds (e.g., Miller, 2009), its results, published in numerous high quality journals, have unambiguously shown that high-quality, scientifically based foster care has positive impacts on virtually all aspects of child development – brain functioning (Bick et al., 2015; Stamoulis et al., 2015), language skills (Windsor et al., 2011), attentional skills (Ghera et al., 2009; Troller-Renfree et al., 2015), cognitive abilities (Fox et al., 2011; Nelson et al., 2007), attachment relationships (McLaughlin et al., 2012; Smyke et al., 2010; Zeanah et al., 2005), social behavior (Almas et al., 2015), emotional functioning (Ghera et al., 2009), and the prevention of psychopathology (McLaughlin et al., 2012).

The BEIP results have also convincingly shown that foster care, in order to be effective, has to be of high quality. In a recent study, Tibu and colleagues (2014) compared internalizing, externalizing, and attention deficit hyperactivity problems of children living in high-quality scientifically-based foster care developed

within the BEIP versus children living in low-quality foster care sponsored by the Romanian government. The results revealed that children in high-quality foster care demonstrated fewer attention and hyperactivity problems than children in low-quality foster care, and this held equally for boys and girls. In addition, girls in a high-quality foster care had fewer internalizing problems than girls in government-sponsored low-quality foster care, although boys in low- and high-quality foster care did not differ in internalizing problems. Also, neither boys nor girls in high-versus low-quality foster care differed in externalizing problems. In conclusion, this study provided clear empirical evidence that a foster care system based on scientific evidence is more effective than a foster care system lacking a scientific basis. Other data also indicates that low quality foster care may be harmful rather than beneficial to foster children's well-being and development, and there is evidence that some foster children were neglected and abused by foster parents (e.g., Žižak et al., 2012).

Mechanisms through which Foster Care Impacts Development

Although, overall, existing research evidence indicates that high-quality, scientifically based foster care is effective and could have a protective role in the development of highly vulnerable children growing up deprived of their biological families, not much is known about the mechanisms through which foster care exerts its effects. Research on factors that moderate and those that mediate the effects of foster care on children's development has only begun. Heretofore, the quality of attachment to foster parents (McLaughlin et al., 2012) and positive attentional biases (Troller-Renfree et al., 2015) have been identified as important mediators of the positive effects of foster care; that is, it appears that foster care exerts its effects through affective and cognitive processes which may alter children's beliefs, behavior, and development. More specifically, growing up in foster families with sensitive and supportive foster parents enables foster children to develop secure attachment relationships and positive internal working models about others and themselves, and secure attachments and positive working models then positively influence a number of developmental outcomes in cognitive, affective, behavioral, and social domains (McLaughlin et al., 2012). Similarly, sensitive and supportive caregiving provided by foster parents promotes development of positive rather than negative attentional biases. A child with a positive attentional bias will pay more attention to positive rather than negative or threatening aspects of the environment and will be more likely to select and process positive rather than negative stimuli. Positive attentional biases then contribute to positive child outcomes such as more social engagement, more prosocial behavior, fewer externalizing disorders, and less emotionally withdrawn behavior (Troller-Renfree et al., 2015).

With regard to factors that may alter the effectiveness of child foster care, Garcia-Martin and colleagues have recently (2015) reported that children's behavior and attention problems are significant moderators of the effects of foster care and are factors that contribute to placement instability. For children with severe behavioral and emotional problems, specialized or therapeutic foster care may be more suitable

than traditional foster care (McMillen et al., 2015). Some effects of foster care also seem to be dependent on the child's gender (Tibu et al., 2014). Future studies should pay more attention to other potential moderators, as well as mediators of the foster care effects on child and adolescent development. The concept of differential susceptibility to environmental influences (e.g., Rioux et al., 2016), wherein some individuals have enhanced susceptibility to the effects of both negative and positive environments on their behavior and development (that is, they suffer most from negative environments, but also benefit most from positive ones), might be useful in theoretically guiding this area of future studies.

Conclusions and Recommendations

This paper analyzes child foster care from the perspective of developmental science. Propositions of child development theories relevant for foster care policy and practice are reviewed and illustrated by empirical findings, mostly from Croatia, in order to identify aspects of the foster care system which could be enhanced by being more strongly based on theoretical assumptions. Empirical evidence on the effectiveness of foster care is also presented, as well as recent research examining mechanisms through which foster care may exert its effects. Taken together, theories and research in developmental science clearly suggest that child foster care is an effective psychosocial intervention which may protect and promote the development of highly vulnerable children living without biological parents. However, it is also clear that, in order to be effective, child foster care has to be of high quality, that is, scientifically based.

Although it is not easy to transfer scientific knowledge into practice, we argue that by conveying relevant theoretical assumptions and empirical findings provided by developmental science to policymakers, professionals working in the child foster care system, and foster parents, child foster care may be further improved and become more effective. An important way through which this may be accomplished is a more extensive and better conceptualized education of foster care professionals and training of foster parents. It is also of crucial importance that the effects of child foster care are systematically and continually assessed. Through such continuing evaluation, child foster care could become not only a scientifically-based, but also an evidence-based intervention (Leve et al., 2012; Spiel, 2009; Spiel & Strohmeier, 2012). In that way, theoreticians, researchers, policymakers, professionals, and foster parents would jointly contribute to well-being of children deprived of biological parents and enable them to truly exercise their rights. It should be noted, however, that parallel to enhancing the quality and effectiveness of child foster care, efforts should also be invested in prevention of removal of children from their biological families in the first place (Ajduković, 2004).

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Gordana Keresteš

HRANITELJSTVO IZ RAZVOJNE PERSPEKTIVE: ISKUSTVA IZ HRVATSKE

Apstrakt

Prema Konvenciji Ujedinjenih nacija o pravima deteta, države potpisnice treba da osiguraju alternativnu brigu o deci koja nisu u mogućnosti da žive sa svojim biološkim roditeljima. Hraniteljstvo je jedan od vodećih sistema alternativne nege. Na ovaj način je deci, koja ne mogu da žive sa biološkim roditeljima, omogućeno odrastanje u porodičnom kontekstu, umesto da odrastaju u institucijama. U radu se analizira sistem hraniteljstva dece u Hrvatskoj iz perspektive razvojne psihologije, kako bi se identifikovali oblasti za poboljšanje ovog načina brige o deci. Razmatrana su međunarodna istraživanja o hraniteljstvu, kako bi se identifikovali mogući mehanizmi promjena. Osobe koje se bave hraniteljstvom i donosiocice političkih odluka treba kontinuirano obučavati i informisati o rezultatima najnovijih istraživanja, kako bi svi zajedno radili na poboljšanju razvojnih ishoda dece. Takođe je istaknuta potreba sistematskog ocenjivanja efekata hraniteljstva kod dece, jer bi na taj način programi hraniteljstva bili još utemeljeniji na rezultatima istraživanja.

Ključne reči: hraniteljstvo, deca, teorije dečijeg razvoja, naučno utemeljene psiho-socijalne intervencije

THE PREPAREDNESS OF YOUTH LEAVING ALTERNATIVE CARE AND SELF-EFFICACY

Abstract

Youth leaving care are exposed to numerous risks. One of the factors that can contribute to reducing risks and increasing positive outcomes is evaluation of self-efficacy. The basic premise of the research is that young people who have had an experience of self-efficacy are more prepared to leave alternative care. Study included 151 young persons in alternative care (N=86, (57%) on foster care, (N = 36, (23.8%) at the residential homes, and N =27(17.9%), at the kinship, (N =76, (50.3%) of girls and N= 7%, (49.7%) of young men between the ages of 16 to 22 years. Self-efficacy scale was used (Jerusalem and Schwarzer, 1995) which estimates efficacy beliefs in professional training, practical and social skills and support networks. Results show that boys have higher scores on self-efficacy scale, $F(1,138) = 6.79, p < .01$. Young people who have a higher self-efficacy have: mastered skills needed for independent living such as purchasing household items $F(3,132) = 4.25, p < .05$ and money management, $F(3,134) = 10.080, p < .01$. social network of support and friendship $F(3,132) = 74.47, p < .05$. Young people who feel anxious regarding leaving alternative care have lower self efficacy $F(1,132) = 5.99, p < .05$, while those who have optimistic expectations for the future have higher self-efficacy score $F(4,131) = 5.71, p < .01$

Key words: self efficacy, youth in care, leaving alternative care

Introduction

Leaving care for most of the youth in care living happens at the age of 18 and seems to be an irreversible step. These youth very often do not have an option to come back into care, nor to get needed support when they are facing difficulties (Dixon & Stein, 2005).

They are deprived of the psychological space that would allow them to face the challenges of independence, unlike their peers with families. Their path to adulthood is accelerated and shortened (Stein, 2006). Most of research is mainly focused on identifying the needs of young people at the moment of leaving alternative care (Montgomery et al.2006; Stein, 2006; Majstorović 2009), and insufficient attention is dedicated to preparation process itself and the period after independence, when

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young people also need support. In a number of studies (Maunder et al., 1999) leaving alternative care is described as a process consisting of three parts: preparation, transition (transition), and emancipation. Studies have shown that young people are leaving alternative care earlier than their peers (at the age 16 - 18) who leave parental home. They are experiencing systemic “breakdown”, which refers to the termination of care and other assistance from the state (Stein, 2006). They are expected to be independent “instantly”, despite series of measures by the social welfare system that made them dependent throughout the period in care

Studies have shown that the success in the following areas is predictor of successful outcome of emancipation: successfully completed high school and obtaining a qualification, the ability to continue education and aspirations to continue, having skills of self-care and household maintenance, participation in decisions making regarding the preparation for emancipation, minimum problems in education and the absence of substance abuse (Twedle, 2005).

The transition to independence is facilitated if there are close family relationships, support networks and participation in the planning of the necessary skills. With these factors young people develop experience of self-efficacy, and they become resilient (Stein, 2004). Longitudinal study of leaving care in Israel has shown that self-efficacy is the biggest predictor of preparedness for leaving alternative care (Rafali, 2014).

These findings refer the need for analysis of the ways in which youth are preparing to leave the system of alternative care in Serbia.

Self efficacy of youth in care

One of the implications of self-efficacy concept is that people will engage more easily in the activities that they think they will be successful in, and it is less likely they will take certain actions if they did not develop belief in their own efficacy (Van der Bijl et al., 2002). Given the fact that people act according to their initial beliefs, self-efficacy acts as a “self-fulfilling prophecy” (Snyder & Lopez, 2007). Self-efficacy has an impact on people’s ability to learn, their motivation and their results (Lunenborg, 2011). The degree of difficulty, which is attributed to a task depends on the degree of self-efficacy (Van der Bijl, et al., 2002). Studies have shown that the experience of self-efficacy of students is connected with their academic achievements, professional aspirations and pro-social behavior (Milanović-Dobrota & Šestić, 2012). It is shown that the person who has a high level of experienced self-efficacy, regardless of the challenges, failures or omissions, thanks to their interests and motivation will overcome challenges and achieve goals (Pajares & Schunk, 2001). Numerous studies, since Bandura (Bandura, 1982), have pointed to the relationship of self-efficacy and success: people with higher self-efficacy longer persist in spite of the difficulties and show greater resistance to failure and are generally more satisfied with their work and life (Judge et al., 1998), set themselves higher goals (Bandura, Cervone, 1986),

generate more effective strategies to facilitate the achievement and react with more optimism to the negative feedback from people with low self-efficacy (Redmond, 2010).

Adolescents whose parents have high expectations, and whose parents make an effort to support their children in learning, had a greater degree of self-efficacy than those who have not had these experiences. (Mistry, 2007; Tiedemann, 2000).

Contemporary findings form an argument that the level of self-efficacy influences the occurrence of behavioral problems, directly or indirectly affects the functioning of communication with parents, and thus the parental control (Caprara et al., 1998). The immediate effect is explained by belief that young people who value their skills are less influenced by peer groups, have open communication with their parents about important matters, and are responsive towards parenting advice that protects them against risky behavior.

The paper aims to establish the link between the self-efficacy of young people who are preparing to leave alternative care and their readiness for emancipation. The readiness of young people is reflected across the range of indicators including success in schooling, degree of aspirations, attitudes towards health and lifestyle, perceived support, skills needed for independence, personal feelings about readiness and perception of future

Goal of the research

The main objective of the research is to determine whether young people leaving alternative care are prepared for independence and if their experience of readiness is associated with the assessment of self-efficacy.

The main assumptions of the research are:

1. the degree of self-efficacy is related to the type of placement. Young people who have the least restrictive placement develop a higher degree of self-efficacy.
2. A higher degree of self-efficacy among youth from the sample is positively associated with better preparedness to leave alternative care such as better grades in school, higher degree of aspiration, healthier habits, more social support, more developed skills for independence, a higher degree of subjective assessment of readiness and positive expectations of the future

Sample

The sample included 151 young people, aged 16-22 ($M = 18$ $SD = 1.78$), which are in the process of preparation for leaving alternative care. The study included 47 young people from residential and 103 from foster care from all centers for foster care in Serbia: Belgrade, Nis, Kragujevac and Subotica and the institution of residential care from all 5 units in Center for protection of infants and young children from Belgrade.

Methods

Questionnaire prepared for research purposes which included information on basic socio-demographic information, such as data on primary family contact with progress and success of their education, involvement in the program of preparation for independence and youth employment). The second part of the questionnaire relates to the issues related to preparation for independence, mode and possibility of seeking help and support, education and aspirations, perceptions of preparedness and leaving care, health and emotional well-being, developing skills, attitudes towards the future, aspirations and expectations .

Analysis of the documentation from the files was focused on collecting basic demographic characteristics of young people and the type, duration, number of changes of placement, contact with family and siblings, characteristics of parents and objectives of the emancipation plan as well as the independence of the forms and methods of participation of young people leaving alternative care.

The General Self-Efficacy Scale - (GSE) (Schwarcer, Jerusalem, 1995), degree of optimism in relation to the success of achieving objectives in various domains of functioning. The scale measures the efficacy of the adaptation, optimism and coping strategies with everyday problems. The purpose of the GSE scale measuring self-efficacy in determining goals, effort and perseverance. For the purposes of this research selected domains were: education, employment, communication skills and improving support networks, aspirations and perceptions of the future. The scale is one-dimensional, good psychometric properties, Cranach alfa.76- .90, was tested in 23 countries. The scale has been validated in many studies where a positive correlation was established with satisfaction, optimism and a positive attitude towards the future. Negatively correlated with depression, anxiety, stress, combustion and health problems.

Results

Type of placement and self-efficacy

Self-efficacy of young people who are preparing to leave alternative care is discussed in relation to sex, type of placement and the number of placement changes. Based on the analysis of variance there is a statistically significant difference in the perception of self-efficacy in relation to gender, $F(1,138) = 6.79, p < .01$ Young men on average have slightly higher experience of self-efficacy ($M = 24.29, SD = 5.13$), compared to young women in the sample ($M = 10.22, SD = 4.75$). This finding can be interpreted in the light of earlier studies, according to which among youth leaving care different "exit" strategies are developed. For men those strategies are training for work and obtaining a diploma, while women tend to marry and start a family (Burgund, Žegarac, 2014). Accordingly, it is possible that girls who leave alternative care are not encouraged to develop self-efficacy to the same extent as boys, because their system of care, as well as the cultural milieu indicates that their aim was not to be independent.

Another aim was to determine differences in the level of self-efficacy in relation to the type of placement. A statistically significant difference $F(2,135) = 2,379, p < .01$ have been found on levels of self-efficacy in relation to the type of placement and

the highest score of self-efficacy is among youth on foster care. It is interesting that those young people who are placed with relatives have a slightly lower average level of self-efficacy, as would be according to the placement restrictively. However, if one takes into account that the relatives often are not sufficiently motivated to take care of the youth, and that the foster parents are trained and supported by the case manager and other helpers from the system of alternative care this finding is understandable in that light. Residential care is most restrictive placement for children on care and it is believed that discourages the development of self-efficacy. However, given the greatest value of the standard deviation and a large range of scores, from the lowest to the highest compared with other groups, this group is specific in terms of intergroup difference in the degree of self-efficacy, which is interesting for interpretation

Table 1. Self-efficacy of youth and type of placement

Self-efficacy of youth on care	N	M	SD	Mini	Max
Foster care	79	23.96	4.3	12.00	30.00
Kinship care	27	22.56	4.5	15.00	29.00
Residential care	32	21.79	7.1	0.00	30.00

Self-efficacy and indicators of readiness for independent life

In order to determine whether there are differences in the degree of self-efficacy in relation to the experience of preparedness for independence, the variance analysis for each of the indicators of different aspects of preparedness has been done.

a. A self-care skills

Self-care skills are presented through indicators of physical activity, healthy diet and exercise, health, mental health (Table 2)

Table 2. Self-efficacy compared to self-care skills

Self-efficacy and physical activity	Catégories	N	M	SD
<i>F(3,135)=3,19, p<.05.</i>	Physically active	70	24.07	5.26
	Sometimes active	42	23.31	4.30
	Seldom active	20	20.20	4.67
	Not active	7	23,43	5.97
Self-efficacy and And healthy nutrition <i>F(3,136)=4,85, p<.05</i>	Complitly healthy	51	24,86	3.82
	Mostly healthy	64	23.02	4.30
	Mostly non healthy	21	20.57	7.63
	Complitly non healthy	4	19.05	7.14

Self-efficacy and workout <i>F(1,138)=11,29, p<.01</i>	non healthy	62	24,77	3,98
	Not non healthy	78	21,99	5,48
Self-efficacy and general health <i>F(3,136)=7,20, p<.01</i>	Often good	53	25.03	3.83
	Mainly good	67	22.94	4.41
	Sometimes good	17	19.12	7.23
	Never good	3	20.67	5.46
Self-efficacy and mental health <i>F(2,136)=8,24, p<.01</i>	Very good	91	24.26	4.65
	Good	41	22.39	3.68
	Not very good	7	17.85	5.70
	Have psyhiatric diagnosis	24	20.58	6.92
	Do not have psyhiatric diagnosis	112	23.76	4.44

A significant difference was shown between self-efficacy and different indicators of self-care skills. Young people who are physically active in their free time and who exercise or have a hobby, also have a greater experience of self-efficacy. Also, the greatest experience of self-efficacy was found in youth whose mental and physical health has been evaluated as very good. Respondents who do not care about their health have lower self-efficacy scores than those who take care of their own health. These results and the results of previous studies show that the level of management in personal life is connected with achievements of young people (Milanovic-Dobrota, Šestić, 2012). This finding is consistent with the Bandura's findings, where physical and emotional state, such as physical reactions to stress, tension, fatigue and pain reduces the experience of self-efficacy (Bandura, 1995). Young people who feel well and invest in activities such as hobbies and sports (which reduce stress and contribute to the general well-being) have higher self-efficacy.

Social support

Support is considered through indicators: assistance in schooling, assistance in finding an apartment, preparing for independence, support of friends and making friends and experiences of safety and security (Table 3)

Table 3. Self-efficacy in relation to the perceived support

	Category	N	M	SD
Self-efficacy and help in schooling <i>F(1,136)=4,67, p<.05</i>	Have help in schooling	42	21.81	6.42
	Did not have help in schooling	96	23.81	4.26
	Have help in finding apartment	11	26.54	2.12
Self-efficacy and help in finding apartment <i>F(1,125)=5,70, p<.05</i>	Did not have help in finding apartment	116	22.78	5.17

Self-efficacy and preparation for emantipation	Have preparation for emancipation	14	25.93	2.41
	Did not have preparation for emncipation	113	22.76	5.23
Self-efficacy and friends support <i>F(1,125)=4,98, p<.05</i>	Of significant help	50	24.92	3.76
	Of some help	59	21.64	5.43
	Not from help	83	24.12	3.44
	No help	6	20.83	7.44
Self-efficacy and making friends <i>F(3,132)=74,47, p<.05</i>	Do not have friends	3	26.33	4.73
	Have few friends	4	16	6.22
	Have friends	31	22.19	3.96
Self-efficacy and perception of safety and security <i>F(3,136)=8,45, p<.01</i>	Have a lots of friends	98	23.85	4.97
	Complitly safe	37	25.56	4.39
	Mostly safe	82	22.98	4.64
	Mostly not safe	12	17.83	4.91
	Complitly not safe	9	23.76	5.96

Young people who have had help in schooling have experienced of lower self-efficacy than those who did not have the help. Young people who perceive themselves as self-efficient do not need extra help in schooling and rather rely on themselves. Maybe young people who have high self-efficacy tend to be independent, so school and training is not interesting, but trying to get a job.

When it comes to support for independence in the form of help in finding a job and an apartment, it was shown that those who have preparation for independence as an assistance, have higher self-efficacy experience of those who have no such preparation.

Support of friends make a significant difference in the perception of self-efficacy so that those who are estimated to have a significant aid have a greater experience of self-efficacy compared to those who perceive that they have some help.

Studies have shown that self-efficacy is associated with the support we receive from close people. According to the Bandura theory, ways in which individuals experience different situations directs the activities and expectations of the behavior until they are fulfilled. (Bandura, 1986; Mischel, 1973). Other authors have shown that significant predictor of career self-efficacy is the support of parents and friends, as demonstrated by this study (Mitrić-Acimovic, Dinić, 2012). If there is a relationship and closeness between the person who provides support, self-efficacy is higher. (Redmond, 2010).

The experience of safety and security in life is also connected to self-efficacy of young people from the sample and so that those who feel safe in life, have greater experience of self-efficacy than those who report that they feel less safe. According to the theory of motivation in human behavior (Maslov, 1943 by Green 2000), satisfying the basic needs of need for security leads to higher needs such as aspiration and achievement.

Possession of skills

When it comes to linking skills with the perception of self-efficacy correlation has been shown in the following areas: skills of making friendship and partnership, finding the necessary information, purchase the necessary things for the household and financial management.

Table 4. Skills development and assessment of self-efficacy

Self-efficacy	Category	N	M	SD
Self-efficacy and skills of making friends <i>F(3,132)=74,47, p<.05</i>	Easily making friends	71	24.66	4.91
	Mostly easy making friends	49	22	3.96
	Mostly harder making friends	10	21.80	6.03
	Harder making friends	8	20.25	8.03
Self-efficacy and skills of making partnerships <i>F(3,124)=5,01, p<.01</i>	Easily making partnerships	45	24.60	5.04
	Mostly easy making partnerships	46	23.74	3.78
	Mostly harder making partnerships	23	21.26	5.45
	Do not make partnershis	14	19.64	6.78
Self-efficacy And skills of finding useful information <i>F(3,133)=6,93, p<.01</i>	Complitly finding	74	24.65	4.81
	Mostly finding	53	21.45	4.49
	Hardly finding	5	18.99	5.48
	Not finding	60	24.43	4.32
Self-efficacy and skills of purchase the necessary things for the household <i>F(3,132)=4,25, p<.05</i>	Complitly maintaining houshold	62	24.43	4.50
	mainly maintaining houshold	65	22.64	4.70
	hardly maintaining houshold	5	17.00	9.72
	Not at all maintaining houshold	4	22.75	7.54
Self-efficacy and money mangment <i>F(3,134)=10,080, p<.01</i>	Completely manage	60	25.10	3.53
	Mainly manage	16	20.37	7.38
	Hardly manage	16	20.37	7.38
	Not manage	2	10.50	4.95
Self-efficacy and relationship towards personal hygiene <i>F(3,136)=3,63, p<.05</i>	Taking care about personal hygiene	112	23.78	4.43
	Mostly taking care about personal hygiene	24	21.71	5.56
	Seldom taking care about personal hygiene	3	16	14
	Not taking care about personal hygiene	1	19	/

Young people from the sample who easily forge friendships and partnerships have higher scores of self-efficacy than those experiencing difficulties in this area. In terms of whether they know where and how to find the necessary information, higher scores of self-efficacy have those who are successful in supplying household items, or those who know how to manage with money.

d. Subjective assessment of readiness to leave alternative care

Analysis of variance showed that there is a significant difference in the degree of self-efficacy and subjective assessment of the readiness of young people to leave alternative care. Negative emotions such as sadness, fear, and anxiety among youth leaving care from the sample lead to reduced experience of self-efficacy (Table 5)

Table 5. Subjective assessment of readiness to leave alternative care

	Category	N	M	SD
self-efficacy and sadness <i>F(1,132)=5,47, p<.05</i>	Mostly sad feelings	44	21.75	5.13
	Mostly happy feelings	90	23.90	4.93
Self-efficacy and feelings of anxiety <i>F(1,132)=5,99, p<.05</i>	Have feelings of anxiety	45	21.00	5.08
	Not having feelings of anxiety	89	23.94	4.94
Self-efficacy and feelings of fear <i>F(1,132)=12,04, p<.01</i>	Presence feelings of fear	38	20.86	5.72
	Not present feelings of fear	96	24.11	4.5

Those who feel sad, anxious or frightened have experience of lower self-efficacy compared to those who do not experience these emotions.

Emotional capacity of the person is manifested through a person's ability to cope with negative emotions, and on their intensity, frequency and duration. We can conclude that the self-efficacy is associated with confidence of a young person in their own coping skills and ability to master their feelings.

e. Perception of future

The perception of the future was discussed through indicators: graduation, expectations of success in business, expectation on acquiring money, expectation to contribute to society, expectation to use cash benefits, expectations of good relationships with others. Findings indicate that the perception of the future of each domain is associated with the experience of self-efficacy, so that those who perceived success in the future have a higher self-efficacy, except when it comes to completing school (Table 6).

Table 6. Self-efficacy and perceptions of the future

	Category	N	M	SD
Self-efficacy and finishing school <i>F(1,138)=4,85, p<.05</i>	Want to finish school	119	22.83	5.05
	Do not want to finish school	21	25.42	3.50
	Biggest chance	71	24.62	4.48
Self-efficacy and expectation of success in life <i>F(4,134)=9,54, p<.01</i>	Big chance	466	22.76	4.33
	Possible	18	20.77	3.56
	Small chance	1	24	/
	Smallest chance	3	10.00	11.79
	Bigest chance	34	24.32	4.76
Self-efficacy and expectation of acquiring money <i>F(4,132)=4,35, p<.01</i>	Big chance	31	25.03	3.74
	Possible	51	22.53	4.67
	Small chance	13	21.61	3.53
	Smallest chance	8	18.12	3.50
	Bigest chance	37	24.95	4.37
Self-efficacy And making contribution to society <i>F(4,127)=2,95, p<.05</i>	Big chance	34	23.41	4.33
	Possible	37	22.57	4.11
	Small chance	14	22.14	4.80
	Smallest chance	10	19.40	9.98
Self-efficacy and cash benefits <i>F(4,126)=2,83, p<.05</i>	Big chance			
	Possible	8	22.50	2.93
	Small chance	15	22.20	3.10
	Smallest chance	99	23.93	5.08
	Bigest chance	110	23.46	4.63
Self-efficacy and expectation of good relationship with people <i>F(4,131)=5,71, p<.01</i>	Big chance	16	24.38	3.52
	Possible	6	23.67	3.50
	Small chance	2	10.50	4.95
	Smallest chance	2	14	19.80

The findings show that young people who do not want to finish school, but are successful at work, have the money and little chance to become users of cash benefits, have a good chance to be leaders in community, have higher score on the scale of self-efficacy, while young who believe that they are unlikely to reach a contribution in society have significantly less experience of self-efficacy perceived. Young people who have a greater chance to establish a good relationship in the future have higher scores on self-efficacy scale.

Perception of positive expectations for the future is associated with self-efficacy. This finding is entirely expected because it supports self-efficacy default theory by which self-efficacy influences the feelings of being self-reliant in future situations and confidence about overcoming difficulties.

Conclusions and recommendations

Self-efficacy proved to be significantly associated with the self-care skills, support, emancipation skills, perceptions of readiness to leave alternative care and perception of the future. There was no connection between self-efficacy and success in education, aspirations, employment and participation in preparation for independence.

There is an interesting link between work and self-efficacy. Although we can think about different circumstances that can produce this result, it could not be reliably interpreted, as only three young people in the sample are employed.

When we look at the cumulative scores of readiness, statistical significance has appeared between the variable perception of the future $F(2,116) = 4.252, p < .05$ and perception of readiness $F(2,127) = 3.499, p < .05$. However, subsequent comparisons do not show statistically significant differences between the individual categories of self-efficacy, so we cannot confidently assert that the degree of severity of these variable is associated with the categories of self-efficacy. It may be noted that those who have a moderate-efficacy have a positive perception of the future. This means that young people who have the most positive perception of their future, have the highest scores of self-efficacy.

When it comes to perceptions of readiness, most young people do not feel ready to leave alternative care, but for young people who have a greater perception of self-efficacy, experience of readiness is greater.

Findings indicate that the support, assistance and warmth have highest influence to encourage self-efficacy. This study, like previous studies in this area (Redmond, 2010) showed that considerable support of a reliable person is most important for success. In the case of youth preparing for emancipation, people from social care system should focus their knowledge and professional skills towards their independence and the acquisition of competencies and experiences. It seems that young people see the foster parents and some of significant other person out of the home as trusted while other people who care about them systemically, such as case managers, social workers and counselors from homes for foster care are not seen as a persons of trust. This research has shown that young people from system of alternative care have mostly non-personalized relationship with their case managers so they perceive them as providers of primarily tangible services, but not as a support.

Encouraging self-efficacy is important, especially because it contributes to a sense of control over life young people from social care system have. With increasing control over their own lives, it is expected that the restlessness of young people will

be reduced and that they will be better equipped to cope with the challenges. This research corresponds with findings that self-efficacy is an important predictor of behavior, and it proved to be influential on improving emotional state of respondents. (Rafali, 2014).

This finding indicates that the system provides a certain kind of preparation in the form of acquiring skills, but does not work with young people on the acceptance of their life experience. Previously conducted research also indicates that the young people do not talk about topics that are painful (Burgund, Žegarac, 2014). Experience of identity and basic security for young people in alternative care is undeveloped and unstable, making them increasingly vulnerable and fearful of the challenges that come with independence. This study clearly suggests that there is room for work on creating mechanisms for effective independence and the emotional stability of young people leaving alternative care.

System support is seen only in terms of exercising the right to social assistance, while communication and support with people from the system is largely absent. After independence and the loss of right to all the benefits of the system, youth face many challenges as well as a growing stress in terms of the uncertainty related to their existence.

When it comes to recommendations for further research, one of the key recommendations relates to the way the research about outcomes of preparedness of youth leaving care is organized. Recommendations for further research tentacles to create a longitudinal study that would measure outcomes criteria on the same sample of young people before and after independence. It would be interesting to repeat the same sample survey after leaving alternative care, and then after a period of adaptation from three to five years. In this way we would have the most accurate information about the outcomes of the process of leaving alternative care in Serbia.

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**Anita Burgund Isakov,
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SPREMNOST MLADIH ZA NAPUŠTANJE ALTERNATIVNOG STARANJA I SAMOEFIKASNOST

Apstrakt

Mladi koji napuštaju alternativno staranje su izloženi brojnim rizicima. Jedan od faktora koji može doprineti smanjenju rizika i povećanju pozitivnih ishoda je procena samoeфикаsnosti. Osnovna premissa istraživanja je da su mladi koji imaju visoku samoeфикаsnost spremniji da napuste alternativno staranje. Studija je obuhvatila 151 osobu na alternativnom staranju (N=86,(57%) na hraniteljstvu, (N=36,(23,8%) na domskom smeštaju i (N=27,(17,9%) na srodničkom smeštaju. Studijom je obuhvaćeno (N = 76,(50.3%) devojaka i N = 7,(49,7%) mladića starosti od 16 do 22 godina. Korišćena je Skala samoeфикаsnosti (Jerusalim i Švarcer, 1995) kojom se procenjuje eфикаsnosti u stručnom usavršavanju, praktičnim i socijalnim veštinama i mrežama podrške. Rezultati pokazuju da dečaci imaju viši skor na skali samoeфикаsnosti, $P(1,138) = 6.79$, $p < .01$. Mladi sa višom samoeфикасношću imaju više: veština za samostalan život kao što je upravljanje domaćinstvom $F(3,132) = 4.25$, $p < .05$ i novcem $F(3,134) = 10.080$, $p < .01$. mreže podrške i prijatelje $F(3,132) = 74.47$, $p < .05$. Mladi koji su se osećali uznemireno povodom napuštanja alternativnog staranja imali su nižu samoeфикаsnost $F(1,132) = 5.99$, $p < .05$, dok su oni sa optimističnim očekivanjima imali i viši skor na skali samoeфикаsnosti $F(4,131) = 5.71$, $p < .01$.

Ključne reči: samoeфикаsnost, mladi na staranju, napuštanje alternativnog staranja

DISORGANIZED ATTACHMENT: OR TRANSGENERATIONAL TRAUMA TRANSMISSION⁵

Abstract

A large number of studies confirms the transgenerational attachment transmission, while the issue of mechanism of the transmission is still unsolved. The first study of transgenerational transmission of attachment in Serbia was conducted in 2001. Fifteen years later, we have decided to approach the problem from the longitudinal perspective. Namely, mothers and children tested for the first time in 2001 were observed and retested in 2016. In the first study, we used: AAI (George et al., 1985), for mothers and AQS (Waters & Deane, 1985), for children. In the second study we had an opportunity to test both mothers and children with the same Serbian instrument for assessing attachment: UPIPAV (Hanak, 2004). In this paper, we present the results of transgenerational observation of only one attachment pattern: disorganized attachment. The choice of the most troublesome pattern was conditioned by the fact that the transmission of this pattern was the most often and usually with the most serious consequences. Results confirmed the transgenerational transmission of negative Internal working models (of self and others). Also, the dimension that remained unchanged across generations was Unprocessed trauma. In conclusion the dilemma remains: Does it mean that traumatic event, experienced in childhood, can not be processed even decades later and in decent living conditions?

Key words: transgenerational transmission, disorganized attachment, trauma.

Introduction

The disorganized pattern of attachment is a concept that emerged from the classification of individual differences which emerged within the theory of attachment. Research into the phenomenon of attachment has determined the existence of four categories (patterns) of attachment: secure, insecure-ambivalent, insecure-avoidant and the insecure-disorganized pattern of attachment. The patterns were firstly identified among the population of children, and later their existence was confirmed among adults as well.

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The dynamics of the disorganized pattern of attachment was always the least clear part of the theory of attachment. Researchers in the field of attachment consider this pattern difficult to evaluate and thus it was identified almost three decades after the other patterns. On the other hand, in clinical practice the disorganized pattern is becoming more and more visible, but only in its significantly advanced and quite devastating phase. Clinical researchers link it to trauma and all types of dissociative personality disorders. They believe that the disorganized pattern of attachment occurs as a consequence of the failure of guardians to break down stressful events to a child in a more or less comprehensible manner, which results in trauma and problematic strategies for “life’s struggles”. Both researchers and clinical doctors confirm that this pattern is transmitted from generation to generation, but that the mechanism of transmission is as yet unknown.

In an attempt to understand how both children and adults who behave according to this pattern function, how they manage to overcome such unfavorable patterns of attachment, and first and foremost what the transgenerational transmission is like – we opted for the longitudinal approach. Namely, we followed twelve individuals who during their childhood were identified as children with a disorganized pattern of attachment. At the same time we also tested their mothers. All twelve dyads were retested after sixteen years. The children were then adolescents, and the mothers were now no longer in early/emerging adulthood, but in late adulthood. At that time we had the opportunity to test them using the same instruments. Prior to presenting and interpreting the results of this study, we will attempt to integrate the data available so far on the disorganized pattern of attachment.

The disorganized pattern of attachment

The founders of the theory of attachment, John Bowlby and Mary Ainsworth (Bretherton, 1992) determined the original tripartite classification of individual differences, only for their followers to, over the following few decades (Main & Hesse 1992, Radke-Yarrow et al. 1985) more and more regularly conclude that there is a group of children who cannot be classified as belonging to any of the existing categories, based on their behavior throughout the experimental procedure of the Strange situation (Ainsworth & Witting, 1969), which was at the same time specific and difficult to explain. It is in fact a method which was established precisely for the evaluation of attachment at the earliest age. More precisely, it is a laboratory experimental procedure whose aim is to study the relations between attachment and behavior under conditions of stress. Ainsworth considers that only one type of behavior in this kind of situation is innate, and that is calling out for one’s mother when she leaves, and becoming pacified when she returns. To use Bowlby’s terms, since the behavioral system of attachment is focused on the individual providing care, its basic task is the constant evaluation of the environmental and internal conditions which lead to an increase or decrease in the level of attachment. Thus, the very response of the child, which is to cry, be upset or cry out for its mother is

expected behavior, or the child's primary strategy. Naturally, children also react using so-called secondary strategies, which refer to the adaptation to specific experiences, acquired through daily contact with their mother. For example, daily experiences with the mother which do not suit the needs and signals of the child will teach the child the secondary strategy of not calling out for its mother, of non-reaction, a lack of expectation, while experience with a selectively available mother will teach the child secondary strategies of control by means of other mechanisms of dependence, helplessness, etc. (Stefanović-Stanojević, 2015).

While relying on this technique, it was noted that there are children who behave in a rather unexpected way. Their attempts to overcome stress caused by the appearance of a stranger are equally bizarre, as are their reactions to the appearance of a familiar individual, that is, the mother. These children would attempt to avoid the stranger by standing completely still or trying to go through a wall, but to their mother they reacted with a mixture of anger, distance and rigidity. In a word, there are children who do not have a clear and organized strategy of how to manage their stress. These children are the reason why a fourth category was devised: the disorganized pattern. Initial studies confirmed the assumptions that these were children who were highly traumatized, sometimes children with psychologically ill mothers, and soon other studies recorded findings of groups of children behaving according to a disorganized pattern who formally speaking had a complete and normal family situation (Stefanović-Stanojević, 2015). These unusual findings were a challenge for theoreticians, researchers but also psychotherapists. We will attempt to systemize their most important insights.

The dynamics of disorganized attachment

The disorganized pattern (or DA)⁶ of attachment can most concisely be explained as fear without solution. When it comes to fear and finding a solution to it, the founder of the theory of attachment, John Bowlby, in a letter to his wife Ursula dated May 3, 1958 stated the following: "Most people think about fear in the context of running away from something. But there is also another side to fear. We run from fear by running to someone, usually a particular person. This may seem quite obvious, but I believe that what we are dealing with is a new and revolutionary idea," (Frank van der Horst, 2011, p. 159)

A metaphor for the strategy of making a choice or: Running towards someone

Based on the aforementioned it is clear that as early as the mid-1950s Bowlby had the idea that if we do not have someone to run to in fear, we become stuck. Running towards someone can be treated as a metaphor for strategy selection among

⁶ DA = Disorganized Attachment

children who follow various patterns of attachment (Stefanović-Stanojević, 2015b). A child which has a secure pattern of attachment will opt to run towards its own dominant figure of attachment, most often a parent. The child which follows the avoidant patterns of attachment will strive to avoid fear as much as possible by raising its threshold of sensitivity to emotions, by building up an armor and demonstrating pseudo-independent behavior. The child following the ambivalent pattern of attachment will always feel fear and run for help. This is how it is able to exert control over its mother or the person it is attached to, and is achieved by lowering the threshold of sensitivity and thus the very frequent recognition of various causes of fear and running away.

Finally, children with disorganized patterns of attachment will feel fear and at the same time will be aware of the fact that they do not have a strategy of choice. There is no person actually worth running to, and there is no way for them to regulate their fear on their own. The question is why? The parents of these children belong to that rare, but important group of parents who represent a danger to their own child. It may be a case of psychophysical abuse or child neglect due to alcoholism, drug abuse, psychiatric problems, domestic violence, but it could also be a case of unresolved trauma on the part of the parent himself who does not have the capacity to deal with his own helplessness and thus reacts by neglecting or frightening the child. In these circumstances the child chooses not to feel the painful and incomprehensible parts of its experience with its parents, that is, to emotionally separate itself from what is happening. Experience is thus blocked and repressed. Children who find themselves in such a conflict begin to develop disorganized patterns of attachment. How does this manifest itself?

Metaphor: the drama triangle

The metaphor of the drama triangle seems to be quite relevant for understanding the behavior of children with DA. Stephen Karpman (according to Murdoch, 2015) an American psychotherapist of the transaction orientation, referred to the dynamics between the role of the rescuer, persecutor and victim as the dramatic triangle. Considering the fact that in the figure of the parent, children with DA often find a figure whom they fear, but also a figure whom they are afraid for, as well as a figure they expect to save them, the metaphor of the drama triangle provides an understanding of the dynamics of this kind of interaction. Thus, based on intimidating parental behavior, these children form a negative internal model of the self and of others. What this means is that in a stressful situation they choose neither to rely on their own capacities nor on others they perceive to be superior. In stressful situations they are overcome by fear without a solution, since the savior they are supposed to turn to at the same time is also the stalker. Thus the IWM⁷ of others in the case of these children is located in a triangle: the rescuer, the victim and the persecutor. The basic

⁷ IWM = Internal Working Model

roles within the drama triangle must be concurrent or replaceable in rapid succession. The internal working model of the self is also multi-faceted and non-integrated, and thus extremely sensitive and susceptible to the development of dissociative personality disorder. The IWM oscillates between the rescuer (thus children with DA patterns of behavior revert their roles in relation to their parents and take on the role of the adult in relation to the helpless or victim-parent), victims (the experience of being in danger from their parent stalkers) and the persecutor (aggressive acting out is a frequent occurrence due to the inhibition of the capacity for empathy and mentalization).

Developmentally speaking the most problematic aspect of this situation is the fact that in the child itself a defensive inhibition of the capacity to mentalize develops, whose aim it is to prevent the child from gaining insight into the fact that the parent might want to hurt it, and so in further development it might be difficult or even impossible for it to process its own experiences and modulate its emotions⁸.

The disorganized pattern: transgenerational transmission

Even since the idea of transgenerational transmission of patterns of attachment was postulated, numerous researchers have attempted to evaluate the variously designed procedures, with the help of different instruments of evaluation. The most frequent patterns of attachment among children were estimated by means of the aforementioned Strange situation procedure for the determination of attachment patterns. Only a few of the available studies included the AQS (Attachment Question Set, Waters & Deane, 1985). This is an instrument which offers information on the quality of attachment between a mother and child, but does not contain elements which might be stressful for the child. In addition to being used in studies carried out in America and Europe, we also find it applied in tribal Africa, the kibbutzim of Israel, in China, Japan (Van Ijzendoorn, 1995), and even in studies carried out in our national setting (Stefanović-Stanojević, 2001). The greater problem was how to determine the pattern of attachment during adulthood and the possibility of comparing the results obtained by evaluating children with the results obtained by evaluating adults. The increase in the number of studies on transgenerational transmission actually occurred after Mari Main and a group of her associates at Berkeley University in California constructed an interview for the evaluation of the attachment patterns of adults – the Adult Attachment Interview (George et al., 1985) which along with the existing Strange situation procedure enabled the comparison between the classification of the patterns of children and the classification of the patterns of adults.

Findings on the similarities between the classification of parents in the Interview (AAI) and the classification of babies in the Strange situation (George

⁸ <http://www.detinjarije.com/dezorganizovana-vezanost-sta-ako-nemam-ka-kome-da-trcim-a-plasim-se/>

et al., 1985; Main and Golwyn, 1992) set off an entire sequence of further studies of transgenerational transmission. Three extensive longitudinal studies (Hamilton, 1994; Main, & Hesse, 1990; Waters et al., 2000) confirmed the existence of as much as 68% to 75% of similarities between the classification of attachment in childhood and in adulthood. Naturally, variations in the study design ensued, with the aim of controlling certain variables. For example, an entire series of studies estimated the possibility that the similarities between parent and child attachment is a result of the parent's adaptation following the arrival of the child, that is, the parents change in accordance with the demands of their new circumstances. In order to dispel any doubt that the parental state of mind adapts to the child, a group of researchers interviewed the "parents" prior to the birth of their children (Fonagy et al., 1991). The first research of this kind was carried out in London, on a sample of 95 mothers, and indicated a statistically significant correspondence between the attachment of the parents and children (66%). Several other studies used the same methodology, where the adults were interviewed prior to the birth of their child. All of the results confirm the existence of a significant correspondence (Sagi et al., 1985; Steele et al., 1996; Van Ijzendoorn & Kioonenbeig, 1988). The idea of the transmission of patterns from generation to generation was evaluated in studies designed so as to include three generations. One of the first studies of this kind was carried out in Canada. It was a transgenerational longitudinal study carried out by Benoit and Parker (1994). The sample of participants consisted of 96 babies, mothers and maternal grandmothers. The mothers were interviewed using the AAI interview, once during their pregnancy and once when the child was 11 months old, while the grandmothers were interviewed once at a random point during the study. With the help of the Strange situation procedure the children were evaluated at the age of twelve months. Both a three-category and four-category system of classification was used. The classification of the mothers was stable during the twelve-month period in 90% of the cases (a three-category classification) that is in 77% of the cases (a four-category classification). Based on the classification of the mothers during pregnancy, it was possible to predict the classification of the children in 81% (a three-category classification) and 68% (a four-category classification) of the cases. Based on the classification of the grandmothers, the classification of the children was predicted in 75% (a three-category classification) and 49% (a four-category classification) of the cases. In brief, the results confirm the existence of a connection between the patterns of attachment of children and parents, even when the patterns of attachment of the parents are determined prior to the birth of the child.

Despite these clear findings, the issue of the mechanism which mediates the transmission remains unclear, so that the problem of the so-called "transmission gap" (Verhage et al., 2016) is the task of future researchers. In the study that we will be presenting, we endeavored to shed light on the pattern transmission mechanism from generation to generation, as well as to study the percent of persistence of the DA pattern during a child's development.

Methodology

The subject and research hypotheses

The subject matter of the study was the question of the existence of a disorganized pattern of attachment from childhood to adulthood, as well as during adulthood, as was the question of the transmission of this pattern from generation to generation (from mother to child). In accordance with the subject matter, we formulated the following research hypotheses:

H1: It is expected a relationship between the quality of the attachment that the participants manifested as children and the pattern of attachment which were noted among the same individuals sixteen years later, that is, during adolescence.

H2: It is expected a relationship between the patterns of attachment of the mothers established when they were adolescents and the patterns established in late adulthood.

H3: It is expected a relationship between the quality of the attachment between the children and their mothers.

H4: It is expected a relationship between the dimensions of attachment among adolescents and the dimensions of attachment of their mothers.

The sample of participants

The sample of participants was extracted from a sample included in a larger study which tested mother-child dyads (Stefanović-Stanojević, 2002) during 2000 and 2001. At that time 146 dyads were tested, 90 of which were included in further analysis. Sixteen years later, 18 dyads were extracted from the pool, all of which were identified as belonging to the disorganized pattern in the case of the mothers and the maladaptive patterns in the case of the children. All 18 dyads were contacted, but unfortunately only 12 of the dyads agreed to take part in the remainder of the study. The average age of the mothers: in 2000/2001 was approximately 30 (30.5), and in 2016 approximately 45 (44.5). The average age of the children: in 2000/2001 it was approximately 2, and in 2016 almost 18.

Measuring instruments

In order to evaluate attachment, we used the AQS technique (Attachment Q-sort) (Waters & Deane, 1985). The standard version of the AQS consists of 90 items which describe various everyday situations. Based on observations of the interaction between the mother and child, scores were added up for every child immediately following observation. First, all the items were sorted into three large categories (slightly characteristic, medium characteristic and very characteristic), after which 10 items were selected which were maximally characteristic of the child in question (they are assigned the value 9) and 10 items which were least characteristic of the child in question (they are assigned the value 1). Types of behavior which was not at all available for observation or were not characteristic for the specific age group were ranked middle (4-6). The remaining assumptions were

distributed through mutual comparison, one by one, into the remaining categories, with the precondition that there be exactly 10 items in each category. This means of item distribution into 9 categories is typical for the so-called Q-sort method based on rectangular distribution (Waters, 1997). This particular type of data are usually processed by having all the data obtained for each individual child compared to the criterion, that is, the profile of the child with a “secure base for growth and development” and the child with a “maladaptive base for growth and development”, which is obtained when a group of experts, based on their free observation of a large number of children, defined in advance all the scores which are characteristics for a certain type of child. By comparing the data on a particular observed child with the data from the criterion of the “typical” child, we obtain a correlation coefficient which indicates the extent to which a child is similar to the typical “optimal patterns of a child” or the typical “maladaptive patterns of a child”.

For assessment of the mother’s attachment it is used the Adult Attachment Interview (AAI, George et al., 1985). The AAI is a semistructured interview with 15 questions which evoke descriptions of relationships with parents in childhood, specific memories, and descriptions of current relationships with parents. The Interviews took about 1 hour and were transcribed verbatim. Then the protocols were coded according to scales for attachment experiences (e.g., loving, rejecting, role reversing, insisting on achievement and neglecting of a child) and for state of mind with respect to attachment (idealization, anger, cynicism), and on Scale of global relation to the life (recall, coherence, metacognition, derogation, fear of loss, and some scales for unresolved loss or other trauma). The final score of the interview is based on an assessment of the psychological relationship that person has against current attachment, not in the nature of the attachment to a specific person in the past. Evaluation of these dimensions is based on the principles of cooperative, rational presentation, which are postulated by Gris (Grice, 1989), the so-called maxims of cooperativeness. Finally, the interviews were classified into one of the three adult attachment categories: autonomous (F), preoccupied (E), and dismissing (Ds) attachment.

For assessment of the attachment of the mothers and adolescents it is used The questionnaire for the evaluation of attachment (UPIPAV-R) (Hanak, 2004). In order to study attachment among adults, we used the UPIPAV-R questionnaire which consists of 77 items included in 7 points on a scale. The responses are recorded on a seven-point Likert scale. The questionnaire is used to evaluate the organization of attachment in general, and not to evaluate attachment to certain primary attachment figures. The following terms were suggested for the components of attachment based on the analyses of the content of the items: the fear of losing one’s external secure base, the capacity to mentalize, unresolved family trauma, a negative self-model, a negative model of others, relying on external secure bases and weak anger regulation (Hanak, 2004). Based on the results obtained from the questionnaire using a cluster analysis, the respondents can be classified into four basic patterns of attachment: a secure, rejecting, preoccupied and fearful pattern. The aforementioned scales are marked by high reliability (Vukosavljevic-Gvozden & Hanak, 2007), while the internal consistency of the scale on our sample has a Cronbach alpha value of 0.891.

Results

The research results of the study carried out in 2000/2001

Table 1 shows the results of the connection between the results of the AQS and the criterion variables: the optimal, or the maladaptive base of growth and development.

Table 1. Correlation between results on AQS with criteria variables: optimal or maladaptive base for development

Optimal base of development	p	Maladaptive base of development	p
.019	.856	.905	.000
.007	.948	.821	.000
-.017	.872	.390	.001
.021	.847	.394	.001
-.042	.693	.323	.001
.007	.948	.355	.001
.014	.898	.891	.000
.019	.856	.303	.001
-.021	.847	.821	.000
.032	.769	.905	.000
-.021	.847	.333	.001
.032	.769	.301	.001

From the entire database obtained in 2000/2001, we extracted the participants who in their dominant parent (the mother) had a maladaptive base for growth and development. To be more precise, the number of scored points correlated significantly with the criterion of the maladaptive pattern. As can be seen from the table, the correlations with the criterion of the optimal pattern are not statistically significant.

Table 2. High scored dimensions on AAI on the sample of disorganized mothers

<u>Scales for Inferred Experiences with Parents</u>	<u>Mother</u>	<u>Father</u>
Loving	12 (1-3)	12 (1-3)
Rejecting	12 (7-9)	4 (7-9)
Role Reversing	10 (7-9)	2 (7-9)
Pressuring to Achieve	1 (7)	3 (7-9)
Neglecting	9 (7-9)	3 (7-9)
<u>Scales for Patterned or Organized States of Mind</u>	<u>Mother</u>	<u>Father</u>
Idealization of Parent	1 (8)	0
Involving Anger	9 (7-9)	3 (7-9)
Derogation	5 (7-9)	4 (7-9)

<u>Scales for Patterned or Organized States of Mind</u>	<u>General</u>
General derogation	4 (7-9)
Insistence on Lack of Recall	8 (7-9)
Metacognitive Monitoring	12 (1-3)
Passivity of Discourse	12 (7-9)
Fear of Loss	11 (7-9)
Unresolved Loss	12 (7-9)
Unresolved Trauma	11 (7-9)
Coherence of Transcript	12 (1-3)
Coherence of Mind	12 (1-3)

The results from the AAI interview were consistent. All twelve mothers were determined to have the disorganized pattern of attachment. The results in bold indicate the dimensions which make up the profile of the disorganized pattern for the AAI protocol. To be more precise, when it comes to their childhood, all twelve mothers scored high for experiencing rejection, and ten of the mothers felt like their children had switched roles with their mothers, in the sense that they had to take care of their mothers instead of the other way round. In addition, none of the participants felt they had experienced being loved during their childhood (by either parent). Nine of the mothers had actually experienced neglect (the most commonly cited reason was alcoholism in the family). In the period of adulthood, what was most prominent was their obsession with being angry at their parents and the situation they had found themselves in as a child (nine of the participants).

The dimensions of the state of awareness are crucial for the classification of the disorganized pattern of attachment. As can be seen from the table, all twelve participants scored low on meta-cognitive processes, and scored high on passivity when recounting their childhood, fear of loss, unresolved loss and unresolved trauma. In addition, exceptionally low scores were obtained for the coherence of transcript and coherence of mind.

The results of the research carried out in 2016

Tables 3 and 4 show the data pertaining to the participants' scores on the instrument used to evaluate attachment. In this case, both the mothers and their children, now adolescents, were evaluated using the same measuring instrument.

Table 3. Descriptive statistics on dimensions of attachment (UPIPAV) for mothers

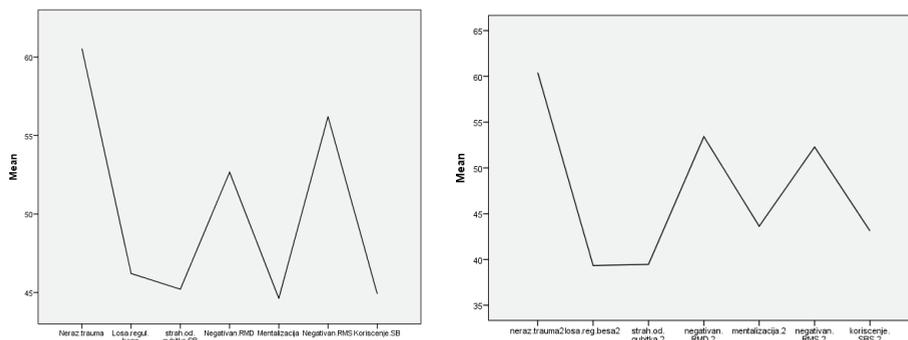
	N	Min	Max	Mean	SD
Unresolved trauma	12	16	69	60.54	10.240
Anger regulation	12	14	59	46.21	14.617
The fear of losing one's external secure base	12	12	65	45.21	15.929

Negative IWM of others	12	14	72	52.67	16.261
Capacity to mentalize	12	14	68	44.63	12.250
Negative IWM of self	12	14	69	56.21	15.932
Using the secure base	12	13	71	44.92	14.062

Table 4. Descriptive statistics on dimensions of attachment (UPIPAV) for children (adolescents)

	N	Minimum	Maximum	Mean	Std. Deviation
Unresolved trauma	12	16	67	60.42	11.780
Anger regulation	12	33	56	39.33	8.442
The fear of losing one's external secure base	12	19	54	39.46	9.422
Negative IWM of others	12	36	67	53.42	7.824
Capacity to mentalize	12	19	67	43.63	12.193
Negative IWM of self	12	23	67	52.29	12.235
Using the secure base	12	13	71	43.13	15.184

In order to compare the scores of disorganized mothers and their grown-up children more easily, along the dimensions which lie at the basis of the pattern of attachment we also showed a graphic representation of the results on the UPIPAV questionnaire for the first and second generation (graph 1).



Graph 1. A comparative overview of the results from the UPIPAV questionnaire of the mothers and adolescents

As indicated, the results show that tables 3 and 4, as well as the graph, point out that sixteen years later both the mothers and their children have a similar, so-called tri-pronged profile in which the greatest values were determined precisely for the dimensions which make up the disorganized pattern of attachment: unresolved trauma, a negative working model of the self and a negative working model of others. Certain differences in the manifestation of the aforementioned dimensions might testify to changes in society (adolescents have a greater negative RMD than their mothers). Naturally, without confirmation from a more extensive sample, the

indications remain nothing more than speculation. What seems to be more revealing than the speculation is the manifestation of the dimension Unresolved trauma. It is the only dimension which actually has an equally high value among both the mothers and the adolescents.

Table 5. *Correlatons of mothers and adolescents scores on dimensions of attachment (UPIPAV)*

	r
First/ second generation	.748**
Unresolved trauma/ Unresolved trauma	.000
Anger regulation/ Anger regulation	.342
The fear of losing one's external secure base/The fear of losing one's external secure base	.102
Negative IWM of others / Negative IWM of others	.728**
Capacity to mentalize/ Capacity to mentalize	.000
Negative IWM of self / Negative IWM of self	.809**
Using the secure base/ Using the secure base	.420*
	.041
	.717**
	.000
	.823**
	.000

The following table shows the results regarding the connection between the expression of the dimensions of attachment among adolescents and their mothers. As can be seen from the table, most of the correlations are statistically significant. Only for the dimension of Poor anger management was no statistically significant correlation determined.

Discussion

The discussion of the results will be organized according to the stated hypotheses. The first hypothesis indicated that we expected a connection between the quality of the attachment which the participants manifested as children, and the patterns of attachment which were evaluated for the same sample of participants sixteen years later, that is, when they were adolescents. Based on the obtained results it is clear that all the participants as children showed signs of maladaptive patterns. Considering that during the testing, in Serbia it was not possible to evaluate patterns of attachment using the Strange situation procedure, no patterns of attachment were obtained and instead the capacity of the child for growth and development on a continuum from the optimal to the maladaptive pattern were determined. All of the children showed signs of the so-called maladaptive patterns of behavior. During adolescence, all these participants were ranked high on dimensions which make up the disorganized pattern: Unresolved trauma, a Negative working model of the self and a Negative working model of others, which indirectly confirms the persistence of the maladaptive pattern of attachment from early childhood to adolescence. Based on the obtained results we can conclude that there is a connection between the quality of the attachment of the participants in childhood and in adolescence.

What is of special importance is that there are no data regarding the existence of any unfavorable circumstances during childhood, and we could even say that the situations in the children's families were somewhat more stable compared to the circumstances noted during the initial testing⁹. Namely, attachment theoreticians believe that the persistence of the patterns of attachment during childhood can be explained through the concept of assimilation: all the new life experiences are incorporated into working models formed in early childhood. So, if the models were negative, the individual will be prone to potentially interpret favorable life conditions negatively, and vice versa. A persistence of the negative working models among the participants, irrespective of the relatively favorable circumstances during childhood, can only be understood based on this concept.

In the second hypothesis it was assumed that there was a connection between the attachment patterns of the mothers established during adolescence and the patterns established in the so-called period of maturity. Based on the obtained results, mothers on the first testing scored high on the dimensions of the AAI protocol which make up the disorganized pattern: Rejection, Role reversal, Obsession with anger, Passivity in conveying experiences, Defects in the metacognitive process, Unresolved trauma, Fear of loss, Unresolved loss, Incoherence of transcript, and Incoherence of mind. Sixteen years later, these mothers, even though they had worked out many of their existential problems which had been bothering them during the first testing, still fulfilled the condition for the disorganized pattern (the tri-pronged profile, with peaks of Unresolved trauma, a Negative self model and a Negative model of others). Based on the abovementioned we can indirectly conclude that there is a connection between the quality of the attachment manifested during the first testing and the one sixteen years later during the second testing. Thus, there is a continuity in maintaining the patterns. As was previously mentioned, the mechanism of assimilation is responsible for this process, or the habit of understanding things and feeling them in the same way we learned to do so in childhood, even if it is in a non-functional and detrimental manner.

Our expectations in the third hypothesis referred to the connection between the quality of the attachment of the children and their mothers. The research results confirmed the connection between the quality of the attachment of the children and the disorganized pattern of attachment of their mothers in the sense that all the children had maladaptive bases of growth and development. This finding was expected and had already been determined in numerous studies, which were mentioned in the theoretical section of the paper.

Finally, we assumed that there was a correlation between the dimensions of attachment of adolescents and the dimension of attachment of their mothers. The question of the mechanism of pattern transmission is actually a question which researchers cannot answer. Perhaps in the results of the connection between the

⁹ The analysis of the socio-demographic data was not included in the result overview, since not all of the mothers were willing to give out data. The impression regarding the absence of additional complications was obtained indirectly (the data were collected by the authors from acquaintances of the participants).

dimensions of attachment of the mothers and the dimensions of attachment of the adolescents sixteen years after the first testing we can glimpse one of the answers to the question of the transmission mechanism. Namely, one of the dimensions whose values did not change is the dimension of the Unresolved trauma. It is highly pronounced both among the mothers and their children. During the first testing, the mothers spoke of their trauma (mostly violence and alcoholism in the nuclear family), so it is not especially surprising that they tend to transmit the trauma further on (even though eight of the twelve mothers are now happily married). This conclusion is surprising from the perspective of their children, who today are adolescents. Where did they get such a high score for unresolved trauma? Most of them, unfortunately, refused to give an interview and provide more data regarding their childhood. Based on hetero-anamnestic data, there is no reason to assume that the studied adolescents experienced any significant or traumatic events, not even during their earliest childhood or when they were growing up. Nevertheless, they all scored high on the dimension of Unresolved trauma. If the obtained results were to be connected to the concept of the capacity for reflexion, mentalization, mirror functions, etc., we might be able to glimpse an answer. Namely, these mothers carried with them an unresolved trauma from their youth, which prevented them from having a good reflexive function, that is, the ability to recognize both their own and the feelings of others. What does this mean for their children? It could mean that these mothers did not have the capacity to adequately explain the situations that their children found themselves in. It might mean that there were dramatic reactions to harmless causes (events from school or simple colds...), but also complete absences of reactions to events which required attention. On the other hand, children interpret events based on the reactions of their primary figures. Just recall the movie *La vita è bella*¹⁰.

Thus, the lives of these children were not nice since their mothers had a trauma that had not been resolved and which was passed on to the next generation. In this case we find ourselves facing a question which requires more serious study: Is one of the means of transmission of disorganized patterns precisely unresolved trauma?

Conclusion

Based on the research results we can conclude that there is a persistence in the patterns of disorganized patterns of attachment during childhood, as well as during adulthood. Thus, the continuity in maintaining patterns does exist, and the responsibility for the continuity is most frequently ascribed to the mechanism of assimilation.

In addition, the research results confirm that there is a transgenerational transmission of the disorganized pattern of attachment. The responsibility for the mechanism might be ascribed to Unresolved trauma.

¹⁰ <http://www.imdb.com/title/tt0118799/>

Future research must focus on the issue of the evaluation of this possibility. Based on the results obtained in this study, the conclusion can only be drawn cautiously and somewhat speculatively, since the sample and the selected methodology do not allow more precise conclusions.

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DEZORGANIZOVANA VEZANOST: TRANSGENERACIJSKI PRENOS TRAUME

Apstrakt

Veliki broj studija potvrđuje transgeneracijski prenos obrazaca vezanosti. Uprkos činjenici da postoji prenos obrazaca vezanosti, pitanje mehanizma prenosa i dalje je nerešeno. Prva studija o transgeneracijskom prenosu obrazaca vezanosti u Srbiji je sprovedena 2001. godine. Petnaest godina kasnije, primenili smo i longitudinalni pristup u rešavanju ovog problema. Konkretno, dijade majka-dete testirane su prvi put 2001. godine, a zatim ponovo 2016. godine. U prvoj studiji, koristili smo: AAI (George et al., 1985) za majke i AQS (Waters & Deane, 1985) za procenu afektivne vezanosti dece. U drugoj studiji smo imali priliku da decu, sada već adolescente, testiramo istim instrumentom kao i majke, domaćim instrumentom za procenu vezanosti - UPIPAV (Hanak, 2004). U ovom radu su predstavljeni rezultati transgeneracijskog prenosa samo jednog obrasca vezanosti – dezorganizovanog obrasca. Ovaj izbor je uslovljen činjenicom da je transgeneracijsko prenošenje ovog obrasca najčešće, a posledice najozbiljnije. Rezultati potvrđuju transgeneracijski prenos negativnih *Unutrašnjih radnih modela* (sebe i drugih). Takođe, dimenzija koja je ostala nepromenjena u obe generacije je *Nerazrešena porodična trauma*. U zaključku ostaje dilemma: Da li trauma doživljena u detinjstvu ne može biti obrađena ni decenijama kasnije, čak i u pristojnim uslovima života?

Ključne reči: transgeneracijski prenos, dezorganizovani obrazac afektivne vezanosti, trauma

RELATIONS BETWEEN SEXUAL BEHAVIOR AND SELF-CONCEPT IN THE CONTEXT OF LEE LOVE THEORY

Abstract

Large body of scientific research indicating the importance of sexuality, preferences for certain sexual activities and propensity, depending on Lee love styles, but relations with dimensions of self-concept are relative uninvestigated. The aim of this article was to examine the structure and intensity of relations between dimensions of sexual behavior and dimensions of self-concept, in the context of Lee love theory. The sample included 237 participants (m - 71; f - 166), age from 18 to 31 (M=22.68). Dimensions of sexual behavior were measured using the Sexual Behavior Questionnaire (Dinić & Knežević, 2008), self-concept was measured using the six scales of self-concept (Bezinović, 1988), and love styles were measured using LAS Scale (Hendrick & Hendrick, 1986). The results discuss in the context of the existing theoretical context. It found that the self-concept was a significant predictor of all love styles dimensions, while sexual behavior significantly predict styles Eros, Ludus, Storge, and Mania. Gender differences show that man have higher scores on Agape and Storge styles. Hence, expected correlation between dimensions of self-concept and sexual behavior on one hand, and love styles from the other side, is confirmed, as well as prediction function of all dimensions, but some assumptions based on previous studies and theoretical view have not confirmed completely.

Keywords: sexual behavior, love styles, self-concept

Introduction

Self-concept is most commonly defined as a subjective experience we have of ourselves (Krač & Kračević, 1973; Vizek-Vidović et al., 2003). There is a disagreement among scientists regarding the use of the term self-concept as an inconsistent terminology (self-concept, self-image, a sense of self, ego, identity, self, and others) which complicates the comparative study of the problem in this field and the integration of scientific knowledge, but, fortunately, there are no major differences when it comes to defining this aspect of personality. Bezinović (1988) defines this concept as an integral part of the attitudes that an individual

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should have about himself/herself, but at the same time it is the initial point of the perceptual space of an individual, because it contains the reference framework for the organization and perception of the world in which one lives. He lists: the perception of personal incompetence, self-esteem, loneliness, fear of negative social evaluation, overall satisfaction and externality (external locus of control) as the aspects of self-concept. The agreement of the authors in the domain of self-concept as a subjective experience of their one's own personalities is going to be the referential theoretical frame of this study, operationalized through the six scales of Bezinović.

Dimensions of sexual behavior are of special importance for us when it comes to researching romantic and partnership relationships, for sexuality has been mentioned as one of the three most important components of a romantic relationship, besides mutual care and attachment (Hazan & Shaver, 1987). Therefore, the expected correlation between the dimensions of sexual behavior and love styles is justified. Since one-dimensional approach is not the best solution (Webster & Bryan, 2007), integrating various components is inevitable. Various studies from biological, psychological, behavioral, social, emotional, cultural or other aspects (Hendrick & Hendrick, 1995; Oliver & Hyde, 1993; Stanković et al., 2001), has only contributed to better understanding of the individual characteristics of sexual behavior, thus enabling the local researchers, on the basis of existing theoretical concepts, to distinguish between behavioral, cognitive, emotional and socio-cultural aspects (Dinić & Knežević, 2008).

The phenomenon of love has been looked into in different ways throughout history, but the theoretical model used in this study is the model of a Canadian sociologist Alan Lee (Lee, 1987). His classification were based on empirically different conceptions of love, starting from ancient times to the time of the foundation of the theory (Stefanović-Stanojević, 2012), and although it is partly taken from the already existing sources, Lee's love theory has been empirically confirmed by many studies. Lee makes a distinction between six different styles: *Eros*, *Ludus*, *Storge*, *Pragma*, *Mania* and *Agape*. *Eros* - a passionate love - for whose members strong sexual and physical attraction and intensive feelings are typical. Love is very important for them, they know how to express it in the right way, whereas high self-esteem, openness to others and falling in love at first sight are their features that distinguish them from the others. *Ludus* - superficial love - is characterized by the fact that these people do not devote their love to just one person, but they skillfully play games and seduce several partners. They are emotionally distant and able to control their feelings. *Storge* - friendly love - is the kind of love you feel towards siblings, colleagues or friends. They shy in expressing love, and see marriage as the culmination of their relationships. *Pragma* - manipulative, pragmatic love - has a practical view of romantic love. *Pragma* has their criteria, and one can either fit in it or do not, but it is very unlikely that one will pass a series of tests and trials before a person belonging to *Pragma* decides to get closer to you. No excessive emotion, no romance, no jealousy. *Mania* - possessive love - they do not take the risk of losing love. When it comes to romantic relationship *Mania* does not end a relationship, they remain in a

relationship at any costs, possessively attached to a partner, what also provokes along suffering, jealousy, over-possessiveness... *Agape* – unselfish love – characteristic of people with high understanding, patience, extremely altruism, with a lot of tender feelings. The selected classification is a great challenge for the present-day studies because it has been designed so that its universal character can survive even in the future. The author of the theory himself held that *Storge*, *Pragma* and *Agape* style would become increasingly rare, while *Eros*, *Mania* and *Ludus* styles would mark the time that comes (Lee, 1987; Stefanović-Stanojević, 2012). This theory predicts that people who belong dominantly to *Eros* have expressed self-esteem (Lee, 1987), as confirmed by later studies (Campbell et al., 2002; Hendrick & Hendrick, 1986), and indicated that it can reasonably be assumed that *Mania* people suffer from low self-esteem (Nikić, 2011). The studies show that loneliness negatively correlates with *Eros* in males and females, positive with male *Ludus* female *Pragma* (Pinto & Neto, 2003; Rotenberg & Korol, 1995). Lonely people are often associated with uncritical position regarding the number of sexual partners (Marshall, 1989; Træen & Sørensen, 2000).

Lee predicted that each of the styles strives to the specific way of sexual behaviour. *Eros*, according to the theory, enjoys the intimacy and has tried out different techniques in sex, while members of the *Ludus* style seek sexual pleasure and good sexual technique. *Storge* style is characterized by avoiding sexual intercourse and enjoying non-genital forms of pleasure. *Mania* style is characterized by sexual frustration, so *Mania* members do not enjoy their sexual relations, in comparison to *Pragma*, which is considered important for compatibility in a relationship, but it is not practiced too often. And finally, *Agape* style is characterized by abstaining from sexual activities (Lee, 1987; Stefanović-Stanojević, 2012).

Are men or women better representatives of a specific love style or gender differences do not exist - is the issue which has been touched by many studies, but it seems that there are a number of disagreements in this field. A small number of studies find statistically significant differences between men and women regarding style *Eros* (Hendrick et al., 1984; Rotenberg & Korol, 1995), although the differences are not going consistently in favor of either of the genders. Concerning other styles, the researchers are mostly consistent and the difference between men with styles *Ludus* and *Agape*, and women with styles *Storge*, *Pragma* and *Mania*, is noticeable (Bailey et al., 1987; Feeney & Noller, 1990; Hendrick & Hendrick, 1986; Hendrick & Hendrick, 1995). However, it should be noticed that the number and arrangement of sex differences in these studies vary, and only after summarizing the results do we come to the conclusion that many researchers agree on the differences in one style. The studies in the local environment have only encountered the difference *Mania* style in favour of women (Todosijević et al., 2001).

The aim of this study is reflected in the bringing the different styles of love with self-concept and sexual behaviour, where some of them have been studied until now in the context of Lee's love theory, but some represent novelty in this area. On the other hand, the theoretical concept itself, from the beginning predicted the existence of sexual behavior within the love styles, so the first hypothesis is the expected

connection between dimensions of sexual behavior with certain styles based on a theoretical concept, and in addition, due to the large number of similar studies, the second hypothesis is based on the comparison of the results of specific sexual behaviors obtained as the results of another studies.

Method

Sample

We used a convenient sample comprised of 237 respondents – 71 male and 166 female subjects, form 18 to 31 years old, the average age of 22.68 years. Most of the respondents were students (84%), while other participants were divided into groups of employed, unemployed and high school students. The residents are mostly from cities and urban areas such as Belgrade, Niš, Kraljevo, Novi Sad, Leskovac, Vranje, Pirot, Raška and others, and they make 84.5% of the sample, while the rest that come from a small town or rural areas.

Instruments

Self-Concept Scale. For the operationalization of this construct we used six scales of Bezinović (1988): perception of personal incompetence (PPI), self-esteem (SE), loneliness (UCLA), fear of negative social evaluation (FNSE), overall satisfaction (OS) and externality, or external locus of control (EXTER). All subscales have relatively good internal consistency for this sample from .88 on Externality skale to .91 on Loneliness skale. The respondents had to give answers to 76 items given to Likert scale of five degrees.

The Questionnaire of Sexual Behavior. The questionnaire covers various aspects of sexuality that the authors (Dinić & Knežević, 2008) included in this questionnaire. A total of 70 questions (the answers are given using different scales) included four aspects of sexuality (behavioural, cognitive, emotional and socio-cultural) and the operationalization of the six dimensions of sexual behavior: Sexual fantasy, Richness of sexual experience, Tendency to non-coital sexual play, Tendency to paraphilias, Tendency to sex on unusual places, Tendency to casual sex.

Love Attidues Scale. The authors of the popular LAS scale (Love Attidues Scale; Hendrick & Hendrick, 1986) operationalize love styles according to the theoretical concept of a Canadian sociologist and social psychologist John Alan Lee (Lee, 1987). The scale includes six love styles: 1) Eros - a passionate love; 2) Ludus – game playing love or superficial love; 3) Storge - friendly love; 4) Pragma - practical love; 5) Mania - obsessive love; 6) Agape – unselfish love. The reliability of the scale on this sample is satisfactory, and it is expressed through Cronbach alpha coefficient of internal consistency ranging from .76 on Storge to .88 on the style Eros.

Results

In the introduction we mentioned that the previous studies showed a correlation between self-concept and love styles, dependent or independent on the gender, as well as the possibility of discovering new connections in this area. Table 1 shows the Pearson correlation between these dimensions.

Table 1. Pearson correlation between love styles and self-concept dimensions

	PPI	SE	UCLA	FNSE	OS	EXTER
EROS	-.211**	.279**	-.378**	-.144*	.385**	.058
LUDUS	.092	-.161*	.265**	.075	-.256**	.103
STORGE	.156*	-.096	.119	.129*	-.105	.175**
PRAGMA	.016	-.020	.047	.130*	.025	.222**
MANIA	.112	-.150*	-.008	.183**	-.003	.251**
AGAPE	-.067	.004	-.096	-.023	.113	.202**

Note: PPI – Perception of personal incompetence, SE – self esteem, UCLA – loneliness, FNSE – fear of negative social evaluation, OS – overall satisfaction, EXTER – externality

** - $p < .01$; * - $p < .05$

Table 2 shows the correlation between the sub-samples of men and women between the dimensions of a self-concept and love styles.

Table 2. The correlation between love styles and self-concept dimensions, on male and female sub-samples

		PPI	SE	UCLA	FNSE	OS	EXTER
EROS	m	-.309**	.310**	-.442**	-.112	.459**	.234*
	f	-.146	.268**	-.340**	-.142	.353**	-.017
LUDUS	m	.040	-.061	.190	.060	-.219	.031
	f	.151	-.230**	.332**	.109	-.278**	.145
STORGE	m	.209	-.105	.242*	.134	-.173	.267*
	f	.188*	-.107	.084	.169*	-.070	.139
PRAGMA	m	-.248*	.101	.054	.131	.094	.076
	f	.124	-.066	.054	.142	-.006	.281**
MANIA	m	-.043	-.168	.036	.110	.041	.179
	f	.192*	-.153*	-.027	.226**	-.026	.283**
AGAPE	m	.086	-.106	.035	.120	.067	.304**
	f	-.027	.015	-.142	-.024	.188*	.186*

Note: PPI – Perception of personal incompetence, SE – self esteem, UCLA – loneliness, FNSE – fear of negative social evaluation, OS – overall satisfaction, EXTER – externality; *m* – male sub-sample; *f* – female sub-sample

** - $p < .01$; * - $p < .05$

The results in Tables 1 and 2 point out that the Eros is characterized by negative perceptions of personal incompetence in male, but not in female; positive self-esteem

and overall satisfaction, negative loneliness for both sexes, while fear of negative social evaluation correlates negatively with this style. Ludus correlates negatively with self-esteem and overall satisfaction, but positively with loneliness, statistically significant only on a female subsample. Storge style correlates positively with the perception of personal incompetence and fear of negative social evaluation, especially on a female subsample, and with loneliness on a male subsample. Mania negatively correlates with self-esteem on a female subsample. With the perception of personal incompetence styles Pragma and Mania correlate positively, and with externality positively correlate styles Storge, Pragma, Mania and Agape, with distinctive features according to a gender shown in Table 2.

Another initial assumption of our work is the existence of a connection between the dimensions of sexual behavior and love styles, primarily determined by the theoretical framework of this study, and later also by studying different sexual behaviours and ove styas

Table 3. Correlation between dimensions of sexual behavior and love styles

	SF	RSE	TNCSP	TP	TSUP	TCS
EROS	-.115	.031	.262**	.020	.134*	-.058
LUDUS	.118	.178**	.022	.164*	.114	.275**
STORGE	-.096	-.133*	-.122	-.108	-.045	-.073
PRAGMA	-.015	.041	-.025	-.041	.007	-.047
MANIA	-.143*	-.114	-.063	-.041	-.039	-.228**
AGAPE	-.050	-.024	.064	-.008	.042	-.133*

Note: SF - Sexual fantasy; RSE - Richness of sexual experience; TNCSP - Tendency to non-coital sexual play; TP - Tendency to paraphilias; TSUP - Tendency to sex on unusual places; TCS - Tendency to casual sex ** - $p < .01$; * - $p < .05$

Eros correlates positively with a tendency to non-coital sexual play and with tendency to have sex on unusual places, Ludus correlate with dimensions such as richness of sexual experience, tendency to paraphilias and tendency to have casual sex. As far as Storge style is concerned, we found a negative correlation with the dimension richness of sexual experience and in Mania with dimensions sexual fantasy and tendency to casual sex, which, only statistically significant correlates negatively also with Agape love style. Pragma does not correlate significantly with any dimension of sexual behavior. All correlations are of low intensity.

Table 4. Correlations of love styles with some questions from the questionnaire

	EROS	STORGE	MANIA
Number of sexual partner	.437**	-.193*	-.193*
'One night' sexual experience		-.133*	-.152*
Enjoying in sexual intercourse	.367**	-.168*	

** - $p < .000$; * - $p < .05$

Questions containing a Questionnaire about sexual behavior has enabled some further exploration of the relations between the variables, and thus confirming the existence of additional bonds between the love styles and sexual behavior. We found a negative correlation between the number of sexual partners and styles Storge and Mania. The results show that there is a medium strong bond between the Eros and the number of sexual partners, while the correlation with the number of partners who had ‘one night’ intercourses was negatively associated with members of Storge and Mania styles. Enjoyment in sexual intercourses correlate positively with the style of Eros and negatively with Storge style.

In an examination of the differences between male and female in love styles, the results of t-test show that males have a higher average value concerning Agape ($t(235)=4.93; p<.000; r=-.306$) and Storge ($t(235)=1.99; p<.04; r=-.129$) styles.

An attempt to explain some aspects of love styles relying on certain personality traits and behaviors, has been operationalized through the dimensions of sexual behavior shown in Table 5, and by dimensions of self-concept, shown in Table 6.

Table 5. The results of the standard multiple regressions: Prediction of love styles based on the dimensions of sexual behavior

CRITERIUM	R	R ²	F
EROS	.380	.122	6.248***
LUDUS	.382	.123	6.480***
STORGE	.283	.056	3.303**
PRAGMA	.092	-.18	.325
MANIA	.293	.062	3.572**
AGAPE	.167	.002	1.084

*** p<.0001; **p<.01; *p<.05

Sexual behavior as a predictor of love styles has proved to be statistically significant in four dimensions, where it significantly predicts dimension Eros, Ludus, Storge and Mania. The percentage of the explained variance of the predictor is highest in Eros and Ludus with approximately the same values, slightly higher than 12%. A contribution has also been realized and in styles Mania with 6.2% and Storge where the value reaches 5.6%.

Table 6. Partial contributions of sexual behavior as a predictor

	β	r(DV)	spc ²
EROS			
SF	-.155	-.110*	.016*
TNCSP	.388	.265***	.081***
LUDUS			
TNCSP	-.230	.044	.028**
TCS	.252	.306***	.046***
STORGE			
RSE	-.191	-.219***	.024*
TSUP	.217	-.045	.022'
MANIA			
TCS	-.228	-.262***	.037**

Note: *SF* - Sexual fantasy; *RSE* - Richness of sexual experience; *TNCSP* - Tendency to non-coital sexual play; *TP* - Tendency to paraphilias; *TSUP* - Tendency to sex on unusual places; *TCS* - Tendency to casual sex

*** $p < .0001$; ** $p < .01$; * $p < .05$

$r(DV)$ – correlation with dependent variable, spc^2 – square of semi partial correlation

The greatest partial contribution, shown in Table 7, in Eros love style, has a dimension - tendency to non-coital sexual play with a contribution in explaining the variables slightly higher than 8%, while negative sexual fantasy contributes negligible 1.6%. The tendency to casual sex with a 4.6% and a negative tendency to non-coital sexual play with 2.8% were significant predictors of sexual behavior of Ludus. Storge is determined by a single positive (tendency to sex on unusual places, 2.2%) and a negative predictors (richness of sexual experience, 2.4%). The negative predictor of Mania style with about 4% of explained variance is the dimension tendency to casual sex.

Table 7. The results of the standard multiple regressions: Prediction of love styles based on self-concept dimensions

CRITERIUM	R	R ²	F
EROS	.446	.178	9.493***
LUDUS	.280	.054	3.255**
STORGE	.236	.031	2.259*
PRAGMA	.240	.033	2.333*
MANIA	.326	.083	4.562***
AGAPE	.249	.038	2.544*

*** $p < .0001$; ** $p < .01$; * $p < .05$

Unlike the first predictors, self-concept is a significant predictor of all six love styles, which contributes to the style Eros with 17.8%, while it makes a smear contribution to the other styles, thus having a value of 8.3% in style Mania, in Ludus 5.4%, and in styles Storge, Pragma and Agape slightly higher than 3%.

Table 8. Partial contributions of self-concept as a predictor

	β	$r(DV)$	spc^2
EROS			
UCLA	-.201	-.416***	.036**
OS	.211	.399***	.015*
LUDUS			
UCLA	.207	.243***	.020*
STORGE			
EXTER	.180	.175**	.031*
PRAGMA			
EXTER	.203	.208**	.040**
MANIA			

FNSE	.169	.177**	.020*
EXTER	.221	.253***	.048**
AGAPE			
EXTER	.199	.204**	.039**

Note: *UCLA* – loneliness, *FNSE* – fear of negative social evaluation, *OS* – overall satisfaction, *EXTER* – externality

*** $p < .0001$; ** $p < .01$; * $p < .05$

$r(DV)$ – correlation with dependent variable, spc^2 – square of semipartial correlation

Table 8 shows that, although self-concept has proved to be a significant predictor of all dimensions of love styles. Negative loneliness with 3.6% and positive overall satisfaction with 1.5% were statistically significant predictors of Eros. Ludus has one significant predictor, loneliness with 2% explained variance. The styles Storge (3.1%), Pragma (4%) and Agape (3.9%) have one significant predictor - a positive Externality. Besides fear of negative social evaluation (2%), externality (4.8%) is also a positive predictor of the Mania style, with 4.8% explained variance.

Discussion

The expectations that the members of the *Eros* style have high self-esteem (Campabell et al. 2002; Hendrick & Hendrick, 1986; Lee, 1987), overall satisfaction in the field of self-concept, and that they perceive themselves as competent, but score poorly when it comes to loneliness (Neto & Pinto, 2003; Rotenberg & Korol, 1995) and the fear of negative social evaluation, were confirmed in this study. When it comes to sexual behavior, the tendency to a non-coital sexual play might not be expected from this style, but when a high value of emotions and emotional stability (Lee, 1977) of *Eros*-style lovers are also taken into consideration, as well as that a non-coital sexual play (in addition to experiences which do not involve penetration) includes the enjoyment of such sexual relations and ease of achieving orgasm, it seems that this dimension can be clearly understood in the emotional context of *Eros*. Emotional stability and the positive aspects of the self-concept of *Eros* indicate a strong correlation with the number of sexual partners, according to which members of this style precede in comparison to the members of other love styles.

The members of the *Ludus* style are characterized by low self-esteem (Lee, 1987) and overall satisfaction, and high scores on loneliness (Neto & Pinto, 2003; Rotenberg & Korol, 1995). Seen from the outside, *Ludus* may be incorrectly be perceived as a style to which somewhat different characteristics would be attributed, concerning the richness of sexual experience, tendency to paraphilias and casual sex (Frey & Hojjat, 1998; Hensley, 1996). Thus the explanation of uncritical sexual relations, is explained by a tendency of lonely people ‘to wander from partner to partner’, with the hope that they would get closer to a potential partner, as discussed in other studies (Marshall, 1989; Træen & Sørensen, 2000). The negative tendency to a non-coital sexual play,

positive tendency to casual sex and loneliness, as predictors of Ludus going certainly redound to the hypothesis mentioned.

Lee said that *Storge* style leans towards a non-coital sexual play (Lee, 1987; Stefanović-Stanojević 2012), but results show there are no statistically significant correlation with this dimension of the questionnaire. However, Storgic female have a characteristic perception of personal incompetence and a fear of negative social evaluation, while males are characterized by loneliness and externality. Such reticence and the negative image of themselves explain the low richness of sexual experience, a small number of sexual partners and low level of enjoying sexual relations and restrictive sexual attitudes, where the only feature of Storge sexual behavior is the tendency to sex in unusual places. Some research also shows that Storgic men feel pressured into performing sexual acts against their will (Russell & Oswald, 2002). Therefore, the Lee's expectations about poor sexual experience of this style stay confirmed in this study, but many studies (Campabell et al. 2002; Hendrick & Hendrick, 1986; Lee, 1977) see Storge with a more stable self-concept compared with the results that are shown here.

The only thing it can concluded about *Pragma* is the perception of the male respondents as incompetent and expressed external locus of control shown in females. The lack of significant correlations with constructs, bring into question the possibility of identifying that dimension and a small number of respondents who dominantly belong to the Pragma, suggest that there is a need to review the existence of this style in the population and possibly reduce the number of love style dimensions. After all, Lee the theoretical conception itself states that Pragma is one of the styles with a tendency to be rarely encountered in the future (Lee, 1987; Stefanović-Stanojević, 2012).

Possessive love style - *Mania* – is indeed characterized by the perception of personal incompetence, low self-esteem (Campabell et al. 2002; Collins & Read, 1990; Nikić, 2011), fear of negative social evaluation and external locus of control, as expected, but thorough examination has shown a statistically significant correlation only in female subsample. In theory Mania is referred to as a sexually frustrated (Lee, 1987), causing lack of enjoyment in sexual relations due a high level of anxiety (Feeney & Noller, 1990), which are consistent with the results of this study in which low sexual fantasies and sexual experience along with a small number of sexual partners are referred to.

Agape style has not found a special place among these constructs, especially because this style is more often mentioned in the context of older people (Lin & Huddleston-Casas, 2005). However, the respondents in this study were just over twenty-one years old. The overall satisfaction in women, similar to findings of life satisfaction in Yancey and Berglass (1991), and external locus of control in men and women are the only features of this style. An Agape lover is sexually restrained, as predicted by the theory (Lee, 1987; Stefanović-Stanojević, 2012). The results show only their disinclination towards a casual sex, as expected (Bailey et al., 1987).

Gender differences in the love styles are not consistent with the results of other authors, who in our community are opposed to female more Manic (Todosijević et

al., 2001), but in our sample there are no differences in Mania. Foreign authors find the difference in Agapa style in favour of men (Bailey et al., 1987; Feeney & Noller, 1990; Hendrick & Hendrick, 1986; Hendrick & Hendrick, 1995), which was confirmed in this sample, but also a difference in style Storge also in favor of men, which the same authors consistently noticed in the female subsample.

The disadvantages of this study were instruments that did not show the expected validation in this sample, a questionnaire of sexual behavior and love style scale. The need for reviewing the existing scale and a theoretical concept of love styles written several decades ago, as Lee himself predicted (Lee, 1987), methodological failure of the sample and the need to examine some less homogenous population structure (eg the elderly) – present the limitations of the research. Perhaps a better operationalization of sexual behavior through other instruments could further enhance the quality of the study and the structure of the results. Thus, the results obtained in this paper can become a valuable basis for the purposes of indicating the direction of future studies in this area, for the interest in the phenomenon of romantic love has always been an inspirational subject, but according to Lee's theory and contemporary philosophy of love, it seems that the contribution in the future may bring major changes in relation to the current understanding of this phenomenon.

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Nikola Goljović

ODNOS IZMEĐU SEKSUALNOG PONAŠANJA I SELF-KONCEPTA U KONETSKTU LIJEVE TEORIJE LJUBAVI

Apstrakt

Veliki broj radova ukazuje na važnost seksualnosti, preferencije određenih seksualnih ponašanja i sklonosti u zavisnosti od ljubavnih stilova, a relacije sa dimenzijama self-koncepta predstavljaju relativnu novinu u ovoj oblasti. Cilj rada jeste utvrditi strukturu i intenzitet povezanosti dimenzija seksualnog ponašanja i dimenzija self-koncepta u kontekstu Lijeve teorije stilova ljubavi. Istraživanje je sprovedeno na uzorku od 237 ispitanika oba pola ($m=71$; $ž=166$), starosti od 18 do 31 godine ($AS=22,68$). Dimenzije seksualnog ponašanja merene su Upitnikom o seksualnom ponašanju (Dinić i Knežević, 2008), self-kocept preko šest skala self-koncepta (Bezinović, 1988), dok je za konstrukt stilova ljubavi korišćena LAS skala (Hendrick & Hendrick, 1986). Dobijeni rezultati tumačeni su u postojećem teorijskom kontekstu. Utvrđeno je da je self-koncept značajan prediktor svih dimenzija stilova ljubavi, dok je seksualno ponašanje značajan prediktor stilova Eros, Ludus, Storge i Mania. Razlike između muškaraca i žena na ovom uzorku pokazuju da muškarci imaju više skorove na stilu Agape i Storge. Dakle, očekivana povezanost između dimenzija self-koncepta i seksualnog ponašanja, sa jedne strane i stilova ljubavi, sa druge strane, potvrđena je, kao i prediktivna funkcija svake od dimenzija, ali neki rezultati studije nisu u skladu sa teorijskim i ranijim empirijskim podacima.

Ključne reči: seksualno ponašanje, stilovi ljubavi, self-koncept

RELATION BETWEEN ATTACHMENT STYLES AND ASSERTIVENESS AND SELF-HANDICAPPING BEHAVIOUR

Abstract

The problem of the research was trying to determine if the dimensions of avoidance and anxiety are statistically significant predictors of assertive and self-handicapping behavior, and if there are statistically significant differences in the level of presence of these traits on the subsample of men and women. The instruments used in this research were: SM-ECR-R test (Hanak & Dimitrijević, 2013), A scale (Tovilović et al., 2010) and SH questionnaire (Mitrović et al., 2010). A convenience sample was used and the participants were 364 students of the University of Niš. The sample includes 141 males and 223 females, aged 19 to 25 ($M=21.12$; $SD=1.45$). The results of the u -test have shown that dimensions: anxiety, avoidance, outer and inner handicaps in interpersonal relations and outer handicaps in achievement situations are significantly more present in male population. By using multiple regression analysis, it was confirmed that we can predict: *assertiveness* ($\beta=-.37$), *outer* ($\beta=.42$) and *inner* ($\beta=.57$) *handicaps in interpersonal relations*, *outer* ($\beta=.54$) and *inner* ($\beta=.35$) *handicaps in achievement situations* based on anxiety; *assertiveness* ($\beta=-.15$) and *inner handicaps in interpersonal relations* ($\beta=.11$) based on avoidance. The contribution of research reflected in confirming the existing theoretical assumptions, with the exception of avoidance as predictive function.

Keywords: avoidance and anxiety, assertiveness, self-handicapping behavior

Introduction

The concept of affective attachment was introduced into the psychological science by the English psychoanalyst John Bowlby (1988). It is a specific relationship formed between the mother and the child in early childhood, and it persists throughout life in the form of a permanent psychological connection (Holmes, 2004).

Affective attachment is a form of behavior that, although most evident in early childhood, persists throughout life. It is an integral part of human nature and characteristic of all human beings. The benefit that the individual involved in the relationship with the responsive attachment figure has is above all a sense of security and protection (Bowlby, 1988).

Working models are the basis of affective attachment. Each individual, through the interaction with a figure of attachment, builds a working model of self and the

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world. These models serve the individual to anticipate future and to plan it based on that. These are the models that represent a set of beliefs and expectations of self and significant others (Bowlby, 1973).

Bowlby assumed that the basis of this phenomenon and its long-term impact and importance was *the internal working model*, that is, a cognitive-affective structure that is developed as a reflection of behavioral patterns. The internal working model as a mechanism that underlies affective attachment consists of the model of the *self* and the model of *significant others*. The working models of self and others can be positive or negative, depending on the formed set of beliefs and expectations in relation to the self and significant others (Stefanović-Stanojević, 2015).

Based on Bowlby's theoretical assumptions about the internal working model, Kim Bartholomew (1990) formulated a four-category attachment model and by using the factor analysis identified two dimensions which are the basis of these models, the dimension of anxiety and the dimension of avoidance. The dimension of anxiety is representative of the internal working model of the self, it is a bipolar dimension, which is low at one pole, while high at the other. The dimension of anxiety is characterized by a strong need for closeness, fear of being left eventually, and worrying about whether your love has been requited. The dimension of avoidance is bipolar too; the acceptance of closeness is at one pole, while dismissing is at the other; it represents the internal working model of the others. By combining the dimensions of anxiety and avoidance, we come to the four main affection styles: secure (low anxiety and low avoidance), preoccupied (high anxiety and low avoidance), dismissing (low anxiety and high avoidance) and fearful (high anxiety and high avoidance).

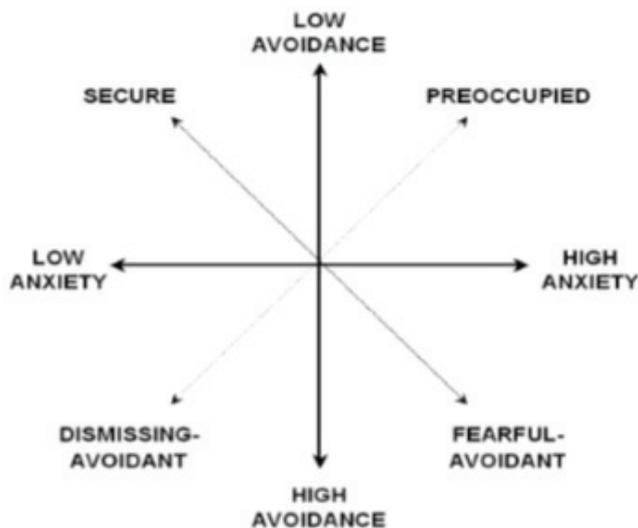


Figure 1: The dimensions of affective attachment (Bartholomew, 1991; see Stefanović- Stanojević, 2015, p. 72).

The concept of assertiveness means the willingness of a person to step forward confidently and take a stand, to assert, protect and defend his/her rights, to stand up for himself/herself in a social situation and to confidently express himself/herself. If assertiveness is considered in the context of the extreme passive and aggressive behavior, this concept is between the two extremes (Hersen & Bellack, 1985; Hjelle & Zigler, 1992).

There is a different approach to the term of assertiveness (Lange & Jakubowski 1976; Zarevski & Mamula, 1998). Zarevski and Mamula define assertiveness as an individual behavior determined by fighting for personal rights and expressing opinions in a clear way; according to these authors, assertive behavior involves rejecting unreasonable demands without feelings of fear and guilt.

Berglas and Jones (1978) first used the term *self-handicapping* strategies to describe a set of behaviors aimed at mitigating the effects of the potentially negative feedback.

Various events that pose a threat to the individual's self-esteem and perception of self-worth may trigger a large number of defense mechanisms. Some people are prone to resort to defense mechanisms in order to protect the basic element of self-concept, self-esteem. By using *self-handicapping* mechanisms, people reduce the possibility that failing on any field of life could be attributed to the lack of ability (Čolović et al., 2009).

In the most general sense, we distinguish self-handicapping on the basis of internal and external factors, while the main areas in which the *self-handicapping* strategies have been observed are situations of achievement and interpersonal situations (Čolović et al., 2009). According to the factors and areas where self-handicapping is expressed, we distinguish four types of self-handicapping behaviors: *self-handicapping by external causes in interpersonal relationships* (the excuses for possible failures are attributed to circumstances beyond the personal characteristics of the person, and, in that way, despite the chronic discontent, the person strives to maintain an optimal level of self-esteem, through masking his/her own specific role and personal responsibility), *self-handicapping by internal causes in interpersonal relationships* (the tendency to look for the excuses for failure within the personality traits, in the permanent features such as being constantly sickly, shy or insecure), *self-handicapping by external causes in situations of achievement* (it is characterized by transferring responsibility to other people around who are perceived as indifferent, hostile or incompetent) and *self-handicapping by internal causes in situations of achievement* (the tendency to use external handicaps as an alibi when it comes to achievement, so the person attributes potential failure to personal characteristics such as perfectionism, problems with concentration, laziness) (Mitrović et al., 2010).

Schore (2003) considers that forming the relationships attachment is crucial for the socio-emotional development, and it takes place during the child's first year, because then, within a secure relationship of attachment, the optimal conditions for maturation of specific neural structures are created. The specific neural structures formed in that period are responsible for affective control, and also have an indirect

impact on all intrapsychic and interpersonal aspects of future socio-emotional function.

The attachment, formed in childhood, to the figures that inconsistently correspond to the needs are is the basis of that high anxiety and avoidance; as a consequence, these individuals are usually not sure of the availability and responsiveness of others, which reduces the individual's belief in his/her personal ability to engage in social interaction (Wei et al., 2005), and also leads to lower social self-efficacy, or feeling less confident in interpersonal relationships (Pedović, 2010). In contrast to that, if a person is characterized by a low score on the dimensions of anxiety and avoidance, that is if a person has formed secure affective attachment, the studies show that those characteristics are associated with social competence and more developed social skills (DiTommaso et al., 2003), greater confidence in social situations, assertiveness in communication and positive beliefs about the social world (Collins & Read, 1990), the tendency of a person to perceive himself/herself as more confident in establishing and maintaining social relationships (Pedović, 2010). According to Skolnick, affective attachment and its impact in early childhood are in the center of later social functioning, which Bowlby also confirms by claiming that the nature of early relationships is the basis for relationships later in life, because those early relationships form models of our beliefs and expectations for ourselves and others and have an impact on social competence later in life (Skolnick, 1986; according to Collins & Read, 1990).

It is expected that the individuals with high scores on the dimension of anxiety will have low scores on assertive behavior as a result of the negative model of the self, while they will have high scores on the dimensions of self-handicapping behavior. That is, we expect the dimension of anxiety to be a possible predictor of assertive and self-handicapping behavior, as more basic dimensions and part of the internal working model of the self, which is formed in childhood. We expect that the individuals with high scores on the dimension of avoidance will have low scores on assertive behavior, as a result of the negative model of others (we believe that these individuals will be more inclined towards the behavior that is too aggressive, instead towards assertive behavior, which is in line with the negative perception of other people), while they will have high scores on the dimensions of self-handicapping behavior. That is, we expect the dimension of avoidance to be a possible predictor of assertive and self-handicapping behavior, as more basic dimensions and part of the internal working model of others, which is formed in childhood. These assumptions are consistent with the research of Mallinckrodt and Wei (2005), whose basic assumption is that high anxiety and high avoidance affect a wide range of poor functioning in the social sphere.

When it comes to the statistically significant differences in the manifestation of the tested dimensions in the subsamples of men and women participating in the research, we started from theoretical and empirical assumptions. According to the theory, assertiveness shows significant differences in relation to sex and gender roles, which is caused by the processes of socialization, and some of the older research shows that assertiveness is typical and desirable for masculine behavior, or that males

are more assertive than females (Crassini et al., 1979; Hollandsworth & Wall, 1977; Maccoby, 1992; Zarevski & Mamula, 1998). However, the results of recent research (Karagoglu et al., 2008; according to Sarkova et al., 2013) and meta analysis (Twenge, 2001) are inconsistent with the above findings with respect to the construct of assertiveness, and according to them, there are no gender differences in terms of assertive behavior, which was caused by the socio-cultural changes in society.

Studies consistently show that men behave in a more self-handicapping manner than women (Arkin & Oleson, 1998; Čolović et al., 2009; McCrea et al., 2008a; McCrea et al., 2008b; Rhodewalt, 1990). The research of Čolović, Smederevac and Mitrović (2009) has shown that there exist gender differences in the inclination towards self-handicapping. Males have a greater tendency to use different strategies of self-handicapping as a stable pattern for dealing with problems, especially in their interpersonal relationships. When it comes to the sphere of achievement, gender differences are observed only in applying external self-handicapping strategies, but not the inner ones (Čolović et al., 2009). In accordance with the findings that males are more prone to self-handicapping strategies than females, we expect the dimensions of avoidance and anxiety to be statistically significant and more prominent in the male sample, as possible predictors of self-handicapping behavior.

The aim of the research is to determine whether the dimensions of avoidance and anxiety, as more basic traits that are formed in early childhood as part of the internal working model, are statistically significant predictors of assertive and self-handicapping behavior, and whether there are statistically significant differences in the manifestation of the given traits between males and females.

Method

Sample

The sample was convenience and it consisted of 364 students of the University of Nis, out of which 141 (38,7%) were males and 223 (61,3%) females, aged 19 to 25 (the average age of 21,12; SD=1.45).

Measures

The dimensions of avoidance and anxiety were operationalized through the score on the subscales “avoidance” and “anxiety” of the Serbian adaptation of the test SM-ECR-R (Experiences in Close Relationships scale) (Hanak & Dimitrijević, 2013). The test consists of 36 items and answers are given on a seven-point Likert scale.

Their sample confirmed the high reliability of the questionnaire as a whole ($\alpha=0.87$), as well as of its two subscales ($\alpha=0.82$ avoidance, $\alpha=0.89$ anxiety). Reliability coefficients on this sample are: $\alpha=0.78$ avoidance, $\alpha=0.89$ anxiety.

Assertiveness was operationalized through the score on the scale for the assessment of assertiveness, A scale (Tovilović et al., 2010). The test consists of 27 items and answers are given on a five-point Likert scale.

The instrument is highly reliable ($\alpha=0.96$). The representativeness of the scale in their sample is 0.93 of the normalized KMO. Therefore, it is the scale of high representativeness and reliability. The coefficient of reliability on this sample is $\alpha=0.89$.

Self-handicapping behavior was operationalized through the scores on the subscales (external and internal handicaps in situations of achievement and interpersonal relations) for the assessment of self-handicapping, of the SH questionnaire (Mitrović et al., 2010). The test consists of 34 items and answers are given on a five-point Likert scale.

The subscales of the questionnaire show satisfactory reliability (the coefficient of reliability of the subscales ranges from 0.70 to 0.91), and representativeness (the coefficient of representativeness of the subscales ranges from 0.81 to 0.92) in their sample. The coefficient of reliability of the subscales on this sample ranges from 0.66 to 0.85.

Results

Descriptive statistical parameters are shown in Table 1.

Table 1: Descriptive Statistics (N=364)

	N	Min	Max	Mean	SD
Assertiveness	364	1.81	4.81	3.45	.53
Anxiety	364	1.17	6.22	3.17	1.03
Avoidance	364	1.17	5.89	3.48	.75
Outer handicaps in interpersonal relations	364	1.00	4.60	2.33	.75
Inner handicaps in interpersonal relations	364	1.00	4.55	2.17	.79
Inner handicaps in achievement situations	364	1.00	4.63	2.78	.72
Outer handicaps in achievement situations	364	1.00	4.80	2.34	.88

Assumptions and conditions for regression are met. By using multiple regression analysis, it was checked whether the dimensions of avoidance and anxiety were statistically significant predictors of assertive behavior and the dimensions of self-handicapping behavior.

The analysis showed that we could statistically significantly predict the dimension of assertiveness (19.5% of explained variance) based on the dimensions of anxiety and avoidance (shown in Table 2). The model is statistically significant [$F(2, 361)=43.79$] $p=.00$.

Table 2: Multiple regression predicting Assertiveness from dimensions of affective attachment

Independent Variable	B	SE B	β
Anxiety	-.19	.03	-.37***
Avoidance	-.11	.03	-.15**

Note: B- non-standardized beta; SE B- standard error for B; β - standardized beta.

*** - $p < .0001$; ** - $p < .01$; $R \text{ Square} = .19$; $R = .44$

According to the results, we can statistically significantly predict the dimension of outer handicaps in interpersonal relations (20,7% of explained variance) based on the dimensions of anxiety, while the dimension of avoidance is not a statistically significant predictor (shown in Table 3). The model is statistically significant [$F(2, 361) = 47.18$] $p = .00$.

Table 3: Multiple regression predicting Outer handicaps in interpersonal relations from dimensions of affective attachment

Independent Variable	B	SE B	β
Anxiety	.31	.04	.42***
Avoidance	.07	.05	.07

Note: B- non-standardized beta; SE B- standard error for B; β - standardized beta.

*** - $p < .0001$; $R \text{ Square} = .21$; $R = .45$

It was determined that we can statistically significantly predict the dimension of inner handicaps in interpersonal relations (38,4% of explained variance) based on the dimensions of anxiety and avoidance (shown in Table 4). The model is statistically significant [$F(2, 361) = 112.74$] $p = .00$.

Table 4: Multiple regression predicting Inner handicaps in interpersonal relations from dimensions of affective attachment

Independent Variable	B	SE B	β
Anxiety	.44	.03	.57***
Avoidance	.11	.05	.11*

Note: B- non-standardized; SE B- standard error for B; β - standardized beta.

*** - $p < .0001$; * - $p < .05$;

$R \text{ Square} = .38$; $R = .62$

The results show that we can statistically significantly predict the dimension of Outer handicaps in situations of achievement (32,8% of explained variance) based on the dimensions of anxiety, while the dimension of avoidance is not a statistically significant predictor (shown in Table 5). The model is statistically significant [$F(2, 361) = 88.22$] $p = .00$.

Table 5: Multiple regression predicting Outer handicaps in achievement situations from dimensions of affective attachment

Independent Variable	B	SE B	β
Anxiety	.46	.04	.54***
Avoidance	.10	.05	.08

Note: B- non-standardized beta; SE B- standard error for B; β - standardized beta.

*** - $p < .0001$; $R \text{ Square} = .33$; $R = .57$

The results show that we can statistically significantly predict the dimension of Inner handicaps in situations of achievement (13.7% of explained variance) based on the dimensions of anxiety, while the dimension of avoidance is not a statistically significant predictor (shown in Table 6). The model is statistically significant [$F(2, 361) = 28.59$] $p = .00$.

Table 6: Multiple regression predicting Inner handicaps in achievement situations from dimensions of affective attachment

Independent Variable	B	SE B	β
Anxiety	.24	.04	.35***
Avoidance	.05	.05	.06

Note: B- non-standardized beta; SE B- standard error for B; β - standardized beta

*** - $p < .0001$; $R \text{ Square} = .14$; $R = .37$

The normality of distribution was tested by the Kolmogorov-Smirnov test, and the results show that eight out of fourteen groups have the distribution that statistically significantly deviates from the normal distribution. For that reason, we still use a nonparametric technique in order to study the differences between male and female participants in the given dimensions. The differences in the manifestation of the dimensions of anxiety, avoidance, assertiveness, outer handicaps in interpersonal relations and situations of achievements, inner handicaps in interpersonal relations and situations of achievement between male and female subjects were tested by using Mann-Whitney U test.

Table 7: Mann-Whitney Test on differences between males and females in attachment dimensions, assertiveness and self-handicapping behaviour

Dimensions	Gender	Mean Rank	r	Significance
Anxiety	Male	199.59	0.13	.01
	Female	171.70		
Avoidance	Male	200.17	0.13	.01
	Female	171.33		
Assertiveness	Male	176.32	0.05	.37
	Female	186.41		
Outer handicaps in interpersonal relations	Male	208.13	0.19	.00
	Female	166.30		

Inner handicaps in interpersonal relations	Male	200.59	0.14	.01
	Female	171.07		
Outer handicaps in achievement situations	Male	203.73	0.16	.00
	Female	169.08		
Inner handicaps in achievement situations	Male	187.25	0.04	.49
	Female	179.50		

Note: r- effect size.

The results of Mann-Whitney U test showed that the dimensions of anxiety, avoidance, outer handicaps in interpersonal relations, inner handicaps in interpersonal relations and outer handicaps in situations of achievement are statistically significant and more pronounced in the male sample. However, the size of the impact is very small.

Discussion and conclusion

The results show that the dimension of anxiety is a statistically significant negative predictor of assertive behavior and a statistically significant positive predictor of the dimension of self-handicapping behavior; also, according to the results, the dimension of avoidance is a statistically significant negative predictor of assertive behavior. Given that assertive behavior is characterized as the healthiest choice in communicating with others (Zarevski & Mamula, 1998), and self-handicapping strategies as a set of behaviors aimed at mitigating the effects of potentially negative feedback, that is, a mechanism aimed at protecting the basic element of self-concept, self-esteem (Čolović et al., 2009), while the dimension of anxiety is viewed as representing the internal working model of self, and the dimension of avoidance as representing the internal working model of others (Stefanović-Stanojević, 2015), the obtained findings are in line with the expectations for the research and the theoretical assumptions on which we have relied in this research. For the socio-emotional development and formation of optimal conditions for the maturation of specific nerve structures and their later indirect impact on all intrapsychic and interpersonal aspects of future socio-emotional functions, it is essential to form the relation of affective attachment during the child's first year (Schore, 2003). Also, the results are consistent with the view that affective attachment and its impact in early childhood is important for later social functioning, and that the nature of early relationships is the basis for future relations, because those early relations form the models of our beliefs and expectations for ourselves and others and have an impact on social competence later in life (Skolnick, 1986; according to Collins & Read, 1990); the results are also consistent with the assumption that high anxiety and high avoidance affect a wide range of poor functioning in the social sphere (Mallinckrodt & Wei, 2005), that is, they lead to less adequate social interaction (Wei et al., 2005), as well as to feeling less confident in interpersonal relationships (Pedović, 2010). The finding that the predictive function of the dimension of anxiety (as the image of the self and its own

self-respect, in the context of the internal working model of the self) is a statistically significant positive predictor of the dimensions of self-handicapping behavior (outer and inner handicaps in interpersonal relations, as well as outer and inner handicaps in situations of achievement) can also be associated with the results of the research conducted by Burušić and Brajša-Žganec (2005) which showed that people with lower self-esteem and less clear image of themselves use self-handicapping as behavior strategy more often.

On the other hand, the research findings have shown that the dimension of avoidance is a statistically significant predictor of inner handicaps in interpersonal relations, while it is not a statistically significant predictor of outer handicaps in interpersonal relations and of both outer and inner handicaps in situations of achievement. This deviation from the expectations for our research and the theoretical assumptions which guided us can be explained by the possibility that the negative image of the self is more important incentive for the use of self-handicapping behavior strategies, because, the function of the self-handicapping behavior strategies in the first place is the protection of the basic elements of self-concept, self-esteem, that is, the internal working model of the self (that is, the dimension of anxiety in our research) and not the negative image of other people (i.e. a high score on the dimension of avoidance).

What we can also notice is that the dimension of anxiety is a better predictor compared to the predictive power of the dimension of avoidance, that is, in most cases compared to the deviations from the expectations of the predictive function of avoidance, which in turn can be explained by our hypothesis that it is more probable that the incentive for assertive behavior and self-handicapping strategies is the image of the self formed at an early age, and not the image and beliefs related to other people, which persists today, in social relations and behaviors, through the internal working model. Of course, this possibility leaves room for doubt.

The secondary aim of the research was to examine whether there existed statistically significant differences in the studied dimensions between male and female subjects. According to the results, outer and inner handicaps in interpersonal relations and outer handicaps in situations of achievement are statistically significant and more prominent in male subjects, which is consistent with the empirical data (Čolović et al., 2009), such as the research findings according to which men behave in a more self-handicapping manner than women (Arkin & Oleson, 1998; McCrea et al., 2008a; McCrea et al., 2008b; Rhodewalt, 1990). Also, the results we got related to statistically significant prominence of the dimensions of anxiety and avoidance in the male sample can be seen in the light of the assumption that these dimensions are predictors of self-handicapping behavior, which our research only partially confirmed; and the research of Čolović, Smederevac and Mitrović (2009) showed that males tend to use self-handicapping behavior strategies. According to the results, there is no gender difference when it comes to the dimension of assertiveness, which is in line with the results of recent research (Karagöglü et al., 2008; according to Sarkova et al., 2013) and the notion that the rise of assertiveness in women, and

consequently the equalization of assertiveness in both genders, was caused by the socio-cultural change of society, that is, by education and lifestyle (Twenge 2001).

By partially confirming the theoretical and empirical assumptions, the contribution of the research is reflected in the understanding of assertive and self-handicapping behavior in the context of the affective attachment dimensions. As for future research in this direction, we recommend to use a sample not consisting entirely of student population, and also to check the potential function of gender as a mediator, and interpret the results in the context of affective attachment patterns.

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Tina Janjić

ODNOS IZMEĐU AFEKTIVNE VEZANOSTI, ASERTIVNOSTI I SAMOHENDIKEPIRANJA

Apstrakt

Cilj istraživanja bio je utvrditi da li su dimenzije izbegavanja i anksioznosti statistički značajni prediktori asertivnog i samohendikepirajućeg ponašanja i dali postoje statistički značajne razlike u izraženosti datih crta na poduzorku muskaraca i žena. U istraživanju su korišteni instrumenti: SM-ECR-R (Hanak i Dimitrijević, 2013), A skala (Tovilović i sar., 2010) i SH upitnik (Mitrović i sar., 2010). Prigodnim uzorkom obuhvaćeno je 364 (M=141, Ž=223) učesnika, studenata Univerziteta u Nišu, starosti od 19 do 25 godina (AS= 21,12; SD=1,45). Rezultati u-testa su pokazali da su kod muškaraca statistički značajno izraženiji: anksioznost, izbegavanje, spoljašnji i unutrašnji hendikepi u interpersonalnim odnosima i spoljašnji hendikepi u situacijama postignuća. Multiplom regresionom analizom je utvrđeno da možemo predvideti: *asertivnost* ($\beta=-.37$), *spoljašnje* ($\beta=.42$) i *unutrašnje* ($\beta=.57$) *hendikepe u interpersonalnim odnosima*, *spoljašnje* ($\beta=.54$) i *unutrašnje* ($\beta=.35$) *hendikepe u situacijama postignuća* na osnovu anksioznosti; *asertivnost* ($\beta=-.15$) i *unutrašnje hendikepe u interpersonalnim odnosima* ($\beta=.11$) na osnovu izbegavanja. Doprinos istraživanja ogleda se u potvrdi postojećih teorijskih pretpostavki, sa izuzetkom prediktivne funkcije izbegavanja.

Ključne reči: Izbegavanje i anksioznost, asertivnost, samohendikepirajuće ponašanje

ADULT ROMANTIC ATTACHMENT, RESILIENCE, AND LIFE SATISFACTION AMONG MEN WITH PHYSICAL DISABILITY AS A RESULT OF WAR EXPERIENCE

Abstract

The purpose of this research is to examine if adult romantic attachment and resilience are connected with satisfaction of one's life among individuals who had experienced a loss of a body part as a consequence of a war trauma, as well as if these variables are good predictors of life satisfaction. Participants of this research were 180 men who had lost a part of their bodies, during or soon after war developments in Bosnia and Herzegovina. The attachment pattern distribution in our sample suggests that the insecure-avoidant attachment is the most common one. Our results indicate that the different socio-demographic characteristics, like parenthood, employment, financial status or PTSD symptoms, are very important for one's life satisfaction and resilience. Also, both adult romantic attachment and resilience seem to be good predictors of satisfaction of one's life in general, as well as in specific areas, taking in consideration that resilience seems to be a better predictor and a possible mediator between avoidance as attachment strategy and life satisfaction. Results also indicate that individuals who are more prone to avoid their significant others are also more satisfied with their lives, which makes us consider using avoidance as some kind of adaptive strategy in coping with stress, taking in consideration time that has passed and also the inability of influencing the trauma consequences, that are very real for them.

Key words: adult romantic attachment, internal working models, resilience, life satisfaction, amputation

Introduction

Social turmoil and political unrest in the beginning of the 1990s affected Bosnia and Herzegovina and left behind a large number of amputees. As there are no many studies with a similar theme in this area, this research has been done in an effort to contribute to identifying those factors that lead to a more successful reintegration and greater life satisfaction of amputees.

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Amputation, final loss of a body part, changes person's life, so significant others are more needed than before, and has consequences not only on the body, but also on the image that one has of himself (Bradway et al., 1984). Still, it's a wonder how amputees successfully adapt to new circumstances, thanks to resilience, ingenuity and dedication of people who care for them (Bradway et al., 1984). Research has shown that for this adjustment presence of the supporting partner is particularly useful (Racy, 1989).

John Bowlby was the one who introduced the concept of attachment in science, one that implies a relationship that is formed in early childhood between mother and child (Stefanović-Stanojević, 2011). Further investigation of this concept has led to the introduction of internal working models, model of self and model of the significant other (Stefanović-Stanojević, 2011). Taking into account qualitatively different experiences of a child, Bowlby defines secure and insecure quality of the interaction among children and those who take care of them (Stefanović-Stanojević, 2004). The internal model acquired in early childhood becomes a part of our emotions, and as such, potentially influences all our future feelings, disappointments and behavior (Stefanović-Stanojević, 2008). Hazan and Shaver, whose studies stimulated research of partnership attachment, find that attachment is important in understanding partnerships (Hazan & Shaver, 1987; 1994). Building on their research, Kim Bartholomew defined the four-pattern attachment formulation for adolescents and adults, by identifying two dimensions in the core of these models: the avoidance dimension (model of others) and the anxiety dimension (the model of self) (Bartholomew, 1990; 1994). Combining these dimensions four patterns of attachment are obtained: secure (positive model of self- low anxiety, positive model of others - low avoidance); preoccupied (positive model of others, negative model of self- high anxiety), dismissive (positive model of self, negative model of others) and fearful, where both models, of self and of others, are negative, so avoidance and anxiety are high. Those with secure attachment report a higher level of perceived social support in opposition to individuals with insecure attachment (Florian, Miculiner & Bucholtz, 1995, according to Woodward et al., 2013).

Individual differences in attachment styles are important for mental health and adjustment, and love and support we experience with others naturally lead to their positive mental representations and a stable sense of self-esteem with the adoption of constructive coping strategies (Shaver & Hazan, 1993, according to Miculiner, Shaver & Horesh, 2006). Those with insecure attachment perceive their partner as unreachable, unready to provide support when necessary, and considering that attachment styles are highly stable over the years, experiencing their partner this way can have consequences on their well-being (Feeney, 2006, according to Nyklíček, Vingerhoets & Zeelenberg, 2011). Bowlby's theory also implies that insecure attachment is a risk factor for the reduction of resilience in times of stress, that it contributes to emotional problems and maladjustments (Bowlby, 1980, according to Miculiner, Shaver & Horesh, 2006). Those with secure attachment are well adjusted, less anxious and often have better relationships, which also contributes to greater

prosperity (Feeney, 2006, to Nyklíček, Vingerhoets & Zeelenberg, 2011). Close ties are those who significantly contribute to life satisfaction, happiness and health (Myers, 1999).

According to the World Health Organization quality of life is actually the perception of the role of the individual in the context of culture and values in which he lives in and in relation to his objectives (World Health Organization, 1996). Diener and colleagues define life satisfaction as one of the main components of personal well-being, which is defined as a global self-assessment of life quality in relation to personal criteria and in independence of specific values, norms and goals (Diener et al., 1985). Defining life quality as the general welfare that includes a sense of happiness and life satisfaction, various researchers have found a correlation between social support and well-being (Emmons et al., 1983; Abbey & Andrews, 1985, according to Myers, 1999). Many studies show that people with developed attachment to their partner are happier (Gove, Style & Hughes, 1990; Inglehart, 1990, according to Meyers, 1999) and better in facing different stressful situations (Perlman & Rook, 1987, by Meyers, 1999). If the negative external or the internal impact on individual's functioning is not too strong, different mechanisms with the aim of restoring quality of life are activated (Cummins, 2003, according Vuletić), and then we can speak about resilience, that allows the individual to partially or completely regain life satisfaction after the negative impact.

Resilience or resistance can be defined as a protective mechanism that functions in opposition to negative stressors, as a positive adaptation or ability to maintain or restore mental health despite experiencing hardship (Bonanno, 2004). Bonanno (2004) defined adult resilience as the ability of adults, in otherwise normal circumstances, who are exposed to an isolated and potentially highly disruptive event such as the death of a close relation or a violent or life-threatening situation to maintain relatively stable, healthy levels of psychological and physical functioning, as well as the capacity for generative experiences and positive emotions. Knowledge about resilience and its functioning in people is vital in order to develop programs for intervention and prevention (Kelley, 2005, according to Reich, Zautra & Hall, 2010). Research shows that resilient people may experience negative psychological consequences of stressful events or trauma, but tend to return to their previous level of experiencing pleasure and well-being (Reich, Zautra & Hall, 2010).

Contemporary studies investigate this isolated impact of resilience and early close relationships on one's efficient functioning and overcoming of stressful situations. For example, those who in difficult situations have available support, report higher levels of well-being (Perrigo-Chiello, 1997, according to Reich, Zautra & Hall, 2010). Similarly, resilience forms a strong basis during childhood, but this base can vary and the development of supportive ties during maturing process (usually with a spouse or a partner) allows us to feel emotional support in this new context and thus improve resilience in later life (Reich, Zautra & Hall, 2010). Studies emphasize the importance of these constructs for our efficient functioning and coping, but they investigate them separately. Not enough research is dedicated to examining the

relationships and cooperation of these constructs in terms of satisfaction with life and especially when it comes to research conducted on individuals with disability. This study seeks to contribute in clarifying the interconnections and possible predictions of life satisfaction based on resilience and partner attachment of amputees.

Present study: Taking into account findings that highlight the importance of attachment and resilience in traumatic and stressful situations, we are interested in finding out whether romantic attachment and resilience can predict life satisfaction of people who lost a part of their body during the warfare. We assume that life satisfaction of those with physical disabilities can be predicted by romantic, adult attachment, as well as resilience, in a way that more prominent presence of secure attachment characteristics and higher level of resilience indicate the greater life satisfaction in various aspects. However, we expect romantic attachment to be a better predictor in this model.

Also, we are interested in finding out if there is a connection between romantic attachment patterns and resilience. We assume that more prominent presence of characteristics that indicate secure attachment point to higher resilience. Findings that would confirm the significance of resilience for better posttraumatic functioning would be of great importance for preventive work with people that are at risk when it comes to losing their body parts. The importance of support and social environment is unquestionable. However, the nature of the relationship with the partner is not enough focused on. If it turns out that the romantic attachment is of true importance, this could be a direction that could be focused on during re-socialization of individuals with disabilities, that would encourage their partners to participate in their psycho-educational and psychotherapeutic work.

Methodology:

Instruments

Romantic attachment was tested by a modified version of the ECR-R questionnaire (Fraley, Waller & Brennan, 2000) which was modified by Hanak and Dimitrijević (Hanak & Dimitrijević, 2013). Individual differences were presented by two dimensions, anxiety of losing closeness with the partner and avoiding of closeness with the partner (Brennan, Clark, & Shaver, 1998).

We measured resilience with the Connor-Davidson resilience scales (CD-RISC-25) (Connor & Davidson, 2003), where higher final score reflects greater resilience.

The WHOQOL – BREF, questionnaire of the World Health Organization (The WHOQOL Group, 1996) measures the quality of life through expressed satisfaction with four aspects of life (physical and psychological health, social relations and environment). A higher score means a better quality of life.

SWSL (Diener, 2006) also measures the quality of life, where higher final score indicates a higher level of life satisfaction.

To register an important subject data, that is potentially relevant to this research, participants also filled in the questionnaire of socio-demographic characteristics and PTSD symptoms, that contains questions about: marital status, children, time passed since the amputation, education, type of amputation.

Sample and procedure

The sample consisted of males who suffered physical disabilities during the war in Bosnia and Herzegovina and its immediate aftermath (1993-1997). There were 180 participants, most of them aged from 39 to 51 (53,9%). Majority of participants has the below-knee amputation (57,2%), while others have above-knee amputation, amputation of both legs or arms. Most of them finished high school (53.3%). The vast majority of respondents are unemployed (83.9%), live in rural areas (64.4%), and assesses their material situation as average (65.6%). 76.1% are married, while 83.9% have children. 66.1% of respondents has no psychiatric diagnosis of PTSD. The research was conducted in the premises of the association for support of people with disabilities and homes of amputees. The average time for completing the questionnaires was around 30 minutes.

Results

Table 1: Reliability expressed through Cronbach α

	Cronbach α
ECR-R	
avoiding of intimacy	0.685
anxiety of losing intimacy	0.835
CD-RISC-25	0.956
WHOQOL – BREF	0.961
SWSL	0.869

Data above shows high reliability coefficients for all questionnaires used in our research, with the avoiding of intimacy having the lowest and WHOQOL –BREF quality of life having the highest Cronbach α .

Table 2: Descriptive statistics (attachment and life satisfaction - various aspects)

	N	Minimum	Maximum	M	SD
Anxiety	180	1.44	6.17	3.3858	.84943
Avoidance	180	1.50	5.67	4.0923	.65598
Physical	180	.00	100.00	56.1905	20.76520
Psychological	180	.00	100.00	62.9630	20.28797
Social	180	.00	100.00	67.6852	20.32968
Environment	180	.00	96.88	52.1875	18.76425

Data above shows us that participants score higher average results on the avoidance of closeness dimension than on the anxiety of losing intimacy dimension. They are most satisfied with the social aspect of their lives, followed by the psychological one. They are less satisfied with the aspect of physical health and the least satisfied with the environmental aspect of their lives.

Table 3: Resilience presented through socio-demographic structure and PTSD symptoms

		M	SE	df	F	p
Amputation	Below-knee	63.887	6.818	3	4.086	.008
	Above-knee	60.402	7.393			
	Both legs	49.665	8.406			
	Arm	64.734	8.873			
Employment	Yes	78.975	8.386	1	11.113	.001
	No	60.160	2.894			
Financial status	Well below the average	47.937	4.407	3	7.963	.000
	Below the average	77.244	8.920			
	Average	69.238	1.931			
	Above average	68.333	10.177			
PTSD diagnosis	Yes	62.234	3.700	1	3.866	.051
	No	63.485	2.790			
Sleep problems	Yes	58.971	3.027	1	8.203	.005
	No	67.938	3.346			
Nightmares	Yes	61.561	3.840	1	6.247	.013
	No	64.178	2.535			
Member of an association	Yes	66.228	2.803	1	3.846	.051
	No	58.049	3.716			
Children	Yes	64.973	1.410	1	9.752	.002
	No	53.241	4.450			

From the data above we can see that there is a statistically significant difference in resilience among participants with different types of amputations ($F(3)=4.086$, $p<.01$), different financial status ($F(3)=7.963$, $p<.01$), employment ($F(1)=11.113$, $p<.01$), those with and without children ($F(1)=9.752$, $p<.01$), and those that do and don't have sleep problems ($F(1)=8.203$, $p<.01$). There are also differences between those with and without a PTSD diagnosis, with and without nightmares, as well as between those who are and are not members of the association for supporting amputees, but these differences are significant at the $p<.05$ level. The most prominent differences in resilience were obtained between patients with and without sleep problems, different financial status and employment. Comparing these differences we can conclude that the most resilient participants are those

that have an arm amputation, that are employed, average financial status, those who have children and those who don't have a PTSD diagnosis, sleep problems and night mares, but are members of the association for supporting amputees. Certain socio-demographic variables (irritability, mood swings and family status), that are not significant in obtaining differences, are not shown above.

Table 4: Life satisfaction, socio-demographic variables and PTSD symptoms

		M					F	p
		Physical	Psychological	Social	Environment	General		
Amputation	Below-knee	59.7781	66.9903	70.3074	53.4891	20.2233	2.001	.014
	Above-knee	53.0000	59.3333	66.5000	51.8750	19.4000		
	Both legs	41.3265	50.2976	58.9286	44.4196	16.2857		
	Arm	56.0440	58.6538	60.8974	51.4423	15.6923		
Employment	Yes	69.5813	77.4425	77.2989	61.7457	24.6897	5.349	.000
	No	53.6187	60.1821	65.8389	50.3518	18.3377		
Financial status	Well below the average	39.7321	45.3125	51.5625	35.1562	15.8750	3.883	.000
	Below the average	50.5952	55.4563	61.5079	41.5923	15.3571		
	Average	60.2300	67.8672	71.8927	57.8125	21.0508		
	Above average	61.6071	67.7083	72.9167	65.6250	25.5000		
PTSD diagnosis	Yes	50.1171	58.8115	63.1148	49.8975	18.0820	2.336	.044
	No	59.3037	65.0910	70.0280	53.3613	20.0168		
Sleep problems	Yes	45.5056	55.5243	61.4232	47.2612	17.1011	13.924	.000
	No	66.7737	70.5524	73.6891	57.1278	21.6292		
Nightmares	Yes	46.0784	55.6373	61.7647	48.5294	18.4510	5.415	.000
	No	60.0624	65.8399	69.7090	53.5466	19.6667		
Mood swings	Yes	49.3088	59.0502	63.6201	48.9247	17.5376	3.229	.001
	No	63.4682	67.2691	71.7871	55.6099	21.2048		

Family status	Married	56.0480	64.5681	70.6813	52.8057	19.6715		
	Common-law marriage	71.4286	76.0417	81.2500	63.2812	20.0000		
	In a relationship	67.2619	67.3611	65.2778	60.9375	20.5000	1.988	.003
	Divorced	57.1429	56.2500	57.1429	47.3214	18.3571		
	Widow	47.8571	55.8333	48.3333	45.0000	21.4000		
	Single	50.5102	50.8929	52.9762	46.6518	15.9286		
Children	Yes	56.3860	64.4040	69.6468	52.8146	19.8344	4.396	.001
	No	55.1724	55.4598	57.4713	48.9224	16.8966		

Results indicate that the most satisfied, considering general well-being, as well as in all individual aspects, are participants with below-knee amputations, those that are employed, have children, are married, whose financial status is above average, those who do not have a PTSD diagnosis, sleep problems, nightmares, frequent mood swings or are easily irritated. Unlike them, those that have both legs amputated are the least satisfied in general and in all individual aspects of life. Life satisfaction was also lower among the unemployed, those who do not have children, those whose material status is well below the average, who have a psychiatric diagnosis of PTSD, sleep problems, nightmares and frequent mood swings and are irritated. Married people are more satisfied with the psychological and social aspects of life than divorced, while comparing to those in relationships they are more satisfied only with the social aspect of their lives. Certain socio-demographic variables (irritability, association membership), that are not significant in obtaining differences, are not shown above.

Table 5: Attachment dimensions as predictors of general well-being and individual aspects of life satisfaction

Aspects	R	R2	F(2)	P	Anxiety p	Avoidance p
Physical	.362	.131	13.37	.000	-.245	.001
Psychological	.553	.306	38.98	.000	-.365	.000
Social	.599	.359	49.50	.000	-.367	.000
Environment	.444	.198	21.78	.000	-.288	.000
General well-being	.365	.133	13.57	.000	-.250	.001

Based on the data presented in the table above, general well-being and individual aspects of life satisfaction can be predicted by romantic attachment. Anxiety of losing closeness and avoiding closeness are significant predictors of general well-being, as well as individual aspects of life satisfaction. By analyzing the contribution of individual predictors through their beta values, considering general well-being and individual aspects, avoidance of closeness seems to be a better predictor. Looking at the proportion

of variance that predictors share with the criterion, we can see that the most significant contribution is in social and psychological aspect of life satisfaction (36% and 31%).

Table 6: Resilience as a predictor of general well-being and individual aspects of life satisfaction

Aspects	R	R2	F(1)	p	Resilience	p
Physical	.579	.335	89.86	.000	.579	.000
Psychological	.733	.537	206.61	.000	.733	.000
Social	.646	.417	127.20	.000	.646	.000
Environment	.600	.360	100.14	.000	.600	.000
General well-being	.520	.271	66.13	.000	.520	.000

Resilience seems to be a statistically significant predictor of general well-being, as well as individual aspects of life satisfaction. By analyzing values of beta coefficients we conclude that the resilience is the best predictor psychological of life satisfaction.

Table 7: Romantic attachment and resilience correlations

		Resilience	Anxiety	Avoidance
Resilience	r	1	-.060	.603**
	p (2-tailed)		.426	.000
Anxiety	r	-.060	1	.202**
	p (2-tailed)	.426		.006
Avoidance	r	.603**	.202**	1
	p (2-tailed)	.000	.006	

Collected data suggest that the correlation between resilience and avoidance dimension is 0.603, which indicates a strong, positive and statistically significant bond. Resilience and anxiety dimension correlation is -.0060, negative, low and not statistically significant. Romantic attachment dimensions are also significantly correlated (r=.202).

Table 8: Predictors of all individual aspects of life satisfaction and general well-being

Aspects	MODEL 1 (anxiety, avoidance)				MODEL 2 (anxiety, avoidance, resilience)			
	R	R2	F(2)	p	R	R2	F(3)	p
Physical	.362	.131	13.36	.00	.600	.360	32.96	.000
Psychological	.553	.306	38.98	.00	.767	.588	83.77	.000
Social	.599	.359	49.50	.00	.706	.498	58.30	.000
Environment	.444	.198	21.78	.00	.625	.390	37.53	.000
General well-being	.365	.133	13.57	.00	.543	.295	24.54	.000

Table 9: Predictors' regression coefficients for all individual life satisfaction aspects and general well-being

Aspects	MODEL 2 (anxiety, avoidance, resilience)								
	Anxiety	t	p	Avoidance	t	p	Resilience	t	p
Physical	-.128	-2.02	<u>.045</u>	-.074	-.932	.353	.616	7.93	.000
Psychological	-.235	-4.64	.000	.057	.890	.375	.685	10.98	.000
Social	-.276	-4.92	.000	.244	3.48	.001	.482	7.0	.000
Environment	-.181	-2.92	.004	.039	.507	.613	.566	7.45	.000
General well-being	-.152	-2.29	<u>.023</u>	-.012	-.145	.885	.519	6.36	.000

Based on the above data, we conclude that the both models, one with anxiety of losing intimacy and avoidance of intimacy as predictors, and the second with anxiety of losing closeness, avoidance of closeness and resilience as predictors are statistically significant in predicting physical, psychological, environmental and social aspect of life satisfaction, as well as general well-being. Regarding the first model, both anxiety of losing intimacy and avoidance of intimacy are significant predictors, taking in consideration that avoidance of closeness is a slightly better one. It was also noted that the contribution of the predictors change in the second model, when we added resilience, and that the avoidance of closeness ceases to be a statistically significant predictor for all, but for the social aspect of life satisfaction. Anxiety of losing closeness remained a statistically significant predictor of general well-being ($p < .05$) and physical aspect of life satisfaction ($p < .05$), as well as of the psychological ($p < .01$), social ($p < .01$) and environmental ($p < .01$) aspect. In the second model, resilience is the best predictor of life satisfaction. Positive beta coefficients for resilience suggest that life satisfaction increases as participants get more resilient. Negative beta coefficients of anxiety of losing closeness indicate that stronger the anxiety of losing our loved one is, lower the satisfaction of life.

Discussion

One of our goals was to provide some insight into the characteristics of romantic attachment, resilience and life of people with physical disabilities. Analyzing the average values obtained among individual aspects of life satisfaction, we can see that participants are the most satisfied with the social aspect of their lives, their personal connections and relationships, social support and sexual activity and the least satisfied with the environmental aspect, which relates to financial resources, social and health care, etc. This is not surprising when we consider that, although the majority of respondents assessed their material status as average, only 16.1% of them are employed and employment usually provides certain security. On the other hand, expressed satisfaction with the social aspect of life speak in favor of the significance of social support to the extent that it is required and necessary. Looking at the quality

of life as some kind of general well-being that includes a sense of happiness and life satisfaction, various researchers have found a correlation between social support and well-being (Emmons et al., 1983; Abbey & Andrews, 1985, according to Myers, 1999).

We also wanted to know whether the romantic attachment is a good predictor of all aspects of life satisfaction and overall satisfaction, as well as whether the participants with secure attachment characteristics are more satisfied with their life. It turned out that the romantic attachment really is a good predictor, which is consistent with studies showing that people with strong attachment to their partner and married ones are happier and more satisfied with their lives compared to single people, widowers and especially with divorced or separated (Gove, Style & Hughes, 1990; Inglehart, 1990, according to Meyers, 1999), which is also proven with our findings that suggest that those who are in some of form of partnership are more satisfied. Both dimensions, anxiety of losing intimacy and avoidance of intimacy, are good predictors of all aspects, taking in consideration that avoidance of closeness is a better one. However, the data obtained in this study showed that participants with enhanced features of secure attachment are not more satisfied with their lives. Most of the participants in our research showed characteristics of insecure attachment. It was expected that with the increase in life satisfaction values on dimensions of romantic attachment would decrease. Regression analysis beta coefficient for the dimension of anxiety of losing closeness did decrease, but this was not the case with the dimension of avoidance of intimacy. Data suggest that those with less negative model of self and more negative model of others are more satisfied with their lives..

The question is why the avoidance of closeness dimension is so important for life satisfaction, as well as why the characteristics that indicate insecure, avoiding pattern of romantic attachment dominate through sample? Research conducted on the US sample has shown that when it comes to partner romantic attachment majority of individuals have secure attachment, while fearful pattern of attachment is the rarest (Crowell & Owens, 1996, according to Stefanović-Stanojević, 2008). In Serbian sample, however, a higher percentage of individuals with fearful romantic attachment was obtained in a number of studies (Hanak, 2007; Stanojević, 2005; Stanojević A. Kostić, 1997. According to Stefanović-Stanojević, 2008), that were conducted on a sample that was raised in the transition period and during the bombing. Commenting on these data it is possible that the obtained characteristics that indicate insecure, avoiding style of attachment, in this sample are a result of starvation and life circumstances after the war. However, previous research (Mikuliner & Shaver, 2003, according to Besser & Neri, 2012) has shown that securely attached subjects better cope with stressful situations, so the question why is the avoiding of closeness dimension of great importance for life satisfaction remains? Although fairly stable, internal working models, that are responsible for the way we perceive ourselves and others, can be modified as a result of significant changes in emotional experience and relationships with close people (Bowlby, 1980, according to Fuller & Fincham, 1995). Individuals with dismissive attachment style cope with stress in a way that they use deactivating strategies of emotional self-control, thus reducing the importance and

danger of existing threats and distancing themselves from the situation by putting barriers against their own stressful thoughts and feelings (Hammen et al., In 1995. according to Besser & Neri, 2012). This kind of distance from painful past events and suffering that have left long-lasting consequences in the post-war period could be an adaptive strategy, which could explain positive correlation between avoidance of closeness and life satisfaction. In addition, the context in which the majority of participants live (mainly rural areas, mostly unemployed, often with lower education) and socialization through childhood itself develop certain traits and value systems that assume men to be strong in order to successfully cope with their emotions. Given that the research sample consists of male participants, this could also be an explanation to why is avoidance of closeness so high.

Further analysis of the data confirms the assumption that the resilience is also a good predictor of life satisfaction. Individuals with higher resilience are more satisfied with their lives, and given that resilience is often defined as a positive adaptation or ability to maintain or restore mental health despite experiencing hardship (Bonanno, 2004), it is pretty clear why this variable has proved to be a significant predictor of life satisfaction.

By analyzing correlations, we can see that the connection between resilience and dimensions of anxiety of losing intimacy is low, negative and not statistically significant. In the absence of previous research that would shed light and in a way explain the obtained data, we will attempt to explain these findings with information previously obtained. These data may indicate that for the resilience to be expressed in trauma or stressful situations that have endangered one's life and left an indelible mark, as resilience indicates overcoming strategies, the dimension of anxiety of losing intimacy, expressed through higher or lower scores, as well as its behavioral parallels, do not represent a part of these strategies one uses in order to return to its previous level of functioning. On the other hand, the connection between resilience and the avoidance of closeness dimension is high, positive and statistically significant, so data suggest that the higher the resilience the more prominent the avoiding of closeness in close relationships is. As we previously mentioned dismissive attachment often means using deactivating strategies of emotional regulation (Hammen et al., 1995, according to Besser & Neri, 2012). Further results indicate that life satisfaction can really be predicted by romantic attachment and resilience, with resilience being a better predictor, especially compared to the avoidance of closeness dimension. After placing resilience in this model, avoidance of closeness remains statistically significant predictor of social aspect of life only. This could mean that the resilience is a potential mediator between romantic attachment, or just the dimension of avoidance of closeness, and life satisfaction. Resilience implies certain coping strategies, while avoidance binds some deactivating coping strategies, so one distances himself from stressful events and thoughts differently. Several researchers have identified avoidance as a type of a coping strategy (Amirkhan, 1990; Billings & Moos, 1981; Endler & Parker, 1990; Nowack 1989, according to Endler & Parker, 1994). Avoidance may include on person or on the task oriented behaviors and

strategies, so Endler and Parker noticed that people can use avoiding strategies by seeking other people (social diversion) or by doing certain replacement tasks for the purpose of distraction (Parker, in 1990, by Endler & Parker, 1994). They do not avoid the presence of others, they use them as a form of distraction, which indicates that it is not necessary to have emotional exchange, that sharing their thoughts, feelings and fears is not something they need.

Taking all this into consideration, it is not surprising that resilience could be a potential mediator, so it would be important to further examine this variable and its effect on the relationship between romantic attachment and life satisfaction. In some of the future research it would be good to have more securely attached participants, so two groups could be compared with regard to life satisfaction. It would be useful to check whether the same results would be presented among women. It would also be important to compare these findings with the results obtained on a sample that has not experienced suffering in the form of loss of a body part. That way we would gain insight into the specifics and possible differences in these constructs and thus, if there are any, contribute to a better understanding of their inner world and therefore find out more about strategies and possibilities for therapeutic work among individuals with disabilities.

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Stela Purić

PARTNERSKA VEZANOST, REZILIJENTNOST I ZADOVOLJSTVO ŽIVOTOM KOD MUŠKARACA SA FIZIČKIM INVALIDITETOM KAO POSLEDICOM RATA

Apstrakt

Cilj ovog rada jeste utvrditi da li su partnerska afektivna vezanost i rezilijentnost povezani sa samoprocjenjenim zadovoljstvom životom kod osoba kod kojih je neki stresogeni događaj za posljedicu imao gubitak dijela tijela, kao i da li se na osnovu ovih varijabli može vršiti predikcija zadovoljstva životom. Uzorak čini 180 ispitanika muškog pola koji su tokom ratnih dejstava na području Bosne i Hercegovine i neposredno nakon njih ostali bez nekog dijela tijela. Rezultati distribucije obrazaca u našem uzorku ukazuju na prevalenciju izbjegavajućeg stila afektivne vezanosti. Posmatrajući rezilijentnost i zadovoljstvo životom ispitanika uočava se da su različite socio-demografske karakteristike, poput potomstva, zaposlenja, materijalnog statusa ili simptoma PTSP-a važne za rezilijentnost i zadovoljstvo životom ispitanog uzorka. Takođe, pokazalo se da su i partnerska afektivna vezanost i rezilijentnost dobri prediktori kako opšteg, tako i pojedinačnih aspekata zadovoljstva životom, s tim da se rezilijentnost javila kao bolji prediktor i potencijalni medijator između dimenzije izbjegavanja kao aspekta partnerske afektivne vezanosti i zadovoljstva životom. Analizom dobijenih korelacija dobijaju se nalazi koji ukazuju na to da su ispitanici kod kojih je izraženija dimenzija izbjegavanja ujedno i zadovoljniji životom, čime se otvara pitanje mogućnosti korištenja izbjegavanja kao jednog vida adaptivne strategije u suočavanju sa stresom, uzimajući u obzir protok vremena i nemogućnost uticaja na prisustvo posljedica traumatskog događaja.

Ključne riječi: partnerska afektivna vezanost, unutrašnji radni model, rezilijentnost, zadovoljstvo životom, amputacija

RELATIONS BETWEEN ATTACHMENT AND RESILIENCE WITH STYLES OF HUMOR

Abstract

Research problem is examining relations between dimension of affective attachment, dominant style of humor and the degree of resilience. The study includes 324 testees from Republic of Srpska, 160 men and 164 women. The sample is fairly gender balanced. The instruments that are used are Humor Styles Questionnaire (HSQ), The Experiences in Close Relationship Scale (ECR) and The Connor-Davidson resilience scale (CD-RISC-25). All instruments show satisfactory reliability. According to the results of the study, dimension of anxiety is positively correlated with affiliative style and self-defeating style of humor and that the dimension of avoidance is negatively correlated with affiliative style and self-enhancing style of humor. There is also demonstrated connection between increased levels of resilience with the using of adaptive styles of humor. In addition, the results show that people with higher levels of resilience have lower dimension of anxiety, as well as lower dimension of avoidance. Dimensions of avoidance and anxiety present a significant predictive set of variable of resilience, while all these three variables together are significant predictors for affiliative style of humor ($R^2=.158$; $F(3)=20.076$; $p<.01$), self-enhancing style of humor ($R^2=.172$; $F(3)=22.189$; $p<.01$) and self-defeating humor ($R^2=.075$; $F(3)=8.704$; $p<.01$). Affiliative style of humor is used by both male and female, self-enhancing style of humor is used mostly by women, only men use aggressive humor and self-defeating humor is mostly used by men. Women and men are equally resilient.

Keywords: humor styles, attachment, resilience, gender differences

Introduction

The study of humor and its impact among psychologists binds to the psychoanalysis in which beside altruism and sublimation, humor presented as the most mature defense mechanism and the humor is economical and efficient expression of repressed sexual and aggressive impulses (Fulgosi, 1994) Freud's contribution to contemporary psychology of humor is reflected in the fact that it is partly based on his idea about humor as a defense mechanism, based on the most commonly tested model (Kolenovic-Djapo, 2012). Canadian author Rod Martin and his co-workers (Martin and associates, 2003) for the purpose of the assessment styles

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of humor engineered “Humor Style Questionnaire support” (HSQ), the scale which will give us in this study constitute the frame of reference for the assessment of the dominant style of humor. These authors were based on series of surveys carried out by coming to the conclusion that the population can extract the four dominant styles of humor: affiliative, self-enhancing, aggressive and self-defeating styles of humor.

Despite the great interest of researchers, there is still no unique definition of a sense of humor, and most of the authors in the operationalization of this construct among other criteria state that “a sense of humor, there is a person who is always ready to laugh” (Martin and Lefcourt, 1986; according to Kolenovic-Djapo, 2009); as well as “the property of the individual to understand the jokes and laughter that responding to them” (Krizmanic and Kolesaric 1982, according to Kolenovic-Djapo, 2009).

Due to the fact that the laughter is only a human characteristic (Bergson, 1987; according to Kolenovic-Djapo, 2009), we can only understand it if we place it in its natural environment, i.e. in the social context. Hehl and Rush (1985, according to Brajkovic, 2010) state that humor has the function of wearing with stress, and therefore considered to be in one of the feature of resilient and resistant people. In addition to the adaptive value, humor has a strong influence on the physical and mental health of the individual (Brajkovic, 2010). Lefcourt (2001) states that humor has the function of preserving the self, and that represents a healthy way of distancing self from the problem, ie. way to look at a problem from a different perspective. One of the ways to resist and to cope with stressful experiences is to strengthen the capacity to develop their own resilience, which is not a privilege of individual person already certain predisposition that can be improved. Therefore, researchers, instead of study of protective factors involved in the concept of resilience, are increasingly seeking to understand the protective processes that underlie resilience as well as the ways in which these factors operate and contribute to positive outcomes in certain contexts (Luthar, Cicchetti & Becker, 2000). Also, humor offers a different picture of reality and people with a good sense of humor are people that can see themselves and others in a separate light. Therefore, humor is an efficient weapon in the fight against stress, as resilient people have the ability to laugh which bothering them and they perceive life from a different perspective, they are in reality and emotionally bind people and events in a positive way .

In the relationship between mother and child comes to the development of individual personality of characteristics, where the affective attachment is seen as socio-emotional development of humans. Ainsworth and associates (Ainsworth 1991, according to Kolenovic-Djapo, 2012) suggest that humorous interaction between the child and parents can play an important role in the development of attachment which can reflects on socio-emotional development. The main motive for the study of the attachment to the development of resilience and styles of humor is the base concept of security as a basis for proper development of a child by Mary Ainsworth postulated in the framework of attachment theory (Salter Ainsworth, 2010). The starting point of this concept is that the child has an innate tendency to discover and create changes

in their environment, while forming a certain way of reacting to them, which is also the basis for the development of personality. According to the theory of emotional attachment, a child on the basis of daily interactions with the person who takes care of them, developing the model of themselves (as a valuable/worthless beings) and the model of the other (as a trusted/untrusted), on the basis of which developing of generalized expectations about themselves, others and the world that surrounds them, and at the same time it improves the experience that closeness with others is a way to successfully regulate the affective state.

The behavior of certain people in the partnership is more accurately described when describing a person with determined scores on the dimensions of anxiety and avoidance, and based on the results we determine its place in the two-dimensional space. Feeney (Feeney, 2002) defines these two dimensions as follows: anxiety dimension refers to the expression of needs for closeness, acceptance, support, security and persuasion in love, while avoidance dimension examines the expression of feelings of discomfort in close relationships, when opening, expressing emotions and addiction. To test these two dimensions of attachment, the most used scale is the scale for testing experiences in intimate partner relationships (ECR - Experiences in Close Relationships Scale; Brennan, Clark & Shaver, 1998).

Bowlby believed that the reaction of significant persons in the child's needs have numerous implications for mental health, regulation of affective and interpersonal relationships. He did not offer an explicit consideration of the relationship between humor, resilience and attachment, or formulated by reference framework within which these relationships can be seen. In his opinion (according to Vukosavljevic-Gvozden and Hanak, 2007) human beings are in addition to other systems innately equipped behavioral systems of attachment and nurturing having an evolutionary character since it increases the chances of survival, reproduction and successful parenting.

The existence of great individual differences in response to extremely unfavorable living conditions has long been observed in science (Agaibi, 2005). There is still no unique definition of resilience, even though in the psychological literature it has different meanings. Masten (2001) generally defines resilience as good results despite serious threats in adaptation or development. Resilience includes both overcoming life's adversities, and the good functioning under adverse circumstances (Masten and associates, 1999; according to Schoon, 2006). The main surmise of this concept is that some individuals, compared with others, work well even though they were, or still are, exposed to unfavorable situations. Among the most important factors in the literature dedicated to the protection of resilience mention the experience based on family interactions in which the individual feels loved, accepted and supported (Werner & Smith, 2001, according to Schoon, 2006; Conger & Conger, 2002; Smith & Prior, 1995, according to the Deater-Deckard and associates, 2013), as well as those studies that suggest humor can have an important role in the regulation of stress resistance (Martin, 2001; Martin, 2007; according to Besser, 2012), but also that humor protective operates and the challenges of social environment and it can serve as a protective factor under risky circumstances (Cameron and associates, 2010).

Problem research

Some international researches have tried to explain the connection between humor styles with patterns of attachment in which were found to be insecure attachment associated with the use of self-defeating style of humor, while safe attachment associated with the use of enhancing style humor (Besser and associates, 2012). However, in our region relations of these two constructs is not explored. Additional explanations are discussed in the context of resilience, but not in a large scale, and not in our country. Existing researches suggest that humor can play an important role in the regulation of stress and resistance (Martin, 2001; Martin, 2007; according to Besser, 2012) and protective works in the challenges of the social environment and the fact that the role of protective factors under risky circumstances (Cameron and associates, 2010). The study, which has recently been done in our region indicates the existence of a negative correlation variable dimensions of anxiety and avoidance dimensions of resilience. People who have a higher level of resilience have a lower degree of discomfort in close relationships and feel less fear of rejection and relinquishment (Kantar, 2014). Studies with this theme in a small extent on our region, and the existing are limited to only some of these relations. From the above, it appears justified the need for reviewing and understanding of those constructs to our population, which leads to the main problem of this study to examine relations between dimensions of attachment to the dominant style of humor and degree of resilience.

Population and sample

The study included a total of 324 respondents from the Republic of Srpska, 160 men and 164 women. The sample was fairly balanced by gender. The sample of this research is appropriate, consisting of students from different study orientations, University of Banja Luka. The survey was anonymous, and all the respondents were aware about the purpose of research and they gave their voluntary consent in participation.

Instruments

The questionnaire about styles of humor (HSQ), which was constructed by the authors Puhlik-Martin and Doris (1999), a translation and adaptation of the Serbian language did Sonja Vukobrat (2013). HSQ measured four dimensions styles of humor on the basis of which it is possible to determine individual differences among individuals in ways of using humor. The original questionnaire containing 32 items, and the task of the respondents to the seven-level scale (1-completely disagree to 7-completely agree) for each item assessment as it relates to it. Styles of humor that are measured by this instrument are:

a) affiliate humor style includes items relating to the use of jokes and puns in order to facilitate relationships with other people as well as reducing tension (Lefcourt, 2001). Reliability of the scale was measured using Kronbahovog index alpha, which is .749.

b) self-enhancing style contains indicators cheerful view on the world as well as the tendency to experience the absurdities of life as entertainment. This subscale operationalize humor as a strategy to overcome (Kuiper, Martin Olinger, 1993). Reliability of the scale was measured using Kronbahovog index alpha, which is .727.

c) Aggressive contains items related to the use of humor despite the potential negative impact that can have on other people (eg. a racist humor). Index Cronbach alpha for this subscale is .643.

d) self-defeating style humor refers to the tendency to use humor as a joke at your expense, laughing with others their shortcomings and omissions, as well as belittling themselves (Martin, 2007). Index Cronbach alpha for this subscale is .672.

The modified scale experiences in close relationships (ECR), which was constructed by Hanak and Dimitrijevic (2013) is intended for testing attachment. This scale operationalizes of the affective attachment to the close relationship of adult content through conscious beliefs of the people close relationships. The questionnaire consists of 36 items that describe different feelings and attitudes towards themselves and others, who have seven-point Likert scale. The theoretical foundation instrument relies on a two-dimensional model of individual differences in affective attachment adults in which the attachment is determined through the score on the dimensions of anxiety (fear of abandonment and rejection) and avoidance (discomfort on the occasion of closeness and dependence on others). Both scales have high internal consistency and in this study Cronbach alpha index for the scale avoidance is .815, and .873 for the scale of anxiety.

Connor-Davidson resilience Scale (CD-RISC-25) is intended to assess of resilience of the respondents during the past month. The scale contains a total of 25 items with 5 levels of acceptance (from 0 to 5 never true/ always true). Using this scale, respondents should mark the degree of agreement for each claim in accordance with how they thought and felt during the past month. The coefficient of internal consistency (Cronbach alpha) of the scale is .89 (Conor & Davidson, 2003), but in this study Cronbach alpha is .910.

Results

The connection between dimensions of anxiety and avoidance with styles of humor

Part of the first hypothesis relates to the assumption that persons achieved higher scores of anxiety dimension increasingly used disadaptive styles of humor. It is expected that the anxiety is positively correlated with maladaptive humor styles

Table 1. Correlation of anxiety with a maladaptive humor styles

		Anxiety	
		r	p
Adaptive	Affiliate	.179**	.001
	Self-enhancing	-.091	.103
Maladaptive	Aggressive	.095	.087
	Self-defeating	.261**	.000

** The correlation is statistically significant at the 0.01 level

Based on data from the Table 1, it shows that the correlation between anxiety and aggressive style of humor is not statistically significant, and it presents that people who achieved higher scores of the dimension of anxiety are not used to a significant extent aggressive style of humor. The table also says that there is a statistically significant correlation between self-defeating style, humor and anxiety. These data suggest that people who have strong self-defeating style of humor and have a more pronounced dimension of anxiety. So, people who have strong fear of rejection and abandonment to a greater extent in their repertoire of behavior used their jokes, not the personal shortcomings and omissions, a propensity for contempt of itself. The resulting correlation is significant at the .01 level. However, there is obtained a significant correlation with the dimensions of anxiety affiliate style of humor that is classified as an adaptive style. This data shows the fact that those individuals who have a strong need for closeness, acceptance, support and security, use jokes in order to facilitate relations with others, and those are important primarily to reduce tensions and increase interpersonal attraction. This correlation is also significant at the .01 level. It can be seen in Table no 1 that there was no statistically significant correlation between dimensions of anxiety and self-enhancing style humor.

The second part of the first hypothesis relates to the presumption that people who achieved higher scores on the dimension of avoiding have lesser using of adaptive styles of humor. The assumption is that the dimensions of avoidance are negatively correlated with the use of affiliate style humor.

Table 2. Correlations of avoidance with adaptive humor

		Avoidance	
		r	p
Adaptive	Affiliate	-.302**	.000
	Self-enhancing	-.155**	.005
Maladaptive	Aggressive	.089	.111
	Self-defeating	.066	.234

** The correlation is statistically significant at the 0.01 level

The results from Table 2 shows that there is a negative and statistically significant relationship between the variables of avoidance dimensions, affiliate style of humor and self-enhancing style of humor. This means that individuals who have avoidance dimension, use also affiliate style of humor and self-enhancing style of humor. Therefore, persons who have pronounced degree of discomfort in close relationships rarely used adaptive styles of humor that tend to maintain a cheerful view on life and increase interpersonal attraction. The correlations were meaningful at the .01 level. Based on the results from Table 2 you can see that there are not obtained statistically significant correlations within the dimensions of avoidance with maladaptive humor styles.

Connection of adaptive styles with variable of resilience

The presumption of the second hypothesis is that people who use adaptive styles of humor have higher levels of resilience.

Table 3. Correlations of resilience with adaptive styles of humor

	Styles of humor	r	p
Adaptive	Affiliate	.295**	.000
	Self-enhancing	.407**	.000
Maladaptive	Aggressive	-.107	.054
	Self-defeating	.006	.916

** The correlation is statistically significant at the 0.01 level.

The results in Table 3 show a positive correlation between the variable resilience with variables of self-enhancing and affiliative humor style. It means that people who are at average more resilient. In their repertoire of adaptive behaviors, have prevalent adaptive styles of humor. Successful correlations were significant at the .01 level. As it can be seen in the table, there are not obtained statistically significant correlations of resilience with maladaptive humor styles. This data indicates that individuals who have higher resilience do not use humor that could have a potential negative impact on the other, as well as the humor that shows their shortcomings and omissions.

Relations of dimension of avoidance, anxiety and resilience

Table 4. Assessment of the significance of the regression model dimensions of avoidance and anxiety

Model	R	R ²	F	p
	.292	.086	15.010	.000

As we can see in Table 4 dimensions of avoidance and anxiety are an important set of predictive variables and the resilience of explaining about 9% of the variance. In addition, both dimensions are statistically significant predictors of resilience (avoidance, $\beta = -.160$, $p < .01$; anxiety, $\beta = -.226$, $p < .01$).

Table 5. Dimensions of anxiety and avoidance as predictors of resilience in relation to gender

Gender	R	R ²	F	p
Male	.338	.115	10.152	.000
Female	.290	.084	7.411	.001

As we can see in Table 5 dimensions of avoidance and anxiety are an important set of predictive variables of resilience in both sexes. For male explaining about 11.5% of variance, while for female 8.4%.

Dimensions of avoidance, anxiety and resilience as predictors styles of humor

Table 6. Assessment of the significance of the regression model for styles of humor

	Model	R	R ²	F(2); F(3)	p
Affiliative	1	.335	.112	20.237	.000
	2	.398	.158	20.076	.000
Self-enhancing	1	.171	.029	4.816	.009
	2	.415	.172	22.189	.000
Aggressive	1	.123	.015	2.464	.087
	2	.144	.021	2.254	.082
Self-defeating	1	.263	.069	11.936	.000
	2	.275	.075	8.704	.000

Model 1 = criterion- humor style, predictors-avoidance, anxiety

Model 2 = criterion- humor style, predictors-avoidance, anxiety, resilience

Based on the results shown in Table 6 we can see that the dimensions of anxiety and avoidance together, but also in combination with resilience represent a significant predictive set of affiliative style of humor. Although the dimensions of avoidance and anxiety explains about 11% of the total variance, statistically significant predictor only in size to avoid ($\beta = -.285$, $p < .01$). In this regression model, statistically significant predictor of affiliative style of humor is the resilience variable ($\beta = .225$; $p < .01$), which addition is explained about 16% of variance of affiliative style of humor.

The dimensions of anxiety and avoidance in combination with resilience represent a significant predictive set of self-enhancing style of humor. Explained variance self-enhancing style using humor dimensions of avoidance and anxiety amounts to about 3% of the variance, a statistically significant predictor only in size to avoid ($\beta = -.146$, $p < .05$). Appendix resilience variables in this regression model, explained variance increases significantly and amounted to 17%. Also resilience is a

statistically significant predictor of affiliate style of humor ($\beta = .396, p < .01$).

The predictive model of aggressive style of humor has no statistical significance. Percentage of explained variance in both models is about 2%. Also, variables do not constitute significant predictors of aggressive style of humor.

Based on the results from Table 6, we can see that in this model the dimensions of anxiety and avoidance in combination with resilience represent a significant predictive set of self-defeating style of humor. The dimensions of avoidance and anxiety are about 7% of the variance and it is about the same when the model is added to this resilience. In both regression models, statistically significant predictor of self-defeating style of humor is dimension of anxiety ($\beta = .257; p < .01$).

Predictions of styles of humor in relation to gender

When it comes to applying these models separately to male and female sex, it is significant value in both cases. Based on data from the Table 7 we can see that in both regression models slightly higher percentage of variance of affiliate style of humor can be explained in male subjects. Percentage of explained variance in both sexes increases by adding the variable resilience and for male is 17%, and for female 15%.

Table 7. Assessing the significance of the regression model based on gender

	Model	Gender	R	R ²	F(2); F(3)	p
Affiliative	1	Male	.387	.150	13.802	.000
		Female	.278	.077	6.726	.002
	2	Male	.417	.174	10.973	.000
		Female	.384	.148	9.249	.000
Self-enhancing	1	Male	.198	.039	3.204	.043
		Female	.169	.029	2.363	.097
	2	Male	.344	.118	6.961	.000
		Female	.487	.237	16.576	.000
Aggressive	1	Male	.251	.063	5.296	.006
		Female	.060	.004	.292	.747
	2	Male	.267	.071	3.987	.009
		Female	.078	.006	.326	.807
Self-defeating	1	Male	.282	.080	6.786	.001
		Female	.249	.062	5.314	.006
	2	Male	.307	.094	5.403	.001
		Female	.253	.064	3.650	.014

Model 1 = criterion- humor style, predictors-avoidance, anxiety

Model 2 = criterion- humor style, predictors-avoidance, anxiety, resilience

As we can see in Table 7 significant value for self-enhancing style of humor can be achieved in the second model, where the addition of variable resilience sees predictive significance present in both sexes, with a higher percentage of explained variance of self-enhancing style of humor present in female respondents and 24%, while in 12% of male respondents.

The predictive model of aggressive style of humor no statistical significance, and predictive variables do not constitute significant predictors of aggressive style. However, based on the data we can see in Table 7, applied to the full group, a statistically significant value for both predictive model is achieved only when the male part of the sample, and the percentage of variance explained by the aggressive style of humor is about 7%. A significant predictor of aggressive style is the dimension of anxiety at the $p < .05$ level and with a very low correlation.

The results suggest that a significant statistical value achieved in both predictor model for self-defeating style of humor, with the percentage of explained variance of self-defeating style of humor in both models higher in male subjects and amounted to 8% and 9%, while in the female the percentage of respondents explained variance in both models around 6%.

Discussion and conclusions

Humor has a very significant role in our lives. Very often it helps us to overcome certain environmental problems and considered to be one of the most desirable human qualities. It is assumed that the anxiety is positively correlated with maladaptive humor styles. The results show that there is no significant correlation between the use of the aggressive style of humor and anxiety, but there is a significant correlation between anxiety and self-defeating style of humor. An explanation of these data lies in the knowledge that individuals with high levels of anxiety that goes along with a strong need for closeness, belonging and support, avoiding the use of aggressive style of humor because of fear of losing other people and everything they can provide. On the other hand, respondents who have a high level of anxiety to a large extent used self-defeating style of humor for the attempted acquisition of approval and recognition by others, while showing themselves as inferior in attempts to receive the care, love and attention. In addition, anxiety is also positively correlated with affiliate style, but not with self-defeating style of humor. This information is understandable in a way that using affiliate style of humor individuals have the possibility of experiencing intense positive emotions in interpersonal relations and thus meet the increasing need for acceptance and support.

Also, the assumption was that people who have a more pronounced degree of discomfort in close relationships, less commonly used adaptive styles of humor that tend to maintain the cheerful view of the world. There are no correlation dimensions of avoidance with the maladaptive styles of humor and these data they are not in line with previous research. Explanation is found in people based to avoidance, because they avoid the creation of close links with other people for fear of their need for love, trust and respect will not be met with respect to this, it is understandable that they have no need to direct your humor aimed at the facilitation of relationships with others, and even the capacity to self-defeating reduce these style through negative affects to create space for experiencing positive emotions. Also, demonstrated the

connection between increased levels of resilience with the use of Adaptive styles of humor, verifying this hypothesis is consistent with the results of many previous research (Martin,2007; Martin, 2001; According to Besser, and associates – 11), which shows that humor played an important role in the regulation of stress and resilience of Explanations for these results we see in the fact that the individuals who use the affiliate style of humor tend to entertain others, facilitate interpersonal relations, and affect a reduction in interpersonal conflict and tension in addition, the use of the self-defeating style of humor refers to the tendency of maintaining witty views on life and even in trouble. They are not obtained statistically significant correlation with resilience maladaptive styles of humor and in accordance with this, we can say that individuals who have a greater resilience don't use humor that may have a potential negative impact on the other, as well as the humour that would done abusing themselves and laughed its shortcomings and omissions.

The combination of the dimensions of avoidance and anxiety is a significant set of predictive variables of resilience. The dimensions of avoidance and anxiety together, but also in combination with resilience, represent a significant predictive set of affiliate and self-enhancing style of humor. Statistically significant predictors and affiliate and self-enhancing style of humor are the dimensions of avoidance and resilience. In addition, the above regression models do not represent a significant predictive set aggressive style of humor. Also, the above regression models represent significant predictive sets self-defeating style of humor, with a statistically significant predictor -self-defeating style of humor dimensions of anxiety.

However, much of the variance in these regression models remains unexplained as evidenced by the fact that the resilience and humor styles are very complex phenomena which cannot be reduced to any single construct, but depend on a number of other variables that are not controlled in this study, and for found to affect both the level of resilience, such as marital and financial status, level of education, religiosity, belonging to community organizations and the like. (Velleman & Templeton, 2007; Pargament & Cummings, 2010, according to Kantar, 2013), as well as the styles of humor.

The difference between male and female, according to the studied variables exist regarding self-defeating and aggressive style of humor, and these data are partly in line with the results obtained in research in these areas (Kolenović-Đapo, 2012). However, when it comes to predictions styles of humor in the above mentioned regression models based on gender, affiliate style of humor used by both sexes, self-enhancing mostly women, only men are aggressive and self-defeating largely by men. Men, compared to women, achieve more results in the avoidance of a smaller dimension in the dimension of anxiety.

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POVEZANOST AFEKTIVNE VEZANOSTI, REZILIJENTNOSTI I STILOVA HUMORA

Apstrakt

Istraživanje se bavi relacijama između afektivne vezanosti, stilova humora i rezilijentnosti. U istraživanju je učestvovalo ukupno 324 ispitanika iz Republike Srpske, od toga, 160 muškaraca i 164 žene. Uzorak je ujednačen po polu. Instrumenti korišteni u istraživanju su Upitnik o stilovima humora (HSQ), Modifikovana skala iskustva u bliskim odnosima (ECR) i Connor–Davidson skala rezilijentnosti (CD-RISC-25). Svi navedeni instrumenti su pokazali zadovoljavajuću pouzdanost. Rezultati ukazuju da se dimenzija anksioznosti nalazi u pozitivnoj korelaciji sa afilijativnim i samoodmažućim stilom humora, kao i to da se dimenzija izbjegavanja nalazi u negativnoj korelaciji sa afilijativnim i samopomažućim stilom. Takođe, dokazana je i veza između povećanog nivoa rezilijentnosti sa upotrebom adaptivnih stilova humora. Pored toga, rezultati ukazuju na to da osobe koje imaju viši nivo rezilijentnosti imaju slabije izraženu dimenziju anksioznosti, kao i slabije izraženu dimenziju izbjegavanja. Dimenzije izbjegavanja i anksioznosti predstavljaju značajan prediktivni set varijable rezilijentnosti, dok sve tri varijable zajedno predstavljaju značajne prediktore za afilijativni ($R^2=.158$; $F(3)=20.076$; $p<.01$), samopomažući ($R^2=.172$; $F(3)=22.189$; $p<.01$) i samoodmažući ($R^2=.075$; $F(3)=8.704$; $p<.01$) stil humora. Afilijativni stil humora upotrebljavaju oba pola, samopomažući uglavnom žene, agresivni samo muškarci i samoodmažući u većoj mjeri muškarci. Žene i muškarci su u podjednakoj mjeri rezilijentni.

Ključne riječi: stilovi humora, afektivna vezanost, rezilijentnost, razlike po polovima

ADULT ATTACHMENT AND MORAL REASONING

Abstract

We examined the connection between styles and dimension of attachment and moral reasoning. Our main aim was to examine how the dimensions of attachment affect moral reasoning for actions of people with whom we achieve close relationship. Whether the different styles of attachment associated with different moral foundations (Moral foundations theory)? Is there any difference in the expression of the moral foundations of both men and women? The study included 120 subjects, between 20 and 30 years. We had used the Moral foundation questionnaire, Moral resonig questionnaire (made for this study) and Serbian version modified and revised scales for testing experiences in intimate partner relationships to operationalization of variables. Results showed that the moral foundations authority, purity and ingroup associated with different styles of attachment. Dimensions of anxiety is more associated with moral justification actions of family members. The moral foundations authority and ingroup depend on sex. This study demonstrated a small association of moral reasoning and attachment, but there is implications for further research of these constructs.

Key words: attachment, moral reasoning, moral foundations, moral justification, close realtionship

Introduction

Attachment

Bowlby represents attachment as specific unequal relationship between mother and child formed in early childhood and lasts a lifetime (Bowlby, 1980; Bretherton, 1985, 1992). Attachment includes establishing or maintaining proximity of child with a person who is primarily concerned with him (Stefanović Stanojević, 2012).

The early formed relationships with parents are permanent capital entities. Attachment theorists developed a concept *internal working model* for “expectations and beliefs formed in early childhood” (Stefanović Stanojević, 2012). Internal working model of itself and others are cognitive-affective structure of the child, formed on the basis of daily, repeated experiences with people who deal with it. People build new relationships predominantly relying on previously adopted expectations about how others behave and what they feel (Stefanović Stanojević, 2012).

Kim Bartholomew formed a model which entails the four attachment styles of adults: *Secure attachment* implies a positive model of itself and a positive model

of others; *Preoccupied attachment* refers to people who have low self-esteem, have a negative model of self and a positive model of other people; *Dismissive attachment* is characterized by a positive model of itself and a negative model of others; *Fearful attachment* is defined by the negative model of itself and negative model of other (Bartolomew, 1990; 1994; Bartolomew & Horovitz, 1991). This attachment styles are differently manifested in all types of relationships.

Attachment could be presented dimensionally. Dimensions of the two-dimensional model are: anxiety dimension refers to the expression of needs for closeness, acceptance, support, security and persuasion in love; Avoiding dimension examined the expression of feelings of discomfort in close relationships, upon opening, emotional expression and dependence (Nikić, Travica, 2007).

We have already noted that internal working models have an important role in shaping the emotional, behavioral responses, accentuation and interpretation of experience (Mihic et al., 2008). We believe moral reasoning may depended of our conduct in relations with close people.

Moral reasoning

In cognitive-developmental theories, the central determinant of morality is the process of reasoning in situations of dilemma. Moral reasoning is evaluative process. Respondents estimates that the action morally righteous or not (Mirić, 2008). This is process of qualitative changes during cognitive development. Moral development of the child ranges from reasoning basis of personal perspective and finishes on the reasoning basis of general principles of justice and benevolence (Power, 1994; according to Hren, 2008). Piaget builds his theory on the development of morality, according to which children with heteronomous morality switch to autonomous morality. There are two types of morality, which correspond to the two types of social relations: coercion (relative child-adult) and cooperation (with respect among peers) (Piaget, 1933/1965). Cognitive theories are criticized because of ignoring non - cognitive factor of human morality, or because of neglect emotions in moral reasoning (Gibbs & Schnell, 1985; Hoffman, 1988; according Raboteg Šarić, 1997).

Moral foundations theory (Haidt and Joseph, 2004) amounted on idea that our moral reasoning depends of the five moral foundations. The theory proposes that several innate and universally available psychological systems (moral foundations) are the foundations of intuitive ethics. The moral foundations are: care and fairness, which are called “individualizing” the basics of morality and group membership: ingroup, authority and purity, which are treated as “connecting” the basics because it connects people in large groups and institutions (Koleva et al., 2013).

In the Dual process theory moral judgment depends on two processes. This two processes depend of different parts of the human brain. In the moral judgment involved emotional reactions (automatic action) and consciously thinking (controlled

action). The basic tenet of the theory is that the characteristic of deontological reasoning are controlled of emotions, while the consequential reasoning generally are controlled by conscious thought (Greene, 2014).

Research showed that the arguments to justify some action are only important when respondents have enough time to think about the purpose. The stronger arguments of action affect the moral flexibility (justification). When time of thinking is long respondents indicate less moral condemnation (Paxton et al., 2011). Another study about connection attachment and moral reasoning showed that different moral foundations associated with different dimensions of attachment. Dimension of avoiding negative associated with damage and equity, while the positive dimensions of anxiety associated with these two moral foundations (Koleva et al., 2013).

How the system of attachment and moral reasoning associated in our population? Whether internal working models influence the moral reasoning? Based on the above we consider that there is sufficient reason for testing connectivity attachment and moral reasoning.

The main aim of the research is to examine the relationship between attachment and moral reasoning in moral dilemmas related to individuals with whom respondents receive or do not receive emotional relationships.

Research methods

Instruments:

To test the attachment will be used Serbian version modified and revised scales for testing experiences in intimate partner relationships (SM - ECR - R - A Serbian Version of Modified and Revised Experiences in Close Relationships Scale; Hanak, Dimitrijevic, 2013). This modification close relationships seen as a general phenomenon, not only in partner relations. SM-ECR-R is better suited tonguespeaking area where the research was done.

To estimate the moral foundations questionnaire will be used Moral Foundations Questionnaire - MFQ-30 (Graham, Haidt, & Nosek, 2009). It is a questionnaire which is based on the five moral grounds: caring, fairness, ingroup, authority and purity (Mitrović, Aćimović, Nikolašević, 2014).

Questionnaire of moral reasoning (Aladžić, 2016) is constructed for this research and consists of 6 stories. In a three story participant makes a moral judgment for action of family member, with whos have close relationship. In a three story participant makes a moral judgment for action of person who is not his family member. Each of the stories of the family member balanced with one of the stories that relate to people who are not close to the subject in nature and size of the damage, and the intention actors. Final data from this instrument are four numerical variables. Two variables come as data from stories that imply a close relationship, to the moral judgment in close relationships and empathy in close relationships. Two variables come from the stories about actions of actors which are not family members

of participants, moral judgment and empathy in situations where the protagonists of the story do not realize affective relationships.

Sample:

The study includes 120 participants, 65 female and 55 male, between 23 and 30 years of age. Participants are students of master studies at the University of Banja Luka. We choose this population primarily because the stories contained in the instrument constructed for this research relate to people younger adulthood. Our resposdensts are people younger adulthood, too. A small sample is based on small population.

Results

Instruments used in the study showed acceptable reliability. For an Moral reasoning questionnaire Cronbach's alpha is .805 (Cronbac's Alpha = .805). Serbian version modified and revised experiences in close relationships scale in this study achieved satisfactory reliability. Cronbach's alpha for the dimension of avoiding trade: .780 (Cronbac's Alpha = .780), while the dimension of anxiety achieves reliability of .790 (Cronbac's Alpha = .790). For the Moral foundations questionnaire Cronbach's alpha is .847 (Cronbac's Alpha = .847) (Tabele 1).

Table 1. Reliability scales

Scale	Cronbach's alpha
Questionnaire moral reasoning	.805
The revised scale experiences in intimate partner relationships	
Dimension avoidance	.780
Dimension anxiety	.790
Moral foundations questionnaire	.847

The expression of the moral foundations in students with various forms of attachment

Participants who have developed a secure style of attachment showed less of authority on moral foundation, compared to people who have developed insecure style attachment. This results are statistically significant ($p < .05$). Participants who have formed an insecure attachment show higher levels of ingroup moral foundation, compared to those who have formed a secure attachment. This difference in expression of moral foundation showed statistically significant ($p < .05$). Participants who have developed a secure attachment achieve higher levels of purity, compared to those who have developed insecure attachment with marginally statistically significant difference ($p = .053$).

Table 2. Differences in the expression of moral basis in a variety of forms of attachment

Attachment style		Mean	p
Harm	Secure	3,68	.426
	Insecure	3,51	
Fairness	Secure	3,56	.812
	Insecure	3,46	
Authority	Secure	3,17	.036
	Insecure	3,39	
Ingroup	Secure	3,09	.047
	Insecure	3,22	
Purity	Secure	3,57	.053
	Insecure	3,31	

Dimensions of attachment and moral justification in close affective relations

Correlation dimensions of attachment and moral justification in close affective relation is confirmed. Dimensions of anxiety show higher correlation with moral justification of moral reasoning in close relationships, compared to the dimension of avoidance. The connection dimensions of anxiety and moral justification in relations where there is affective tone is positive and marginally statistically significant ($r=.175$, $p=0.50$). Dimension avoiding achieves marginally statistically significant association with variable moral justification in close relations ($p=.055$). This association was weaker than the connection between moral justification in close distances and dimensions of anxiety ($r=.171$) (Table 3).

Table 3. Correlation coefficients dimensions of attachment and justification in moral reasoning in close relations

Dimension attachment	Mean	Moral justification in close relations	p
Avoiding	57.60	.171	.055
Anxiety	60.66	.175	.050

Moral Foundations and sexes

Male and female respondents expressed two different moral foundations, ingroup and authority ($p<.01$, $p<.05$). Men realize greater value on moral foundations ingroup and authority than women. We can conclude that the ingroup and authority as a moral foundations in moral reasoning are more important to men than to women (Table 4).

Table 4. Differences in the expression of moral foundations in relation to gender

Moral Foundation	Men mean	Women mean	F	p
Harm	3,59	3,71	.828	.365
Fairness	3,52	3,47	.081	.776
Ingroup	3,59	2,95	11.629	.001
Autorthy	3.29	2.94	5.224	.025
Purity	3.38	3.40	.033	.857

Discussion

The results showed differences in expression of moral foundation authority, ingroup and purity in different forms of attachment. People who have developed insecure attachment pattern show higher levels of moral foundation authority. We believe that these results can be viewed through the features of the moral foundations, and attachments style. Attachment theory assumes that the internal working models are closely associated with the attachment dimensions and attachment styles. People with secure attachment have a positive internal working model of self and a positive internal working model of others. These people have trust in other people and trust in themselves. They are self-confident and autonomous personality, ready to explore and dominate challenges. People with insecure attachment have lower self-esteem, poor self organization, immature defense, poor regulation affects (Mihic et al., 2008). It is possible that for this reason, people who have developed insecure attachment style obey the authority. The authority is important when they are making various decisions, including moral judgment.

People who have insecure attachment showed greater expression of the moral foundation ingroup, compared to people who have secure attachment. We believe this is related to the characteristic attachments. Because certain personal instability, these people rely on group which they belong, and for this reason, this moral foundation is considered as an important for moral judgment. The results show that people who have developed a secure attachment showed higher values on the moral foundation purity compared to people with insecure attachments. It is expected that people who have positive models other people and themselves tend to stay clean and abide by their value systems in moral reasoning. If they have a positive model of themselves and of other people, we can expect that their lifetime value is based on a clear relationship both to themselves and to other people.

Results of connection dimensions of attachment and justification actions of people which have close affective relations with participants show that respondents who have anxiety attachment show more moral justification for actions of family members, compared the people who avoid attachment. Dimensions of attachment can be seen as internal working models that make feelings and beliefs about themselves and others, expectations and strategies of behavior in affective ties (Vukčević, 2010). People who have dimesion of anxiety have a fear of losing a close person and these people show greater moral justification for the actions of people

from close relationship, compared with people who have avoidance dimension of attachment characterized avoidance of closeness and a negative model of others.

The hypothesis of sexes and five moral foundations showed significant connection between sexes and moral foundations of authority and ingroup. Our results show that these two moral foundations showed more pronounced in male subjects. There is a possibility that the gender roles in our society has contributed to this result. Studies show traditional gender roles adults play in expectations related to finance, layout, choice of activities (Jugović and Kamenov, 2008). All of the above constructs contribute different roles (obligations and rights) of men and women in a society. Men are still in the growing number of employees, and in greater numbers provide financial stability of family. They are less tied to family responsibilities and the care of children in our society. All this implies men belonging to different groups, business, social. Because men belong to different groups, increasing contacts with them they choose more moral foundation of group membership in moral judgment, compared with women. Men showed higher result of moral foundation of the authority, too. Their gender role have more authority in our society.

These results could be seen primarily to the methodological limitations of our study. The study included a small and specific sample, master students. It is possible to be stronger significant association of results if a sample had more respondents. The small statistical significance is connected with sample size (Tenjović, Smedervac, 2011).

The small association between the attachment system and moral reasoning could be explained with Dual theory. The basic tenet of the theory is that the characteristic of deontological reasoning are controlled of emotions, while the consequential reasoning generally are controlled by conscious thought. The stories contained in the questionnaire that we designed for this study contain small personal responsibility of subjects. Subjects in these stories are set in the role of a third party. They had small personal responsibility for actions in our stories of moral reasoning. There is a possibility that the participants had enough time to think about the consequences of the situation in which the moral dilemmas related. All this could contribute to a smaller impact of emotions on moral judgment, and attachment is an emotional construct primarily.

Conclusion

Results of this study confirmed some expectations about the connection between moral judgment and attachment, but expectations were not confirmed sufficiently to make a moral judgment and affective attachment could be referred to as related constructs.

The results showed that participants who have developed insecure attachment and participants who have formed secure attachment are different on the moral foundations of authority, ingroup and purity. Participants who have insecure attachment forms showing a higher value on the moral foundations of authority and ingroup. Participants who have secure attachment form showing a higher value on the purity.

Dimension of anxiety achieved a statistically significant correlation with moral reasoning of (un)ethical actions in close relations, while dimension of avoiding achieves marginally significant association. The correlation between moral reasoning and a dimension of anxiety is higher than correlation between moral reasoning and dimension of avoiding. This confirms our expectations that people who have developed the dimension of anxiety showed less conviction for close people in moral judgment.

Correlation of sexes and moral foundations showed that male and female subjects different values realized on two moral foundations, ingroup and authority. Men realize greater value to both the aforementioned moral foundations. We interpreted on the basis of the different roles that belong to the men and women in our society.

When we summarize all the results of this study we can conclude there is tendency of connection between moral judgment and attachment, but marginally significant and very small. About the concepts of moral judgment and attachment we should think of as different systems, at least when it comes to our results.

Further studies of attachment and moral reasoning that would include a larger sample, or other independent variables such as the age or size of the place from which participants come. It would be interesting to examine whether the security / insecurity of attachment affects moral judgment individual stories that represent moral dilemmas, as well as the stories grouped based on proximity relations with stakeholders how we used them in our study. We think it would be interesting to research in what manner the system of attachment affects moral judgment at different distances close, when the response time of respondents is limited, and therefore the influence of conscious thinking and evaluating the consequences reduced.

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AFEKTIVNA VEZANOST ODRASLIH I MORALNO RASUĐIVANJE

Apstrakt

Ispitali smo povezanost između stilova i dimenzija afektivne vezanosti i moralnog rasuđivanja. Naš glavni cilj bio je ispitati kako dimenzije afektivne vezanosti utiču na moralno rasuđivanje o postupcima ljudi sa kojima smo u bliskim vezama. Da li su različitih stilova vezanosti u vezi sa različitim moralnim osnovama (Teorija moralnih osnova)? Da li izraženost moralnih osnova zavisi od pola? Istraživanje je obuhvatilo 120 ispitanika, između 20 i 30 godina. Za operacionalizaciju varijabli koristili smo:

Upitnik moralnog rasuđivanja (napravljen za potrebe ovog istraživanja), Srpsku verzija modifikovane i revidirane skale za ispitivanje iskustva u partnerskim odnosima i Upitnik moralnih osnova. Rezultati su pokazali da su moralne osnove autoritet, pripadnost grupi i čistota povezana sa različitim stilovima afektivne vezanosti. Dimenzija anksioznost je više povezana sa moralnim opravdanjem postupaka članova porodice od dimenzije izbjegavanje. Moralne osnova autoritet i pripadnost grupi su povezane sa polom. Ovo istraživanje je pokazalo malu povezanost moralnog rasuđivanja i afektivne vezanosti vezanosti, ali sadrži implikacije za dalja istraživanja ovih konstrukata.

Ključne riječi: afektivna vezanost, moralno rasuđivanje, moralne osnove, moralno opravdanje, bliske afektivne relacije.

ATTACHMENT AND SELF-CONCEPT RELATIONS AMONG ADOLESCENTS AND YOUNG ADULTS

Abstract

The purpose of this research is to examine differences in relations between attachment towards significant others (mother, father, best friend and partner) and certain domains of self-concept (competence, family, social, emotional, academic and general) within two different age groups. Participants of this research were 150 adolescents, aged 15-19, and 150 young adults, aged 22-26, from Banja Luka. To test attachment we used newly created UPHAV (Hadžić, Vujaković, 2014) that measures avoidance of intimacy and anxiety of losing intimacy in closed relationships ($\alpha=0,808$ to $\alpha=0,895$) and to measure self concept we used SC-POLIE (Čerlija, 2003), a multidimensional instrument that tests different aspects of self-concept ($\alpha=0,493$ to $\alpha=0,837$). Our results indicate that there are statistically significant correlations between every one of these individual domains and attachment dimensions, except some relations considering the domains of competence and physical self-concept. For the participants in younger group stronger connections between these constructs are found in relation to family and peers, while in the older group these links, for the most domains, are stronger with the partner. However, for the self-image in general, the most powerful and the strongest connection, within both groups, is found with avoidance of closeness towards the mother. By analyzing the hierarchical order, considering the attachment dimensions for different figures, we came to conclusion that the hierarchical order of our attachment to close ones, doesn't change through time, except the fact that the relationship with the partner becomes more secure and moves up in terms of relevancy. Once again, by doing this research, we emphasized the across life importance of relationships with our close ones and, by analyzing these age differences and similarities, in finding out more about family interactions and their overall importance, which is maybe conditioned by some cultural and time period determinants.

Key words: attachment towards significant others, self-concept, adolescents, young adults

“Attachments lie at the heart of family life. They create bonds that can provide care and protection across the life cycle, and can evoke the most intense emotions - joy in the making, anguish in the breaking - or create problems if they become insecure” (Byng-Hall, 1995, p. 45)

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Introduction

Attachment, as an important part of our emotional development, that occurs in early childhood, is a factor that affects the mental, social and emotional life of an individual for the rest of his lifetime. In adolescence, as a transitional period between childhood and adulthood, one faces changes that are reflected in their overall life, their thoughts, feelings and behavior. These changes imply changing and forming a stable image of themselves, of who they are and who they want to be. Large number of contemporary studies emphasize the connection between self-concept, process of its creation, and social environment (Cooley, 1902; Leary, Tambor, Terdalam and Downs, 1995, according to Foster, Kernis and Goldman, 2007). The family, as the most important factor of socialization in early childhood, exceeds its influence in adolescence and adulthood, although research shows that this effect decreases with age in favor of other, important individuals (Opačić, 1995, according to Janjetović, 1996).

In order to create attachment, according to Bowlby, who first came up with this theoretical concept, four components must be manifested in one's behavior: proximity seeking, secure base, safe haven and separation anxiety (Stefanović-Stanojević, 2011). Further research in this area presents us with the first classification of individual differences by Mary Einsworth, as well as the four-pattern attachment formulation for adolescents and adults by Kim Bartholomew, built on an assumption of two types of internal working models of attachment - the model of self (anxiety dimension) and the model of others (avoidance dimension) (Stefanović-Stanojević, 2011). According to some studies, transfer of the proximity seeking function of attachment starts in childhood, and it is through these early close friendships, that the process of creation of new attachment figures begins (Nickerson & Nagle, 2005). Redefining relationship with parents, which is associated with the processes of separation and individuation, is one of the characteristics of adolescence as well (Todorović, 2005). Young adulthood, that occurs after adolescence, is characterized by the establishment of closeness and deep intimate relationships with others (Erikson, 1968). Parents are still present in one's life as an important support, but relationships with other figures are characterized with more intimacy than in adolescence. Many studies show that it is adaptive to have different figures fulfilling attachment functions in different contexts (Hazan and Shaver, 1994, Howes, 1999, according to Vukelić-Basarić, 2010), and that in period from early childhood to adulthood, people form more affective ties. This raises the question of possible hierarchical organization of attachment.

Depending on theoretical orientation, self-concept is differently defined. Havelka says that self-concept is the totality of perceptions, thoughts, feelings, evaluations and predictions one has about himself as experiential object and as a participant in the interaction with the physical and social environment (1992, according to Janjetović, 1996). Disagreements are present in structuring self-concept as well. While some authors argue that self-concept is one-dimensional, many are persistent in the conviction that self-awareness is actually a multidimensional concept. This study leans on Bracken's (1992) definition of self-concept as multidimensional and context-dependent, learned behavioral pattern that reflects the individual's evaluation of past behavior and experiences, affects the current behavior, and can predict the future.

According to this theory, self-concept consists of six domains: social, competence, emotional, family, physical and academic.

Previous research show significant correlation between high scores on the anxiety dimension and instability of self-esteem (Foster, Kernis & Goldman, 2007). The study by Brennan and Morris (1997, according to Vukčević, 2014) found that secure attachment can be predicted based on the higher results achieved in terms self-satisfaction. Similarly, Vukojević-Stojiljković (2007, according to Vukčević, 2014) shows that higher scores on the global dimension of self-esteem among adolescents are associated with secure attachment. Connection between estimated parental support with psychosocial adjustment, high self-esteem, positive relationships with their peers, as well as academic achievement are found in many other studies (Aquilino and Supple, 2001; Chen and Kaplan, 2001; Kotchick and Forehand, 2002, according to Šlehan, 2008). However, not many studies focus on examining the influence of close relationships, especially newly created partnership attachment. on different dimensions of self-concept and everyday functioning. Impact of these close relationships in different periods of our life are rarely focused on. It is clear that parents and their support play an important role for the proper functioning of the individual throughout their lives, but now there are other experiences and close relationships, that also affect our everyday existence. How do proximity and relationships with others affect our understanding of ourselves, does this influence vary with growing up, and how these relations themselves, change over time?

Present study

Considering the importance of attachment, specific circumstances relating adolescence and changes that occur in the transition to young adulthood, we are interested in finding out if there are differences in relating attachment to significant figures with aspects of self-concept in two different age groups and how these differences are distributed within the subdomains of self-concept. Metric characteristics of an instrument measuring attachment, created for the purposes of this research, are also going to be presented here. We are also interested in finding out do and how these relationships change over time. Through these results we will understand better not just those around us, but also a man's need to be accepted and loved by those close to him, as well as the consequences that arise from the lack of that closeness. These findings can be used in everyday psychotherapy and psycho-educational work with different groups of people (incomplete families, juvenile delinquents).

The hypothesis

Meeus et al (2004) in their research conclude that parental support contributes commitments in certain areas of life (school, business, emotional adaptation). It is undisputed that parental support remains very important in adolescence, while with

the years this impact seems to decrease, in favor of other, important figures (Opačić, 1995, according to Janjetović, 1996). According to some research (Berschied, Snyder and Omoto, 1989, according to Vukelić-Basarić, 2010; Doherty and Feeney, 2004), in young adulthood partner is the one who takes precedence in the hierarchy, and these bonds include seeking comfort and support (Allen, Land, 1999; Collins, Sroufe, 1999, Feiring, 1996, according to Vukčević, 2014). In the group of adolescents, we expect to find stronger bonds between family and peer attachment and all domains of self-concept, as well as general self-image, than between partnership attachment and these constructs. In the group of young adults we expect these bonds to be stronger in relation to partner, than in relation to parents and peers. Research show that the primary function of attachment, depending on age period, belongs to our different loved ones (Trinke and Bartholomew, 1997, Doherty and Feeney, 2004; Berschied, Snyder and Omoto, according to Vukelić-Basarić, 2010; Freeman and Brown, 2011, according to Vukčević, 2014). We assume that given the dimensions of anxiety and avoidance, significant others will not be equally ranked in both groups.

Methodology

Instruments: To assess their self-image participants used SC-POLIE (Čekrljija, 2003), 47-items questionnaire with five-point Likert scale. It is an indicator of six different self-concept subdomains, so it provides six scores for each one and one total score as an indicator of global self-concept. Subdomains include: competence (ex. „I learn very fast, even if something is hard“); family („My family is always getting along well“); social („I never had real friends“); physical („I rarely think of myself as ugly“); emotional („I don't find it hard to talk about my emotions“); academical („I went to school only because I had to“). To determine scale reliability we used Cronbach alpha coefficient, which ranges from $\alpha = 0.493$ to $\alpha = 0.837$. The minimum reliability is calculated on a scale of emotional self concept, while reliabilities on other scales are satisfactory.

UPHAV (Hadžić and Vujaković, 2014) consists of 36 items and has been created for the purposes of this study. Its core is taken from the ECRR-r (Hanak and Dimitrijević, 2013), a questionnaire that assesses experiences in close relationships, but the assessment in UPHAV is made considering 4 types of close relationships, two of which make up the family attachment - mother and father, and the remaining two are relationships with the best friend and the partner. This model can be seen in instruments like IPPA-R (Armsden & Greenberg, 1987), Hierarchy and support (Vukelić-Basarić, 2010). Each of the attachments is operationalized through dimensions of avoidance of intimacy (ex. „I prefer not to be close with this person“) and anxiety of losing intimacy (ex. „My desire to be very close sometimes scares this person and drags him/her away from me?), which are in accordance with internal models of self and others, resulting in 8 variables: avoiding intimacy in relation to the mother/father/best friend/partner and anxiety about loss of closeness with mother/father/best friend/partner. Cronbach alpha is ranging from $\alpha = 0.808$ to $\alpha = 0.879$ for

the avoidance dimension, within each of the relationships, and from $\alpha = 0.835$ to $\alpha = 0.895$ for the dimension of anxiety, so they are more than satisfactory.

Sample and procedure: The target population involved adolescents, aged 15-19 years, and young adults, aged 22-26. This sample is selected considering the developmental nature of these variables. There were 300 participants, 150 in each age group. The total number of males is 146, and 154 women, or 48.7 to 51.3%. The questionnaires were distributed within high schools and universities, in the municipality of Banja Luka. We made two short breaks during the questioning, and the average time for completing both questionnaires was around 25 minutes. The examiner was in the room during the whole process, so he could prevent ambiguity and misunderstanding. The anonymity was guaranteed.

Results

In the following section we will provide the results considering age differences by domains of self-concept in total and individually by every domain, as well as descriptive statistics, so we can conclude which group has better self-image in each of the contexts.

Tables 1:
Age difference by self concept domains (in total)

Effect	Value	F	P
Pillai's Trace	.07	3.25	.002

Table 2:
Age differences by individual domains of self-concept and their descriptive statistics

	Sample		Adolescents		Young adults		Mean Square	F(2)	p
	M	SD	M	SD	M	SD			
COM	3.21	.41	3.24	.43	3.17	.38	.34	1.80	.181
FAM	4.15	.65	4.18	.70	4.12	.60	.09	.22	.642
SOC	3.88	.50	3.86	.51	3.89	.48	.05	.22	.643
PHY	3.38	.63	3.32	.66	3.44	.60	1.05	2.63	.106
EMO	3.43	.54	3.36	.55	3.49	.52	1.90	5.73	.017
ACA	3.54	.69	3.42	.73	3.67	.61	4.85	10.65	.001
GEN	3.60	.32	3.56	.32	3.63	.31	.43	4.27	.040

Note: COM – competence self-concept PHY – physical-self-concept
 FAM – family self-concept EMO – emotional self-concept
 SOC – social self-concept ACA – academic self-concept
 GEN – general self-concept

Within the whole sample, as well as in the groups, the best self-image is obtained in the context of family (M = 4.15; SD = 0.65), while the worst within the

domain of competence ($M = 3.21$; $SD = 0.41$). Looking at the first table, we can see that two groups differ with regard to the cumulative assessment of their self-concept, $F(2)=3.25$; $p<.01$, but if we look at the table no. 2 those differences are statistically significant only within emotional, ($p <0.05$), academic ($p <0.01$) and general self-concept ($p <0.05$). According to these results, young adults have better self- image in emotional and academical context, as well as better general notion of themselves.

Next, we were interested in age differences obtained considering attachment dimensions. Here we present them in total and individually by each dimension and each close relationship, as well as their descriptive statistics, so we can conclude which group has higher parameters.

Table 3:
Age difference by attachment dimensions (in total)

Effect	Value	F	p
Pillai's Trace	.17	7.28	.000

Table 4:
Age differences by attachment dimensions in each close relationship and their descriptive statistics

	Sample		Adolescents		Young adults		Mean Square	F(2)	p
	M	SD	M	SD	M	SD			
AvoidM	2.94	.97	2.84	.97	3.05	.95	3.20	3.46	.064
AnxM	2.16	.75	2.32	.84	2.01	.62	7.09	13.03	.000
AvoidF	3.33	1.05	3.21	1.03	3.44	1.05	4.19	3.87	.050
AnxF	2.25	.79	2.41	.87	2.09	.66	7.54	12.58	.000
AvoidBF	2.90	.74	2.89	.72	2.91	.77	.03	.05	.816
AnxBF	2.58	.96	2.82	1.01	2.33	.83	17.68	20.52	.000
AvoidP	2.96	.83	3.02	.69	2.90	.94	1.17	1.73	.190
AnxP	2.86	1.12	3.23	1.07	2.50	1.06	39.93	35.36	.000

Note: AvoidM – avoiding intimacy with the mother; AnxM – anxiety of losing intimacy with the mother

AvoidF - avoiding intimacy with the father; AnxF - anxiety of losing intimacy with the father

AvoidBF - anxiety of losing intimacy with the best friend; AnxBF - anxiety of losing intimacy with the best friend; AvoidP - anxiety of losing intimacy with the partner; AnxP - anxiety of losing intimacy with the partner

Looking at these results, highest avoiding of intimacy is in contact with the father, while the greatest anxiety of the loss of intimacy occurs in relationships with the partner. This applies to the whole sample, as well as to both groups. Adolescents and young adults are, however, significantly different when it comes to their assessment of relationships with close people, $F(2)=7.28$; $p<.01$. Those differences can be seen within dimension of anxiety about the loss of intimacy with the mother, father, best friend and the partner, as well as within the dimension of avoidance in their relationship with the father. Adolescents are more worried about the loss of the relationship with their mother, father, bestfriend and partner, while young adults are more prone to avoid closeness with their father.

Since we were interested in finding out do and how our close relationships change over time we created UPHAV instrument, so we could have an opportunity to rank each close relationship by two attachment dimensions, in two different time periods.

Table 5:
Hierarchical order of relationships among all attachment dimensions.

Anxiety		Young adults		Avoidance		Young adults	
Adolescents		Adolescents		Adolescents		Adolescents	
	M		M		M		M
1. AnxP	3.23	1. AnxP	2.50	1. AvoidF	3.21	1. AvoidF	3.44
2. AnxBF	2.82	2. AnxBF	2.33	2. AvoidP	3.02	2. AvoidM	3.05
3. AnxF	2.41	3. AnxF	2.09	3. AvoidiBF	2.89	3. Avoid BF	2.91
4. AnxM	2.32	4. AnxM	2.01	4. AvoidM	2.84	4. AvoidP	2.90

Note: AvoidM – avoiding intimacy with the mother; AnxM – anxiety of losing intimacy with the mother; AvoidF - avoiding intimacy with the father; AnxF - anxiety of losing intimacy with the father; AvoidBF - anxiety of losing intimacy with the best friend; AnxBF - anxiety of losing intimacy with the best friend; AvoidP - anxiety of losing intimacy with the partner; AnxP - anxiety of losing intimacy with the partner

According to these results adolescents and young adults do not differ considering ranked close relationships within anxiety dimension. Both groups are most anxious when it comes to losing their closeness with the partner, and least anxious about losing closeness with mother. They do, however, differ considering ranked close relationships within avoidance of closeness, although not much. Avoidance of closeness with father is ranked the highest in both groups. Avoidance of closeness with mother is ranked the lowest in younger group, while among young adults, avoiding closeness with partner has taken the last spot.

One of our main goals was to examine if there are differences in relating attachment to significant figures with aspects of self-concept in two different age groups and how these differences are distributed within the subdomains of self-concept.

Table 6:
Correlations between attachment dimensions among different relationships and self- image by each domain among adolescents

		COM	FAM	SOC	PHY	EMO	ACA	GEN
AnxM	r	.041	-.445	-.158	-.106	-.107	-.137	-.315
	p	.622	.000	.054	.196	.192	.096	.000
AvoidM	r	-.034	-.578	-.253	.012	-.390	-.320	-.517
	p	.680	.000	.002	.888	.000	.000	.000
AnxF	r	.021	-.488	-.133	-.138	-.119	-.107	-.332
	p	.796	.000	.105	.092	.146	.193	.000
AvoidF	r	-.110	-.621	-.230	-.040	-.344	-.238	-.517
	p	.181	.000	.005	.630	.000	.003	.000

AnxBF	r	.010	-.373	-.234	-.177	-.123	-.112	-.336
	p	.907	.000	.004	.030	.135	.173	.000
AvoidBF	r	-.062	-.257	-.311	-.023	-.333	-.178	-.363
	p	.454	.001	.000	.777	.000	.030	.000
AnxP	r	-.046	-.300	-.156	-.131	-.082	-.152	-.289
	p	.576	.000	.056	.110	.320	.063	.000
AvoidP	r	-.051	-.266	-.277	-.091	-.342	-.177	-.381
	p	.535	.001	.001	.267	.000	.031	.000

Note: AvoidM - avoiding intimacy with the mother; AnxM - anxiety of losing intimacy with the mother;

AvoidF - avoiding intimacy with the father; AnxF - anxiety of losing intimacy with the father;

AvoidBF - anxiety of losing intimacy with the best friend; AnxBF - anxiety of losing intimacy with the best friend; AvoidP - anxiety of losing intimacy with the partner; AnxP - anxiety of losing intimacy with the partner

COM - competence self-concept; PHY - physical-self-concept; FAM - family self-concept;

EMO - emotional self-concept; SOC - social self-concept; ACA - academic self-concept;

GEN - general self-concept

Table 7:
Correlations between attachment dimensions among different relationships and self- image by each domain among young adults

		COM	FAM	SOC	PHY	EMO	ACA	GEN
AnxM	r	.163	-.359	-.307	-.253	-.281	-.292	-.421
	p	.046	.000	.000	.002	.000	.000	.000
AvoidM	r	.076	-.603	-.306	-.247	-.440	-.272	-.554
	p	.353	.000	.000	.002	.000	.001	.000
AnxF	r	.154	-.358	-.243	-.191	-.185	-.263	-.349
	p	.059	.000	.003	.020	.023	.001	.000
AvoidF	r	.052	-.633	-.287	-.227	-.389	-.260	-.540
	p	.531	.000	.000	.005	.000	.001	.000
AnxBF	r	.181	-.309	-.393	-.435	-.225	-.294	-.467
	p	.027	.000	.000	.000	.006	.000	.000
AvoidBF	r	.065	-.238	-.414	-.147	-.385	-.290	-.423
	p	.428	.003	.000	.072	.000	.000	.000
AnxP	r	.174	-.327	-.432	-.480	-.222	-.345	-.515
	p	.033	.000	.000	.000	.006	.000	.000
AvoidP	r	.123	-.394	-.388	-.195	-.560	-.317	-.529
	p	.133	.000	.000	.017	.000	.000	.000

Note: AvoidM - avoiding intimacy with the mother; AnxM - anxiety of losing intimacy with the mother;

AvoidF - avoiding intimacy with the father; AnxF - anxiety of losing intimacy with the father;

AvoidBF - anxiety of losing intimacy with the best friend; AnxBF - anxiety of losing intimacy with the best friend;

AvoidP - anxiety of losing intimacy with the partner; AnxP - anxiety of losing intimacy with the partner

COM - competence self-concept; PHY - physical-self-concept; FAM - family self-concept;

EMO - emotional self-concept; SOC - social self-concept; ACA - academic self-concept;

GEN - general self-concept

Correlation results (adolescents) indicate that not all connections between the individual domains of self-concept and individual dimensions of attachment of different relationships are statistically significant. When it comes to competence domain of self-concept, no dimension of any relationship has established statistically significant connection, while the physical domain of self-concept is significantly correlated only with the anxiety of losing intimacy with the best friend ($p < .05$). The strongest bond for family self-concept is with the avoidance of closeness with parents, while the strongest connection of social self-concept is established with avoidance of closeness with the best friend. When it comes to emotional and academic self-concept strongest connection is established with avoidance of closeness with the mother. Generally speaking, the strongest link for these constructs is found between general self-image and avoidance of closeness with the mother.

Results of young adults show a similar trend. However, competence self-concept, in this case shows significant connections with anxiety dimension (best friend, mother, partner). Family and general self-concept build the strongest correlations with avoidance of closeness with the parents, while the strongest connection with the physical, social and academic self-concept is obtained with anxiety over the loss of intimacy with the partner. Ties concerning the avoidance of intimacy with the partner show the strongest connection with emotional self-concept. Generally speaking, the strongest link between these constructs in older group is found between general self-image and avoidance of closeness with the mother.

Discussion

The goal of this study was to investigate differences in bonds between close relationships and self-image in two different age groups. We assumed that results among adolescents indicate stronger connection between family and peer attachment and participants' self-image, while in the older age group stronger links with attachment towards the partner. Results of adolescents do meet our expectations. There are statistically significant connections between the one's self-image and close family and peer relationships achieved in each domain of self-concept, except in the domain of competence, in which correlations are not statistically significant. For social and physical self-concept the strongest bond is obtained in relation to the best friend, while in the domain of family, emotion and academic achievements the strongest link is with parental relationships. General self-concept is most associated with parental figures. In the group of younger participants family, therefore, holds primacy, which is consistent with previous findings that talk about the significance of family support for the degree of emotional adaptation and achievement in school (Meeus et al., 2005), psychosocial adjustment, high self-esteem, positive relationships with peers, fewer behavioral problems (Aquilino and Supple, 2001; Chen and Kaplan, 2001; Kotchick and Forehand, 2002, according to Šlehan, 2008). Although adolescents experience romantic relationships, these relationships rely heavily on time spent together and achieving popularity in peer groups, while it is only in their

late adolescence and young adulthood that they seek comfort, support and care, actual components of attachment. (Allen, Land, 1999; Collins, Sroufe, 1999, Feiring, 1996, according to Vukčević, 2014). Differences found in these age groups, in terms of lower self-concept results and less security in terms of close relationships, could be associated with adolescence itself, the period of “storms and turmoil”, period when relationships with others are complex, and self is still in development (Rudan, 2004). Results in the group of young adults do differ. There is a connection between the competence subdomain of self-concept and dimensions of anxiety of losing close relationships, the strongest in relation to the best friend. Within the family domain, ties concerning relations with parental figures are still the most important ones, while with the social, physical, emotional and academical self-concept, determinants considering relationship with the partner, achieve the strongest bond. Based on the above, we can conclude that relations concerning partnership attachment actually achieve stronger bonds with the individual aspects of self-concept than the family and peer attachment, which dominate in the domains family and competence. However, when it comes to general self-concept, results do not meet our expectations. Although the relationship with the partner is more important than in the group of adolescents, the highest correlation with the general self-image is still obtained with avoidance in relation to the mother. These results are partially in line with the studies that speak of moving the partner to the top of the hierarchy (Bershied, Snyder and Omoto, 1989, according to Vukelić-Basarić, 2010; Doherty and Feeney, 2004). However, results within the competence and family subdomain do not follow this trend, nor do those of the general self-image, which can be linked to previous studies that talk about the importance of constant supportive relationships with parents (Wel, Linsen and Abma, 2000, according to Vukčević, 2016), and mothers as the most important source of emotional safety regardless of the participant's age (Markiewicz et al, 2006). It is also interesting that stronger ties are formed between the participants' self-image and close relations in the group of older subjects, where self is supposedly developed, than in the group of the younger ones. We should, however, take the characteristics of our culture in account, social context, context in which the older participants grew up and matured, as well as the one they live in now. Given that this group included young people aged 22-26, it is inevitable to assume that this generation was part of the adverse events that occurred in Balkan area, from 1990 to 1995, and that the period occurring after the war was equally hard due to the difficulties in renewing and adapting to new life circumstances. The current conditions of life in our region, where it is very difficult for young people to find jobs after finishing school and education, to acquire something and become self-sufficient in financial terms, are also important. Young adults continue to live in their parental homes for longer periods of time than it would be expected in Western countries, which can also be addressed as some kind of “extended youth” period. Therefore, we can assume that these shared everyday experiences position parents high on the guidelines of their own functioning. Since self-concept is considered as a dimension of self-experience, the fact that our results are more affected by internal working model of others (dimension of avoidance) than

internal working model of self (dimension of anxiety), one can not help but wonder about the characteristics of our culture and development. Many authors speak of collectivistic values and collectivistic vision of functioning in our region (Bajović, 2013). Directions of obtained correlations once again indicate the significance of secure attachment. This is consistent with the previous studies that report significant connection between secure attachment and self-satisfaction, wider network of social support and better stress management (Armsden & Greenberg, 1987), lower levels of mental problems (anxiety, depression, attention deficit) (Nada-Raja, McGee & Stanton, 1992), as well as negative correlations with avoidance towards others, inadequate interpersonal communication and psychoactive substances abuse (Howard & Medwey, 2004). The answer to our question do our close relations change over time is found in the obtained hierarchical order. Significant others are almost equally ranked in both groups, except the fact that partner relationships become more secure with age, which is consistent with previous findings (Doherty & Feeney, 2004).

Taking in consideration these results, as well as the possibilities of the newly created instrument, whose reliability is very high, it would be interesting to examine the differences in the quality of attachment in relation to various close figures. With this instrument, we have the ability to express these results by patterns of attachment and thus check whether they are not only different in terms of quality, but also examine their quality through time. In our study we used a convenience sample, so we were not able to control current presence or absence of close relations, as well as its length, so this would be a suggestion for further research. It would also be very interesting to examine these differences in opposition to older age groups, taking in consideration this „period of extended youth“.

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RELACIJE AFEKTIVNE VEZANOSTI I SELF-KONCEPTA KOD ADOLESCENATA I MLADIH ODRASLIH OSOBA

Apstrakt

Ovim istraživanjem željela se ispitati mogućnost postojanja razlika u povezanosti relacija afektivne vezanosti sa bliskim ljudima sa pojedinačevom slikom o sebi, kako generalnom, tako i u okviru posebnih subdomena (kompetencijski, porodični, socijalni, fizički, emocionalni, akademski) kod dvije uzrasno različite grupe ispitanika. Takođe, zanimalo nas je kako se nama bliske relacije (majka, otac, prijatelj, partner). Uzorak je sačinjavalo 150 adolescenata, uzrasta

od 15 do 19 godina i 150 mladih odraslih, od 22 do 26 godina. Afektivnu vezanost smo testirali UPHAV (Hadžić, Vujaković, 2014) upitnikom kreiranim za potrebe ovog istraživanja ($\alpha=0,808$ to $\alpha=0,895$), a self koncept SC-POLIE upitnikom (Čekrlija, 2003), multidimenzionalnim instrumentom koji mjeri različite aspekte self koncepta ($\alpha =0,493$ to $\alpha=0,837$). Statistički značajne korelacije su uočljive u okviru svih relacija i subdomena, osim kada su u pitanju neke od relacija u odnosu na fizički i kompetencijski self koncept. Rezultati ukazuju na to da postoje statistički značajne razlike između adolescenata i mladih odraslih i to takve da se jače veze između pojedinčeve slike o sebi u okviru različitih aspekata, ali i u okviru generalnog self koncepta, ostvaruju u odnosu na porodične i vršnjačke relacije, dok su u starijoj grupi ispitanika ove veze jače povezane sa partnerskom afektivnom vezanošću. Generalna slika o sebi, neovisno o grupi ispitanika, je u najjačoj vezi sa izbjegavanjem bliskosti sa majkom. Analizirajući hijerarhijski poredak u odnosu na dimenzije vezanosti, vidimo da se hijerarhijski poredak figura ne mijenja naročito kroz vrijeme, osim pomjeranja partnera ka vrhu hijerarhije, kada je u pitanju sigurnost afektivne vezanosti. Rezultati naglašavaju cjeloživotni značaj povezanosti sa bliskim ljudima, a analize grupnih razlika ukazuju na neka nova saznanja u okviru porodičnih interakcija, koja su možda uslovljena određenim determinantama perioda u kojem živimo i same kulture.

Ključne reči: afektivna vezanost,, self-concept, adolescenti,, mladi odrasli

ATTACHMENT TO DIFFERENT FIGURES AND SEXUAL SELF CONCEPT OF ADOLESCENTS

Abstract

The aim of this research was to investigate the relations of different organizations of family and partner attachment patterns with the formation of different experiences of sexual self concept in adolescents, due to the assumed differences between the adolescents in secure attachment pattern compared to those with fearful attachment pattern. The sample consisted of 400 respondents, the average age from 18 to 19 years. We used Questionnaire of socio-demographic characteristics (made for this study). Attachment in adolescents was measured with Questionnaire assessing the hierarchical attachment. Third instrument used in this work was Multidimensional Sexual Self-Concept Questionnaire. Results showed that adolescents in our study regardless of the close attachment figure (mother, father, partner), who have demonstrated features of secure attachment pattern (low anxiety and low avoidance) have the highest tendency towards sexual openness and self-confidence ($R=.22$, $R^2=.05$, $F(6,392)=3.39$, $p=.003$), prevention and responsibility ($R=.22$, $R^2=.05$, $F(6,392)=3.39$, $p=.003$), and demonstrated the lowest level of sexual anxiety ($R=.27$, $R^2=.07$, $F(6,392)=5.14$, $p=.000$) compared to the adolescents who belong to one of the remaining three attachment patterns (avoidant, preoccupied or fearful).

Keywords: attachment, sexual self concept, adolescents

Introduction

Attachment Theory

An important point of attachment theory, supported by the findings of numerous studies, is that the attachment is a universal phenomenon. Attachment includes different behaviors that have a predictable effect, or outcome - establishing or maintaining physical and emotional closeness with person who primarily take care for the child (Stefanović Stanojević et al., 2012).

Hazan and Shaver considered, that all children have opportunity to form close relationships, either secure or insecure (Hazan & Shaver, 1994). The quality of secure style is characterized by children who seek and gain the protection, security

and pleasure, who explore with self-confidence and optimism, who are aware of the availability and support from their caregivers. Insecure qualities develop when the attachment behavior encounters rejection, inconsistency or threat. These children feel negative reactions from mothers as their personal handicap (Bowlby, 1969 according to Dasković & Stefanović-Stanojević, 2011). Bowlby considers that the majority of infants form affective relationship with more than one person. These persons are called figures of attachment (Bowlby, 1980). However, the child does not treat all the figures of attachment in the same way, they are organized in a network where one figure usually serves as the "primary". Absence of attachment behavior is treated as a pathology (Dimitrijević & Hanak, 2007). The founder of attachment theory already postulated that early formed attachment patterns represent permanent value of one person. Those early formed patterns are stable and resistant to change (through the mechanism of the internal working model), persist throughout the life span and have influence on all our adult relations. Bowlby also assumed that together with the forming of partner emotional relationships in adulthood, emotional partners take the position of primary attachment figures and reach to the top of the hierarchy (Bowlby, 1980).

Adult Romantic Relationships

Close partner or romantic relationships are the form in which most people spend their lives. Almost all adults tend to seek comfort and safety in their partner and in stressful situations they have a particular need for a partner. Therefore, adults protest when they recognize a threat that they could lose their partner (Weiss, 1982, 1991, 1998 according to Stefanović-Stanojević, 2011). Kim Bartolomew formulated a four-category model of attachment styles in adulthood which are manifested differently in all types of relationships:

Secure pattern implies a positive model of self and positive model of others (Bartolomew, 1994; Bartolomew & Horovitz, 1991). It might be expected that they feel good in relation to their sexuality and to enjoy a variety of sexual activities with others. Also, it's expected that they will prefer a sexual relationship with one partner, not sex with multiple concurrent partners (Stefanović-Stanojević & Tošić, 2011). *Preoccupied pattern* refers to people with low self-esteem, negative model of self and positive model of others (Bartolomew 1994; Bartolomew & Horovitz, 1991). Part of this strategy can be a willingness to fulfill every sexual behavior or the desires of partners, taking less care of their own satisfaction (Stefanović-Stanojević & Tošić, 2011). *Avoiding pattern* is characterized by a positive model of self and negative model of others. *Fearful pattern* is defined by the negative views of both self and the others and it could be explained by the lack of confidence in themselves and other people (Bartolomew, 1994; Bartolomew & Horovitz, 1991). Attachment patterns could also be presented as the two-dimensional model: Anxiety dimension refers to the expression of needs for closeness, acceptance, support, security and persuasion in love; Avoiding dimension examines emotional discomfort in close relationships upon „opening“ itself to someone, emotional expression and dependence (Nikić & Travica,

2007). With the empirical evidence, Bartolomew came to the conclusion that this model could be used for close peer (friends and partners) attachment relationships and for experiences of attachment relations within the family (Bartolomew, 1994).

Many attachment theoreticians assumed that adolescence itself is a period when first major replacement of attachment figures happens (Weiss, 1982, according to Stefanović-Stanojević, 2011). Thus, adolescence is a period when generalization of representation relationships with other relevant people happen, primarily it is a period when the number of important and close relationships with peers and other adults increases (Dwyer, 2005, according to Krstić, 2007). However, it is important to note that in addition to peers, there are other important persons for whom the adolescent can be attached during the period of adolescence and during their whole life. The involvement of father in child's development is specific, whereas independent from the influence of mother as undisputed primary object. Father interacts with a child very early and its role in development of child's personality goes far beyond the birth of a child (Hedrih et al., 2006). Since it is assumed that children have multiple figures (Ainsworth 1989, Bretherton 1987, according to Stefanović-Stanojević, 2011), theoreticians have questioned the concept of their organization and thus created the concept of hierarchy among attachment figures. Mother is the most common candidate for the primary figure in childhood, but in many cases others could be (and are) primary figures. In adolescence and adulthood primary figures are usually peers and partners (Collins & Read, 1994, Trinke & Bartholomew, 1997). One of the most important characteristics of adolescence is the development of sexual identity among young people. Sexual identity is developed on the basis of cognitive and emotional development of young people followed by certain sexual thoughts and behavior.

Sexual self concept

There are many definitions of sexual self concept, which are different from author to author. According to Markus and Nuriusu, sexual self concept is defined as the way a person sees itself, and is seen as a sexual being (Markus & Nurius, 1986, according to McKeague et al., 2006). Sexual self-concept is an individual evaluation of our own sexual feelings and behaviors (Chu Pai et al., 2011). The authors note that in the literature and research, the most commonly used term is sexual self concept. Also, it should be noted, that although similar concepts, each of these (sexual self-scheme, sexual subjectivity and sexual self concept) has their own specifics and various aspects of measurement of human sexuality. Finally, sexual self concept model, unlike other two models, contains factors involved in the assesment of cognitive, affective, behavioral and psychological aspects of sexuality, as well as the attributions of desires and excitement. Other aspects of an individual's sexuality (eg, sexual behavior) together with individual's social environment, form a reciprocal relationship with sexual self concept and continue to develop over time (Mollen & Stabb, 2010, according to Deutsch et al., 2013). Therefore, in order to better understand sexual behavior of adolescents it is necessary to realize how adolescents develop their feelings or how they form the image of themselves as sexual beings.

Attachment patterns and sexual self concept

The role of the family is changing during the different phases of life cycle, but regardless of this, it exists, in its broadest sense, in order to facilitate conditions for growth and development of all its members (Hedrih et al., 2006). Each child, while growing up, will pass certain stages of development - meaning physical, emotional, intellectual and sexual development. Each of the stages of sexual development is followed by various physical and mental changes together with the complex of emotions associated with sexuality. Nowadays, it's considered that the development of sexuality begins much earlier, precisely in period between 2 and 4 years of age, when a child becomes aware of its sexual identity. During this period, the importance of mother and the relationship with mother is undisputed and that relationship influences the later development of the child. On the other hand, in later development stages, researchers have shown that girls who had a positive relationship with their fathers later engage in sexual intercourse and their sexual activity was with less risky behavior. Girls who grew up without a father, demonstrated higher tendency for risky sexual behavior than those raised by both parents (Dimitrijević, 2011). Indirectly, fathers resolve strong symbiotic connections between child and its mother and support child's further individualization (Abelin 1975, according to Hedrih et al., 2006). Affective attachment during adolescence contains a component different from the affective attachment in childhood. That component is sexual attraction, and together with it, sexual thoughts, behaviors and sexual intercourse. Many researchers in their studies confirm that our experiences from childhood or from our primary family, influence our sexual behavior and the formation of sexual orientation in adolescence (Garnets & Peplau, 2000). Katorski states that the relationship formed between the daughter and the father in childhood, transfers through the adolescence, and in large extent have the impact on future relationships, including romantic relationships and sexual behavior in those relationships (Katorski, 2003). Sexual self concept is being developed simultaneously through a subjective interpretation of our sexual experiences and the feedback received from our social environment (eg. sexual socialization, social comparisons, etc.), where an important role is played by peers and partners with whom adolescents are sexually and emotionally connected (Andersen et al., 1999, according to Deutsch et al., 2013).

Studies have shown that adolescents who had secure pattern enjoy exploring their sexual freedom, have a more positive sexual self concept, are more satisfied when expressing sexual interest (Cyranowski & Andersen, 1998, according to Mikulincer, 2006). People with preoccupied attachment pattern, primarily engage in sexual intercourse to avoid the abandonment (Tracy et al., 2003; according to Mikulincer, 2006). On the other hand, people with anxiety style, enjoy more in hugging and cuddling rather than specific forms of sexual behavior (Hazan et al., 1994, according to Nikić & Travica, 2007), while those with avoiding attachment style have a low sex drive, less sexual activity and low sexual competence (Tracy, 2003, according to Nikić & Travica, 2007).

Methodology

The problem of the research refers to determining how the different systems of partner and family attachment and sexual self concept are associated in our population? We wanted to know, are the different systems of attachment and sexual self concept in our population connected and how?

The main aim of our research is to examine whether adolescents with different characteristics of family and partner attachment styles will form and have a different experience of sexual self concept.

Participants

The research included 400 adolescents (200 final year students of Gymnasium (third and fourth graders) and 200 final year students of the Agricultural School (third and fourth graders) in the city of Banja Luka, which are uniform by gender (50% male and 50% female) and the average age of respondents was 18 years ($M = 17.6$). The youngest participant in the research was 16 years old and the oldest was 20 years old.

Instruments

Attachment in adolescents was measured with UPHAV-1 (Questionnaire assessing the hierarchical attachment). Questionnaire operationalized two dimensions of attachment - the *avoidance* of intimacy and *anxiety* about the loss of intimacy, with each of the four close attachment figures (mother, father, boyfriend, girlfriend). The questionnaire gives a hierarchy of figures with whom adolescents have formed the attachment bonds (Vujaković, 2015). By using the method of cluster analysis, four attachment patterns can be obtained and represented in different extent. Questionnaire assessing the hierarchical attachment in this research achieved satisfactory reliability. Cronbach's alpha for the dimension of mother avoidance is .849, for the dimension of father avoidance is $\alpha=.847$, for dimension partner avoidance is $\alpha=.800$, while the dimensions of anxiety with different figures achieved reliability of $\alpha=.773$ to $\alpha=.794$.

Another instrument used in this research is Multidimensional questionnaire of sexual self concept (Snell, 2001). The survey above is based on self-assessment of the participants and is designed to examine the 20 psychological aspects of human sexuality, which are presented in the questionnaire as dimensions of sexuality. First dimension (*sexual openness and confidence*) is consisted of following subdimensions: sexual self-efficacy, sexual consciousness, sexual assertiveness, sexual optimism, sexual self-perception, sexual motivation, management of sexual problems, sexual esteem, sexual satisfaction, sexual self schemes and inner control of sexual life. *Sexual prevention and liability* (second dimension) is consisted of following subdimensions: the existence of motivation for avoiding sexual risky behavior, sexual awareness, sexual optimism, sexual self blaming, managing sexual problems, prevention of sexual problems, sexual self schema and inner control of sexual life. Finally, the subdimensions that are part of third dimension (*sexual anxiety*) are:

sexual anxiety, external sexual control, sexual preoccupation, sexual self blame, sexual self-perception, management of sexual problems, sexual control of other people. For dimension sexual openness and confidence Cronbach's alpha is .763, for sexual prevention and responsibility Cronbach's alpha is .790 and for third dimension sexual anxiety is $\alpha=.780$. *Questionnaire of socio-demographic characteristics* is the third instrument that was made for this study and it refers to the necessary socio-demographic characteristics of the respondents (gender, age, place of residence, family structure, socio economic status, whether they had a sexual relationship, the existence of the current partners, etc.).

Results

Adolescents with different characteristics of family and partner attachment styles will form and have a different experience of sexual self concept

Our hypothesis, that adolescents with different characteristics of family and partner attachment styles will form and have a different experience of sexual self concept is confirmed. When it comes to the close connection between the figure and sexual self concept, the highest correlation was achieved with the father figure on the dimension of anxiety ($r=.25$). This correlation is of moderate intensity and with positive sign, and it is achieved with variable sexual anxiety, indicating that the greater the fear of losing the close relationship with father the greater is the tendency for sexual anxiety. Subsequently, the correlation with father is achieved on the dimension of prevention and sexual responsibility ($r=-.22$), and indicates if less anxiety of losing the relation with father exists, therefore a higher level of prevention and sexual responsibility is present in sexual behavior of adolescents. Furthermore, looking at the results from the table, we can notice that the correlation of moderate intensity is acquired with the close figure of mother. The correlation achieved on the dimension of mother anxiety with the dimension of prevention and sexual responsibility is of moderate intensity and with negative sign ($r=-.23$), indicating that if we are less anxious to lose the relationship with mother, we will have stronger sexual prevention and responsibility. It is important to highlight the correlation between the attachment dimension of mother avoidance with sexual prevention and liability which is of moderate intensity and with negative sign ($r=-.20$). Mentioned correlation indicates that adolescents who are more prone to the avoiding model of behavior towards their mothers show less sexual prevention and responsibility in their sexual behavior. It is interesting that, although we got the correlation between partner figures (boy/girl), they are much lower intensity than those obtained within the family attachment (close relations with mother and father).

Table 1: Correlation between dimensions of attachment with significant figures at adolescence and dimensions of sexual self concept

Dimension of attachment (different figures)		Sexual openness and confidence	Sexual prevention and responsibility	Sexual anxiety
Avoiding Mother	Pearson's r p	-.13 .00	-.20 .00	.11 .02
Anxiety Mother	Pearson's r p	-.13 .00	-.23 .00	.24 .00
Avoiding Father	Pearson's r p	-.07 .11	-.12 .01	.08 .11
Anxiety Father	Pearson's r p	-.12 .01	-.22 .00	.25 .00
Avoiding girlfriend/ boyfriend	Pearson's r p	-.18 .00	-.18 .00	.12 .01
Anxiety girlfriend/ boyfriend	Pearson's r p	-.15 .02	-.08 .08	.16 .00

Respondents with secure attachment style have in average more noticable scores from respondents who belong to one of three other models (M=5.46). The difference between the mentioned means is statistically significant (p=.00), (table 2.). An interesting fact, when we compare the differences between means of preoccupied attachment style with secure, fearful, and avoiding style, the lowest sexual openness and confidence is achieved by the respondents who belong to the preoccupied attachment style (from p=.00 to p<.01). When it comes to the sexual prevention and responsibilities, data obtained in the table suggest that the observed differences between adolescents with secure attachment pattern and those belonging to avoiding and preoccupied attachment style (M=4.41, M=3.99), are statistically significant (p<.01 and p<.01). These differences indicate that greater preference to sexual prevention and liability have those who are securely attached. The lowest sexual anxiety is connected with the respondents who belong to a secure attachment pattern, unlike others belonging to avoiding, fearful and preoccupied attachment type (p<.05).

Table 2. The differences on sexual openness and self-esteem, sexual prevention and responsibilities, and sexual anxiety between different attachment patterns.

	Attachment pattern for the girl/boy	Attachment pattern for the girl/boy	The difference between the arithmetic means	p
Sexual openness and confidence	Secure	Secure	5,462723	.000
		Preoccupied	0,674629	.627
		Fearful	2,506831	.109
	Preoccupied	Secure	-5,462723	.000
		Fearful	-4,788093	.000
		Avoiding	-2,955891	.041
	Fearful	Secure	-0,674629	.627
		Preoccupied	4,788093	.000
		Avoiding	1,832202	.176
	Avoiding	Secure	-2,506831	.109
		Preoccupied	2,955891	.041
		Fearful	-1,832202	.176
Sexual Prevention and Responsibility	Secure	Secure	3,994690	.004
		Preoccupied	1,947444	.137
		Fearful	4,413733	.003
	Preoccupied	Secure	-3,994690	.004
		Fearful	-2,047246	.084
		Avoiding	0,419043	.758
	Fearful	Secure	-1,947444	.137
		Preoccupied	2,047246	.084
		Avoiding	2,466289	.053
	Avoiding	Secure	-4,413733	.003
		Preoccupied	-0,419043	.758
		Fearful	-2,466289	.053
Sexual anxiety	Secure	Preoccupied	-2,810370	.046
		Fearful	-0,489134	.711
		Avoiding	-1,370946	.356
	Preoccupied	Secure	2,810370	.046
		Fearful	2,321237	.052
		Avoiding	1,439425	.296
	Fearful	Secure	0,489134	.711
		Preoccupied	-2,321237	.052
		Avoiding	-0,881812	.493
	Avoiding	Secure	1,370946	.356
		Preoccupied	-1,439425	.296
		Fearful	0,881812	.493

The results of our research have shown that the respondents who are securely attached to the mother achieved greater sexual openness and self-esteem than those who are preoccupied or have avoiding attachment style with the mother ($M=3.0$, $M=3.9$) ($p<.01$, $p<.01$), (table 3.). Furthermore, on the dimension of sexual responsibility and prevention the differences of adolescents belonging to a secure attachment pattern compared to those belonging to avoiding and preoccupied attachment style, are statistically significant ($p<.01$, $p<.01$). This result indicates that adolescents who have a secure relationship with their mothers, achieved the highest propensity for sexual prevention and liability.

Table 3: The differences on sexual openness and self-esteem, sexual prevention and responsibilities, and sexual anxiety between different attachment patterns.

	Attachment pattern for mother	Attachment pattern for mother	The difference between arithmetic means	p
Sexual openness and confidence	Secure	Preoccupied	3,982355	.002
		Avoiding	3,008588	.014
	Preoccupied	Secure	-3,982355	.002
		Avoiding	-0,973767	.520
	Avoiding	Secure	-3,008588	.014
		Preoccupied	0,973767	.520
Sexual Prevention and Responsibility	Secure	Preoccupied	4,844427	.000
		Avoiding	4,003954	.001
	Preoccupied	Secure	-4,844427	.000
		Avoiding	-0,840473	.556
	Avoiding	Secure	-4,003954	.001
		Preoccupied	0,840473	.556
Sexual anxiety	Secure	Preoccupied	-4,177039	.001
		Avoiding	-2,097220	.071
	Preoccupied	Secure	4,177039	.001
		Avoiding	2,079819	.149
	Avoiding	Secure	2,097220	.071
		Preoccupied	-2,079819	.149

Same as the relations with mother, respondents show similar relations with father figure (table 4). As in the previous case with mother, the greatest propensity to sexual confidence and openness is seen in securely attached adolescents. The differences between secure, avoidnig and preoccupied attachment pattern on dimension of sexual prevention and responsibility, is statistically significant ($p<.01$, $p<.01$, $p<.01$). In comparision with mother, the greatest tendency towards sexual

prevention and responsibilities have those adolescents securely attached. It could be seen from the table that the lowest propensity for sexually anxious behaviour is seen in adolescents securely attached to father figure, while the further data analysis notes that preoccupied respondents have expressed tendency toward sexual anxiety.

Table 4. The differences on sexual openness and self-esteem, sexual prevention and responsibilities, and sexual anxiety between different attachment patterns.

	Attachment pattern for father	Attachment pattern for father	The difference between arithmetic means	p
Sexual openness and confidence	Secure	Preoccupied	4,616253	.013
		Avoiding	2,379947	.025
	Preoccupied	Secure	-2,236306	.013
		Avoiding	-4,616253	.249
	Avoiding	Secure	2,236306	.025
		Preoccupied	-2,379947	.249
Sexual openness and confidence	Secure	Preoccupied	6,742576	.000
		Avoiding	2,241880	.025
	Preoccupied	Secure	-6,742576	.000
		Avoiding	-4,500696	.014
	Avoiding	Secure	-2,241880	.025
		Avoiding	4,500696	.014
Sexual anxiety	Secure	Preoccupied	-5,966066	.001
		Avoiding	-1,881846	.062
	Preoccupied	Secure	5,966066	.001
		Avoiding	4,084220	.027
	Avoiding	Secure	1,881846	.062
		Preoccupied	-4,084220	.027

Discussion and conclusion

The majority of attachment theoreticians considered that adolescence itself is a period which leads to the first important replacement of attachment figures (Weiss, 1982, according to Stefanovic-Stanojević, 2011). These figures are usually father, partners, peers and other people with whom adolescents form a strong emotional bonds. One of the most important determinants of adolescence is the development of sexual identity (sexual self concept) in young people, the way a person sees himself and is seen as a sexual being. Sexual identity is developed on the basis of cognitive and emotional development of young people too, and is often accompanied with certain sexual thoughts and behavior.

In this paper, we dealt with the relations between various organizations of family and partner attachment patterns and the formation of different experiences of sexual self concept in adolescents. The results of our research confirm the hypothesis that is consistent with previous research (Stefanović-Stanojević & Tošić, 2011; Mikulincer, 2006; Mikulincer, Shaver, 2007; 2014) meaning that depending on formed attachment styles the adolescents will form and develop different experiences of sexual self concept. When we talk about the affective attachment to close partner figure (boyfriend or girlfriend), we notice that those respondents who belong to a secure pattern of attachment (low avoidance and low anxiety), on all three dimensions of sexual self concept, achieved statistically significant difference in means compared to those showing the characteristics of preoccupied, fearful and avoidant attachment style. Therefore, they are more prone to the expression of sexual openness and self-esteem, have low sexual anxiety and have tendency towards higher sexual prevention and responsibility in sexual behavior. The results of our hypothesis are consistent with previously conducted research showing that adolescents who are securely attached enjoy exploring their sexual freedom, have more positive sexual self concept and are more satisfied when expressing sexual interest (Cyranowski & Andersen, 1998, according to Mikulincer, 2006). When it comes to relations achieved with the close figure of mother and the impact thereof on the dimensions of sexual self concept, we got similar results as in partner relationships and their impact on the three dimensions of sexual self concept. Results showed that the average propensity to sexual openness and self-confidence, sexual prevention and responsibilities is higher among those adolescents with low levels of avoidance and anxiety for the mother. The lowest level of sexual anxiety is seen in securely attached respondents, while it is interesting that the highest propensity to sexual anxiety is seen in adolescents with preoccupied attachment style. The same as in achieved relations with mother and partner, those adolescents showing low anxiety and low avoidance, i.e. those with characteristics of secure attachment pattern, have the highest propensity for sexual openness and confidence, prevention and liability, and show the lowest level of sexual anxiety. More specifically, if our needs for intimacy were satisfied in childhood, we should have a secure pattern of attachment and on the basis of it, the ability to provide caring relations with our partners, and to seek for sexual intimacy, meaningful sexual behavior and considerations and satisfaction (Harvey et al., 2008).

Apart from the close attachment figures (mother, father or partner), adolescents in our research showing the characteristics of secure attachment pattern (low anxiety and low avoidance) have the highest propensity to sexual openness and confidence, prevention and liability, and show the lowest level of sexual anxiety. We see the importance of the forms of different organizations of family and partner attachment patterns with the formation of different experiences of sexual self concept among young people. It is important when explaining the formation of sexual identity among young people and effects on some aspects of sexual thoughts and behaviors, such as the existence of sexual openness and self-esteem, sexual prevention and liability, sexual anxiety and many others.

The limitation of our study may be the multidimensional questionnaire used to examine sexual self concept, which was translated and adapted, used for the first time in our country in the context of integration with different close figures of attachment. Questionnaire items could be further adapted especially that they are comprehensible to adolescent age, because so far this form in the other countries was used only to exam adult responders. Our study was conducted at the end of the school year, which could also affect the interest, motivation and sincerity in providing answers by adolescents.

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Bojana Borodža

VEZANOST ZA RAZLIČITE FIGURE I SEKSUALNI SELF-KONCEPT ADOLESCENATA

Apstrakt

Cilj ovog istraživanja bio je ispitati relacije različitih organizacija porodične i partnerske afektivne vezanosti sa formiranjem različitog doživljaja seksualnog self koncepta kod adolescenata, s obzirom na pretpostavljene razlike između djece koja su u sigurnom modalitetu vezanosti u odnosu na one koji pripadaju nesigurnom stilu vezivanja. Uzorak je činilo 400 ispitanika prosječnog uzrasta od 18 do 19 godine. Korištena su tri instrumenta: prvi instrument je samostalno kontrusian u cilju dobijanja podataka koje se odnose na neophodne socio demografske karakteristike ispitanika. Za ispitivanje afektivne vezanosti kod adolescenata korišten je Upitnik za ispitivanje hijerarhijske afektivne vezanosti. Sekusalni self koncept je ispitivan Višedimenzionalnim upitnikom seksualnog selfkoncepta Multidimensional Sexual Self-Concept Questionnaire. Adolescenti u našem istraživanju nezavisno od bliske figure vezivanja (majka, otac ili partner), koji su iskazali karakteristike sigurne vezanosti (nisku anksioznost i nisko izbjegavanja) imaju najveću sklonost ka seksualnoj otvorenosti i samopouzdanju ($R=.22, R^2=.05, F=3.39, p=.003$), prevenciji i odgovornosti ($R=.22, R^2=.05, F=3.39, p=.003$), te ispoljavaju najmanji stepen seksualne anksioznosti ($R=.27, R^2=.07, F= 5.14, p=.000$) u odnosu na adolescenete koji pripadaju jednom od preostala tri obrasca afektivnog vezivanja (izbjegavajući, preokupirani ili bojažljivi).

Ključne riječi: afektivna vezanost, seksualni self koncept, adolescenti

MODERN THEORETICAL APPROACH TO ADULTHOOD¹⁷

Abstract

Despite the fact that theoretical analysis of adult development substantially grew in popularity in the 1980s with the work of Daniel Levinson, one of the pioneers of the new approach to lifetime development, modern authors still debate whether becoming middle aged is a crisis or not, as well as if development in this period of life should be analysed over time or in connection to specific events. Initially, we comment briefly on the advantages and disadvantages of the chronological approach to the event-related approach and review various theoretical standings motivated by the question whether transition to middle age is a crisis or not. Then, in this paper we present in more detail basic theoretical standings of developmental psychoanalysts to adulthood, primarily the standings of Calvin Colarusso, one of the leading authors of this area. Colarusso made a great contribution to our understanding of lifetime development, but he is still less known to the Serbian psychological community. In the 1990s, Colarusso continued the terminology of the first and second individualization, introduced by Mahler and Blos, and introduced the concepts of the third, fourth and fifth individualizations in order to bring the attention to the normative processes in the development of adults. In general terms, according to this standing, in the same way as the first two individualizations, the other three reflect the achieved level of stability of self and object. On the other hand they are qualitatively different because parents do not have a dominant role in their realization, they are more influenced by the physical regression than growth, and they happen in periods of a more complex psychical structure.

Key words: adulthood, developmental psychoanalysis

Introduction

Not long ago, at the moment when the understanding of development in adult age has taken a significant place in the psychology literature, many questions have

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been raised. Firstly, what the initiators of adult development are, what it depends on and what its most significant topics, or tasks and problems are. This is followed by questions of whether the early, middle and old ages can be chronologically separated and what the boundaries which separate them are. Then, there are advantages and disadvantages of the chronological, that is, thematic approach to the development in adult age, as well as different theoretical viewpoints initiated by questioning whether the transition to middle age is a crisis or not.

The advantage of the chronological approach, in which the basic developmental processes in all three periods of adult age are viewed together, is the fact that the entirety of functioning is preserved. Besides this, it follows the natural course of life. On the other hand, being that adult age is the longest period in an individual's life, in this approach, it is not possible to entirely cover, at least some key topics which permeate the three periods through which many adults go. In addition, the longer life span of humans and the changes brought by the modern age contribute to the ever more present tendency that some life events, which have usually been related to certain life period, occur several decades before or after that. Today, for example, it is not so rare for an individual to become a father in old age or to go to college in his/her sixties.

However, in the thematic approach, in which a certain process is viewed through all three developmental periods of adult life, a more complete image of each process of the entire life is obtained, but the entirety of functioning is lost, that is, the processes which are usually, more or less, related become separated. Therefore, the presentation of adult age is often limited to single thematic units – intellectual development, family life dynamics, professional development...

However, developmental psychoanalysts, whose viewpoint is presented in this paper, view the adult development through the key developmental aspects and processes characteristic for the childhood period, as well as adolescence, such as the Oedipus complex and separation-individuation process. These basic developmental tasks in childhood and adolescence also continue to be central aspects of all life stages which come after that. In essence, the adult development is viewed as a dynamic process, shaped by developmental problems which are characteristic in childhood, and modelled by a unique experience of an adult and the current present.

It is known that within the psychodynamic literature, as well as within other theoretical orientations, the developmental aspect of adult age has long been neglected. However, it should be mentioned that this period of life has, in some way, also been present in the classical psychoanalysis through the possible outcomes, ways of resolving developmental conflicts during childhood and adolescence. Unlike the classical psychoanalytical approach in which the term 'development' has mostly been related to the periods before the adult age, developmental psychoanalysts (Diamond, 2004; Pollock, 1998; Ross, 1994; Colarusso & Nemiroff, 1981) take the viewpoint which perceive development as a lifelong process, equally dynamic and dramatic in the late adulthood as in any other period of the life cycle.

In the 1990s, Colarusso (2000), one of the most important authors of the psychodynamic approach to adulthood, adding to the use of the already accepted

terms of first and second individuations, proposed by Mahler (1974) and Blos (1967), introduced the concepts of third, fourth and fifth individuations in order to point to normative processes in adults. The third individuation refers to the multi-determined, complex separation-individuation phenomena characteristic for early adulthood (from the age of 20 to the age of 40). In the fourth individuation (from the age of 40 to the age of 60) the elaboration on these processes occurs, which also continues in the late adulthood (over 60 years of age). All five individuations are similar in the fact that they maintain the achieved level of constancy of self and object. However, the three individuations of adulthood are qualitatively different from the preceding ones in the fact that relations with parents are not of primary importance in them, that they are more influenced by physical retrogression than growth, and that they occur in the periods in which the psychological structure is more complex.

Basic Assumptions of Adult Development

One of the basic assumptions of contemporary psychodynamic understanding of adult development is that *the development is a continual, lifelong process*, and that it is not limited to the periods of childhood and/or adolescence. While in the classical psychoanalysis it was considered that adulthood is a long and relatively stable stage of life, in which developmental processes do not play a large role, the papers by few authors of this approach (Pollock, 1998; Ross, 1994; Colarusso & Nemiroff, 1981) present the viewpoint of lifelong development. However, if the truth be told, even before the developmental psychoanalysts directly focused their attention on adulthood, psychoanalysis recognised the significance of adulthood experiences such as pregnancy, marriage, aging or death, but, primarily, in relation to previous experiences and conflicts. However, the fact that life events and developmental problems of adults are unique in themselves and in some important aspects outside the childhood domain. An adult individual is not only the product of his/her past, who is modelled by current psychological conditions and consciousness, but continues to change in the present (Pollock, 1998; Ross, 1994; Colarusso & Nemiroff, 1981).

In addition, Carl Gustav Jung (1995) was the first psychoanalyst who paid special attention to adulthood. This idea by Jung was extended by Erik Erikson (1963/2008) in the 1950s. In his psychosocial theory of development, Erikson provided an integrative viewpoint of the way in which an individual develops throughout his/her entire life cycle. The followers of these ideas were René Spitz, Robert Emde and Georg Pollock. Among these understandings, we will emphasise the explicit statement by Pollock (1998) that “development, obviously, is not the same as growth and can include progression, regression, new contributions, remodelling, and, in some ways, decline” (p. 44). In essence, early development is primarily focused on the formation of the psychological structure, while adulthood emphasises the development of the existing structures. The images of ‘self’ and ‘object’ and their mental representations from the infancy period continue to modify in their key developmental changes brought

about by puberty, adolescence, marriage, parenthood, climacteric, retirement, aging (Steinschein, 1973).

Another important assumption by developmental psychoanalysts on the adult development is that *the key developmental problems in childhood remain central aspects of adulthood, but in a changed form*. The main developmental problems of adults, the same as during childhood and adolescence, are expressed through the separation-individuation processes and the Oedipal problems. Certainly, these developmental aspects in adulthood are qualitatively different than those from previous developmental periods. The emotional and developmental tasks which adults are faced with, such as, for example, sexuality, generativity, work, etc., and their more developed psychological structure, give them a different meaning (Colarusso & Nemiroff, 1981).

Although Freud (1924) himself spoke about the continuity of the Oedipus complex throughout the entire life, this phenomenon was not much discussed as the central factor of the development of adults who do not suffer from a psychological disorder. Fenichel (1961) also pointed out that entire life is, in fact, re-adaptation to old conflicts. Marriage, parenthood, illness, retirement or death, confront us over and over with some of the aspects of the Oedipus complex. First, during adolescence, and later during all stages of adulthood, the redefinition of this triad relation occurs. The competitiveness of parents with children who are becoming sexually mature can be additionally intensified when the children choose their partners or when they get married. This tendency is re-engaged in old age, especially with the arrival of grandchildren, as it was proposed by Rangel (according to Colarusso & Nemiroff, 1981). Of course, an adult individual handles the Oedipal problems in a qualitatively different way than a child. The maturity of his/her psychophysical structures provides different ways of control and expression of the Oedipal conflict (Colarusso, 2002).

When it comes to the separation-individuation processes, let us remind that Mahler (according to Winestine, 1973) also pointed out that these are lifelong processes because in “each new step of independence”, there is a threat to (fear of) losing the object. The absolute dependence on the mother during infancy becomes a relative dependence during the entire life. In adulthood also, the independence from the object is achieved only partially and the trait of maturity is important (Spiegel, according to Marcus, 1973).

Colarusso (2000) also states some key differences between separation-individuation in childhood and adulthood. In the periods of childhood and youth, the physical presence of infantile objects is essential for these processes. Over time, the ‘self’ and ‘object’ images and their mental representations continue to modify during adolescence, marriage, parenthood, professional career, climacteric, retirement, aging, as well as due to physical aging and accepting the time limit of the future and one’s own death. Furthermore, during adulthood there is a continuous separation from aspects of the self which have been formed earlier. By entering a marriage one is not single anymore, the middle-aged mentor is not a young student anymore, a responsible parent is not only a husband or a wife anymore. It can be said

that middle age also initiates the final departure from self-representations which have never been achieved. The fact is that, during this stage of life, we are faced with, among other things, the realization that there is no more time for us to become all that we could be, that many of our expectations will not come true (Erikson, 1963/2008). This is illustrated by Levinson's (1978) description of the midlife as the period of the loss of illusions. However, as pointed out by many authors, Staton (2001) or Auchincloss & Michels (1989) being among them, "the losses of illusions" can also be an incentive for further development.

Developmental psychoanalysts (Madow, 1997; Settlege, 1988; Colarusso & Nemiroff, 1981) also clearly emphasise the significance of immediate past onto the developmental processes in adulthood. Naturally, "newer" experiences are very connected to childhood events, but they cannot be used to explain them completely. Thus, for example, the way in which an adult will confront the changes in the field of sexuality will undoubtedly depend on pregenital events, but also partly on the experiences in intimate relations and places they occupy in that individual's life. This is why the current circumstances should be taken into account. For example, when it comes to the quality of the role of a father, besides the "internalized model of the parent role", it will depend on one's system of beliefs about parenthood, on the significance of the father-child relationship, on personal emotional experiences related to the father role, the relation of a mother towards the relation between the father and the child, and the like.

Within the psychodynamic theories of adulthood, it is also pointed out that *adult development, as well as childhood development, is strongly influenced by the body and physical changes*. In general, the authors with this orientation have expressed a significant interest in the role of the body within the development and structure of the personality, primarily through the concepts of narcissism, the fear of castration and the ego structure. As stated by Fisher (1970), one of the leading authors in this field, the body and the experience of one's own body represent the basis for the self-image and significantly influence the formation and the integrity of a personality during one's whole life.

In mid-adulthood, after a relatively stable period concerning the physical side since the period of adolescence, bodily changes are intensified again. The reduced physical capabilities, as well as the experience of illness or surgical interventions, will initiate, in some individuals, numerous intra-psychological conflicts and narcissistic injuries. Due to high physical investment, the physical signs of aging and the decline of bodily functions can represent a serious narcissistic injury (Colarusso, 1997).

With the tendency to deny growing old and to fuse with one's body from his/her youth, in the modern society, which nurtures the cult of youth, it is more and more common to resort to the aesthetic remodelling of one's body. In order to overcome the conflicts related to bodily changes in one's middle age, it is not so rare to use transition objects. As the symbolical substitutes for a youthful body, individuals use the so-called "toys for adults", i.e. as large and as good cars, houses and computers as possible. However, these replacement mechanisms are often unsuccessful, and sometimes

pathological. In order to adequately respond to the decline in physical abilities, an individual in his middle age should go through the process of grief, to deal with the loss of the body from youth and to gradually readjust his/her body image according to reality. Redefining one's body image and accepting new ways of achieving more realistic goals, in relation to personal physical competence, provides the possibility to fulfil developmental potentials and the further process of individuation.

The recognition and acceptance of the limit of time and the inevitability of one's death stand out as the central, stage-specific and normative themes in the adult development. Although the threat of losing objects and the threat of death are present during the entire life, the heightened awareness of the limit of time which has remained is a powerful psychological organiser which significantly influences all aspects of development during middle age.

During the first individuation, death is not a conscious or cognitive concept. In this period, it can be recognised by a prolonged painful separation from an object as in, for example, hospitalism and anaclitic depression. Death is understood conceptually during the second individuation, but the lack of the loss of someone close, primarily parents or brothers and sisters, the demands of adolescence and the awareness of the future often minimise the influence of this cognitive progress.

Unlike childhood and adolescence, and early adulthood as well, in middle age the threat of the loss of object and the threat of death represent an inevitable, normative, universal experience of abandoning "everything and everyone". Paradoxically, precisely when one's life is filled with numerous relations (with a partner, children, grandchildren, aging parents and friends), at the same time there is also a threat of an approaching possibility that they will all be lost. Painful awareness about the limited future and the inevitability of death can lead to different psychological difficulties and disorders, but also, to reassessing one's goals and the highest level of individuation, competence, power and close relations with others (Jung, 1995; Colarusso & Nemiroff, 1981; Levinson, 1978; Jacques, 1965). Regressive and pathological answers, among other things, can be recognised by unrestrained physical activities, neglecting one's body, or competitive envy towards younger generations. In extremely critical situations one can also reject the most important parts of life, such as stable marriages or successful careers, and all that in an illusory attempt to stop time and conquer death (Modell, 1989). On the other hand, the separation from important objects and other losses can contribute to finding new goals and exceptional individuation. The process of grieving provides the possibility of accepting losses and changes, the reality as it is and, as a consequence, the higher satisfaction with life (Pollock, 1979).

Conclusion

It is my strong opinion that the basic assumptions of developmental psychoanalysts of adulthood provide the possibility for overcoming the flaws of the chronological and thematic approach to adult development which is still

prevailing. Contrary to the approach in the classical psychoanalysis in which the term 'development' referred only to the periods before the adulthood, developmental psychoanalysts understand development as a continuous, lifelong process, equally dynamic and dramatic in late adulthood as in any other stage of life. The same as in childhood and adolescence, the development in all stages of adulthood is determined by previous experience and stage-specific, new developmental challenges and conflicts. In addition, it is very important to bear in mind that the experience of adults is specific, unique, and in some important aspects, outside the childhood domain. Their main developmental problems, such as those in earlier developmental periods, are expressed through separation-individuation processes, and the Oedipal problems but in a changed form.

Briefly, adult development from the perspective of developmental psychoanalysts is viewed as a dynamic process which is expressed through the same basic developmental problems which are characteristic for childhood, but modelled by a unique experience of an adult and the current present.

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Vesna Anđelković

MODERAN TEORIJSKI PRISTUP ODRASLOM DOBU

Apstrakt

Mada je do porasta popularnosti teorijskih stanovišta u kojima se razmatra razvoj u odrasloj dobi došlo sedamdesetih godina prošlog veka, sa Danielom Levinsonom, kao jednim od začetnika novog pristupa celoživotnom razvoju, i dalje se vode rasprave među autorima da li je prelazak u srednje doba kriza ili ne, kao i da li se razvoj u ovom periodu života treba sagledavati kroz honološki ili tematski pristup. Osvrćući

se, ukratko, na prednosti i mane hronološkog, odnosno tematskog pristupa i pregled različiti teorijskih shvatanja koja je pokrenula zapitanost da li je prelazak u srednje doba kriza ili ne, u radu se opširnije predstavljaju osnovne teorijske postavke razvojnih psihanalitičara o odraslom dobu, pre svega, gledište Calvina Colarussa, jednog od vodećih autora iz ove oblasti. Colarusso je pružio izuzetan doprinos razumevanju celoživotnog razvoja, ali je i dalje malo poznat psihološkoj javnosti Srbije. Devedesetih godina dvadesetog veka, Colarusso se nadovezuje na termine prva i druga individuacija, koje su predložili Mahler i Blos, i uvodi koncepte treća, četvrta i peta individuacija kako bi ukazao na normativne procese u razvoju odraslih. Najopštije rečeno, prema ovom stanovištu, kao i prve dve individuacije, poslednje tri odražavaju dostignuti nivo konstantnosti selfa i objekta. S druge strane, one su kvalitativno drugačije od prethodnih po tome što u njihovom dostizanju uloga roditelja nije od primarnog značaja, pod većim su uticajem fizičke retrogresije nego rasta, i što se dešavaju u periodima kada je psihička strutura kompleksnija.

Ključne reči: odraslo doba, razvojna psihoanaliza

NEW LIFESTYLES OF THE ADULT POPULATION

Abstract

Starting a family – marriage and parenting, stand out as important developmental tasks that allow an individual to enter into adulthood. Numerous social changes that have taken place during the second half of the 20th century and the challenges posed by modern lifestyles have led to the emergence of lifestyles of adults which deviate significantly from these developmental tasks. What we are dealing with here is the choice of an individual to live alone; to live as a couple, but without having children; or to live in two separate households. Living alone is a new lifestyle which was born of the need for independence and self-realization, but also as a response to the demands of one's profession. Most young adults who live alone see this as a period of building an independent life prior to finding a partner. However, many still maintain this lifestyle, since it is difficult for them to give up their independence, freedom and the peace that solo living brings. For similar reasons another lifestyle has also emerged – childless by choice. These couples are often met with a lack of understanding and judgment for breaking fertility mores. Nevertheless, they point out that parenting should not be viewed in a fatalistic sense, but as a very important choice. Once they see what parenting might mean on the individual plane and the plane of the relationship, some couples decide to remain childless. Individuals who are in a living apart together relationship (LAT relationship) represent a rather heterogeneous group of couples, many of whom have already been in traditional relationships. Some of them do not want to begin another relationship of this kind, but there are also those who are curbed by circumstances.

Keywords: new lifestyles, adults, solo living, childless by choice, LAT relationship

Introduction

Various cultures determine when and how an individual becomes an adult in a variety of ways. In modern societies, there is an age limit to coming of age, after which an individual is recognized as an adult. This limit in our country and in most countries is the age of 18; a smaller number of countries set the coming of age limit much earlier age (for example at 16 – Cuba, Kuwait, Vietnam) or later (19 – for example in Canada or South Korea; at 20 in Japan; or 21 in Singapore, Zambia and

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several of the states of the USA). From the viewpoint of psychologists, the transition across a chronological border is not enough for an individual to be recognized as an adult. It is also necessary to fulfill certain developmental tasks, which might be divided into two groups. One set of tasks is related to the completion of one's education, obtaining employment and abandoning one's primary family – in order to realize their independence; the other set refer to marriage and parenting (Berk, 2008; Schaie & Willis, 2001). This paper briefly presents the significant changes which the challenges of modern life have introduced into the developmental tasks of an adult in terms of family life.

Both starting a family and family life have undergone many changes in industrialized countries following World War II. One part of the reason for this lies in the social changes such as the increase in the population of cities and the anonymity which an individual has in the city; the education and employment of women and the right to a divorce; as well as the pronounced rise in the service economy of the 1970s (housekeeping, caring for children and elderly, food preparation, laundry) (Klinenberg, 2012). In the middle of the second half of the 20th century the homosexual rights movement also left a mark on the forms of family life. Another important source of changes related to family life is also progress in the field of assisted reproduction, where the most important event was the first successful in vitro fertilization – in 1978 in the United Kingdom (Golombok, 2011). Now, when we are almost at the end of the second decade of the 21st century, we are talking about new forms of families, but also of new lifestyles of adults, which do not always take place within the scope of family life (Opsenica Kostić, Todorović & Janković, 2017; Opsenica Kostić, 2017). These new styles are represented by individuals who live alone by choice; childless by choice couples; and living apart together relationships. In this paper, we will present some of the specificities of these living arrangements.

Living Alone

One of the most noticeable changes in the family life of modern societies in the post World War II period is the stable increase in the number of one-person households (Fokkema & Liefbroer, 2008; Jamieson et al, 2009). Living alone in Europe is particularly common among women in the late-middle and old age following the death of a spouse (Prioux, 2002; Wall, 1989). A population census in Serbia from 2011 indicated that 22,33% of the households are one-person households (basic data of the 2011 population census). However, we are currently interested in solo living as a lifestyle choice in early adulthood. Previous studies have shown that there are more men than women who live alone in their early and mid adulthood (Prioux, 2002; Wall, 1989). In Northern and Western Europe in 2008, for the 30-49 age group, approximately one fifth of the men were living alone, compared to one tenth of the women, whereas for the 50-69 age group slightly more women than the men were living alone (Demey et al., 2013). This, as well as other new lifestyle choices, partially

reflects the demographic changes which are known as the Second Demographic Transition (Lesthaeghe, 1995), where among other things we find a delay in family formation, a decrease in marriage rates and diffusion of cohabitation, rising divorce rates and the rising incidence of childlessness. In his well-known volume *Going solo: The Extraordinary Rise and Surprising Appeal of Living Alone*, Klinenberg (2012, p.46) indicates the significant findings of Barbara Dafoe Whitehead related to divorce: beginning with the 1950s, Americans became more acutely conscious of their responsibility to attend to their own individual needs and interests; people began to judge the strength and “health” of family bonds based on their capacity to promote individual fulfillment and personal growth, rather than on more traditional measures, such as income, security or class mobility. Similar changes were also identified by scholars in Europe. By 1970, increasingly more (one might even say – most people) began to consider their search for personal happiness more important than any other commitment; the freedom to aspire to this goal is considered a basic human right. Finding one’s own place of residence is the best way to achieve this, and solo living became in vogue (Klinenberg, 2012).

Klinenberg speaks of another significant reason why people want to live alone. He actually claims that many of the young adults who live alone were brought up to do so. Not explicitly, since all children share their home with a family or adults of some sort, and schools do not promote living alone as a goal. But today an unprecedented number of children around the world develop the capacity and desire to live independently through another, historically novel experience: growing up in a room of one’s own (Klinenberg, 2012; p.48). And not only that, but both parents and children in modern society are focused on organizing family life around individual needs and interests. The individual development of each child is promoted, children from the same family attend different schools and take part in different sports, have different friends, and parents invest a lot of effort into supporting the various activities of their children. As a result, children feel special and often become competitive towards their siblings. Separate rooms and the nurture of individuality are linked to another international phenomenon which drives the desire for solo living. We are referring to the sharp rise in the number of so-called latchkey kids during the 1960s and 1970s. (We do not have a suitable term for this phenomenon in the Serbian language; since a latchkey is a front-door key, smaller children sometimes carry it around their neck, so as not to lose it.) Most people will recall at least one childhood friend who would come to school like this. Since their parents are at work, a great number of elementary school children daily take care of themselves after school and during school holidays. Latchkey kids grow up with very little adult supervision, significantly less than in previous periods when the mothers were unemployed or when people lived in larger families; and they begin their self-care approximately at the time when they begin school – at the ages of 6 or 7. Children who have grown up under these circumstances would like to continue the same lifestyle at university. Universities in the USA during the first decade of the 21st century constantly faced demands for single-room units which they could not meet; as a result, adaptations were made and new facilities built,

which would meet the needs of the adolescents who did not want to share a room – those who wanted to live alone.

Why does the desire for living alone among some people persist well into adulthood, despite both the open and subtle social pressures to find a partner and start a family? Even though the development of one's capacity to live alone is an intensely personal experience, a series of interviews carried out by Klinenberg (2012) suggest that some features are widely shared. The basis is made up of the redefinition of living alone as a sign of an individual's special nature and success (in comparison to previous historical periods when living alone was seen as a great personal failure). Young adults who decide to live alone see their lifestyle as an opportunity to invest in their personal, but primarily, to invest into their professional development. They believe that such an investment in oneself is necessary since modern families are fragile, as are most jobs, and everyone has to be ready and willing to rely on themselves. The strengthening of the self for these people means acquiring some everyday skills, such as keeping a household, learning to enjoy one's own company and building confidence that an individual can perform certain activities, such as travel and rest, by themselves. On the other hand, most of them also invest significant effort into being social, by developing strong networks of friends and work contacts. Most young adults who live alone see this as a period of building an independent life prior to partnering (Hughes, 2015). Interviews carried out with those who chose to maintain this lifestyle indicate that these individuals find it difficult to forgo their independence, freedom and the peace afforded them by solo living (Klinenberg, 2012). Hughes (2015) puts forth a very interesting claim: while living alone may coincide with a focus on the self and life outside a couple's relationships, it also often coincides with idealized notions of romantic love and the search for a soulmate. Thus, the author considers that most young adults living alone are not challenging the hegemony of heterosexual couple relationships, but finding new ways of maintaining the heterosexual couple ideal. A special topic of interest in the study of individuals living alone is the later questioning and doubt of one's choices during their late thirties, primarily in the case of women, as they are nearing the end of their reproductive cycle; even if they are able to find the "right" partner in the upcoming years, the possibility of the couple remaining childless is a quite real.

Klinenberg (2012) puts forth a very important caveat – the desire for professional success and autonomy does not define all the adults who live alone. This includes the population of the poor, the ill, addicts or former inmates, which in the USA often reside in single-room occupancy hotels (SRO's). An important point of difference is that such people during their early adulthood did not consciously choose solo living as an option in their life.

People who live alone by choice start and support organizations which promote solo living as a legitimate life choice, connecting people who live alone and fight discrimination. One such activist, Sasha Cagen, is the author of *Quirkyalone: A Manifesto for Uncompromising Romantics* and the founder of the website *Quirkyalone.net*. It was her idea to proclaim February 14 International Quirkalone

Day, and celebrations of it were held all over the USA. This story is an interesting one especially because of the twist: when Sasha was in her late thirties she became tired of promoting the status of singletons and confessed her longing for a long-term relationships and a husband (Klinenberg, p.134). Another prominent activist, Kim Calvert, founded a magazine for singles – Singular and SingularCity Social Network. Staunch opponents to discrimination in various spheres of life (for example, health care, housing, unmarried parenting) for many years also included activists supporting the Alternatives to Marriage Project¹⁹.

At this time, there are significantly few studies which include individuals living alone, since it is difficult to compile such a sample of participants. One of the ideas in this field which is worth consideration, and which has not been mentioned so far, is the pronounced preference for solitude among those who have chosen to live alone. As the author of the *Preference for Solitude Scale* Jerry Burger (1995) points out, people differ in the extent to which they prefer to spend time alone. The reactions of individuals to solitude vary considerably, from loneliness and depression to contentment and happiness. These individual differences are relatively stable during life and individuals living alone probably have a more pronounced preference for solitude; being alone to an individual who wants to be alone has significant benefits (for example, Long & Averill, 2003). However, we should bear in mind that, as Demey et al. (2013) point out, even when one is able to find a sample of individuals living alone, it is not often possible to differentiate between those who remain single by choice and those who are unable to find a partner, despite their intentions to do so.

In any case, individuals who live alone by choice represent a challenge to the redefinition of the normative tasks of adulthood. The population which is even more intriguing in that sense are the voluntarily childless.

Childless by Choice

Even in modern societies the majority of people hold normative expectations regarding parenthood. However, the number of couples the world over who choose to be childless is on the rise (Abma & Martinez, 2006; Park, 2005). It is not easy to conclude how many of them there are precisely, since the data are usually compiled for women alone, and at the same time it is not often known how many of them are voluntarily, and how many are involuntarily childless. Data from the USA indicated that in 2002 18% of the women between the ages of 40 and 44 were childless (Osborne, 2003); by 2006 that number had increased by 20% (Dye, 2008). Abma, Chandra, Mosher, Peterson, and Piccinino (1997; as cited in Park, 2005) concluded that 8.9 percent of all American women between 15 and 44 in 1995 were and expected to remain childless; of this total group of women, 6.6 percent were voluntarily childless, as they were either fertile or contraceptively sterile. McAllister and Clarke

¹⁹ If you would like to learn more about this, please visit <http://quirkyalone.net/>, <http://singular-city.com/>, <http://www.unmarried.org/>

(1998; as cited in Park, 2005) acknowledge the scarcity of data on men's fertility behavior. They cite studies indicating that male and female fertility rates and rates of childlessness differ, and that the low fertility rates in contemporary Europe would be even lower if men's behavior were measured instead. Most of the countries which have policies designed to increase fertility among the population are to be found in Europe (United Nations 2011).

The space needed to make the decision "whether or not to have children" exists thanks to a relatively new phenomenon: the introduction of oral contraceptive pills in the 1960s. In her book *Complete without Kids* the clinical psychologist and therapist Ellen Walker talked about three simultaneous societal shifts which are related to being childless by choice: the availability of a choice of whether or not to have children; the acceptance of not having children; and the willingness on the part of some parents to acknowledge disappointment in their kids (Walker, 2011, p.31). Sociological studies indicate that voluntarily childless couples deviate significantly from pronatalism which permeates social and individual values in various cultures. Veevers (1980; as cited in Park, 2002) believes that these couples are perceived as someone who is breaking the fertility mores, thereby exhibiting deviant behavior. "(...)the deviance of the voluntarily childless lies not only in the fact that they do not *have* children, but primarily, and especially for women, in the fact that they do not *want* them" (Park, 2002, p.22). Voluntarily childless couples are often stigmatized – people tend to ascribe to them a wide range of imperfections on the basis of the fact that they do not want to have children. Where do they in fact get the motivation to remain childless and what do we actually know about these men and women?

In 2002 in the USA, Sylvia Ann Hewlett's book *Creating a Life: Professional Women and Quest for Children* came out (Hewlett, 2002, as cited in Scott, 2009). It was a study of 1,658 high-achieving women, in which it was determined that approximately 40 percent of them were still childless at the age of forty-five. The author chose to write about women who wanted children but had postponed childbearing because of career demands or a lack of opportunity. As a result, the message of the book, which was widely spread by the media, was – Don't delay, have kids now, or you'll be sorry! In that campaign it seemed that life without children is not worth living (Scott, p.15). What was not mentioned was that 14 percent of the high-achieving women Hewlett surveyed made the decision some time towards the end of their adolescence that they would not have children and did not regret that decision; just like not all women, who for various other reasons remained childless, felt any remorse. The author of the book *Two is Enough* and the initiator of the *Childless by Choice* project, Laura Scott, cites 4 categories for the childless, that is, 4 ways that lead to a life without children (Scott, 2009): "early articulators" are individuals who quite early on in their lives make the decision not to have children; "postponers" put off starting a family and because of that remain childless; "acquiescers" made the decision to remain childless primarily because their partner wants to be childfree; and "undecided", which are still in the decision making process. Scott carried out a study regarding the motivation to be childless by choice, on a rather small sample however – 171 voluntarily childless respondents (121 women and 50 men), which included both single and partnered/

married individuals²⁰. Contrary to the results that Hewlett obtained, that in their case childlessness is to be “blamed” on their career, Scott indicates (2009, p.17) that only 41 percent of her respondents expressed high levels of agreement with the claim “My lifestyle/career is incompatible with parenthood”. The list of claims which the respondents agreed with the most was the following: 1. I love our life, our relationship, as it is, and having a child won’t enhance it; 2. I value freedom and independence; 3. I do not want to take on the responsibility of raising a child; 4. I have no desire to have a child, no maternal/paternal instinct; 5. I want to accomplish/experience things in life that would be difficult to do if I was a parent; 6. I want to focus my time and energy on my own interests, needs, or goals. The first three motivations listed above were determined to be top motivators because they were rated a 4 or 5 on a scale of 0-5 by more than 70 percent of the respondents. The remaining three were rated a 4 or 5 by over 60 percent of the respondents indicating they were also strong motivators for the majority of the participants (Scott, 2006).

The motivation for a childless life was also studied by Houseknecht in her 1987 review of the literature on voluntary childlessness (Houseknecht, 1987; as cited in Park, 2005). The data included in this review study were, from today’s perspective, quite old, but it is worth considering which of the results the author obtained based on the statements of the voluntarily childless in twenty-nine studies published between 1971 and 1981. The motive with the highest frequency was *freedom from child-care responsibility*, and *greater opportunity for self-fulfillment and spontaneous mobility*, appearing in 79 percent of all studies and mentioned nearly equally by females and males. The second most frequently mentioned motive in Houseknecht’s review was *higher marital satisfaction*, reported in 62 percent of the studies, and slightly more often mentioned by females than males. Third place is shared by two equally frequent motives: *female career considerations* and *monetary advantages*, both appearing in 55 percent of the studies. Sex differences were apparent here, as 74 percent of the females-separate studies cited the career factor, compared to only 29 percent of the males-separate studies. Conversely, 57 percent of the males-separate studies mentioned financial benefits, compared to 42 percent of the females-separate studies (Park, 2005, p.379). In fourth place there are two motives which are equally frequent: 38% of the studies reported *concerns about population growth* and *general dislike of children* as the reason for remaining childless. Here too we have differences in relation to gender: 32 percent of the female samples expressed population growth concerns, compared to 14 percent of the male samples. On the other hand, 43 percent of the male samples mentioned a general dislike of children, compared to only 26 percent of the female samples. At the end of the list we find *early socialization experiences and doubts about parenting abilities* (31 percent of the studies, mentioned by 37 percent of the females and no males) and *concern about physical aspects of childbirth and recovery* (24 percent of the studies, mentioned by 21 percent of the females and 14 percent of males) (Park, 2005, p.380).

²⁰The questionnaire and a summary of the results are available at http://www.childlessbychoiceproject.com/Childless_by_Choice_Survey.html

We might assume that the voluntarily childless might also have a specific identity. However, studies which focused on that are infrequent and were mostly carried out on samples of women. Christine Brooks in her doctoral dissertation (Brooks, 2007; as cited in Walker, 2011) presented results obtained through in-depth interviews with women who belong to the group of early articulators: those who knew from an early age that they did not want to have children. Most of them pointed out that they highly valued their own autonomy, their ability to control the environment and their economic safety. These options women mostly considered signs of their own freedom. Often the shared experience of these women meant a loss of female friends when they became mothers, that is, difficulties in establishing relationships with women who are mothers of small children. Some of the respondents described that they sometimes felt like outsiders and were judged by women who chose to be mothers. Most of the interviewed women pointed out that they do not regret their decision to remain childless and were, for the most part, very satisfied with their lives. The author concluded that the specific nature of her respondents lay in the high value of freedom, independence and the possibility of control over their own lives. However, we should also take into consideration the ability to choose and impact of being childfree on personality development over time (Walker, 2011). A person who is childless has many more opportunities to develop their own independence than an individual who is a parent.

There is also a very interesting book of interviews *Families of Two: Interviews with happily married couples without children by choice*, written by Laura Carroll (Carroll, 2000). Researchers which only worked with women implicitly make the assumption that having no children is primarily the decision of the woman, not of the man; as well as the fact that there is no need to study a couple in order to understand this phenomenon (we might even be able to glean the assumption that women who are childless do not have a stable partner). From thirty interviewed couples, Carroll selected 15 interviews with the aim of representing the population of the voluntarily childless to the wider public. Contrary to the belief that childless couples are immature and that they do not want to take on responsibility which adulthood carries with it, Carroll believes that the couples she interviewed were very responsible and seriously analyzed their decisions. "Like all big decisions they make or responsibilities they choose to take on, they very carefully considered their decision about parenthood. They realistically looked at how having children would affect their lives and what it would truly mean to them individually and as a couple. All of them are leading adult lives and handling the responsibilities that often come with it (...)" (Carroll, 2000, p.14). In addition, the author points out that her respondents did not reach their decision because they do not like children. Some of them did state that they do not feel comfortable around infants and that they feel more comfortable with children as the children get older. However, they were all in a way included in "molding the next generation of children" (Carroll, 2000, p.15). A significant number of respondents have professions that contribute to children, from teaching to matching nannies with the right families. Some are very involved in raising the children in their extended

family, while others establish relationships with the children in their neighborhood or the church community they belong to. The author concludes that these couples often feel that it is important for them to set a positive example through their own behavior, as well as to understand that they can fulfil their urge to nurture in many ways other than through biological offspring. As one of the respondents said “*We have given the birth to many things in our marriage; we just haven’t given birth to children.*” (Vicky, from the interview with Vicky and Nathan; Carroll, 2000, p.48).

Living Apart Together (LAT relationships)

An LAT relationship means that the couple does not share a home together. Each partner lives in their own home, where other people can be living as well (for example children or the partner’s parents). Individuals in an LAT relationship consider themselves a couple and are perceived as such way the people in their closer social network. That is, the definition of a LAT couple requires that three conditions be met (Levin, 2004): the couple has to agree that they are a couple; others have to see them as such; and they must live in separate homes.

There are also those who consider it unnecessary to give LAT relationships a special name. Living apart together might also be construed as a premarital form. Before society began approving of co-habitation, unwed couples maintained their relationships in special households. This form of relationship was usually identified as ‘going steady’ and was limited to a certain period of time during which the couple either decided to continue and become a ‘real’ couple and get engaged to be married, or decided to break up the relationship (Levin, 2004). This phase is a part of the LAT relationship, and probably for some LAT couples might merely be a temporary situation which will either end in a life together or a breakup; but for some couples an LAT relationship represents something much more than ‘going steady’, and it lasts over a longer period of time.

It is very difficult to determine how many LAT couples there are. They are not visible in any census. It is assumed that a certain number of them are individuals who voluntarily choose to live alone (Funk & Kobayashi, 2016), which we discussed at the beginning of this paper. The very term LAT was first used in the Netherlands, where a Dutch journalist, Michel Berkiel, wrote an article in the *Haagse Post*, in 1978, about a phenomenon he had observed, and in which he himself lived with the person he loved (Levin, 2004). Today this term is a part of the daily speech of the Dutch, and special terms for an LAT relationship can be found in both Norway and Sweden (særbo and särbo; Levin, 2004). In addition to USA and Canada, this phenomenon was also written about in Europe, particularly in France and Germany. So, even though it is not possible to give a good estimate of the number of LAT couples, this form of relationship was recognized by researchers from several developed countries. The results obtained on large random samples from Sweden could serve as an orientation point. One of the questions in these studies was ‘Do

you live in a marriage-like relationship with someone while maintaining separate homes?'. In 1993 it was determined that 6 percent of respondents who were neither married nor cohabitating confirmed that they were living in an LAT relationship; in 1998 the number had risen to 12 percent, and in 2001 to fourteen. A similar study in Norway carried out in 2002 indicated that LAT couples made up approximately 8% of the population aged 18–74 (Levin, 2004).

LAT couples are not a homogenous group. A qualitative study including 100 couples from Sweden and Norway indicated (Levin, 2004; a study carried out with Jan Trost published in Swedish in 2003) that they can be divided into two groups: those who would like to live together but for one reason or another have decided not to do so, and those who would not live together even if they could, and who want to remain a couple *living apart together*.

In the group of those who would like to live together we find two dominant reasons for maintaining an LAT relationship. The first is a sense of responsibility towards others, usually towards children from a previous relationship or elderly parents. If the partner were to move into their home (or if they were to leave their own) very significant changes would occur, which are perceived as undesirable. Individuals who care about their elderly parents, in addition to not wanting to leave them on their own, also do not want to change their living arrangement in any way that might indicate to their parents that they should go to a home (and a partner moving in might be construed precisely in that way). Those who care for their children, even if they are not their guardians, believe that a shared household with their current partner would amount to some form of *cheating* one's own children and they want no part in it (Levin, 2004, p.230). By keeping the home as it is, it is easier to keep relationships, with children or aged parents, as they are. Simply speaking, a new couple relationship is not allowed to threaten or replace already existing relationships, since these relationships and sense of responsibility existed long before they met their new partners. If they were not to behave in accordance with this responsibility, a sense of guilt might ensue. For people in such situations, LAT relationships enable them to care for children or aged parents and maintain a relationship with a new partner.

The second reason for living apart together is that even if the couple wanted to live together, they work or study in different locations. Individuals in this situation do not want to choose between work and their partner. They want both and they decide to keep both. A consequence of this decision requires them to live in separate homes. This might sound like a temporary situation, since, in principle, it is possible to change jobs. However, if an individual should decide to make such a step, everything that had previously been built in their career, as well as any possibility for progress, disappears. This, as experts point out, is not a question of money, but instead of independence and individualization. In the past, the idea that a couple should accommodate one another's needs for self-realization was not promoted. It was usually considered that the woman was the one to give up her job and relocate where her husband lived. This problem was even presented as a way of showing one's love: 'If you love me enough,

you will relocate.’ (Levin, 2004, p.232). The job and the partner are seen as being in competition, and one has to choose between them. Today acceptance of the idea that a person can keep both his job and friends is quite widespread (or in the previous case – relationships with their children and parents), as is acceptance of the idea that one can, at the same time, maintain a long-term and stable relationship with a partner living in another separate household.

Researchers point out that this situation includes some student couples who are studying at various locations. They also admit to being somewhat surprised when they heard from students who define themselves as an LAT couple: “We, in our old-fashioned way, saw them more as ‘going steady’. This is a way of seeing their relationship as less serious and uses the traditional marital system as the guiding model.” (Levin, 2004, p.232). However, these students stated that they would, if it were not for their studies, live as a cohabiting couple; since their separate studies prevent them from doing so, they see themselves as an LAT couple.

The second large group of LAT couples are those who would not wish to live together even if they could do so, and still want to remain a couple. In interviews with them, we isolated three basic reasons for such a living arrangement.

Many couples have already lived with a spouse or have co-habited with a partner and simply do not want to create the same conditions which led to the breakup of the past relationship – they do not want to make the same mistake twice. They believe that living together, in itself, will change the way each of them relates to the other and that those changes could threaten the relationship’s survival. Choosing to live apart is a strategy used in order to avoid another painful separation (Levin, 2004, p.233).

The next reason offered by retired couples is related to abandoning the home. It would be necessary to make an entire series of practical decisions – who would be the one to move? whose things would be rendered redundant? They mostly lived in one-person homes for many years, a lot of the things they own are connected to memories of important happenings from their previous lives. An LAT relationship is a way for both partners to keep their homes and things which are closely bound to their identity and well-being.

The final reason is related to couples for whom the sequence of changes in their living arrangements is quite unusual: they first lived as a married couple or in co-habitation, and then moved to living apart together. During their life together many arguments broke out about everyday matters, which made their days together quite uncomfortable, but the couple still loved each other and still felt a strong bond. For that reason, neither of them (nor their children, if he couple has any) wanted a divorce or to bring an end to their relationship. For these couples an LAT relationship represents a solution which is better suited to their (different) lifestyles.

The authors of this qualitative study finally propose three factors which, in their estimate, most greatly contribute to the increase in the number of LAT couples. One factor refers to the increased life-span and greater probability that one person would go through a divorce or a breakup, or the death of a partner, which leads us further

to the probability of an LAT relationship being formed in the future. Other factors include changes in the labor market. Today it is expected of employees to constantly improve and be mobile, so that one couple where both partners work cannot easily keep up with these demands by living in a shared household. The third factor is related to travel and IT communication. People fall in love on business trips or vacation or become couples on the internet. Some of these relations will not last, but there are those that will. If one or both partners cannot or is not willing to relocate, they might form a long-distance LAT relationship.

There is a more recent study of LAT couples, though one based on a much smaller sample – 28 couples (Funk & Kobayashi, 2016). The average age of the participants was 59 (range = 39 to 92); all were heterosexual. Almost all the participants (93%) had at least once been in a relationship which included a shared life together. For the duration of the study their LAT relationships had lasted from 3 to 26 years (average = 10 years). The authors cite that the 4 couples were engaged or married, but there were no precise data on the number of married participants. The distance between the households of the partners varied, and was presented in the form of driving distance: there were those who lived less than a minute apart (e.g., residing in the same building) and those who lived more than 45 minutes apart; the average was still a lot lower – 15 minutes. At least 66% of the participants had a child from a previous relationship, but only 26% still had coresiding children. No couples had children from their current partnership. The reasons for living in an LAT relationship determined for this sample of Canadians were a lot similar to the reasons which were identified in Sweden: the need for independence and self-realization, along with the need to maintain the safety of one's home; avoidance of everyday stress and sharing the responsibilities which living in a shared home brings, with the protection of children and adjustment to a new family (no care for elderly parents was mentioned); and a group of reasons which could be understood as a call for freedom of life choices. Even though the sample is small, interesting differences were noted for each gender: women mentioned more often that they did not want to perform any household duties for two and that is most often related to negative experiences from previous relationships. For them the LAT relationship is some form of avoiding conflict. Women also appeared to place more emphasis on the need to avoid becoming dependent on (or passive in relation to) their partner, as a particular risk they faced in cohabiting relationships. Women also gave specific responses to the question of the right to such a choice: "(...)women tended to emphasize the importance of finally, at their age, having the opportunity to live alone without responsibilities for considering or caring for others, as in: "I don't want to take care of anybody. I've done that all my life"" (Funk & Kobayashi, 2016).

As Levin and Trost conclude (Levin, 2004), requirements at work will not be reduced, people will still meet other people on trips and over the internet, the divorce rate will not go down, nor will difficulties in a relationship or the length of a life-span decrease – and all this opens the door to an increase in the number of LAT couples.

In the end, we can conclude that lifestyles of adults today directly challenge the developmental tasks regarding getting married and starting a family. Research

involving individuals who live new lifestyles – are alone by choice, childless by choice and LAT – are still few in number, but they speak of people who are characterized by independence, responsibility and generativity. These are important features of adulthood, so we cannot deny the maturity of these people. This opens up space for redefining developmental tasks of adulthood in modern society.

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NOVI ŽIVOTNI STILOVI ODRASLIH

Apstrakt

Zasnivanje porodice – brak i roditeljstvo, izdvajaju se kao važni razvojni zadaci za ulazak u odraslo doba. Brojne društvene promene koje su se dogodile u drugoj polovini XX veka i izazovi života u modernom društvu, doveli su do pojave životnih stilova odraslih koji značajno odstupaju od tih razvojnih zadataka. Radi se o izboru ljudi da žive sami; da žive kao par, ali bez dece; ili da žive kao par u dva odvojena domaćinstva. Living alone je novi životni stil nastao iz potrebe za nezavisnošću i samoostvarenjem, ali i kao odgovor na zahteve u okviru profesije. Većina mladih odraslih koji žive sami vide to kao period izgrađivanja independent life prior to partnering. Ipak, mnogi zadrže ovaj životni stil, jer im je teško da se odreknu nezavisnosti, slobode i mira koji pruža solo

living. Iz sličnih razloga se javlja još jedan novi životni stil – childless by choice. Ovi parovi se često susreću sa nerazumevanjem i osudama zbog kršenja fertility mores. Međutim, oni ističu da na roditeljstvo ne treba gledati fatalistički, već kao na vrlo važan izbor. Nakon sagledavanja šta bi roditeljstvo značilo na individualnom planu i na planu veze, neki parovi odluče da ostanu childfree. Osobe koje se nalaze u living apart together odnosu (LAT relationship) predstavljaju dosta heterogenu grupu parova, od kojih su mnogi već biti u tradicionalnim vezama. Neki od njih ne žele zasnivanje još jednog takvog odnosa, ali ima i onih kojima to ne dozvoljavaju okolnosti.

Ključne reči: novi životni stilovi, namerno sami, parovi namerno bez dece, LAT odnos

EMPATHY AND INTERPERSONAL ORIENTATION OF SOCIAL WORKERS WHO ARE ENGAGED AS FAMILY MEDIATORS

Abstract

Mediation is an informal and flexible process of resolving the conflict through negotiation with the help of a mediator. The mediator has a decisive role whose access shapes the relationship with clients and influences the outcome of the mediation itself. Theories (negotiation theory, systems theory, theory of communication) and practice in the field of family mediation show that the primary consideration that mediator sets up is a warm atmosphere and cooperative relationship with clients; to listen very carefully, empathize and understand clients, and to have a positive attitude towards people. Hence, the main goal of this study is to examine differences in expression of various aspects of empathy and interpersonal orientation of social workers, who are engaged as family mediators. The sample consists of 47 social workers from the Center for Social Work in Belgrade. The study used the Interpersonal Reactivity Index to measure the empathy and the Interpersonal Orientation Scale, which measures attitudes toward others. Results showed that participants have achieved significantly higher scores on the Perspective taking scale ($p < 0.01$), on the Fantasy ($p < 0.01$) and the Empathic concern ($p < 0.01$), in comparison with the scores on Personal distress scale. The scores on Philanthropy scale (Need for people and Friendship) were significantly higher than on the Misanthropy scale (Distrust and Social isolation) ($p < 0.01$). Also, there were significant correlations between the various aspects of empathy and interpersonal orientation.

Keywords: empathy, interpersonal orientation, social workers, mediation

Mediation

In the Republic of Serbia the Law on Mediation (Zakon o posredovanju – medijaciji, 2005) was adopted in 2005. In the same year, the Center for Mediation of City Center for Social Work in Belgrade was founded, and its primary area of work was in the field of family mediation. The Law on mediation in resolving disputes (Zakon o posredovanju u rešavanju sporova, 2014) is an amendment to the law of 2005., and it points to the main principles of mediation: voluntariness, equality, participation and attendance at the mediation, excluding the public, confidentiality, neutrality, urgency, admissibility of evidence in other proceedings.

An individual can contact a mediator when his or her emotions and emotions of others are intense and when they prevent an agreement, when communication between

a person and the other side is poor and when misconceptions and stereotypes make difficulties in resolving conflicts (Isić, 2010). Due to various causes, procedures and target groups, more types of mediation can be distinguished. According to Isić (2010) the main aspects of mediation are: Peer and school mediation, Family and mediation in divorces, Mediation in business relations, Mediation in the local community, Mediation in labor disputes, Mediation between juvenile offenders and victim of criminal work.

Mediation may appear in different fields of private and public life, and its process is largely determined by the context in which it is applied. However, we can distinguish several basic phases and steps in its process (Moor, 1982, according to Džamonja Ignjatović & Žegarac, 2007): preparing for mediation and initial meeting, the beginning of the mediation, bringing out the important aspects of the conflict and the exchange of relevant information and explanations, structuring of the topic of the dispute and determine the agenda of negotiations, duplicating of proposals to the solution, and also, building a consensus on a solution, writing the agreement and monitoring the implementation of the agreement.

Family mediation

According to Barsky (Barsky, 2001) social work recognized mediation as a special method and its function within the competence of social work since the 80's of the 20 century. In the system of Social Protection, mediation is the most studied and the most represented in the field of family mediation, but according to this author, it is a separate profession with its techniques, approaches and theories.

In general, family mediation has been current since 1970. and comes from the US and Canadian cities where in the beginning, it was an alternative to the judicial proceedings. It was less formal, less expensive, more cooperative and simply more economical process. People of different professions would take the role of mediator. Lawyers were more focused on financial issues, on division of property, the alimony, while the social workers and mental health professionals focused more on the custody and welfare of children. In some cases, experts from different disciplines mediated as a team. In time, family mediation has become a part of the subjects at universities (law, social work) but most of the family mediators were trained within certified programs offered by faculties, centers for social work or private coaches. Areas that have been studied within family mediation dealt with the development of man and family, family law, divorce process, community resources, flow of mediation and professional ethics (Barsky, 2007). And in our country, mediation begins to be applied in the field of psycho-social care within family and divorce disputes, as well as in work with victims and juvenile offenders and also in cases of peer conflicts in schools (Džamonja Ignjatović & Žegarac, 2007). Several theoretical concepts have influence on development of family mediation as special professional skills as well as mediation in general (Sladović Franz, 2005): negotiation theory, system theory, theory of communication.

According to the negotiation theory (Fisher & Ury, 1981) the key aspects of negotiation are: to separate person from the problems (joint attack on the problem, rather than separate); to focus on interests rather than positions (initially reported position does not necessarily reflect what people really want or need); to create as many options (in order to choose the option for conflict resolution that satisfies all parties of the conflict) and to accept the objective criteria (regardless of the will of either party in the conflict). Here, authors highlight the facts that one of the most important skills a negotiator can possess is the ability to see the situation as the other side sees it. „If you want to influence them, you also need to understand empathetically the power of their point of view and to feel the emotional force with which they believe in it“ (Fisher & Ury, 1981, p.16).

Significant theoretical impact on mediation had systems theory – emphasizes the connection of the system within the conflict that arose in general, and the parties in the conflict in this regard are directed through the process and content (Sladović Franc, 2005). Family system theory is particularly important for family mediation precisely because an integral aspect of family life is the interdependence of family members and the problems and tensions that affect one or more family members also affect other family members (Roberts, 1988, according to Sladović Franc, 2005).

Basic communication principles, originating from the theory of communication are key to mediation, regardless of model practiced. Along with the basic communication skills in mediation (listening, empathy...), the following skills and processes are also significant: use a neutral expression, use of metaphors, asking questions, reflection, transformation, normalization, redirecting position in the negotiation of interests, encourage reciprocity and mutual relationships between the parties to focus on the future, focus on the task (Sladović Franc, 2005).

Characteristics of mediators

Since it appeared, family mediation has been the subject of many sciences: law, psychology, social work, pedagogy. Therefore, there are different approaches to the study of mediation and that depends on professions that perform it. There is an interesting statement – „A number of different disciplines have been fighting for custody over mediation, as well as parents during divorce“ (Breber & Sladović Franz, 2014; Parkinson 2011). The greatest contribution of psychology in the context of this field is in therapies which it has developed, and in studying of the characteristics of participants in the mediation, especially mediators (Sladović Franz, 2005).

The contribution, within individual characteristics of mediators, is reflected in adequate knowledge, skills, motivation, personal characteristics, etc., which are appropriate for a successful therapy. According to Nedić and Toskić (2015) mediators must have skills in communication and negotiation. In mediation, parties which come have unconstructive or broken communication, or direct negotiations didn't lead to any solutions. In contrast to direct negotiations where sides hold to their positions,

where often comes to escalation of the conflict and further disorders of relations, an introduction of a mediator as a third neutral and unbiased part, fundamentally changes dynamics of negotiations and helps to transform a problematic relationship and communication into a constructive dialogue. A successful mediator should master a skill of summarizing, paraphrasing, reflection, empathy, active listening skills while one of the most important techniques of a mediator is a skill of separation of positions from their interests and needs.

A model of effective mediation, in the context of different areas, was set in the 70's (Kochan & Jick, 1978) where it was emphasized that the success of mediation depended on four factors: a source of a problem (type and intensity), situational factors, strategies used by a mediator and his characteristics (personality and socio-demographic characteristics). First, it is proposed that the intensity of the impasse will be negatively related to the effectiveness of the mediation process. One of the important situational determinants of the effectiveness of mediation is the amount of perceived pressure on the parties to avoid going to the next step of the impasse procedure (Kressel, 1972, according to Kochan & Jick, 1978). Obtaining the trust and confidence of the parties in the mediator is a necessary condition for the success of mediation. Once an initial level of trust is established between the parties and the mediator, the mediator must begin the search for information regarding the causes of the dispute. The personality, background, training, and other mediator specific characteristics influence how a mediator responds to dispute situations. Besides, effective mediators are intelligent, funny, understanding, assertive, persevering.

In addition to possessing professional and social skills, Pažin, Djuranović, Lutovac, Božović and Martinović (2009) indicate that mediators should also have personality traits that are necessary to establish a relationship of trust and cooperation between mediators and parties in conflict. These characteristics are: knowledge and understanding of self and others, self-confidence and self-criticism; insights into his own feelings, patience and calmness, respect of personality (a mediator does not ask from his clients to change in order to communicate with them, and has awareness that every person has an opportunity of choice, and also he should leave others an opportunity to choose their own models of behavior); creativity in solving problems; sense of humor (through moderate use, he may contribute to create a positive atmosphere and eliminate tension); the authority, honour, reputation and trust; motivational energy and optimism, and belief in success; inventiveness (a mediator should be open to different solutions of the problem); leadership; professional development (a mediator should continuously expand his knowledge and develop skills of managing mediation); empathy (which is an ability of identification with clients; compassion with clients by appreciating and understanding of their feelings, thoughts and situations in which they are).

In one US research (Dilts & Karim, 1990) on a sample of 263 respondents (persons who worked in mediation processes in management and unions) characteristics which were important in the opinion of respondents for a successful mediation process, were studied. The necessary characteristics of a mediator that

were the following: the ability to „speak a language of a client“, persistence and self-control, acceptance, knowledge and expertise, impartiality and honesty, originality and creativity.

Empathy and mediation

Since the beginning of the research of empathy, two concepts were the most represented and they emphasized an affective and cognitive aspect of empathy. Empathy is considered to be an emotional response to a situation of another person, identification with the emotions of others „sharing of affects“, that is, an affective reaction, and also an understanding of other people`s feelings, interpretation of other people`s behavior and being in somebody else`s shoes, that is, a cognitive reaction (Young, 2014). In Hoffman`s (Hoffman, 2000) theory of empathy, it is emphasized that the disposition to respond empathically to the troubles of others is universal, while specific forms which empathy can receive during the development may be learnt through socialization. This theory includes the affective and cognitive component of empathy. Besides mere empathic reaction, awareness that the source of an affect is something that happens to another person must be included, as well as awareness of what the other person feels.

Davis`s (Davis, 1980) multidimensional approach to empathy is based on Hoffman`s model of empathy. His model shows that the empathic reaction is complex and it includes both cognitive and affective component, individual differences, origin and interpersonal aspect of empathy. Thereby, emphatic reaction depends on: characteristics of a person empathized (dispositions of empathy, previous personal experience, specific affective sensitivity, specific perception of the situation), characteristics of a person with whom you empathize and on situational characteristics (surrounding, relationship between a subject and an object of empathy) (Davis, 1983). Cognitive dimensions in Davis`s model are perspective taking and fantasy. Perspective taking reflected tendency or ability of patients to use the mechanism of cognitive taking over of roles, or to spontaneously accept the psychological point of observing other people. Fantasy denoted the subject`s ability to undertake the feelings and actions of fictional characters, the ability to undertake the imaginary circumstances, as well as the tendency of daydreaming. Affective dimensions are: empathic concern which reflected tendency for the subject to experience feelings of warmth, compassion and concern for others undergoing negative experiences, and personal distress which indicated that the subject experienced feelings of discomfort and anxiety when witnessing the negative experiences of others.

According to Yang (Young, 2014) empathy can be an important catalyst in the process of mediation. First of all, developing of empathy at mediators is desirable, because highly empathetic people express curiosity for strangers, „break down“ prejudices and discover similarities, listen carefully, inspire others and develop imagination. There are three important roles of empathy in a mediation process: a role by which empathy changes a

mediator where he believes that empathy makes him a better mediator; a role of changing parties through mediation (empathy enhances the use of techniques and methods used by a mediator and it affects a positive outcome of parties), a role where parties change each other; when clients begin to talk with understanding and not as opponents.

In addition to this, it can be said that the ways in which empathy influences the mediation are the following (Young, 2014): clients in mediation feel more capable when their feelings and needs are recognized by a mediator (a change will not come if we feel that our actions are not understood by others); empathy encourages humanity in people, allowing a change to happen; empathy implies the acceptance and increases the chance of developing intimacy (empathy helps to build interconnections which are the key to enabling mediation); empathy is a motivator for pro-social behavior (it increases the intrinsic motivation of people who want to help and they can be directed to take action); empathy helps us to ask a right question in the right way, at the right time.

In their study Goldberg and Shaw (Goldberg & Shaw, 2007) in a sample of 216 respondents, people of different professional orientations having at least one year of experience in mediation procedures, investigated the characteristics and abilities that are in their opinion, the most important for the success of mediation. Considering that the respondents could give more than one answer, all what they believe a successful moderator should possess, the authors in the end summed up all the answers in groups by similarities, and the most frequent were identified as the most important. For the success of mediation, according to the greatest number of respondents, the most important features concern mediators themselves and which can be characterized as necessary features to build trust (confidence-building attributes). In the context of these qualities before all, are friendly relationship and empathy, secondly – honesty and integrity, and thirdly, their cleverness and preparation in the field of legal matter may be singled out. Skills that are essential in the process of mediation are: patience and persistence in the first place, then implementation of the evaluation and thirdly asking the right questions and listening carefully to clients responses. Therefore, the authors conclude that for the success of mediation the most important ability for mediators is to gain trust of clients which is primarily reflected in their empathic participation and then in honesty and integrity.

Empathy should be developed for all who deal with social work and working with different vulnerable groups (Lazo & Vik, 2014), as well as to develop their skills of empathy to understand the clients and to be familiar with the social problems and respond appropriately.

Interpersonal orientation and mediation

The concept of interpersonal orientation has its origins in many theories of which Sullivan's theory (Sullivan, 1953, according to Hall & Lindsey, 1983) is important and often cited. According to this author the individual does not exist, neither he can exist independently of his relationships with other people. From the first day of life, a baby is part of relationships and throughout life he stays in a social field. In parallel with the development of self-knowledge also interpersonal orientation is being developed. If an individual in

interpersonal interaction cannot satisfy the needs (for belonging and intimacy) there is a sense of loneliness which as a result of negative social experiences has negative consequences on all development plans- on a social, emotional and cognitive level.

In area of interpersonal orientation Karen Horney (Horney, 1945) talks of three basic orientations: moving towards, away and against people. Orientation towards people is characterized by a need for affection and approval, to be valued and significant and that others care about them. A step against people is characterized by the need to take advantage of others, to present themselves as powerful, intelligent, desirable, and that's why people like this seek environment where others can see them like that. A step from people is characterized by the need for independence, self-sufficiency, loneliness, to make an emotional distance between themselves and the outside world. Essentially, the model of interpersonal orientation which Horney wrote, proposes that each individual can be characterized as committed, aggressive or dismissive.

In the mediation process, considering the nature of work which is done, it is certainly important that mediators are philanthropically oriented. It has been said that compassion and cooperative relations are recognized as desirable and useful in the process of mediation, then concern for others, helping, positive attitude towards people – all these represent philanthropic orientation. The relationship of mediators with clients should be based on mutual trust and respect. Besides the fact that philanthropy is desirable in the process of mediation, thus we decided to classify it in this study, it is interesting to note that it is expected that social workers have (as well as other social and humanistic profession) highly expressed philanthropic orientation and because of such selection of vocation. Holland's (Holland, 1971) theory of professional interests explains that people choose professions which are appropriate for their type of personality and where their work tasks while performing them give more satisfaction to them. Such professional choice affects greater enthusiasm which may affect better results and obtaining relatively better prizes. In this way, they have a better chance to be successful and satisfied with their job. Working together on some business people with similar type of personality creates an environment which rewards their type. This means that more social people and who are more prone to helping others, who are friendly, cooperative and full of understanding will choose such tasks and interests which will coincide with those characteristics.

Method

Considering the importance of mediation which it has in resolving family conflicts and the important function of a mediator, the main goal of this study is to examine differences in expression of various aspects of empathy and interpersonal orientation of social workers, who are engaged as family mediators in Center for social work in Belgrade. Researches in this area are very rare in our country, so this research tends to contribute to the theoretical and research findings in explaining more current procedure of mediation process and the role which a mediator has in order to perform his mediation successfully. Also, in this research we examined relations between dimensions of empathy and interpersonal orientation.

The research was conducted on the sample of 47 social workers, who are engaged

as family mediators in Center for social work in Belgrade. The youngest participant is 26 and the oldest is 60 years old. The average age is 43.21 (SD=9.83). Years of service ranges from 2 to 35 years, the average years of service is 14.70 (SD = 9.67).

Two questionnaires were used to obtain the necessary data: IRI – Interpersonal Reactivity Index (Davis, 1980) and IO – Interpersonal Orientation Scale (Bezinović, 2002). IRI contains 28 items and measures four factors: Perspective Taking (PT) measures the ability of patients to use the mechanism of cognitive taking over of roles; Fantasy (FS) measures the subject's ability to undertake the feelings and actions of fictional characters, as well as the tendency of daydreaming; Empathic concern (EC) measures individual differences in affective response of an individual to observed emotional manifestation of others; Personal distress (PD) measures the feelings of the respondents focused on our personal I, which are caused by observing the expression of someone else's (negative) emotional experiencing. In this research, reliability was tested through Cronbach α coefficient of internal consistency. The Cronbach alpha coefficients for three subscales (PT, FS, PD) are from 0.71 to 0.82. Hence, the reliability of this scales is acceptable. Empathic concern has a slightly lower reliability of an acceptable limit ($\alpha=0.65$).

Interpersonal Orientation Scale measured attitudes towards generalized others. The scale contains 29 items and measures the two generalized factors: a factor of positive orientation (philanthropic) and a negative orientation factor (misanthropic). The first factor contains subfactors – Need for people and Friendship (orientation „towards people“). The second factor comprises subfactors – Distrust („against people“) and Social isolation („away of people“). In this research, only subscale Friendship has reliability lower than acceptable ($\alpha=0.54$), while the Cronbach alpha coefficients for others subscales are from 0.77 to 0.89.

Results

First of all, descriptive parameters of research variables are given (Mean, Standard deviation, Skewness, Kurtosis, Kolomogorov – Smirnov test). A paired sample t-test was used to evaluate the statistical significance of differences between subscales of IRI and IO. Pearson's coefficient of correlation (r) was used to examine the relations between empathy and interpersonal orientation.

Table 3. Descriptive parameters of the IRI scale

	N	Min	Max	M	SD	Sk	Ku	K-S
Perspective Taking	47	16.00	34.00	25.44	4.82	0.13	-0.51	0.13*
Fantasy	47	15.00	34.00	23.89	4.71	0.15	-0.49	0.11
Empathic Concern	47	16.00	34.00	23.82	4.52	0.44	-0.34	0.12
Personal distress	47	10.00	32.00	18.17	5.71	0.69	-0.47	0.17*

* $p < 0.05$

Based on the results in Table 3, the greatest scores among examinees are on the

Perspective Taking scale, then on the Fantasy, Empathic Concern, and the lowest are on the Personal distress scale. Even though the values of Kolmogorov – Smirnov test indicate a deviation of values from normal distribution on the scales that evaluate Perspective Taking and Personal distress, skewness and kurtosis on this scales do not exceed the values that would point to a deviation from a normal distribution.

Table 4. Differences in the scores on IRI dimensions

		t	df	p
Perspective Taking	Fantasy	2.078	46	0.053
Perspective Taking	Empatic concern	1.611	46	0.114
Perspective Taking	Personal distress	5.903	46	0.000
Fantasy	Empatic concern	0.088	46	0.930
Fantasy	Personal distress	5.594	46	0.000
Empatic concern	Personal distress	5.811	46	0.000

There are significant differences between the scores on the Perspective taking scale and the Personal distress scale ($t=5.903$, $df=46$, $p<0.01$); between the Fantasy and the Personal distress scales ($t=5.594$, $df=46$, $p<0.01$), and the Empatic concern and the Personal distress scales ($t=5.811$, $df=46$, $p<0.01$). In all three cases the scores on the Personal distress scale were significantly lower.

Table 4. Descriptive parameters of the IO scale

	N	Min	Max	M	SD	Sk	Ku	K-S
Philanthropy	47	35.00	72.00	50.17	7.95	0.42	-0.21	0.11
Need for people	47	15.00	37.00	22.65	5.25	0.54	-0.20	0.09
Friendship	47	19.00	35.00	27.51	3.50	0.03	0.29	0.10
Misanthropy	47	13.00	47.00	27.57	9.00	0.55	-0.46	0.09
Distrust	47	7.00	29.00	15.00	5.49	0.56	0.06	0.11
Social isolation	47	6.00	21.00	12.57	4.25	0.43	-0.65	0.09

The higher scores among examinees are on the Philanthropy scale, than on the Misanthropy scale (Table 4). Values of Skewness, Kurtosis and Kolmogorov – Smirnov test indicate that there is a normal distribution on the Inerpersonal orientation scale (and subscales).

Table 5. Differences in the scores on IO dimensions

		t	df	p
Philanthropy	Misanthropy	11.952	46	0.000
Need for people	Distrust	6.303	46	0.000
Need for people	Social isolation	9.830	46	0.000
Friendship	Distrust	12.460	46	0.000
Friendship	Social isolation	17.624	46	0.000

A paired samples t-test indicated that scores were significantly higher for Philanthropy scale than for the Misanthropy scale ($t=11.952$, $df=46$, $p<0.01$). The scores on the Need for people scale are significantly higher, than on the Distrust scale

($t=6.303$, $df=46$, $p<0.01$) and the Social isolation scale ($t=9.830$, $df=46$, $p<0.01$), and so are the scores on Friendship scale in comparison to Distrust ($t=12.460$, $df=46$, $p<0.01$) and Social isolation scale ($t=17.624$, $df=46$, $p<0.01$).

Table 6. Correlations between dimensions of empathy and interpersonal orientation

		Perspective taking	Fantasy	Empathic concern	Personal distress
Philanthropy	r	0.005	0.305*	0.245	0.174
	p	0.975	0.037	0.097	0.242
Need for people	r	-0.060	0.207	0.146	0.079
	p	0.689	0.162	0.329	0.596
Friendship	r	0.101	0.383**	0.338*	0.276
	p	0.500	0.008	0.020	0.061
Misanthropy	r	-0.359*	-0.194	-0.276	0.526**
	p	0.013	0.192	0.061	0.000
Distrust	r	-0.344*	-0.241	-0.249	0.476**
	p	0.018	0.103	0.092	0.001
Social isolation	r	-0.316*	-0.099	-0.263	0.498**
	p	0.030	0.509	0.074	0.000

The results indicate that there is a significant correlation between the philanthropic orientation and Fantasy ($r=0.305$, $p<0.05$), as well as subdimension of Philanthropy –Friendship with Fantasy ($r=0.383$, $p<0.01$) and Empathic concern ($r=0.338$, $p<0.05$). The results revealed significant negative correlation between Perspective taking and Misanthropy ($r=-0.359$, $p<0.05$) and both its dimensions – Distrust ($r=-0.344$, $p<0.05$) and Social isolation ($r=-0.316$, $p<0.05$). Personal distress is significantly positively correlated with Misanthropy ($r=0.526$, $p<0.01$) and her subdimensions – Distrust ($r=0.476$, $p<0.01$) and Social isolation ($r=0.498$, $p<0.01$).

Discussion

The main goal of this paper was to examine differences between expression of various aspects of empathy and interpersonal orientation of social workers who are engaged as family mediators in Center for social work in Belgrade. Family mediation is becoming the preferred method to resolve family conflicts and reach an agreement (Kelly, 2004), so the role of the family mediators, their characteristics and strategies, becomes increasingly relevant. Researches in this area are very rare in our country, and this exploratory approach tends to contribute to the theoretical and research findings.

Firstly, in the Interpersonal Reactivity Index, participants have achieved significantly higher scores on the Perspective taking, Fantasy and Empathic concern, relative to the scores on the Personal distress. Considering that in the family conflicts, the introduction of mediators is the inclusion of a neutral and impartial side which fundamentally changes the dynamics of the negotiations, and helps troubled relationships and communication to transform into constructive dialogue (Nedić & Toskić, 2015), it is expected from mediators to develop more cognitive aspects

(perspective taking and fantasy) relative to the affective aspect of empathy such as personal distress. Personal distress is more related to individual's own feelings of fear, apprehension and distress at witnessing the negative experiences of others (Davis, 1980), while cognitive aspects are related to understanding feelings of others, interpretation of other people's behavior and taking someone else's perspective. The ability of a mediator to understand feelings of clients, to accept their point of view and that he is able to enjoy in imaginary circumstances that the parties evoke (fantasy) – all these are certainly more constructive ways of resolving conflicts than to react emotionally.

Respondents reported significantly higher values on the Empathic concern, relative to values on the Personal distress. Empathy plays a very important role in the mediation (Goldberg & Shaw, 2007; Pažin et al., 2009; Young, 2014). An empathic, trusting relationship between the mediator and the parties may be the most important factor in creating an environment for settlement (Goldberg & Show, 2007). A mediator's empathic concern, which is the ability of identification with clients, compassion with clients through mutual respect and understanding of their feelings, thoughts and situations in which they are found, is one of the most preferable (Pažin et al., 2009). A mediator should know how to accept the client's emotions, make it possible to express emotions safely and to reduce the intensity of emotions. It is significant that a personal distress in the sample is lower than empathic concern, because there is a tendency to feel distress as a response to trouble of others, and that is certainly not a desirable construct in resolving conflicts in mediation.

Duffy (Duffy, 2010) stated that the mediator empathy is an essential tool for helping partners, when they are involved in a conflict with another. The best mediators know how to listen without criticism and suspend judgment. They are able to access their own emotional intelligence to assess what a party to conflict needs to see, hear, or do at any given point in time during the mediation. But, as author highlighted, empathy can easily become sympathy when the personal values, feelings and sensitivities of a mediator are triggered by the plight of a party in mediation. There is a real danger that the mediator may lose the separateness of his or her own identity in the empathic process, in an emotional environment that heightens the potential for emotional reaction. Although the result from this study is optimistic, it is certainly important to further investigate the process of empathy of family mediators.

Secondly, the expression of philanthropic orientation was significantly higher in comparison with misanthropic orientation. Considering that philanthropy represents action for common good, to promote human well-being, love for humanity and humankind and misanthropy negative attitude towards people (Bezinović, 2002), this result was expected given the nature of the work performed by mediators. Also, expression of philanthropic orientation is expected at mediator because of the nature of his profession – social workers (as well as other social and humanistic profession). Holland's (Holland, 1971) theory explains that the people choose professions that matches to their own type of personality and in which they do tasks which performance represent greater satisfaction to them. By choosing of those professions

people „reward“ their personality type. That means that more social people, who are more prone to helping others, friendly, cooperative and full of understanding will choose such tasks and profession that will match with those characteristics.

Regarding subdimensions of philanthropy, need for people and friendship are significantly higher expressed, compared to Distrust and Social isolation. It turned out that for a successful mediation the most important features which can be characterized as characteristics required to build trust, in the first place are friendly attitude and empathy (Goldberg & Shaw, 2007). Therefore, expression of friendship is good and desirable for a mediation process. Also, the need for people which is related to the need for being surrounded by people, developing interpersonal relations, to be cheerful and optimistic, could present important characteristics of mediators for mediation process itself. Distrust and social isolation, misanthropy aspects, are both undesirable characteristics for mediators.

The results showed the positive correlations between philanthropic orientation and fantasy, between friendship and fantasy and between friendship and empathic concern. The negative correlation was shown between perspective taking and misanthropy (and distrust and social isolation). Personal distress is positively associated with misanthropy (with its both subdimensions). It is clear therefore that the higher expression of philanthropy and friendship, which is love of people, orientation „towards people“ is associated with greater prominence of empathic concern which relates to the ability to feel sympathy and compassion for others who are in trouble and the affective response of individuals to the noticed emotional manifestation of others. For fantasy, which stands for an ability of empathy for feelings and actions of fictional characters as well as a tendency of daydreaming, Davis (Davis, 1983) pointed out that it is an important factor in the cognitive ability of empathic process, that facilitates empathy and contributes more lively to the experience of a viewer. Therefore, it is clear its relationship with the orientation which is oriented „towards people“. On the other hand, if orientation „of the people“ is more pronounced, less pronounced is perspective taking – „taking of another’s point of view“, which is also an expected result. Cohen (Cohen, 1967) explained that persons belonging to the orientation related to „movement towards people“ („compliant oriented people“) are more empathic and altruistic in relation to others. They want to be part of the activities of other people, to be loved and respected. Because of the importance that they attach to having fun and love for others they develop sensitivity to the needs of others and empathy.

Conclusion

Practice shows that the family mediation is a process that is widely accepted, and about which there is little research. The greatest contribution to psychology in the context of this field, is in therapies it has developed so far, and in studying the characteristics of the participants of mediation, primarily mediators. In our country, the family mediation has been applied for full ten years, but a research area was not particularly inclined to it. The aim of this research was to determine the differences

in expression of various aspects of empathy and interpersonal orientation of social workers who perform the role of family mediators, but also to emphasize the importance of the process of mediation and its deeper study. The results showed that social workers have achieved greater scores on empathic concern, perspective taking and fantasy in comparison with the personal distress. Also, among participants, the philanthropic orientation was more prominent than misanthropic one. It is recommended that for further studies, this assumption should be verified on a larger sample of social workers, which is the greatest limitation of this study. Considering the importance of mediation and characteristics of mediators which they may have in a process of mediation, as already described, one of the most important conclusions is also pointing to the importance of this kind of education. For future researchers of this field, it would be good to examine some other characteristics of mediators which may affect the performance of mediation, such as conflict resolution, emotional intelligence, strategies of overcoming stress, optimism, self-efficacy, tolerance to frustration, etc.

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Ana Lazarov

EMPATIJA I INTERPERSONALNA ORIJENTACIJA SOCIJALNIH RADNIKA ANGAŽOVANIH U PORODIČNOJ MEDIJACIJI

Apstrakt

Medijacija je neformalan i fleksibilan proces rešavanja konflikata kroz pregovore uz asistenciju posrednika. U njoj odlučujuću ulogu ima medijator, koji svojim pristupom oblikuje odnos sa klijentima i utiče na sam ishod medijacije. Teorije (teorija pregovaranja, teorija sistema, teorija komunikacije) i praksa u oblasti porodične medijacije ukazuju da je od prevashodnog značaja da medijator uspostavi toplu atmosferu и saradljiv однос са клијентима, da pažljivo sluša, saoseća i razume klijente, i da ima pozitivan odnos prema ljudima. Stoga, glavni cilj ove studije je ispitati

razlike u istraživanju različitih aspekata empatije i interpersonalne orijentacije kod socijalnih radnika koji obavljaju poslove porodičnih medijatora. Uzorak se sastoji od 47 socijalnih radnika Gradskog centra za socijalni rad u Beogradu. Studija je koristila Indeks interpersonalne reaktivnosti za merenje empatije i skaliranja interpersonalne orijentacije, koja meri stavove prema drugima. Rezultati su pokazali da su učesnici postigli znatno veće rezultate na skali Perspektive ($p < 0.01$), na Fantaziji ($p < 0.01$) i Empatijska briga ($p < 0.01$), u poredjenju sa rezultatima na ličnoj skali. Rezultati na skali Filantropije (potreba za ljudima i prijateljstvom) bili su znatno viši nego na skali Mixentropije (nepoverenja i socijalne izolacije) ($p < 0.01$). Takođe, postojale su značajne korelacije između različitih aspekata empatije i interpersonalne orijentacije.

Ključne reči: empatija, interpersonalna orijentacija, socijalni radnici, medijacija

**CLINICAL PSYCHOLOGY
AND
HEALTH PSYCHOLOGY**

THE DIFFERENCES IN ANXIETY AND DEPRESSION BETWEEN THE PEOPLE WITH SCHIZOPHRENIA AND THE NONCLINICAL SUBSAMPLE

Abstract

In this study, the research is focused on testing the differences in anxiety and depression between people with schizophrenia and nonclinical subsample. Survey was conducted on a sample of 100 respondents, gender balanced and balanced by clinical or non-clinical determinant, aged between 18 and 65. STAI questionnaire and BDI questionnaire were applied. First of all, normality of distribution was tested by using Kolmogorov-Smirnov test. The differences were checked by the application of Mann-Whitney U test and Kruskal-Wallis test, while the correlations were tested by Spearman's correlation coefficient. The results indicate that there are statistically significant differences in the severity of Anxiety as a state ($U=583.50$, $p<0.001$), Anxiety as a trait ($U=272.00$, $p<0.001$) and Depression ($U=151.00$, $p<0.001$), between the people with schizophrenia and nonclinical subsample. Significant and positive correlation of anxiety and depression dimensions was determined on both subsamples. Statistically significant low and positive correlation of the dimension of Anxiety as a trait and age of the people with schizophrenia was determined ($r=0,35$, $p<0,05$). The results are in accordance with the research of dimensions relation of anxiety and depression and in line with the initial assumptions.

Key words: anxiety, depression, people with schizophrenia, non-clinical subsample.

Introduction

Schizophrenia is one of the most serious psychological disorders, affecting 1% of the general population. It presents a difficult and chronic disorder which largely 'impoverishes' the person, when it comes to mental disorders (The Republic Scientific Committee for Making and Implementing good Clinical Practice Guideline, 2013). Schizophrenia is a chronic mental disease, a kind of endogenous (heritable) psychosis, which leads to the heavy deterioration of the personality, and possesses a constellation of specific psychopathological symptoms (positive and negative) that encompass several psychological functions: emotions, perception, thinking, consciousness, will and urges (Marić, 2005).

It should be noted that anxiety and depression present important schizophrenia correlates, and that they are comorbid with schizophrenia. Though the clinical-

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phenomenological classifying approach in mental diseases has led to distinct separation of certain mental diseases, clinical practice has shown that there is comorbidity of certain mental disorders. Therefore is it noticed that people with schizophrenia can often have anxiety and depression.

Anxiety is certainly one of the central phenomena which is referred to in an enormous number of theoretical considerations and researches of personality, in both normal and psycho-pathological functioning (Anđelković, 2008). It presents a diffuse, inner, floating tension which has no realistic danger, and has no outer object (Marić, 2005). The term anxiety can be used dually, to mark the passing condition of the organism, varying and fluctuating in intensity over time, and to mark personality trait, or the disposition for a similar degree of anxiety in different situations (Spielberger, 1983, according to Tovilović et al., 2009). According to Spielberger's theoretical assumptions, (Spielberger, 1972, according to Anđelković, 2008), anxiety is deemed both a trait and a condition. There is a number of researches that highlight the importance of anxiety as predisposing factor for paranoid conditions and disorders (Freeman et al., 2003, Freeman et al., 2005, according to Gogić et al., 2009).

Depression presents a kind of mood disorder, in which emotions as psychological functions are dominantly impaired (Marić, 2005). It is the grief of pathological quality, not induced by any outer cause in person's background, or disproportionate to that cause (Golubović, 2008). In the basis of depressive disorders Beck (Beck, 1967) sees a learned negative self-assessment. Cognitive defect is reflected in a specific triad consisting of a negative sense of oneself, negative sense of the environment and negative anticipation of future. Depression often appears with people with schizophrenia (Katalenac and Matišić, 2015; Preradović, 2009). Even though there is common comorbidity of depression and schizophrenia, depression is often difficult to recognize and even more difficult to predict with people suffering from schizophrenia. With people suffering from schizophrenia, depression can occur as post-psychotic depression (consequence of schizophrenia), as a part of an acute psychotic episode or as a prodromal symptom of schizophrenia relapse (Mulholland & Cooper, 2000, according to Katalenac & Matišić, 2015). Not only does depression with people suffering from schizophrenia increase the grief and additionally impair their psychosocial functions, it also increases the risk of suicide and schizophrenia relapse, therefore causing the increased rate of morbidity and mortality. Prevalence of depression with people suffering from schizophrenia is from 60% to 80% and when compared to the prevalence of depression in general public (from 8% to 26%), it can be concluded that people suffering from schizophrenia have much higher risk of depression occurrence (Naidu et al., 2014, according to Katalenac and Matišić, 2015).

In the research that Raes conducted, (Raes, 2010) one of the specific problems was dealing with the research of the correlation between anxiety and depression. Depression was measured by Beck's depression inventory (Beck, Streer & Brown, 1996, according to Raes, 2010), while anxiety was measured by STAI-T form of Spilberger's anxiety questionnaire (Spilberger, 1983, according to Raes, 2010). The

results of this research, (Raes, 2010) showed that high and positive correlation between depression and anxiety was determined ($r=0.70$, $p<0,001$). In the research that Rothe conducted with his associates, (Rothe, Coles & Heimberg, 2002), moderate and positive correlation of depression (BDI) and anxiety as a trait (STAI-T) was determined ($r=0.54$, $p<0,001$).

In the longitudinal research conducted by Pine and his associates, (Pine et al., 1998, according to Zaić, 2005), the disorder of excessive anxiety in adolescent period is connected with high possibility of the occurrence of huge depression disorder in the early adult period. According to Gotlib and Cane, (Gotlib & Cane, 1989, according to Zaić, 2005), people with anxiety disorder, which is marked with long lasting and intensive anxiety, may encounter so called secondary depression. Besides daily problems in functioning and social interactions piling up, those people also encounter higher number of depression symptoms. Vulić-Protrić and Macuka (2004, according to Kostić, 2006) measured high correlation of anxiety and depression ($r=0.72$).

Some scientists (Gotlib & Cane, 1989, Clark & Watson, 1990, according to Lovibond & Lovibond, 1995) have determined statistically significant correlation of 0.40 and 0.70 between anxiety and depression scales, depending on the clinical and nonclinical sample. Hiller and Zaudig (Hiller & Zaudig, 1989) found that the correlation was statistically significant only on the level of symptoms, not on the level of syndrome and diagnosis. Numerous researches have confirmed the relation between anxiety and depression symptoms (Breier et al., 1984, Biller et al., 1986, Overall et al., 1966, Paykel, 1971, Van Valkenburg et al., 1984, according to Hiller & Zaudig, 1989).

Due to insufficient number of researches of the relation between anxiety and depression on the sample of the people suffering from schizophrenia, it was necessary to encourage further researches of this problem.

Research method

Research goals

The central goal of research is to determine statistically significant differences in the degree of the presence of anxiety and depression between the people suffering from schizophrenia and the nonclinical population, as well as the statistically significant correlation of anxiety and depression in clinical and nonclinical population of Zvornik, Gradiška, Belgrade and Banja Luka.

Specific goals were to determine normality of distribution, to determine statistically significant correlation of the dimensions of anxiety and depression with age, as well as to determine statistically significant differences in the degree of the presence of anxiety and depression depending on the marital status.

Research variables

Independent variable is identifying schizophrenia with a person. Schizophrenia is a chronic mental disease, the type of endogenous psychosis (there is a loss of the contact with reality), which includes general tendency towards disorientation and deterioration of a personality, possesses a constellation of specific psychopathological symptoms (positive and negative) that deal with psychological functions: emotions, thinking, perception, consciousness, wilful activities and vital dynamism. These psychological functions are characteristically altered and impaired (Marić, 2005, page 122).

Dependent variables are: anxiety and depression.

Anxiety is defined as a diffuse, inner, floating tension which bears no real danger, and has no outer object (Marić, 2005, page 194). Anxiety dimensions, operationally determined through scores *State-Trait Anxiety Inventory* STAI; Spielberger et al, 1970, according to Sesti, 2000) are: anxiety as a condition and anxiety as a trait.

Depression presents grief of pathological character, not induced by any outer cause in the person's environment, or disproportionate to that cause (Golubović, 2008).

Demographic variables used in this research are operationalized and are: age and marital status.

Instruments

For anxiety evaluation *State-Trait Anxiety Inventory* (STAI; Spielberger et al, 1970, according to Sesti, 2000) was used. The instrument consists of two forms, one measuring anxiety as a condition (STAI-S), and the other one measuring anxiety as a trait (STAI-T). The questionnaire consists of 40 items in the format of four-degree Lickert's scale, 20 items for each questionnaire form. In this questionnaire a high reliability of the scale was acquired STAI-S ($\alpha=0.943$) and STAI-T ($\alpha=0.926$).

For depression evaluation Beck depression inventory was used (BDI; Beck, 1967, 1978, according to Beck et al., 1988). The questionnaire contains 21 items in the format of four-degree Lickert's scale for answers. In this questionnaire a high reliability of depression scale was acquired ($\alpha=0.969$).

Sample type and sample structure

The sample was appropriate and consisted of 100 interviewees, separated evenly into two groups: a group of clinical and a group of nonclinical population, 50 interviewees with schizophrenia diagnosis (the diagnosis confirmed by at least two specialists) and 50 interviewees from so called "normal population", or nonclinical population. Both groups of interviewees are of nearly unified age, from 18 to 65. The average age of the interviewees is 40.

Statistical data processing

For the purpose of determining differences in anxiety and depression in a specific group, the Mann-Whitney U test was used. For evaluating the correlation of the variables from anxiety and depression domains on a sample, in total and on each subsample

(the subsample of people with schizophrenia and nonclinical subsample), as well as for evaluating the correlation of the said constructs with age, Spearman's correlation coefficient was used. Kruskal-Wallis test was used for determination of statistically significant differences in anxiety and depression depending on a marital status.

Research process

The research was conducted in September 2015. Diagnosis data were obtained from medical records of the patients. Criteria for determining the clinical and nonclinical group (subsample "healthy") were: 1) the interviewee was not treated as a psychiatric patient, 2) the interviewee had no psychiatric record and 3) the interviewee had no need for psychiatric help. The interviewees from the clinical population were questioned in a group, whilst the interviewees with schizophrenia diagnosis were questioned individually. The research was conducted in Zvornik, Gradiška, Banja Luka and Belgrade.

Research results

Before data analysis in accordance with the research plan, the normality of distribution of all used instruments was tested, using Kolmogorov-Smirnov test for normality of distribution. By application of descriptive statistical analysis, basic descriptive measures of the research variables in anxiety and depression domains were determined (Table 1).

Table 1. Normality of distribution of the scores on anxiety and depression scales and the description of the interviewees' scores on the measured scales

Variables	Min	Max	AS	SD	KS	p	N
Anxiety as a state	24.00	77.00	49.22	13.90	1.12	0.166	100
Anxiety as a trait	23.00	71.00	48.50	12.43	0.99	0.285	100
Depression	0.00	57.00	19.20	16,82	1.98	0.01**	100

KS- Kolmogorov-Smirnov test; p-Statistical significance

**KS is statistically significant on the level $p < 0.01$

On the basis of the results of Kolmogorov-Smornov test, it is evident that the distribution of the scores of the interviewees on the Depression scale diverges in statistically significant way from the normal distribution (Table 1) and in further statistical analysis nonparametric techniques were used. The measures of average scores achieved on the measured variables are lower than theoretical average scores, which suggests that the interviewees have no tendency towards anxiety and depression.

The differences in the degree of severity of anxiety dimensions and depression between people with schizophrenia and nonclinical population was found using Mann-Whitney U test.

Table 2. *The differences in the degree of severity of anxiety dimensions between people with schizophrenia and nonclinical population (Mann-Whitney U test)*

Variables	Subsamples	N	Mean Rank	Mann-Whitney U	Statistical significance
Anxiety as a state	Schizophrenia	50	63.80	583.50	0.000***
	Nonclinical	50	37.17		
Anxiety as a trait	Schizophrenia	50	70.06	272.00	0.000***
	Nonclinical	50	30.94		

***The difference is statistically significant on the level 0.001

Statistically significant differences in the severity of Anxiety as a state ($U=583.50$, $p<0.001$) and General anxiety ($U=272.00$, $p<0.001$) between the people with schizophrenia and nonclinical subsample were determined (Table 2), wherein the people with schizophrenia compared to nonclinical sample have higher tendency towards negative thrill while experiencing threatening requests and/or dangers, and they show stronger individual differences in tendency to react with situational anxiety while anticipating threatening situations.

Table 3. *The differences in the degree of severity of the depression dimension between people with schizophrenia and nonclinical population (Mann-Whitney U test)*

Variables	Subsamples	N	Mean Rank	Mann-Whitney U	Statistical significance
Depression	Schizophrenia	50	72.48	151.00	0.000***
	Nonclinical	50	28.52		

*** The difference is statistically significant on the level 0.001

There are statistically significant differences in terms of severity of Depression dimensions ($U=151.00$, $p<0.001$) between the people with schizophrenia and clinical subsample (Table 3). People with schizophrenia when compared to nonclinical population have a stronger tendency for depression.

Statistically significant correlation of the dimensions of anxiety and depression was also researched on a subsample of people with schizophrenia and nonclinical subsample.

Table 4. *The correlation of dimensions of anxiety and depression (Spearman's correlation coefficient)*

		Depression	
		People with schizophrenia	Nonclinical subsample
Anxiety as a state	r	0.66***	0.28*
Anxiety as a trait	r	0.71***	0.42**

***The correlation is statistically significant on the level of 0.001

** The correlation is statistically significant on the level of 0.01

* The correlation is statistically significant on the level 0.05

Statistically significant moderate and positive correlation of Depression dimension with Anxiety as a state dimension is determined ($r=0.66, p<0.001$) with people with schizophrenia (Table 4), and also high correlation with Anxiety as a trait dimension ($r=0.71, p<0.001$) is found. On nonclinical subsample, statistically significant low and positive correlation between Depression dimension and Anxiety as a state dimension ($r=0.28, p<0.05$), as well as moderate correlation with Anxiety as a trait dimension ($r=0.42, p<0.01$) is determined. People who are more anxious are also more depressed.

Statistically significant moderate and positive correlation of the dimensions of anxiety as a trait and age ($r=0.35, p<0.05$) was determined with people suffering from schizophrenia (Table 5).

Table 5. *The correlation of the dimensions of anxiety and age (Spearman's correlation coefficient)*

		Age	
		People with schizophrenia	Nonclinical subsample
Anxiety as a state	r	0.27	0.09
Anxiety as a trait	r	0.35*	-0.11
Depression	r	0.16	-0.21

*The correlation is statistically significant on the level of 0.05

Within further statistical analysis, statistically significant differences in the degree of severity of anxiety and depression dimensions, depending on a marital status of the people with schizophrenia and nonclinical population were researched.

Table 6. *The differences in the degree of severity of anxiety and depression dimensions in relation to marital status of the people with schizophrenia (Kruskal-Wallis test)*

Variables	Marital status	N	Mean Rank	Kruskal-Wallis test	Statistical significance
Anxiety as a state	single	15	25.47	3.84	0.279
	married	17	24.18		
	divorced	10	21.00		
	widowed	8	34.00		
Anxiety as a trait	single	15	24.77	8.74	0.033*
	married	17	20.32		
	divorced	10	24.95		
	widowed	8	38.56		
Depression	single	15	25.83	5.63	0.131
	married	17	23.82		
	divorced	10	19.80		
	widowed	8	35.56		

* The difference is statistically significant on the level $p<0.05$

Statistically significant differences in the severity of Anxiety as a trait dimension in relation to the marital status of the people with schizophrenia were determined ($KW_{(3)}=8.74$, $p<0.05$), wherein widowers have the highest average rank of this dimension (Table 6).

In order to determine between which people with schizophrenia statistically significant differences in relation to marital status exist, in terms of the severity of Anxiety as a trait dimension, Mann-Whitney U test was used.

Table 7. *The differences in the severity degree of Anxiety as a trait dimension between single and married people with schizophrenia (Mann-Whitney U test).*

Variables	Marital status	N	Mean Rank	Mann-Whitney U	Statistical significance
Anxiety as a trait	single	15	17.83	107.50	0.446
	married	17	15.32		

The data showed that statistically significant differences in the severity of Anxiety as a trait dimension ($U=107.500$, $p>0.05$) between single and married people with schizophrenia were not determined (Table 7). No statistically significant differences in anxiety dimensions depending on a marital status of the nonclinical population were determined. The results showed that there were no differences in depression dimension depending on a marital status.

Discussion and conclusion

The results of this research showed that statistically significant differences in the degree of anxiety and depression with people suffering from schizophrenia and nonclinical subsample were determined. The obtained findings were expected since the research showed higher severity of anxiety and depression with people with schizophrenia (Huppert et al., 2001; Naidu et al., 2014, according to Katalenac and Matišić, 2015; Pastor-Morales et al., 2011). In the research conducted by Pastor-Morales and associates (Pastor-Morales et al., 2011), higher prevalence of certain Anxiety dimensions was determined, such as General and Cognitive anxiety, with people with schizophrenia compared to nonclinical population. Anxiety occurs very often in comorbidity with schizophrenia and the prevalence of anxiety disorders with people suffering from schizophrenia is higher than in general population (Cosoff & Hafner, 1998), which is confirmed by the results of our research. Huppert's research supports these results (Huppert et al., 2001). In this research it was determined that anxiety had statistically significant correlation with positive and negative schizophrenia symptoms. Patients with chronic schizophrenia often consider themselves anxious (Kelly & Walter, 1968). These research is also supported by a clinical research conducted in 2014 by Naidu and his associates (Naidu et al., 2014, according to Katalenac and Matišić, 2015), which shows that the severity of a psychotic

episode is correlated with higher presence of depressive symptoms in the acute phase of schizophrenia. In the research conducted by Sönmez and his associates, (Sönmez et al., 2013, according to Katalenac and Matišić, 2015), 50% of patients had depression after the first psychotic episode, and one year later depression was present with 35% of the patients, 9% of which showed no signs of depression at the beginning.

Acquired results showed the statistically significant correlation of anxiety and depression. The determined correlations were of expected, positive direction, as in prior researches (Lovibond & Lovibond, 1995). High correlation of Depression dimension with Anxiety as a state dimension with people with schizophrenia, which supports high comorbidity of anxiety, depression and schizophrenia. The biggest comorbidity of depression is with anxiety (Marić, 2005, page, 175.) and their high and positive correlation was expected. Prior researches showed statistically significant positively correlation of anxiety and depression (Akiskal, 1985, Clark, 1989, Clark & Watson, 1990, Dobson, 1985, Stavrakaki & Vargo, 1986, Watson et al., 1988, according to Lovibond & Lovibond, 1995).

Statistically significant moderate and positive correlation of the dimension of anxiety as a trait and age of the people with schizophrenia was determined. Older people with schizophrenia have a stronger tendency to react with situational anxiety while anticipating threatening situations. The acquired finding is in accordance with many researches (Blazer et al., 1987, Eaton et al., 1989, Kramer et al., 1985, Myers et al., 1984, Weissman et al., 1988, according to Gallo et al., 1994). However, in Christensen's research (Christensen et al., 1999), on the sample of 2622 interviewees, aged 18 to 79, negative correlation of age and depression was determined, which suggests that younger interviewees are more depressed. In Spinhoven's research (Spinhoven et al., 1997) no differences in anxiety and depression related to age of the interviewees were found. The results neither showed statistically significant correlation of anxiety and age dimensions on a nonclinical subsample, nor statistically significant correlation of depression and age on a subsample of people with schizophrenia and on nonclinical subsample, which is in accordance with Spinhoven's research (Spinhoven et al., 1997).

When it comes to the relation between anxiety and depression and the marital status of the interviewees, widowers were expected to be more anxious and depressed. People are social beings who have a need for supportive social network and intimate social relationships in order to feel secure in the exploration of themselves and the world around them (Bowlby, 1988), which is why it was expected that married people would be the least anxious and depressed, compared to other categories of marital status. The initial assumption was not confirmed, even though statistically significant differences related to the marital status of the people with schizophrenia were determined only on the dimension of Anxiety as a trait, and it was not determined with which interviewees the dimensions of anxiety and depression were more pronounced.

The acquired results partly confirmed the starting research presumptions and new questions about these constructs and their relation were opened. New questions indicate that there is a need for researching the relation with other correlates dealing

with anxiety and depression. Important correlates of anxiety and depression which can further be included in researches on a sample of people with schizophrenia are: optimism, pessimism, loneliness, stress and stress-overcoming strategies, hostility, personality features, control locus, worry, subjective well-being, self-pity, learned helplessness, rumination, quality of life, satisfaction with life, family relations, social support and socioeconomic status. The results can be of use for clinical psychologists in clinical practice, for the purpose of promoting the quality of health protection and providing psychosocial support for all the patients, as well as in counselling the people with schizophrenia. The obtained data may offer the possibility of insight into the way in which people with schizophrenia in this part of the world succeed in lowering anxious and depressive symptoms. The achieved relations between measured constructs refer to the ways in which depression and anxiety influence the course, prediction and treatment of the people with schizophrenia.

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RAZLIKE U ANKSIOZNOSTI I DEPRESIVNOSTI KOD OSOBA SA ŠIZOFRENIJOM I NEKLINIČKOG UZORKA

Apstrakt

U radu je prikazano istraživanje usmereno na ispitivanje razlika u anksioznosti i depresivnosti između osoba sa shizofrenijom i nekliničkog poduzorka. Istraživanje je sprovedeno na uzorku od 100 ispitanika, ujednačenih po polu i po tome da li su klinička ili neklinička populacija, starosti od 18 do 65 godina. Na uzorku su primenjeni STAI upitnik i BDI upitnik. Najpre je proverena normalnost distribucije korišćenjem Kolmogorov-Smirnovog testa. Razlike su ispitane primenom Men-

Vitnijevog U testa i Kruskal-Volisovog testa, dok su korelacije ispitane Spirmanovim koeficijentom korelacije. Rezultati pokazuju da postoje statistički značajne razlike u pogledu izraženosti Anksioznosti kao stanja ($U=583.50$, $p<0.001$), Anksioznosti kao crte ($U=272.00$, $p<0.001$) i Depresivnosti ($U=151.00$, $p<0.001$) između osoba sa shizofrenijom i nekliničkog poduzorka. Utvrđena je značajna i pozitivna povezanost dimenzija anksioznosti i depresivnosti na oba poduzorka. Nađena je statistički značajna niska i pozitivna povezanost dimenzije Anksioznost kao crte i starosti osoba sa shizofrenijom ($r=0,35$, $p<0,05$). Dobijeni rezultati su u skladu sa istraživanjima odnosa dimenzija anksioznosti i depresivnosti i u skladu sa polaznim pretpostavkama istraživanja.

Ključne reči: anksioznost, depresivnost, osobe sa shizofrenijom, neklinički poduzorak.

STRESS AND WELL-BEING

Abstract

The basic psychological constructs in the theoretical and applied field of Health Psychology are stress, well-being, life satisfaction and feeling of happiness. Our research interests are focused on the interaction and dynamics of these phenomena into work environment with higher risk. The aim of the current research is to identify a correlation between the subjective perception for the levels of stress and well-being within a six month period and a correlation with self-perception for feeling of happiness and life satisfaction. A pilot survey was conducted with a sample of 90 respondents, 36 men and 54 women, aged 26 to 64 ($M=42.52$; $SD=8.89$), 20 people live alone and 70 – have a partner. Respondents work as pilots, air traffic controllers, administrators, managers, doctors and science workers; 34 of them assess their profession as risky and 56 – as not risky. For the last six months their estimates for the levels of stress and well-being are predominantly in the middle and the upper part of the scale of their subjective perceptions, where the levels of well-being are assessed higher than those of stress. The results support the hypothesis regarding significant positive correlations between well-being and life satisfaction, well-being and happiness, and negative correlations between well-being and stress. It was found that respondents who live with a partner are more satisfied with their life than the ones who live alone. No significant differences were registered in the assessment of subjective perception depending on the type of profession – risky or not risky.

Key words: stress, life satisfaction, well-being, feeling of happiness

Introduction

Stress, well-being, life satisfaction and feeling of happiness are some of the basic psychological constructs in the theoretical and applied field of Health Psychology. Our research interests are focused on the interaction and dynamics of these phenomena into work environment with higher risk.

Stress as a phenomena is inevitable in contemporary everyday life. Considering the intensity and dynamics of nowadays life, especially the one in bigger cities, the increased stress levels are constantly discussed in public as the main reason for many

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different health problems. Meanwhile, stepping on one of the definitions about stress as “the non-specific response of the body to any demand placed upon it” (Селие, 1982, p.22), stress can be defined as a stimulus for personal development and creative problem solving. These inherent dualism and contradiction in stress manifestation continue to provoke interest in the study of the prerequisites for it and its effects, the borders of impact and its interaction with other factors, influencing the optimal mental life of the modern human being.

The focus of this research is on the interaction between subjective perceptions on experienced stress and well-being within a six month period. The questions that seek answers, refer to: the interrelationships between the level of stress, life satisfaction and feeling of happiness; to what extent the demographic characteristics of the respondents differentiate variations in the studied phenomena and whether the type of work environment and one’s perception of the job as being risky have a significant impact on life satisfaction and feeling of happiness as components of subjective well-being.

The approach for the interpretation of the received data is based on the understanding that the evaluated constructs are individually determined, and refracted through the prism of the subjective perception on the experience of stress and well-being. Similarly, the subjective feeling of happiness and life satisfaction are assessed through differentiated by each respondent’s own internal criteria and they stay into the field of hypothesis for the researchers. Theoretically, the basis for the analysis are the cognitive stress model and the hedonistic paradigm of subjective well-being.

Theoretical background

In the frame of the cognitive transactional model, stress is defined as an interrelationship between the person and the environment, based on the cognitive personal evaluation for the quality and the opportunities of each component of this relation. Lazarus and Folkman (1984) defined psychological stress as “a relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being“(p.21). In this context, the main role for the stress experience has a cognitive appraisal for the following aspects. The first one (primary appraisal), is on the environment, perceived as a challenge – a stimulus for energy and mobilization, or as a threat, provoking worries and fears of not coping. The second one (secondary appraisal) is on the actual resources available to cope with the situation –and it is positive, when the actual resources exceed the needed ones, and the opposite – it is negative, when they are less than the necessary resources. The criteria for this type of evaluation are entirely subjective and they are not always clearly defined and rational. They are based on the current personal status, previous experience and accumulated knowledge and wisdom.

In the paradigm of Hedonism well-being is seen as a structure with emotional and cognitive components. The cognitive component reflects life satisfaction in the main important areas of human life – work, family, social appearance, free time. The emotional component is measurable in the ratio between the experiences of positive emotions and negative affects. Diener et al. (1985) defined subjective well-being as “the quality of life, based on the availability and frequency of positive and negative emotions and the overall satisfaction in a human’s life” (p.71). Pavot and Diener (1993) created a Scale for subjective well-being measuring (SWLS). In the three pillar structure of the subjective well-being, Satisfaction is a long-term vision and evaluation of one’s own life based on the personally chosen criteria and standards. The feeling of happiness has its own short time measurability – it is the result of the ratio of pleasant and unpleasant emotions in the present.

According to Diener et al. (1985) Life satisfaction reflects a cognitive process, since it is linked to “a global assessment of the quality of life and the achievements that a person retrospectively determines and compares to their own criteria” (p. 71). These criteria are formed continuously during the personal development process under the influence of the environment and culture, therefore they cannot be imported from the outside and to set a single standard for assessing personal satisfaction. There are no universal rules that combine the objective conditions and the subjective evaluation in order to form the feeling of satisfaction.

Happiness as an emotional state is characterized by positive feelings and emotions of joy, contentment, delight and bliss. It is a dynamic variable, ranging in time. According to Keyes et al. (2002) Happiness is a short-time measured – it is a result of relationship between the current positive and negative emotions. As a philosophical category Happiness reflects the highest good and therefore is regarded as a strong motivator in human behavior. As a psychological construct it is always refracted through the personal perspective – no one else can feel or know the presence of this experience. The subjective measurement of happiness lies on a continuum, a numerical scale that ranges from a very low to a very high level and the only reliable source of information about its manifestation is a personal self-report. Lyubomirsky (2008), the author of the Subjective Happiness Scale (SHS), describes it as “an experience of joy, contentment, or positive well-being, combined with a sense that one’s life is good, meaningful and worthwhile.” (p.52)

Data from the European Social Survey Round 6 (2012), carried out in Bulgaria, showed the lowest level of assessment of the experience for well-being in our country, compared to the other 28 European countries, participating in the study. Data, provided by Gallup International from the World Happiness Report (2016), put Bulgaria on the 129 position out of 157 countries from all over the world about the state of happiness. Despite differences in methodology of measurement, the results undoubtedly show the dominance of unsatisfactory experiences for the Bulgarian population. Most of the intercultural and national psychological surveys, carried out in Bulgaria, using the SWLS method - for example Байчинска (2010); Гарванова (2015); Diener (2000) also present a low level of life satisfaction for the contemporary Bulgarians.

The aim of the current study is to identify a correlation between the subjective perception for the levels of stress and well-being within a six month period and a correlation with self-perception for feeling of happiness and life satisfaction.

Method

Respondents

A pilot survey was conducted with a sample of 90 respondents, 36 men and 54 women, aged 26 to 64 ($M=42.52$; $SD=8.89$), 20 people live alone and 70 have a partner. Respondents work as pilots, air traffic controllers, administrators, managers, doctors and science workers; 34 of them assess their profession as risky and 56 – as not risky. The participation was voluntary and all respondents were invited directly in a face to face contact or by an e-mail to answer the paper-based questionnaire.

The dependable variables in the survey are the levels of *stress*, *well-being*, *happiness* and *life satisfaction*. The undependable variables are six with two conditions for each one – *age* (24/40 and 41/60), *gender* (male/female), *marital status* (married/alone), *occupation* (humanistic/technic), *type of organization* (public/private), *work environment* (risky/not risky). There is no control variables.

Instruments

The methodology of the study consists of four short questionnaire surveyed constructs:

The Satisfaction with Life Scale (SWLS), adapted for the Bulgarian population by Ivanova (Иванова, 2011). The Scale consists of five statements in a five level Likert rating scale.

The Subjective Happiness Scale (SHS), adapted for the Bulgarian population by Ivanova et al. (2015). The Scale consists of four statements with opportunities for answers in a five level Likert rating scale.

A Scale to measure the subjective stress level experience within a 6 month period of time. The scale varies from 1 = very low level of stress to 9 = extremely high stress level.

A Scale to measure the subjective well-being level experience within a 6 month period of time. The scale varies from 1 = very low level of well-being to 9 = extremely high level of well-being.

Results and discussion

The statistical data processing uses Descriptive statistics, One-way ANOVA and Correlation.

Descriptive statistics

The Descriptive statistical data processing provided the following findings. The survey results show that for the last six months the results for the level of stress and well-being are predominantly average and slightly above average, with the well-being experience rated higher. The well-being average value for the respondents is $M=7,46$, $SD=1,49$, with 80% of the responses being above the average scale level – 5. The highest values of 9 and 10 are given by 23,3% of the respondents. The stress average value is $M=6,50$, $SD=2,06$, with 53,3% above the average scale level – 5. The highest values of 9 and 10 are given by 17,7% of the respondents.

At the same time, the summarized subjective values about the well-being experience were higher than the above-mentioned trend in other surveys for the Bulgarians being positioned in the lower values for life satisfaction, happiness and well-being. This trend is also seen in the results of the life satisfaction scale and the happiness scale– the average values in this latest survey are higher than values of the previous surveys. Based on the two major strategies for maintaining optimal mental functioning – by changing the external conditions or by an internal change of the interpretation of what is happening, these results can be explained in two ways. On one hand, the standard of living in larger cities (95% of the respondents live in Sofia or in a large city) is higher due to different financial options for the improvement of the environment (funds, programmes, projects), availability of goods and services, both as their availability and price. On the other hand, the wealth of information and knowledge available to the average intelligent person (86% of the respondents have higher education) implies the probability of wider interests and better possibilities for interpretation of events in life. An additional impact probably has the fact that all respondents are employed - 64% in government structures and 36% in the private sector. This fact implies a status of relative stability and security, a vision of temporal perspective in a dynamically changing socioeconomic environment. But it is also important to take into account the impact of the six-month time window in the subjective assessments of the experiences of stress and well-being of the survey, which sets a foreseeable common framework and coherence in the answers of the respondents.

Correlations between well-being, level of stress, happiness and life satisfaction

Correlation analysis was used to check the relationships between the studied phenomena, the results of which are shown in Table 1.

There is a weak negative correlation between subjective assessments of experience for the both measurable constructs - stress and well-being ($r=-0.236$, $p<0,05$). These results match the conventional understanding of the inverse proportional relationship between the intensity, workload, everyday difficulties and strain, associated with stress and the experience of well-being, which is semantically relevant to the receipt and consumption of goods, to positive feelings and related emotions of joy, delight and satisfaction.

Table 1. Correlations between well-being, levels of stress, happiness and life satisfaction

	Well-being	Stress	Life satisfaction	Happiness
Well-being	1	-.236*	.606**	.498**
Stress		1	-.276*	-.318**
Life satisfaction			1	.534**
Happiness				1

* $p < 0,05$; ** $p < 0,01$

A negative correlation between the subjective experience of stress and happiness ($r = -0.318$, $p < 0,01$) was found, which confirms the dominant belief for a more stable correlation between the perception of stress and the emotions in the negative register. However, the interpretation of this tendency can be sought in the weakening effects of stress under the influence of dominant positive emotions. In support of the claim of Lyubomirsky (2008) for the correlation between social relationships and happiness as being bi-directional – “romantic partners and friends make people happy, but the opposite is also true - happy people are more likely to attract lovers and friends” (p.138).

A negative correlation is identified also between stress experience and life satisfaction. This correlation can be assumed as a sequel to the previous correlation and as a form of projection or reflection of an actual experience (of stress and its accompanying emotions) on the process of retrospection and cognitive appraisal of the quality of life and achievements – i.e. dominant state of stress will decrease life satisfaction. The received high positive correlation between happiness and satisfaction ($r=0.534$, $p < 0,01$) is a logical confirmation of the common and popular understanding of the interrelationship between both constructs as based on pleasure emotions.

As expected, there is a well-established high positive correlation ($r = 0,606$, $p < 0,01$) between life satisfaction and well-being experience. In Bulgarian language, from semantic aspect, well-being is associated with “receipt of goods”. From this point of view, in the survey, well-being is reflected in cognitive assessments as satisfactory quality of life reported by the individuals in retrospect as available “goods” and vice versa - a positive interpretation of one’s experience and possessions in former life presupposes a subjective assessment of current well-being experience. In this line of thought, Lyubomirsky (2013) sets experiences higher than possessions due to several circumstances. First, the permanent nature of possessions leads to a rapid adaptation to them. Second, the social character of the experiences presupposes, on one hand, the possibility to be shared and tried again with other people, and on the other hand – it is less likely experiences to be subject to juxtaposition and comparison with someone else’s experiences or with hypothetical ones. Third, but not last – the experience as a process integrates a certain level of stimulation, challenge and achievement or defeat and a subsequent similar cycle (Любомирски, 2013).

Differences in life satisfaction, happiness, levels of stress and well-being

To check the major differentiations in the levels of stress, the feelings of happiness and life satisfaction, the statistical method One-way ANOVA between subjects is used.

The results from the analysis of the variance showed that gender, age, occupation, type of organization (public, private) and the perception of the risk nature of the job have no statistically significant impact on the subjective assessments of the experiences of stress, well-being, happiness and life satisfaction. Thus, the initial hypothesis that the risk environment is a determinant factor for the studied constructs found no confirmation in this pilot study. One possible explanation may be of methodological nature and it is bound with the fact that the nature of the job (risky or not) is being subjectively determined by each respondent, which brings room for interpretations and gaps in the understanding of the parameters of risk. In this sense, the cognitive assessment of stress experience towards the perception of the profession as being risky can vary widely and proportionately, even for such objectively risky occupations such as those of air traffic controllers, pilots, and surgeons that can be defined as risk-free by those exercising them, while the experiences of stress and well-being as being low due to differences in expectations.

Table 2. Differences in life satisfaction depending on marital status

Life Satisfaction	dF	SS	MS	F
Between Groups	1	47.3	47.30	4.59*
Within Groups	83	854.75	10.3	
Total	84	902.05		

* $p < 0,05$

Following a field analysis of variance it was found that the marital status differentiates significantly the degree of life satisfaction ($F_{(89,1)}=4.593$; $p < 0.05$), as the married respondents were more satisfied ($M=19.49$), unlike the unmarried ones ($M=17.67$). The results are in Tab.2. One of the possible interpretations of this results could be connected with the mutual life experience between the partners. The sense of mutuality of values, goals, dreams, rituals, of jointly undertaken risks and responsibilities, of experienced difficulties and joys, of common life perspective, creates a sustainable framework for partner relationships and connectivity between the participants in these relationships. In this aspect, the coexistence in a partnership in the nowadays socioeconomic conditions in our country can be brought out as a predictor of life satisfaction. Csikszentmihalyi (2016) states that the family provides mainly “emotional security”, as his explanation for this is associated with “channeling the mental energy and stress relieving on the suitability and return on emotional investment that the decision for a permanent cohabitation with the partner gives” (Чиксентмихай, 2016, p.234). For the same author (2016) the quality of human life depends largely on how one manages to bring enjoyment in the interactions within the family and to maintain a balance between challenges and skills or how this one

manages to transform a hopeless situation into a new controllable flow activity and to derive pleasure and strength from the challenges (Чиксентмихай, 2016).

Conclusion

As a conclusion, the results obtained in this pilot study reaffirm the hypothesis for significant positive correlations of well-being with life satisfaction and happiness, and negative correlation with the level of stress. Cohabitation with a partner emerged as a reliable predictor of experience of life satisfaction. The appraisals of the experiences of stress, well-being, happiness and life satisfaction, placed in the context of the six-month time period are not influenced significantly neither by gender, age, and education of the respondents, nor by the type of job and its level of risk. The subject of future studies and analyses will be the content measurement of the concepts and the more detailed study of the different constructs and their correlations.

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STRES I BLAGOSTANJE

Apstrakt

Osnovni psihološki konstrukti u teorijskoj i primenjenoj oblasti zdravstvene psihologije su stres, blagostanje, životno zadovoljstvo i osećaj sreće. Naši istraživački interesi su fokusirani na interakciju i dinamiku ovih pojava u radnom okruženju sa većim rizikom. Cilj sprovedenog istraživanja bio je utvrđivanje povezanosti subjektivne percepcije nivoa stresa i blagostanja u toku šestomesečnog perioda i korelacije samopoštovanja sa osećajem sreće i zadovoljstva životom. Pilot istraživanje je sprovedeno na uzorku od 90 ispitanika, 36 muškaraca i 54 žena, od 26 do 64 godine ($M = 42,52$, $SD = 8,89$), od toga 20 osoba živi samo, a 70 ima partnera. Ispitanici rade kao piloti, kontrolori vazdušnog saobraćaja, administratori, menadžeri, doktori i naučni radnici; 34 njih ocenjuju svoje zanimanje kao rizičnu, a 56 kao nerizično. Tokom šest meseci njihova procena nivoa stresa i blagostanja pretežno je u srednjem i gornjem delu njihove subjektivne percepcije; nivoi dobrobiti se ocenjuju višim od stresa. Rezultati podržavaju hipotezu o značajnim pozitivnim korelacijama između blagostanja i zadovoljstva životom, blagostanja i sreće;

i negativnih korelacija između blagostanja i stresa. Utvrđeno je da su ispitanici koji žive sa partnerom zadovoljniji svojim životom od onih koji žive sami. U proceni subjektivne percepcije nije bilo značajnih razlika u odnosu na bavljenje rizičnim ili ne-rizičnim zanimanjem.

Ključne reči: stres, životno zadovoljstvo, blagostanje, osećaj sreće

LEARNED HELPLESSNESS AND NOISE IN URBAN LIVING ENVIRONMENT

Abstract

Auditory environmental pollution generally referred to as noise, and it is one of the most spread physical environmental stressors. Noise-induced stress, so it could lead to learned helplessness. The aim of this study was to determinate if there is correlation between the noise annoyance and learned helplessness. Other aims were to define the individual variables that may influence the subjective noise sensitivity and the learned helplessness in a living environment. The research sample consisted of 160 participants (gender and area balanced). Noisy-environment consisted of the students who stayed in a student dorm located in the center of the City of Niš. Not-noisy environment consisted of the students living in another student dorm located away from the city center. Questionnaires used in this study were Learned Helplessness Scale and Weinstein's Noise Sensitivity. Noise annoyance was measured with a self-rating ten-graded scale. A short general questionnaire referred to age, gender and period of residence. The results showed that a positive relation between reported noise annoyance and SNS was highly significant in both dorms. In addition, they showed that there was a positive correlation between noise annoyance and LHS. No significant differences in average LHS scores were observed between the residents in both areas. No significant differences in average noise sensitivity scores with respect to age and gender were found between the noisy area and the not-noisy environment. There was a negative correlation between the period of residence and the self-report noise annoyance in the noisy environment.

Key words: learned helplessness, noise, noise pollution, sensitivity.

Introduction

The study was conducted as part of a broader research of noise as a stressor in living and working environment. Auditory environmental pollution, generally referred to as noise, is one of the most common physical stressors. The degree of its adverse effects is determined by the objective parameters, such as intensity, levels of frequency or exposure, as well as individual sensitivities. The negative effects of noise are quite wide. Noise is any undesirable or unpleasant sound phenomenon that, when

being of certain intensity, affects the mental and physical status of human beings, plasters and reduces labor productivity and people's rest, as well as creates anxiety and mood (Obrenović, 2003). The noise is defined as any unwanted sound in the environment where people live and work, which causes discomfort or may adversely affect the health.

Noise causes numerous vegetative-visceral and psychological reactions of the organism, which are not equal in all people. They can range from mild transient symptoms to violent reactions and serious permanent damage, all of which, in most cases, depends on the intensity and characteristics of noise. If the noise exposure is chronic and exceeds certain levels, the negative health consequences can be observed. Although people tend to get used to the noise exposure, those able to fully adapt are rare. The degree of adaptation to noise differs from person to person (Weinstein, 1980).

People usually are not passive recipients of sound irritation and can develop coping strategies to reduce the impact of noise. If people do not like the noise, they can take steps to avoid it by moving away from a noisy environment, or if you are unable to move, by developing coping strategies.

There is a common denominator, however: unwanted sound. Noise is typically characterized by intensity (eg. expressed in decibels), frequency (eg. tons), periodicity (continuous or intermittent) and duration (acute or chronic). Harmful effects of noise depend on its characteristics, as well as time exposure, weather volatility and direction of the noise, and finally the individual susceptibility of the person exposed to that noise. One of the main characteristics that affect the assessment of noise as unwanted is their volume or experienced intensity. The volume consists of sound intensity, tonal sound distribution and duration. The sound is necessary but not sufficient to produce the noise. The psychological component of sound (eg. unwanted sound) and its physical components (eg. intensity) play a central role in the perception of noise. The psychological component of sound (eg. unwanted sound) and its physical components (eg. intensity) play a central role in the perception of noise.

The results of several studies suggest that the physiological effects and the health complaints are more closely associated with the subjective reactions to noise than with the physical characteristics of the noise (Passchier-Vermeer & Passchier, 2000; Stansfeld, Haines, & Brown, 2000).

Noise as a stressor is also linked to cognitive judgment and the meaning of environmental sounds. Whether certain chronic occurrences in the environment, such as noise, are seen as a challenger of the stress depends on the cognitive processes of assessment. Cognitive assessment and the sense given to the sounds from the environment may affect the response to them - for example, the reaction to aircraft noise may vary between the employee at the airports and the residents who fear the long-term health effects from exposure to noise. Psychological factors have a stronger effect on noise as a stressor (50%) than actual physical characteristics and exposure to noise (9-29%) (Bell, Greene, Fisher, & Baum, 2001). Sound level is only a minor factor in response to noise. Although social studies often report a positive correlation between noise intensity and the average level of

sensed annoyance, intensity alone rarely explains more than one-quarter of the variance in individual annoyance. Stansfeld, Haines, & Brown (2000) concluded that “noise sensitive people attend more readily to noise, perceive more threat from noise and may react to noise more than less sensitive people, perceiving noise as an environmental threat and lack of environmental control and are less adaptable to noise than people who are less sensitive”. For the assessment of the harmful effects of noise and the through undertaking certain measures of protection in specific circumstances, it is necessary to derermine certain parameters of noise measurement. Measurements of noise can be subjective and objective. Objective measurements mean the the determination and monitoring of the physical parameters relevant to the state of the environment in which the noise occurs. Objective measurements are made using a variety of instruments and appliances. The second group consists of subjective measurement methods aimed at assessment of disturbing and harmful noise effects. The conditions under which measures noise parameters must be uniform and sufficiently well-known to each other and the results were comparable. Data by which the easiest is the most used is the total noise level of which is determined on the basis of sound pressure and expressed in dBA. Quiet sounds in the environment are of the order of 20-30 dB, normal speech levels of 60-70 dB, a very loud noises (eg, loud music) have levels of 90-110 dB, and more (Table 1).

Table 1. The effects of different frequencies of noise.

Effect	Noise frequency (dB)	Typical causes of noise
Serious hearing impairment	140	Rocket launching
Hearing impairment and pain	130	Jumbo jet motor
Hearing impairment after short exposure	120	Air strike siren
Serious danger of hearing impairment	110	Being next to the podium during a rock band performance
Danger of hearing impairment	100	Jumbo jet taking off
Some danger of hearing impairment	90	Noisy industrial plant
Negative impact on health	80	Huge truck at 70km/h
Moderate negative impact on health and an unpleasant feeling	70	Car at 60 km/h
Unpleasant feeling	60	Shouting conversation
Moderate unpleasant feeling	50	Normal conversation
Good sound environment	40	Soft music
	30	Whispering
	20	Quiet bedroom
	10	Leaves rustling
Unpleasant silence	0	Anechoic chamber

Source: Praščević & Cvetković (2005).

For residential areas the maximum permitted noise level is 55 decibels during the day and 45 decibels at night while in the city center allowed noise level of 60

decibels during the day and 45 decibels at night. Although people tend to get used to the noise exposure, rare are those who fail to fully adapt. What characterizes the noise as a stressor is that the person exposed to noise feels helpless and unable to do anything about it. This feeling that nothing cannot be done against the stress to change the discomfort and creates the impression that one has to live with it is called learned helplessness. An individual is expected only to relax and accepts things as they are. The sense of helplessness is also used to exclude the psychological feeling that is associated with the stress of the noise. In their study, Bronzaft, Deignan, Bat-Chava, & Nadler (2000) concluded that only less than 20% of the people complaining about the noise actually managed to reduce or completely eliminate. When people complain to the authorities about the noise, they often come to the conclusion that nothing can be done about it. This leads to the feeling of “learned helplessness” when the person meets and reconciles with the situation and accepts it. However, this is not a healthy way of life because too energy is lost on adapting to the new situation. Noise induced stress means that the organism is unable to ignore, block out or otherwise cope with the unwanted sound, so it could lead to learned helplessness. In this study, helplessness was defined as learned helplessness. Learned helplessness is a potential human response to a variety of psychological, physiological, and sociological experiences resulting from an inability to influence the outcomes of events felt to be significant to an individual (Seligman, 1975). Learned helplessness is dependent on interference with escape/avoidance learning following repeated, but failed, attempts at manipulating a situation. As an individual repeatedly fails to effect a change in a situation, the individual learns of his or her response-outcome disconnect. The eventual outcome of this interference with learning is the impairment of behavior to escape or avoid situations interpreted by an individual to be undesirable.

Learned Helplessness

Learned helplessness is an act of giving up or stops trying a task by individual or organism which they fail to accomplish even due to previous repeated attempts. It is the result of the general belief that one has very little or no control over the environment. Learned helplessness is an act of surrendering or quits attempting an errand by individual or life form which they neglect to fulfill even because of past repeated endeavors. According to Comer (2004) learned helplessness phenomenon works in three related zones i.e. cognitive, affective and motivational. In cognitive zone, an individual or organism fails to find association between new stimulus and response, in affective area organism shows depressed affect and in area of motivational functioning organism shows a retarded initiation of responses i.e., they learn that the entire attempt to solve a problem goes futile (Comer, 2004). Learned helplessness can be developed at any stage of one’s life and influence his cognitive, behavioral and affective zone. At the point when a person diminish confidence in him and expands the sentiment dissatisfaction and frustration in him his cognitive zone will

be influenced. When a learned helpless person is in habit of putting things off or give up he is influence his behavioral zone. The affective zone is affected when a person shows the sign of depression, blames his lack of ability when failed and credits his luck when succeeds (Comer, 2004).

Theory of Learned Helplessness

Learned helplessness happens when an individual considers a circumstance or occasion as stress. To maintain a strategic distance from this distressing circumstance he tries to make it not so much difficult but rather more great, yet when he neglects to impact the circumstance utilizing numerous failed reactions, reaction result autonomy is found out, which is the key suspicion of the learned helplessness hypothesis. In response–outcome autonomy, individual makes a desire that there will be no connection between his activity and the result in future actions as his prior result of an activity is autonomous of self-started activity. As a result of this response–outcome autonomy frustration develops related to individual’s uncontrollable, unpredictable and future occasions. The response- outcome autonomy may produce deliver three impacts helplessness: 1) the motivational, 2) the cognitive and 3) the emotional (Maier & Seligman, 1976). Motivational: The motivation to impact any circumstance or occasion happens with the desire of the person that his reaction to a specific circumstance or an occasion will change the result. In any case, his inspiration to react diminishes, with the observation that result of any without bounds occasion is autonomous of his activity and thus he diminishes his endeavors to react. Cognitive: subsequently of the response–outcome autonomy, people or living being additionally encounter cognitive deficiency (i.e. failure of the person to comprehend which activity produces what result). This cognitive deficiency is not limited to the present circumstance but rather additionally relevant to the future circumstance, came about hindrance in future learning. In the event that in future his activity creates the coveted outcomes he gets to be distinctly unconscious of his prosperity and his activity worked. Emotional: When an individual or organism face a situation which he is unable to change, he experience negative emotional state. Negative emotional state is characterized by anxiety, depression and frustration. This state remains persistent till an individual become able to control the situation. Emotional: When an individual or life form confronts a circumstance which he can’t transform, he encounter negative emotional state. Negative emotional state is described by dissatisfaction, uneasiness, gloom, anxiety, frustration and depression. This state stays diligent till an individual get to be distinctly able to control the circumstance. The accompanying figure (Fig. 1) exemplifies the Theory of Learned Helplessness. This figure demonstrates that as an individual or creature encounters stress, challenges and other negative circumstances, he endeavored to perform such activity which changes the present undesired circumstance. His inability to change the circumstance makes reaction result freedom response–outcome autonomy. This

response outcome independence produces motivational, cognitive and emotional effect on the individual that through repeated failed attempts to change the situation leads to learned helplessness (Seligman, 1975).

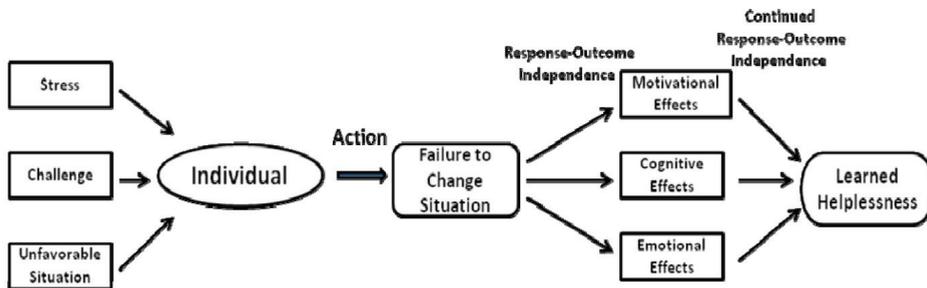


Figure 1. Schematic presentation of the Theory of Learned Helplessness (source: Seligman, 1975).

Noise sensitivity

There are an extensive variety of ways to determine noise sensitivity. According to Stansfeld S. V. (1992) it is a measure of attitudes to noise in general. It constitutes a personality trait covering attitudes towards an extensive variety of environmental noises (Stansfeld S. V., 1992; Zimmer & Ellermeier, 1999). Noise sensitivity is more probable related to disposition to respond to noise in general than to the physical properties of noise (Nivison & Endresen, 1993). Noise sensitivity is a predictor of annoyance (Stansfeld S. V., 1992). Job (1999) refers to physiological and psychological internal states of any individual, which increase the degree of reactivity to noise in general.

Noise sensitive people pay more readily attention to noise, perceive more threat from noise and may respond more to noise than less sensitive people (Stansfeld 1992). Noise sensitivity and annoyance are considered to be related but not identical concepts (Nivison 1993). According to Smith (2003), noise sensitivity is characterized as an element altering or interceding the impacts of noise presentation on the result measure, a free factor, which might be straightforwardly identified with results, for example, subjective wellbeing status.

It has likewise been resolved as a self- perceived pointer of vulnerability to stressors all in all, not just to noise. As a rundown, Noise sensitivity can be determined as a personality trait covering attitudes towards noise in general and as a predictor of annoyance. The main refinement is that while annoyance is related to noise level, sensitivity is definitely not. According to (Guski, Felscher-Suhr, & Schuemer, 1999) annoyance has likewise been resolved as a multifaceted psychological concept, covering immediate behavioral noise effects aspects, like disturbance and interfering with intended activities, and evaluative aspects like “aggravation”, “nuisance”,

“disturbance”, “unpleasantness”, and “repulsiveness”. In spite of the fact that annoyance is related to acoustic factors, they don’t assume play an overwhelming role in the concept of annoyance.

The study was conducted as part of a broader research of noise as a stressor in living and working environment. The main aim of the research was to establish if there is a correlation between noise annoyance and learned helplessness. Other aims were: a) to establish connection between noise annoyance and noise sensitivity to in the noisy and quiet groups, as well as between the period of residence and noise annoyance) to determine whether there are statistically significant differences in learned helplessness and noise sensitivity between the groups; c) to determine whether there are differences in noise sensitivity in relation to age and gender in both groups and d) to determine the average scores on scale Learned helplessness.

Methods

Instruments

A questionnaire was conducted among the students that are living in noisy and not-noisy residential environments. Noisy environment consists of students who stay in a student dorm located in the center of the City of Niš (day Leq \geq 55 dB A and night Leq \geq 45 dB A). The data related to objective measures of noise were obtained from the experts of the Faculty of Occupational Safety, Niš. They carried out the measurement of noise for another research in both areas. Not-noisy environment consists of students that live in a student dorm located away from the city center near the fields (day Leq \leq 55dB A and night Leq \leq 45 dB A). The research sample consisted of 160 participants (gender balanced and area balanced).

Questionnaire used in this study were:

Learned Helplessness Scale (LHS). The LHS is a 20-item, 4-point Likert scale.

Noise annoyance was measured with a self-rating ten-graded scale. Grade 1 represented “not annoyed”, while grade 10 represented extreme annoyance.

A short general questionnaire referred to age, gender, and period of residence.

SNS was assessed with the Weinstein’s Noise Sensitivity Scale (Weinstein 1978), consisting of 21 statements with proposed degrees of agreement. Variables > LHS, SNS, noise measurement , noise annoyance – are described in theoretical part of framework and so as control variables > gender, age, area, residential period

Data analysis

For determination of scores on LHS descriptive statistics has been used (Table 2). To determine the correlation between the variables, Pearson’s correlation coefficient correlation techniques were used. For determination of the difference between groups, the ANOVA technique was used (Table 3).

Results

Normal distribution of the scores on the Noise Sensitivity Scale was both in the noisy area and in quiet. However, the distribution of scores on the Noise Annoyance Scale was asymmetrical, with the grouping towards higher scores in the noisy area, and towards lower scores in the quiet area. Scores on Learned Helplessness Scale in this study ranged from 20 to 66 suggesting a skewed sample with a majority of subjects reporting less learned helplessness (Table 2).

Table 2 . Scores on learned helplessness scale.

	N	M	Min	Max
Learned helplessness	160	34,4	20	66

Results show no significant differences in average Learned Helplessness Scale scores were observed between the residents in the noisy and the quiet urban area (Table 3).

Table 3. ANOVA Between groups learned helplessness and noise sensitivity scale.

		F	Sig.
Learned helplessness	Between groups	3,207	,042
Noise Sensitivity Scale	Between groups	2,140	,023

Positive relation between reported noise annoyance and Noise Sensitivity Scale was highly significant in both areas (Pearson $r = 0.485$ and 0.324 , $P < 0.00016$ (Table 4).

Noisy – area, medium correlation

Table 4. Correlation between noise annoyance and noise sensitivity scale in noisy area.

		Noise annoyance	Noise Sensitivity Scale
Noise annoyance	Pearson Correlation	1	,485
	Sig. (2-tailed)		,000
	N	160	160
Noise Sensitivity Scale	Pearson Correlation	,485	1
	Sig. (2-tailed)	,000	
	N	160	160

Quiet – area, low correlation

Table 5. Correlation between noise annoyance and noise sensitivity scale in quiet area.

		Noise annoyance	Noise Sensitivity Scale
Noise annoyance	Pearson Correlation	1	,324
	Sig. (2-tailed)		,000
	N	160	160

Noise Sensitivity Scale	Pearson Correlation	,324	1
	Sig. (2-tailed)	,000	
	N	160	160

Results show that there is a positive correlation between noise annoyance and learned helplessness (Pearson $r = 0.326$, $p < 0.05$) (Table 6).

Table 6. Correlation between noise annoyance and learned helplessness

		Noise annoyance	Learned helplessness
Noise annoyance	Pearson Correlation	1	,326
	Sig. (2-tailed)		,041
	N	160	160
Learned helplessness	Pearson Correlation	,326	1
	Sig. (2-tailed)	,041	
	N	160	160

No significant differences in average noise sensitivity scores with respect to age and gender were found between the noisy area and not-noisy environment (Table 7).

Table 7. ANOVA Between groups Gender, Age and Area

		F	Sig
Gender	Between groups	3,207	,023
Age	Between groups	2,140	,043
Area	Between groups	3,511	,041

There is negative correlation between period of residence and self-report noise annoyance in noisy environment (Pearson $r = -0.417$, $p < 0.05$) (Table 8).

Table 8. Correlation between noise annoyance and period of residence.

		Noise annoyance	Period of residence
Noise annoyance	Pearson Correlation	1	-,417
	Sig. (2-tailed)		,021
	N	160	160
Noise Sensitivity Scale	Pearson Correlation	-,417	1
	Sig. (2-tailed)	,021	
	N	160	160

Conclusion and discussion

Learned helplessness is defined as a failure in coping due to perceptions of uncontrollability, (Seligman, 1975). This uncontrollability is prompted by introduction to circumstances where an individual discovers that the results of his or her reactions are independent of those reactions. Learned helplessness results when feelings of incompetence are acquired which are often from repeated failure experiences (Vasta, Halth, & Miller, 1995). Same situation affects different persons in different ways.

Individual differences in noise tolerance are notoriously large (Broadbent, 1972). Noise sensitivity is a personality characteristic covering attitudes towards noise in general and a predictor of noise annoyance (Weinstein, 1978). The non-significant results indicate that noise sensitivity is not associated with learned helplessness, at least for subjects studied in this sample. The, non-significant results could be due to subjects scores on the LHS Scale not being extreme enough so no relationship with characteristics subjective noise sensitivity was found. The way that subjects were all students, obviously, demonstrates that they have possessed the capacity to adapt and adjust to commotion levels of noise in both locations.

This study showed that SNS was a personality variable independent of noise exposure. Age and sex have been widely investigated as determinants of noise annoyance, but frequently conflicting results are reported. In this study no significant differences in average noise sensitivity scores with respect to age and gender were found between the noisy area and not-noisy environment. Regardless, these factors are applicable as intermediaries for different variables that adjust the individual's perception of and reactions to environmental stimuli. Other factors, which may have limited any chances of significance, are the limited sample size. More noise sensitive subject reported more noise annoyance what is logic. People that are more annoyed by noise have more chance to develop learned helplessness due to perceptions of uncontrollability of stressor. Future research should examine how much time is needed for adaptation to the noise, increase sample side, ask people whether they come from urban or rural area and assign personality test for motivation, extraversion and introversion.

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NAUČENA BESPOMOĆNOST I BUKA U URBANOJ ŽIVOTNOJ SREDINI

Apstrakt

Buka je jedan od najrasporostanjenijih fizičkih zagađivača životne sredine koji prouzokuje stres. Buka može dovesti do pojave naučene bespomoćnosti. Cilj ovog istraživanja je bio da se utvrdi da li postoji korelacija između iritiranosti na buku i naučene bespomoćnosti. Ostali ciljevi su bili da se odrede individualne varijable koje da utiču na subjektivnu osjetljivost na buku i naučenu bespomoćnost u životnoj sredini. Uzorak se sastojao od 160 ispitanika (uravnotežen po polu i oblasti). Bučnu oblast činili su studenati koji su boravili u studentskom domu koji se nalazi u centru Niša. Ne-bučnu oblast su činili studenati koji žive u drugom studentskom domu koji se nalazi daleko od centra grada. U ovom istraživanju korišćeni su upitnici: skala naučene bespomoćnosti i Vajnstajnerova skala osjetljivosti na buku. Iritiranost na buku je merena desetostepenom skalom samoprocene. Zadat je i opšti upitnik o starosti, polu i periodu boravka. Rezultati su pokazali pozitivnu korelaciju između iritacije na buku i osjetljivosti na buku u obe oblasti. Pored toga, dobijena je pozitivna korelacija između iritacije na buku i naučene bespomoćnosti. Nema statistički značajne razlike u

prosečnim skorovima na skali naučene bespomoćnosti između studenata u obe oblasti. Nema značajne razlike u prosečnim skorovima u osetljivosti na buku u odnosu na starost i pol u obe oblasti. Utvrđena je negativna korelacija između perioda boravka i iritiranosti na buku u bučnom okruženju.

Ključne reči: naučena bespomoćnost, buka, zagađenje bukom, osetljivost

**SOCIAL PSYCHOLOGY
AND PSYCHOLOGY OF CREATIVITY**

GROWING UP OF THE FAMOUS CREATORS²⁵

Abstract

So far, the research of gifted and actualized creators was partially targeted towards the source and nature of their specific characteristics that are often manifesting in the early developmental period. Among the theoreticians and researchers from this field, there is a debate between the natavistic viewpoint on giftedness and the view point where the talent and creativity are mainly product of practice, intrinsic motivation, specific cognitive style or, among other things, atypical brain organization that is present with some autistic children with exceptional achievements. Still, we are aware that even the most talented children and most of the child prodigies that show exceptional capabilities in arts and science at the very early age, don't become famous creators. We tried to find some answers in this paper, which that are in regards to emotional and social development in childhood and adolescence of the affirmed creators from the field of arts and science. Research of the literature that deals with biographical data and the work of these creators provided the list of questions. Among other things, do the creators come from the families that supported child's need for knowledge and achievement? Whether the children were overprotected, or unwanted, disregarded, or suffered the loss of someone close? Question about the dominant mother and passive father, or vice versa? Children, future creators, living with the disability? Are those children, often unrecognized/recognized by educators or parents as being exceptional in certain field? Psychopathological disorders during the childhood and adolescence in famous creators? In the final conclusions, author will elaborate on the findings from the studies dealing with these issues.

Key words: affirmed creators, childhood, giftedness, creativity

Introduction

Though the choice may seem random, I've decided to present some biographical data about two undoubtedly accomplished creators: Henri Marie Raymond de Toulouse-Lautrec-Monfa and Bill Gates.

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²⁵ This investigation was done as part of the project of the Ministry of Education and Science of the Republic of Serbia "Indicators and models of adjustment of the professional and familial roles", # 179002.

Henri Marie Raymond de Toulouse-Lautrec-Monfa was born in 1864. in the aristocratic family. He was the first and the only child, since his younger brother died as a baby. His parents were close relatives, and it wasn't the first time that marriages between relatives have been made in the family.

When he was 12 years old, Henri broke his left hip, and with 14 his right hip. Genetic disorder caused his legs to stop growing, while the torso continued to develop normally. In his mature age he barely reached 1,5m. During his growing up his mother continued encouraging him to paint.

Not being able to fully use his body, he started to live for the art. He lived in Paris, on Montmartre. Paris was at the time the center of all cultural events, heartland for arts and nightlife on the streets. At the same time some great painters lived there: Van Gogh, Paul Gauguin, Georges Seurat and Toulouse-Lautrec. All of them, despite the differences in the characters, were connected by their own personal tragedies. Henri's life, though short, was very fruitful. Caused by alcoholism, he suffered through a heart-attack, and was put into a sanatorium. Soon after he was released from there, he died on 9.9.1901. His last words were for his father: "You old fool!"²⁶

Bill Gates was a shy, hyper-excitable child, until the moment when he was transferred to the private school for gifted children, where he had below the average achievements. Studies at Harvard were not inspiring enough for him, so he left the university and started his work in IT industry. He wrote his first computer program when he was thirteen years old, in time when only a handful of his peers had any interest in computers. He was lucky that both his parents and educators recognized his gifts.²⁷

These are, of course, not universal stories. Despite the assumption that there are other people with similar capabilities, there is obviously something else that makes these gifted people exceptional and makes them stick out of the crowd. When we compare these two creator, among the many questions in relation to the wider creativity, one is clearly questioning the idea about specific kind of creativity that can be met only in the artists. It is expected that this idea is a subject of many debates today (e.g. Baer & Kaufman, 2005).

So far, the research of gifted and actualized creators was partially targeted towards the source and nature of their specific characteristics that are often manifesting in the early developmental period. Among the theoreticians and researchers from this field, there is a debate between the nativistic viewpoint on giftedness and the view point where the talent and creativity are mainly product of practice (e.g. Ericsson et al., 1993; Howe et al., 1998), intrinsic motivation (Sternberg & Lubart, 2001; Winner, 1996), specific cognitive style (Csikszentmihalyi et al., 1993; Sternberg, 1999) or, among other things, atypical brain organization that is present with some autistic children with exceptional achievements (such as music, or arts, O'Boyle & Benbow, 1990). Indirect evidence indicates that some gifted children and savants have atypical brain organization (whether as a result of genetics, the in utero environment, or after-birth trauma). Giftedness in mathematics, visual arts, and music is associated with

²⁶ www.toulouse-lautrec-foundation.org/biography.html (Retrieved December 20. 2016.) <http://>

²⁷ www.biography.com/people/bill-gates-9307520 (Retrieved September 10. 2016.)

superior visual-spatial abilities, and children with mathematical gifts show enhanced brain activity in their right hemisphere when asked to recognize faces, a task known to involve the right hemisphere (O'Boyle et al., 1991).

Relations between creativity and psychopathology were a subject of recent exploration based on the new methods of investigation, such as MRI, PET, EEG, and neuroanatomical studies. Cognitive and Behavioral tasks are used in conjunction with these testing methods, which have allowed the possibility of molecular genetic research to probe the question of the heritability of creativity (Kuszewski, 2009). It should be stressed that the difficulty in defining and measuring creativity has been a contributing factor to the small amount of research in this area to date and we still don't have a more complete solution why, for example, even the most talented children and most of the child prodigies that show exceptional capabilities in arts and science at the very early age, don't become famous creators.

I tried to find some answers in this paper, which are in regards to emotional and social development in childhood and adolescence of the affirmed creators from the field of arts and science. Research of the literature that deals with biographical data and the work of these creators provided the list of questions. Among other things, do the creators come from the families that supported child's need for knowledge and achievement? Whether the children were overprotected, or unwanted, disregarded, or suffered the loss of someone close (parent, sibling, death in the family, divorce, migration...)? Question about the dominant mother and passive father, or vice versa? Children, future creators, living with the disability? Are those children, often unrecognized/recognized by educators or parents as being exceptional in certain field? Psychopathological disorders during the childhood and adolescence in famous creators?

Did it all start in the childhood?

I've chosen to talk about creators who lived and created in the twentieth century. Direct cause for this choice have been an inspiring book by Goetzel and Hansen: "Cradles of eminence: childhoods of more than 700 famous men and women" (Goetzel & Hansen, 2004) that provided a string of relevant data about the early development of people with exceptionally high achievements in different fields, including both science and art. What should be expected when we talk about the development, I will touch upon certain family traits, parents, and specific traits in children and the environment in which future famous creators have grown up.

From what type of families do the exceptional creators come from?

Intellectually "hungry families"

Targeted towards permanent learning and discovery, with high validation of professional achievements in certain field. At the same time their attitudes towards formal education were often negative (e.g. Thomas Edison and Guglielmo Marconi were home-taught boys) (Goetzel & Hansen, 2004).

This kind of parents allowed their children to be different from their peers, navigating them to develop their talents and creativity, and not formal academic achievements. Parents' love for cognition very often lasted until their old age.

Families that recognized the capabilities of their children in the early stage, and directed them towards exceptional achievements in various fields.

We know that for the artists, composers, writers, directors, architects, psychologists, and for many others, prepuberty age is not as relevant for the development of gifts, as it is important in the cases of musicians or dancers.

Families that openly express their political religious attitudes (agnostics or atheists), often in opposition to the mainstream thinking in that period. (e.g. Charles Darwin's father).

Even though the scientist Charles Darwin lived and worked in the 19th century, I talk about him now, since his influence directly or indirectly is very present nowadays in many of the scientific research. During the 20th century, DNA studies revealed evidence of his theory of evolution, although controversy surrounding its conflict with Creationism—the religious view that all of nature was born of God—still abounds today.²⁸

Families where talented and creative children were in open opposition to the values and attitudes of their parents (e.g. Henrik Ibsen left home when he was seventeen, refusing to accept parental religious fundamentalism) (Goetzel & Hansen, 2004).

Families where parents were murdered, imprisoned or banished from the country (e.g. pianist Jan Pederevski, writer Joseph Conrad, painter Paul Gauguin - Sweetman, 1995).

Nonfunctional, turbulent families

We will meet them in the families where parents were reformers, humanitarians, actors... This is the often case with future writers, artists and musicians. Differing from that, available data show that accomplished scientists come more often from cohesive families (Goetzel & Hansen, 2004).

Fathers?

Fathers with unsuccessful careers - those could be unpractical people, dreamers, or fathers with nonrealistic, grandiose ideas (e.g. Csikszentmihalyi, 1996).

Despite the unsuccessful careers, it can be surmised that for the certain number of creators, for various psychological reasons, this type of father was a key factor in their development.

Alcoholic fathers (e.g. Charlie Chaplin, Louis Armstrong...)
(e.g. Chaplin, 1960).

Goetzel and Hansen (2004) give an interesting data that from 21 alcoholic fathers

²⁸ <http://www.biography.com/people/charles-darwin-9266433#theory-of-evolution> (Retrieved December 20, 2016.)

from their sample, 14 children became actors, singers or writers - with the great sense of humor!? It appears that this psychological description is clarified quite well in the words of Bernard Shaw: "If you cannot get rid of the family skeleton, you may as well make it dance" (Goetzel & Hansen, 2004; pp. 60).

Dominant fathers

They are not characteristic for exceptional creators. One of the assumptions could be that this kind of father often wants the son to be just like him, not better than him, in opposition to dominant mothers. This standpoint leaves lots of space for thinking. When we talk about formative participation of the father in the development of the future creator, we find Bernard Shaw's words again: "*Father's sons are more often revolutionaries and philosophers, while mother's sons chose arts*" (according to the Goetzel & Hansen, 2004; pp. 41). Why, or, is it really like that? This statement leaves us with the string of questions...

Mothers?

Dominant and overbearing mothers

It seems that son in the family constellation where father is not dominant, even with over-protective mother and attitudes, realizes his talents and capabilities much better.

Mothers who are occupied by children, those that "suffocate" children

He (most often, a son) is a center of her universe, and differing from the dominant mother, she doesn't put constant pressure on the child to fulfill her dreams about the achievement of her child. As an illustration, I would like to present quite a particular data about the growing up of Rainer Maria Rilke (Prater, 1994). In poet's Rainer Maria Rilke's family, father couldn't communicate with his son. It seems that for mother Sophie, son was a surrogate for a daughter who died before he was born. Mother acted like he was a girl and called him: Sophie?! I would like to stress again that mother called her son by her own name, not the name of the deceased daughter?! I will leave out possible psychological/psychopathological interpretations which pop up when we talk about this specific example of family constellation, but I would like to remind that the birth of a child after the death of the older child often strains the interactive space between the child and the parents. Independently from the sphere of exploring functions of the creative people, as stated by Čeranić (2005): "It is not rare that in this kind of circumstances parents can be burdened with anxiety and to behave overbearing, and relations can be further complicated by treating the child as a proxy for the deceased child, without any sensitivity for their unique traits" (pp. 33). Still, in this case we are talking about the poet Rainer Maria Rilke...

Children?

Certain number of creators have been different from their peers by certain physical traits or health problems.

Blindness or heavy sight loss - Helen Keller, Rudyard Kipling, Aldous Huxley, Emile Zola, James Joyce...

Short stature - Maurice Ravel, Mohandas Gandhi, Henri Marie Raymond de Toulouse-Lautrec-Monfa ...

Physical disability - Henry and William James, Gustav Mahler, Frida Kahlo...

Obese children - Maria Callas, Oskar Wilde...

Sick children - Thomas Edison, Bela Bartok... (Bayley, 2001; Goetzel & Hansen, 2004).

A serious kick and the temptation for every family is a birth of the child with a physical disability, or in comparison to the average or the expectations, inadequate physical characteristics or problems that appeared during growing up. If we talk about the mother as the most frequent primary object, reaction of the mother will depend not only on the nature, type or the level of disability of the child, but also from her own personal experience and previous conflicts. Disappointment, helplessness and lack of success in her female role, and above all, birth of a child with the defect, represents for that mother the loss of her wanted, expected, perfect child, as noted by Solnit and Stark (1961). In this context, not less important is the question about the nature of relation of the father, future creator, in this kind of family dynamics?

Further on, some children had specific family environment that might have influenced their development.

Unattractive children from attractive parents - Sarah Bernard, Bertrand Russell, Paul Gauguin, George Orwell...

It is clear that the growing up and creation of the identity is under the strong influence of the process of the identification with parents, not only when we talk about the creators. The dynamics of the relationships between unattractive children and attractive parents hasn't received so far the full attention from the researchers and more in-depth theoretical overview.

Children born after the death of their sibling - Salvador Dali, Oscar Wilde...

I would like to pick on interesting detail from the Salvador Dali's biography. Dali had an older brother, born nine months before him, also named Salvador, who died of gastroenteritis. Later in his life, Dali often related the story that when he was 5 years old, his parents took him to the grave of his older brother and told him he was his brother's reincarnation. In the metaphysical prose he frequently used, Dali recalled, "[we] resembled each other like two drops of water, but we had different reflections." He "was probably a first version of myself, but conceived too much in the absolute."²⁹

²⁹ <http://www.biography.com/people/salvador-dal-40389> Retrieved February 5, 2017

It is known fact that there is a significant number of children who were to become famous creators didn't like school – Tagore, Mann, Einstein, Picasso... (Goetzel & Hansen, 2004). It is not necessary to remind that even today, in prevalence of psychometrical approach in many fields of psychology, there is still a negligible number of empirical researches about children and adolescents who are gifted and creative, but they are not recognized as such in school or family. One of the reasons is that it is hard to locate this type of subjects in a way that is correspondent to the acceptable experimental draft (Vidanović, 2015). Or whether the description of the hyper-excitable children that was formulated by Dabrowski (1996), corresponds, at least partially to Silverman's (Silverman, 1999) statement that children with these characteristics usually use visual-spacial learning and cognitive styles. They are characterised by openness and often negligence to many details, streaming towards the "big picture". This type of children/adults enjoy improvisation, they are divergent thinkers, don't like clearly structured situations, prefer experiences that are open and fluid. They show resistance to the drill and pure memorising of the data, as well as to the settings that favours rigidity and has many rules. They use inductive logic, and they can work on multiple problems at the same time, and they can also leave some of the tasks unfinished. Can we recognize in these descriptions, for example Tagore, Mann, Einstein, Picasso...?

Though the researched sample by Goetzel & Hansen (2004), that included Zola, Proust, Chagall, who were the children with certain psychological problems (e.g. with speech impediments), available data show that relatively small number of children showed serious behavioral disorders, or serious mental disorders, at least during their childhood. It is important to emphasise that we are talking about period of childhood, not adulthood, when certain creators did have evident particular psychopathological problems (e.g. Post, 1994; Ludwig, 1996).

Conclusion

When we talk about creativity, giftedness and remarkable achievements, it is actually more adequate to talk about the string of questions, dilemmas that are open and that require answers, rather than making any conclusions. It is also important to remind ourselves that there is relatively modest amount of relevant data about the famous creators in 20th century, and having this in mind, many things are still in the domain of assumptions.

We can see that insignificant number of exceptional scientists was raised in unsupportive family, in contrast to many negative life occurrences that were part of the development of many actualized writers, artists and some of social activists. Differing from the writers, religious leaders, artists or musicians whose emotional experiences are by definition directly or indirectly included in their work, scientific, university or business career demands high focus on abstract and impersonal things. For them, personal tragedies or conflicts can be disturbing factors, not a direct or indirect source for creative development.

It appears that sometimes to become exceptional in some field is a question of luck, to be in the right place in the right time (or be in a wrong place in a wrong time). Even though luck is important, it seems that those who are well equipped follow the luck, and those who are persistent. If there is something common for all the exceptional creators, it is persistence to achieve own goals and the vision, the thing that psychologists call “inner locus of control”, or if seen through the emotional specter, “to bear being different”. Many authors that work in this field, as well as the statements from some of the parents of the creative children show that creative children need time and space to deal with the things that keep their attention. Sometimes they do this because parents are supporting them, but sometimes only because parents are simply too busy and leave them to their own devices.

Based on the available biographical data about the early development of the exceptional creators, it is clear that it is not easy to give guidelines to parents how could they up-bring their creative children in the most adequate way so they would be able to realize their talents and creative potential. One of the ways that is being applied in many countries is introduction of the special programs with models that besides intellectual giftedness, include musical, artistic, interpersonal, spacial, psycho-motoric and exceptional verbal and mathematical competences. The intense drive characterizing gifted children should be recognized, celebrated, and cultivated, not destroyed. In order for the creative children and youth to be free to follow the road that is not traditional, parents and educators should support children and youngsters to explore various possibilities and follow their muses, no mater where they take them.

Even though today we know quite a bit about the family characteristics of gifted children and the research does not allow us to conclude that particular family characteristics play a causal role in the development of giftedness. I tend to agree with Winner (2000) that there are at least two reasons why no causal conclusions can be drawn from the existing data. First, there is the lack of relevant control groups. Second, if causality exists, its direction could be either from parent to child or from child to parent.

At the end, let's leave great Shakespeare to speak to us today:

“Some are born great, some achieve greatness, and some have greatness thrust upon 'em.”

(W. Shakespeare, *Twelfth Night*, Act II, Sections 5, line 159, according to Goetzel & Hansen, 2004; pp. 358)

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Snežana Vidanović

ODRASTANJE POZNATIH STVARALACA

Apstrakt

Dosadašnja razmatranja nadarenih i aktualizovanih stvaralaca jednim delom bila su usmeravana na poreklo i prirodu njihovih specifičnih obeležja koja se, katkada, javljaju još na ranom uzrasnom periodu. Među teoretičarima i istraživačima iz ove oblasti vodi se debata između, na primer, nativističkog pogleda na nadarenost i gledišta da je talenat i kreativnost dominantno produkt vežbanja, intrinzične motivacije, specifičnog kognitivnog stila ili, između ostalog, atipične moždane organizacije koja je prisutna kod pojedine autistične dece sa izuzetnim postignućem u nekom domenu. Ipak, znamo, da i najteltentovanija deca, čak i većina one koja u veoma ranom uzrastu ispoljavaju izuzetne sposobnosti u oblasti umetnosti ili prirodnih nauka, ne postaju poznati stvaraoci. Pokušali smo u radu da, bar delom pronađemo neke odgovore koji se tiču emocionalnog i socialnog razvoja u detinjstvu i adolescenciji afirmisanih stvaralaca u oblasti umetnosti i nauke. Pregled literature koja se bavila biografskim podacima i radom stvaralaca otvorio je niz pitanja. Između ostalog, da li stvaraoci uglavnom potiču iz porodica koji su podsticali kod dece potrebu za saznavanjem i postignućem? Da li su to bila deca koja su prezaštićena, neželjena, odbačena ili doživela gubitak bliske osobe? Pitanje o dominantnoj majci i o pasivnom ocu, ili, obrnuto? Deca, budući stvaraoci, sa hendikepom? Da li su to i deca, ne retko, neprepoznata/prepoznata od edukatora ili roditelja kao izuzetna u određenoj oblasti? Psihopatološki poremećaji tokom detinjstva i adolescencije kod poznatih stvaralaca? U završnim razmatranjima autor će se osvrnuti na nalaze studija koje su se bavile ovom oblašću.

Ključne reči: afirmisani stvaraoci, detinjstvo, nadarenost, kreativnost

AUTHENTIC DANCE MOVEMENT: CONNOTATIVE DIMENSION OF MEANING

Abstract

The aim of this study was to investigate the connotative dimension of the meaning of dance in the context of experience of the people who are dancing in festive or party occasions. There were 35 participants, students of the University of Novi Sad who did not have any training in dance. To measure the dimension of the connotative meaning of dance, participants rated their experience of dance on the connotative differential which was given in the form of "semantic differential" and it consisted of 15 seven-point bipolar rating scales of opposite adjectives, 5 measuring cognitive (understandable, explainable, definite, clear and sensible), 5 measuring emotive (pleasant, good, attractive, relaxing and favourable), and 5 measuring the conative dimensions of meaning (impressive, expressive, inspiring, active and interesting). The results have shown that cognitive dimension of meaning is rated with significantly lower values in comparison to emotive and conative dimension of meaning, which do not differ significantly. Furthermore, results show that emotive and conative dimension of meaning of dance are rated with higher values by the female students than by the male students. The results of the study are analyzed in the context of spontaneous dance movement and dance is discussed as a way of social interaction and a way of self-expression.

Key words: dance, connotative dimension of meaning, students

Introduction

Dance represents a complex aesthetic, artistic, cultural and psychological phenomenon and it may be understood as spontaneous and artistic (Krešić, 1997). A spontaneous rhythmic dance has no particular meaning; there is no conscious intention for the dancers to express content and it is not related to any specific kind of moving. On the other hand, artistic dance is defined as a specific type of human, complex and highly articulated movement. It is a system of organized and formalized movements conveying meaning which an artist expresses consciously and transfers to the spectator on purpose (cf. Blom & Chaplin 2000; Carter 1998;

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Jowit 1994; Layson 1994; Meekums 2005; Tufnel & Crickmay 2006). As an art form, dance is not an expression of emotion as a psychomotor reaction to experience, but it represents a symbol of emotion. The dancer's body in spontaneous dance is not influenced by a technique, which limits the expression, whilst with dance as a form of art, the expression of the dancer's body is determinate and conditioned by the specific technique (McFee 1992).

This paper aims at investigating dance as spontaneous rhythmic movement without an intention to convey any particular meaning, free of specific technique and unconditioned by any specific kind of moving. In that sense, in this paper, spontaneous dance movement is understood as a synonym for the authentic dance movement. Also, in this study, the dance is investigated through the perception and experience of participants regarding their own experience of dancing in festive or party occasions, i.e. celebrations, festivities, informal gatherings, weddings, etc. In this way, the dance is approached as a form of social interaction (Giurchescu, 2001; Layson 1994; Kassing, 2007; McFee 1992; Ros & Demiris, 2013). As suggested by Giurchescu (2001, p.109), the social component is implicit to the dancing person as an individual and as a member of a socio-cultural community. Also, some authors (Maletić, 1986) suggest that there are significant functions of dance-related social motives and that, through the history, dance has been an important means of social interaction (Kassing, 2007). In all epochs of civilization (Giurchescu, 2001; Kassing, 2007; Maletić, 1986) dance has played a significant role and had a variety of functions such as: expressing emotions, fun and entertaining, gathering of people in the community, fulfilling the need for aesthetics, strengthening ethnic identity, social integration, reinforcing traditional rules of behaviour and showing social status.

When dance is approached from the social aspect, as a form of social interaction, within which an individual communicates to others and expresses her/himself, the main assumption is that dance as a form of social interaction certainly has some kind of structure of subjective meaning, which stems from individual differences and describes dance as an activity. From this assumption and considering individual differences, a question arises: what kind of structure of connotative meaning accompanies the notion of dance? In other words, which position does the dance occupy in the three dimensional space of connotative meaning?

Connotative dimension of meaning

The connotative dimension of meaning refers to the personal, emotional and implicit characteristics which are subjective in nature and derived from the subject that understands, and not from the entity that is understood (Janković, 2000, p. 222). It is a dimension in a hypothetical multidimensional semantic space and it serves for determining specific features of connotative space of meaning and the position occupied by different entities in such space. The connotative dimension of meaning is measured by "Connotative Differential" and in his factor analytical study Janković

(2000, p. 225) defines the three main dimensions of the connotative dimension of meaning. The first dimension is connected to the affective-evaluative domains of human functioning. The second dimension is called conative and it refers to the interest, attention and the importance of the entity of the person. The third, cognitive dimension refers to the cognitive aspect of experiencing the meaning of the entity. By using the "Connotative Differential" the number of semantic components of the term can be quantitatively evaluated.

Since by the term *dance*, in this research, we assume a spontaneous rhythmic movement without an intention to convey any particular meaning, free of specific technique and unconditioned by any specific kind of moving (Krešić, 1997), it can be suggested that the notion of dance, could be highly charged with individual meaning which arises from individual experience, emotions and motivation. Based on this assumption, this research aims at investigating the connotative dimension of meaning of dance in its relation to social occasions.

Method

The aim of this study was to investigate whether there are any differences in rating the connotative dimension of meaning of dance in the context of experience of the students who are dancing in festive or party occasions.

Participants

There were 35 participants in this research who were students in the academic year 2015/2016 of Novi Sad Business School – Higher Education Institution for Applied Studies of Serbia. The participants were aged $M = 21.31$ ($SD = 1.367$). There were 14 male and 21 female students.

The criteria for the selection of the participants were: a) that students do not have any training in dance, b) that students are familiar with dance and that they practice dancing as social activity c) that students were present at least at 85% of all lectures, d) that students are passing the exams at the time that was predicted. There were no limitations in participating in this study depending on the GPA (Grade Point Average) of the studies.

Variables such as the type of festive or party occasions, as well as the genre of music to which participants usually dance, were not controlled.

Instruments

"Connotative Differential" – the instrument for measuring the connotative dimension of meaning (Janković, 2000)

To measure the dimension of the connotative meaning of dance, participants rated their experience of dance on the connotative differential which was given in the form of semantic differential and it consisted of 15 seven-point bipolar rating scales of opposite adjectives, 5 measuring cognitive (understandable, explainable, definite, clear and sensible), 5 measuring affective (pleasant, good, attractive, relaxing

and favourable) and 5 measuring the conative dimensions of meaning (impressive, expressive, inspiring, active and interesting). The participants' task was to rate the extent to which each adjective (e.g., pleasant, clear) characterizes dance, regarding their experience of their own way of dancing in festive or party occasions. The instructions for completing the questionnaire were: "The scale consists of adjectives of opposite meanings which describe authority. Please rate the intensity of your experience of the meaning of dance on each of the 15 scales by circling the number which most suits your evaluation. The more prominent the adjective is describing dance, whether in a positive or negative way, the higher the number (0 being the minimum, 3 or -3 being the maximum)". In data analysis, the assessments on the scales are transformed from bipolar (-3 – +3) to unipolar (1 – 7) form.

Questionnaire on socio-demographic data

This questionnaire is applied with an intention to collect basic socio-demographic data, adjusted for the participants from the student population. Students were asked to indicate gender, year of study and experience in dance training.

Procedure

The research was conducted during the academic year 2015/16. The sample included students of Business School - Higher Education Institution for Applied Studies in Serbia, which also approved the realization of the research. The research was conducted in group. The battery of tests was in the paper - pencil format, and the time required for completing the battery of tests was between 10 and 20 minutes. The participants were not familiar with the aim of the research, but before they started filling out the battery of tests they were informed that the participation is voluntary, that they can withdraw from the study at any time, and that by filling out the questionnaires they give consent to participate in the research. After the procedure had been clarified to the participants, they were asked to complete a questionnaire on socio-demographic data, and provide assessments on every scale presented on the Connotative Differential for dance. All students have participated in the study voluntarily and have not received any payment or any type of compensation for their participation in the study. The anonymity was guaranteed to the participant and personal data was not required.

Results

The results of t-test [Paired Samples Test] have shown that there are significant differences in the ratings of cognitive, emotive and conative dimension of the connotative meaning. The results of t-test are shown in Table 1.

Table 1. The differences between pares of dimension of connotative meaning

Pares of Dimensions	<i>t</i>	<i>df</i>	<i>Sig.</i> (2-tailed)	95% Confidence Interval of the Difference	
				Lower	Upper
Cognitive and Emotive	-2.971	34	.005	-.7987	-.1498
Cognitive and Conative	-2.843	34	.007	-.8034	-.1336
Emotive and Conative	.073	34	.942	-.1527	.1642

Results have indicated that the cognitive ($M=5.48, SD=1.104$) dimension of meaning is rated with significantly lower values compared to the emotive ($M=5.95, SD=1.03$) and conative ($M=5.94, SD=.897$) dimension of meaning, which do not differ significantly.

On the other hand, results of t-test [Independent Samples Test] have shown that there are significant differences in ratings of the emotive and conative dimension of connotative meaning between male and female students. The results of t-test and ratings on each dimension of connotative meaning are shown in Table 2.

Table 2. The differences between male and female students in ratings of dimensions of meaning

Dimensions of meaning	Male students		Female students	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Cognitive $t(33) = -1.850, p < .073$	5.07	1.124	5.75	1.027
Emotive $t(33) = -6.159, p < .001$	5.04	.999	6.56	.440
Conative $t(33) = -4.600, p < .001$	5.27	1.015	6.40	.404

The results have shown that the emotive and conative dimensions of meaning of dance are rated with significantly higher values by the female students than by the male students.

Discussion and conclusion

The main purpose of this study was to examine the differences among students in their assessments of different dimensions of the connotative meaning of dance, concerning their own experience of dancing in festive or party. Results have revealed that cognitive dimension of meaning is rated with significantly lower values compared to the emotive and conative dimension of meaning, which do not differ significantly. In addition, the emotive and conative dimensions of meaning of dance are rated with significantly higher values by the female students than by the male students.

Students' experience of dancing in social occasions is characterized as pleasant, attractive, relaxing, impressive, expressive, inspiring, active and interesting. The

connotative meaning which students ascribe to their dancing in festive and party occasions indicates that their connotation is related to experience of dance as means of entertainment, fun and self-expression. In the previous studies, different authors pointed out that entertainment, fun and self-expression represent powerful and significant functions of dance as form of social interaction (Giurchescu, 2001; Layson 1994; Kassing, 2007; Maletić, 1986; McFee 1992).

The result that suggests that female students assess the emotive and conative dimension of the connotative meaning with higher values was expected. In the previous studies, it has been shown (Chan et al., 1980; Eysenck & Castle, 1970; Frois & Eysenck, 1995) that women generally have higher aesthetic sensibility as well as higher inclination towards art (Frumkin, 1963). In addition, a recent neuro-aesthetic study has shown that there are significant differences in the aesthetic appreciation of photos, drawings and reproductions of paintings between men and women and that this difference is related to the different regions in the brain which process spatial relationships (Cela-Conde et al., 2009). Regarding the previous studies in the domain of social dances, Pflug and Mandarić (2012), too, have suggested that women have higher aesthetic sensibility and inclination towards social dances compared to men.

Based on the results of this research and the conducted analyses, it can be concluded that the present study pointed out the significant fact that students ascribe the meaning related to the important role of dance as means of entertaining social interaction and self-expression to the experience of their dancing. This paper answers certain questions such as those related to the meaning ascribed to dance as a form of students' social interaction, but it seems many of them related to dance as form of students' social interaction remain open. For instance, is there any difference in the connotative meaning of dance experienced by students in different types of festive or parties? It would also be especially interesting to discover how different genres of music influence the students' experience of dancing in social occasions. These questions would need further empirical investigations and may serve as valuable directions for future studies.

Finally, it can be concluded that this research may be considered an insight into the experiences of students, although the size of the sample is very small and does not allow the generalization of results. However, this study could be one of the first steps in investigating the role of dance in the contemporary social setting.

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Maja Vukadinović

AUTENTIČNI PLESNI POKRET: KONOTATIVNA DIMENZIJA ZNAČENJA

Apstrakt

Cilj ovog istraživanja je da se istraži konotativna dimenzija značenja plesa kod osoba koje igraju u socijalnim situacijama i na zabavama. U istraživanju je učestvovalo 35 studenata Univerziteta u Novom Sadu bez prethodnog iskustva u bavljenju plesom. Za merenje konotativnog značenja plesa korišćene su skale date u formi semantičkog diferencijala. Instrument se sastojao od 15 sedmostepenih skala procene koje se sastoje od opozitnih prideva i mere tri dimenzije konotativnog značenja: kognitivnu dimenziju (razumljiv, objašnjiv, određen, jasan, smislen), emotivnu (prijatan, dobar, privlačan, opuštajući, omiljen) i konativnu dimenziju (upečatljiv, izražajan, inspirativan, aktivan, zanimljiv). Rezultati su pokazali da je kognitivna dimenzija procenjena sa značajno nižim vrednostima u poređenju sa emotivnom i konativnom dimenzijom značenja, koje se, pri tome, ne razlikuju statistički značajno. Takođe, nalazi studije pokazuju da je konativna dimenzija značenja procenjena višim vrednostima kod devojaka u odnosu na momke. Rezultati istraživanja diskutovani su u kontekstu autentičnog plesnog pokreta i ples je analiziran kao način socijalne interakcije i vid samoizražavanja osobe.

Ključne reči: ples, konotativna dimenzija značenja, studenti

SOCIAL NETWORKS AND SOCIOLINGUISTIC ASPECTS OF PERSONALITY

Abstract

Bearing in mind that internet communication, especially on social networks, occupies a central position in the Digital Age, the authors of this work deal with deliberation of its impact on sociolinguistic aspects of personality. In reflection of the relationship between social networks and language, as well as their indirect influence on the personality itself, the authors refer to theoretical assumptions of the linguist David Crystal, who acknowledges the appearance of 'Netspeak'. Basic assumptions of this work are related to the existence of difference between age categories in relation to the usage and knowledge of the Netspeak vocabulary. The used method is a survey. The sample consisted of 200 respondents, users of the social network called Facebook. Statistical methods used are techniques of descriptive statistics (frequencies, cross-tabulations and a chi-square test). The results showed that there are no significant differences between the age categories in relation to the usage of emoticons and abbreviations, as well as differences related to knowledge of vocabulary characteristic for Netspeak. That leads us to the conclusion that continued presence in the online space brings people to language socialisation, in other words accepting new language rules and forms.

Key words: Internet, language, social networks, language socialization.

Introduction

New media technologies influenced not only all social life spheres, but language as well. Communication on social networks is limited by the existing range of signs, symbols and sounds. Besides spoken and written language, which is mediated by books, letters and other traditional media, nowadays a new language of media technology is recognized, with its specific characteristics and rules. In examining the relationship between social networks and language, as well as their indirect impact on personality itself, the authors refer to theoretical hypothesis of the linguist David Crystal³². Crystal believes spoken and written language are replaced by a completely

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³² Author of *The Cambridge Encyclopedia of Language*, *The Cambridge Encyclopedia of English Language*, *Dictionary of Linguistics and Phonetics* and other significant work of modern linguistics.

new medium, and that the major role belongs to English language, which led to domination of plurilingualism, by becoming the global language.

New technologies especially contributed to the dynamics of social relationships, therefore it is often shown that the relationship between young and old people is changing rapidly, and earlier ways of life and thoughts are becoming old-fashioned and inadequate in the new, changed living environment. Different experiences in the process of language socialization can stimulate the creation of new linguistic forms which further testifies to the many changes at personal and collective levels.

Lack of nonverbal elements in a computer-mediated communication has caused the creation of new forms which try to compensate for this deficiency. Emoticons, which serve to express feelings and attitudes, are becoming a constant companion of messages on the Internet. However, it is becoming more common to use these symbols without the text, which expands the meaning of emoticons, but leaves room for potential misinterpretation, ambiguities and manipulative communication directing.

Subject of this work relates to the use of Netspeak among users of social network Facebook in different age categories. The starting point was the hypothesis that users of various age categories differ in use of abbreviations, emoticons and knowledge of vocabulary which are typical of the language of new media and social networks.

Theoretical framework of the research

Theoretical assumptions of David Crystal

British linguist, professor David Crystal, believes that one of the key factors in language revolution which started in the nineteen-twenties is the development and expansion of the Internet and communication 'online' (Crystal, 2006), therefore a new form of linguistic communication, interaction in the *online* sphere, requires the attention of many multidisciplinary sciences. 'Language being such a sensitive index of social change, it would be surprising indeed if such a radically innovative phenomenon (Internet) did not have a corresponding impact on the way we communicate' (Crystal, 2006:237).

In his book *Language and the Internet* (2006), writing about language online, which contains features of spoken, as well as written language, Crystal introduces the term *Netspeak*. He believes that the phenomenon of Netspeak is going to 'change the way we think' about language in a fundamental way, because it is a linguistic singularity – a genuine new medium. (Crystal, 2006:238) The term 'Netspeak' is 'an alternative to 'Netlish'³³, 'Weblish', 'Internet language', 'cyberspeak', 'electronic discourse', 'electronic language', 'interactive written discourse', 'computer-mediated communication' etc.' (Crystal, 2006:17). Netspeak is, therefore, a specific language in online sphere, which, although a written language, is significantly informal than traditional written

³³ Netlish is, for example, derived from the word English, but its use is decreasing due to multilingualism of the Internet.

discourse, so it can be defined as a written speech. In addition, Written language on a screen does not behave in the same way as writing on a traditional page. We write it differently and we read it differently.’ (Crystal, 2011:7). The author emphasizes the spontaneity of Netspeak, which isn’t present in written communication, but states that it is significantly different from a direct communication itself. ‘A big difference between Netspeak and face-to-face conversation also results from the technology: the rhythm of an Internet interaction is very much slower than that found in a speech situation, and disallows some of conversation’s most salient properties.’ (Crystal, 2006:31) Speech which is not mediated by technological means possesses specifics such as tonality, intensity, color, voice depth, rhythm of speech, which is not the case with Netspeak. Crystal points out that ‘Netspeak lacks the facial expressions, gestures, and conventions of body posture and distance (the kinesics and proxemics) which are so critical in expressing personal opinions and attitudes and in moderating social relationships’ (Crystal, 2006:36). It is exactly for these Netspeak limitations that the Internet communication can easily lead to double meanings, misunderstandings and misinterpretations.

Smileys or emoticons were created in early development of Netspeak in order to reduce the possible problems in communication to a minimum. As Crystal states, they represent combinations of keyboard characters designed to show an emotional facial expression: they are typed in sequence on a single line, and placed after the final punctuation mark of a sentence. There are two basic types which express positive attitudes and negative attitudes (...) - “:)” and “:(“ (Crystal, 2006:36). Crystal concludes that the semantic role of emoticons has proved to be very limited because ‘an individual emoticon can still allow many readings – the basic smile, for example, can mean sympathy, delight, amusement, and much more – and these can be disambiguated only by referring to the verbal context’ (Crystal, 2011:23).

As another significant difference between direct communication and one mediated by new media, Crystal points out the lack of feedback. More precisely, he agrees that feedback between communicators exists, however, it is significantly different than the one in direct communication.

‘In Internet situations, simultaneous feedback is invariably absent. When someone is writing an email, there can be no such feedback, because the recipient is unaware of the impending message. Successive feedback will arrive, but not simultaneous. Even in so-called ‘instant’ messaging, while the fragment of dialogue is being typed there is no simultaneous feedback. And even in an apparently face-to-face situation, such as two people sending messages to a split screen at the same time, or a dialogue using visual Skype, there is a lag which can cause conventional interference, making the participants unsure about the relationship between turns’ (Crystal, 2011:22).

As previously mentioned, even though traditional speech and online speech (Netspeak) differ, they also have many common characteristics. Crystal states that email, chat, instant messaging, and texting, though expressed through the medium of writing, contain several key speech features – they are time governed, expecting

or demanding an immediate response; they are transient, in the sense that messages may be immediately deleted or be lost to attention as they scroll³⁴ off the screen; and their utterances display much of the urgency which is characteristic of face-to-face conversation. (Crystal, 2011)

The existence of Netspeak is undisputable; however, opinions are divided in terms of its impact on the speech itself. David Crystal states that when text-messaging became popular in the UK, around the year of 2000, many people saw it as a linguistic disaster. Namely, 'there was a widespread belief that texting had evolved as a modern phenomenon, full of abbreviations that were being used in homework and exams by a young generation that had lost its sense of standards' (Crystal, 2011:4), which will directly lead to language ruining. However, Crystal is explicit about this subject: 'All popular beliefs about texting are wrong.' (Crystal, 2011:4) As an argument he claims that:

'only a small part of text-messaging uses distinctive abbreviations; these abbreviations are not a modern phenomenon; they are not restricted to the young generation; young people do not pour them into their homework and exams; and texting helps rather than hinders literacy standards. Text-messages are not 'full of abbreviations.' (...) In a Norwegian study, only 6% of text-messages contained abbreviations.' (Crystal, 2011:4).

Crystal illustrates that abbreviations are not a modern phenomenon by giving the example where one letter, number, or a symbol is used as a word or a part of a word – b 'be' and 2 'to', claiming that they are called rebuses and that they have been existing for centuries. He states that *cos* instead of *because* and *wot* instead of *what* have been present in English sentences since 1828 and 1829 (Crystal, 2011:5). In favor of a positive attitude towards usage of abbreviations, one of the characteristics of Netspeak, this author presents the results in which it is shown that texting and abbreviations do not negatively influence reading and writing among children. On the contrary, the literacy improves. There is a positive correlation between the use of abbreviations and spelling and writing in pre-teenage children. It was proven that children who were better at spelling and writing used most abbreviations. (according to: Crystal, 2011:5)

However, it is the fact that the language of global network, as Crystal³⁵ points out, is Anglo centric, global and interactive, and it tends to nest beyond computer-mediated communication, which is one of the reasons to explore the existence of specific features typical of Netspeak in a direct communication.

Language socialization on social networks

The leading agents of socialization, besides formal and informal (family, school, peer groups, associations and organizations) are media. Through their field of work, they trace the path for the formation of values and prerogatives and desirable patterns

³⁴ Skrolling – eng. to scroll – moving the text up and down on the screen.

³⁵ More at: <http://www.politika.rs/scc/clanak/52226/Pipi-salje-SMS>

of behavior and thinking. It is therefore assumed that the virtual communities of digital age represent a new space for the process of socialization, in which a sense of unity and authentic interaction and discussion is developed.

Language which is used by users of social media, especially, virtual community (e.g. Facebook, Twitter...) shows how long they have been online, i.e. the extent to which they are conformed to social norms of a group and adopted to specific forms of thoughts and feelings. In one of the research whose focus was on the relationship between language and membership in an online community (Nguyen, Rose, 2011), the authors concluded that the length of membership in the group influence the adoption of specific jargon and language style which is freed from formalities. That way of speaking indicates closeness and emotional engagement in a discussion. David Buckingham (David Buckingham, 2008) emphasizes that abbreviations in a text and creativity in language among young people serve to convey the group affiliation and to confirm the identity.

Idea of language socialization was shaped by Ochs and Schieffelin in a book called *Language socialization among cultures*³⁶. By using sociolinguistic approach to socialization, they pointed out the mutual dependence of culture and language. Contrary to the view that the process of socialization is the way consciousness and experiences of young generations are molded, language socialization researches are setting a different approach. Although socialization is based on social and cultural inheritance of a certain community, the young are invited to take part in a communicative processes and they are expected to negotiate with the given elements, to create their own meanings and therefore, contribute their interaction with other group members, as well as its outcome. This results in creating interactive communicators who are increasingly replacing roles of experts in interaction, and also exchanging experiences (Duranti et al., 2012).

Eva Lam claims that online communities are somewhat neglected areas when it comes to language socialization (Wan Shun Eva Lam, 2008). These significant social areas help the users examine their existing identities, create new language forms, rules of group dynamics and understanding, as well as specific symbolism. Lam's starting points are: how do users come to adopt and develop competence in the language practices of particular online communities, and how do those social and linguistic practices change over time. She quotes the research on community formation on an international forum hosted by Massachusetts Institute of Technology (Cassel & Twersky, 2005). Intensifying discussion on global subjects, there have been some modifications in language use after only 3 months. Communicators were increasingly using the pronoun 'we' instead of the pronoun 'I', they became more open to different views, and thirdly, a pursuit towards common goals was established. Eva Lam suggests that the sociolinguistic approach to online communities confirmed that language practices are instrumental in creating norms of behavior among group members. Function of those norms is strengthening sociability, support, information, and a

³⁶ Schieffelin, Bambi B. and Elinor Ochs (Eds.). 1986. *Language Socialization Across Cultures*. Cambridge: Cambridge University Press.

sense of collective identity. In the absence of physical evidence of gender, age, ethnic background, or class, linguistic behaviors become the primary means to confirm the affiliation to certain social categories (Lam, 2008).

Symbolic (nonverbal) expression of feelings on social networks

In everyday life, in a real world, people convey messages with verbal and nonverbal means of communication. Besides speech, the important roles in expressing someone's views and feelings are played by miming, gesture and facial expressions. Internet and new virtual reality, which it brings, are establishing new means of communication, which include the absence of nonverbal component. Bojana Lazić claims that this type of communication, in addition to having similarities with face-to-face communication 'impoverishes communication for a large number of information which are transmitted by extra linguistic and paralinguistic means', exactly because of the absence of interlocutor (Lazić, 2014:24). In a computer based communication, communicators try to compensate for this deficiency. Ivas and Žaja explain that that is how, in a virtual space, 'new culture body culture' appears (Ivas & Žaja, 2003: 93). On social networks, almost unavoidable segment that helps to express feelings are emoticons.

Term *emoticon*, from a word *emotion* and *icon* mostly represents the image which expresses emotions, moods, attitudes, actions, situations, beings and objects (Ivas & Žaja, 2003). In addition to different ways of character combining known in history such as pictograms in further and comics in the more recent past (the same, 2003), first version of the emoticon was used in 1967 in a text published in Reader's Digest, while smiley, made of eyes, nose and laughing mouth, was designed by Scott Fahlman in 1982 (Jibril & Abdullah, 2013).

Emoticons mostly strand with text and explain in detail the context in which it is used. They make it easier to interpret the meaning of a message. The research done by Derk, Fisher and Ross, shows that people use emoticons to clarify and strengthen the messages they are sending (Lazić, 2014:29). Aldunate and González-Ibáñez see the importance of emoticons in interactions which are based on textual messages because the interaction might seem cold without them (Aldunate & González-Ibáñez, 2017).

Absence of physical contact in a virtual world, according to Bojana Lazić, leads to the increased freedom of speech, therefore, interlocutors can express negative emotions, since there is no fear of physical reaction, and people can also get aggressive or start maltreating others (Lazić, 2014). By adding one emoticon, it is possible to completely transform the meaning, mask an insult, exaggerate an emotion, and even lie.

In a computer-mediated communication emoticons are used in communication with people whom they are acquainted, and people with whom they have more or less friendly relationship. We can find a reason for that in a research conducted by Huang and which showed that 'when interlocutors are using emoticons, they feel more connected to the interlocutor, and that, as a consequence, they enjoy that interaction more.' (Lazić, 2014:29). Derks, Bos and Von Grumbkow researched the usage of

emoticons in social interactions online, and to what extent it depends on the social context. (Derks et al., 2007). The results showed that people used more emoticons in socio-emotional than in task-oriented social contexts. The authors concluded that ‘this is possibly related to the social norms in our society. It is more appropriate to show one’s emotions and feelings towards friends than towards colleagues.’ (Derks et al., 2007:846). Crystal points out that emoticons are used the most by the young. However, as he observes, young people use them in combination with the text, while older users are prone to exchange whole text messages with emoticons (Crystal, 2011).

Methodological framework

Primary research goal:

To determine whether the Facebook users’ preference towards the using of Netspeak depends on the belonging to the age group.

Special goals:

1. To determine to which extent the lexis characteristic for Netspeak is present in a communication between people of different age groups on a social networking site Facebook.

2. To determine if the range of offered symbols (emoticons, smileys) are used by Facebook users of different age groups at the same level

3. To determine whether young users of social network Facebook are more acquainted with vocabulary characteristic to Netspeak.

Data collection technique:

For purposes of this research, a survey which was filled in online, namely on the social network Facebook, was used.

Research sample:

Research sample consists of 200 subjects, social network Facebook users.

Table 1
Structure of the sample based on the gender

	Subject number	Percentage
Male	80	40
Female	120	60

Table 2
Structure of the sample based on the age categories

	Subject number	Percentage
Younger than 30	126	63
Older than 30	74	37

Plan for statistical data processing:

The program used for data entry and its analysis was *SPSS for Windows*, version 15.0. Applied statistical methods: descriptive statistics (frequency, cross-tabulations and chi-square test).

Results and discussion

Table 3 shows the ratio of abbreviation usage on writing messages online and age categories. It is noticeable that only 1.6% of subjects younger than 30 years use abbreviations in every message, while such tendency in subjects older than 30 is present among 1.4%. The largest number of subjects (71.4%) younger than 30 use abbreviations when communicating with close people and friends who often use abbreviations, while the number of subjects older than 30 who use abbreviations in this way is 63.5%. 27% of Internet users younger than 30 never use abbreviations in messages, while the percentage in users older than 30 is 35.1%.

Table 3

Frequency of the usage of abbreviations when writing messages online (email and chatting on the social networks) in relation to age categories

	Each one of my messages contains abbreviation	I use abbreviations when communicating with close people and friends who often use abbreviations	I never use abbreviations	Chi-square	Df	p
Younger than 30	2 (1.6%)	90 (71.4%)	34 (27%)	1.476	2	0.478
Older than 30	1 (1.4%)	47 (63.5%)	26 (35.1%)			

Here we can assume the existence of socially based motivation to use abbreviations in writing. David Crystal points out that use of different abbreviations has a function of indicating group membership (Crystal, 1997). The application of Chi-Square Test has not determined significant differences between the age groups in relation to use of abbreviations in messaging on the Internet (Pearson Chi-Square (Asymp. Sig (2-sided) = 0.478)).

Hypothesis that lexicon characteristic to Netspeak is to a greater extent present in communication among younger users of social network Facebook was not proven.

Table 4

The frequency of abbreviation usage in a direct face-to-face communication in relation to the age categories

	Always	Only in presence of friends familiar with the meaning of an abbreviation	I never use abbreviations	Chi-square	Df	p
Younger than 30	0	45 (35.7%)	81 (64.3%)	0.007	1	0.934
Older than thirty	0	26 (35.1%)	48 (64.9%)			

The frequency of abbreviation usage in a direct face-to-face communication in relation to the age categories is illustrated by table 4, in which it is noticeable that 64.3% of subjects younger than 30 never use abbreviations in a direct communication, while in the category of subjects older than 30 the situation is almost identical, 64,9%. Only in the presence of friends familiar with the meaning of an abbreviation in a direct communication 35.7% of younger users and 35.1% of users older than 30 use abbreviations. The application of Chi-Square Test has not determined a significant difference between age categories in relation to the usage of abbreviations in a direct face-to-face communication (Pearson Chi-Square (Asymp. Sig (2-sided) = 0.934)).

Table 5:
The frequency of use of emoticons in relation to age categories

	I always add some of the emoticons in my text messages	I use emoticons all the time, except in formal messages	I never use emoticons	Chi-square	Df	p
Younger than 30	21 (16.7%)	98 (77.8%)	7 (5.6%)	0.434	2	0.805
Older than 30	10 (13.5%)	59 (79.7%)	5 (6.8%)			

According to the results shown in table5, larger number of young people, 77.8%, constantly use emoticons, except in formal messages, while only 5.6% of users younger than 30 never use emoticons. The situation is similar with users older than 30, 79.7% of users constantly use emoticons (except in formal messages), while 6.8% never use them. These results are in accordance with the results from Derks et al. (2007). More frequent use of emoticons is characteristic for communication with friends, while formal communication lacks symbolic expression of feelings. Here, a contextual condition of emoticon usage is proven. Crystal reached the same conclusion. The application of Chi-Square Test has not determined a significant difference between age categories in relation to the usage of emoticons (Pearson Chi-Square (Asymp. Sig (2-sided) = 0.805)).

Based on these data, the second hypothesis, that the range of offered symbols (emoticons, smileys) is to a greater extent used by younger users of social network Facebook, was not proven.

Table 6
Knowledge of Netspeak vocabulary in relation to the age categories

	I am familiar with all the meanings	Almost all the meanings are familiar	Less than half of the meanings are familiar	I am not familiar with almost any of the meanings	Chi-square	Df	p
Younger than 30	92 (73%)	33 (26.2%)	1 (1.8%)	0	5.576	2	0.062
Older than 30	42 (56.8%)	31 (41.9%)	1 (1.4%)	0			

Table 6 illustrates the knowledge of vocabulary characteristic to Netspeak in relation to age categories. It is a significant data that there were no subjects who did

not know any of the meanings of offered Netspeak terms, while 73% of younger than 30 and 56.8% older than 30 knew all the meanings. The application of Chi-Square Test did not determine a significant difference between age categories in relation to knowledge of vocabulary characteristic to Netspeak (Pearson Chi-Square (Asymp. Sig (2-sided) = 0.062)). Everyday Internet users (99% in our sample) were introduced to different linguistic forms, creative ways to use abbreviations and a new language culture of an online sphere. On a conscious and unconscious level, they enriched their vocabulary and socialized linguistically, which has helped them be accepted as communicators within a variety of forums, blogs and virtual social networks. The fact that almost the same number of subjects of both age groups was familiar with the meaning of words characteristic to Netspeak confirms that a large number of people is aware of the importance of new communication space. Whether these new spaces of communication enable free chat, exchange of opinions and critical discussion or support and assist special groups of users, the need to become a member of one of the groups represents a powerful stimulus for learning new language forms and intragroup norms of behavior.

Based on these data, the third hypothesis, that younger subjects are better at understanding meanings of words of Netspeak was not proven.

Final comments

With expansion of new media technologies and with improvement of an online social sphere, social networks are taking over the processes of socialization. Information age imposes multidisciplinary approach to new channels of communication as an imperative. Language, as a primary means of communication, changes its primary form on the network, and it has different characteristics compared to direct communication. Having noticed a specific linguistics on the Internet David Crystal introduces the term Netspeak, which means language online, or written speech. Its characteristics are absence of simultaneous feedback, use of abbreviations and emoticons, due to lack of nonverbal communication components mediated to new media. Despite the fact that emoticons are improvement, they still cannot compensate the properties of nonverbal communication. Their uniformity leads to carelessness in expressing and it narrows the range of feelings and conditions which can be expressed by them, directly impacting the development of personality of new generation.

Results of this research, whose subject is usage of Netspeak among the users of social network Facebook of different age categories showed that there are no differences between age categories in relation to the use of emoticons, abbreviations, as well as knowledge of the vocabulary of Netspeak and their use in a direct or face-to-face interaction. This all obviously leads to the conclusion that the presence in online space has led to language socialization, that is, to accepting new language rules and forms.

Language, as the most important means of communication in society is considered inseparable from the environment which it names and determines. There is a relationship of mutual dependence between social structure and language, which means that those characteristics of the environment relevant to some society can be found in a language. Language and culture are closely related. If this point is applied to linguistic changes that occur within social networks and online communities, then it is a justified hypothesis that new culture is conceived, with its special norms, language rules and jargon by which loyalty, faithfulness and affection to certain groups is proven.

Since the key terms of this work are complex phenomena which are becoming more and more significant in a modern multimedia society, it is necessary to conduct further and more extensive researches on language changes in a variety of virtual communities. This research was explorative, with an adequate instrument and an adequate sample. In that sense, it is only an initial step that indicates changes within linguistic forms have occurred, but is also an invitation to researchers to provide a clearer image and a better explanation of new language cultures by further research. The results of this research should be verified in further research by different data collection instruments, on a different sample which would, in addition to a larger number of subjects, cover older categories, and require more demographic data.

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DRUŠTVENE MREŽE I SOCIO-LINGVISTIČKI ASPEKTI LIČNOSTI

Apstrakt

Imajući u vidu da komunikacija putem interneta, posebno na društvenim mrežama, zauzima centralni položaj u digitalnom dobu, autori ovog rada bave se razmatranjem uticaja ove komunikacije na sociolingvističke aspekte ličnosti. U istraživanju odnosa između društvenih mreža i jezika, kao i njihovog indirektnog uticaja na samu ličnost, autori se oslanjaju na teorijske pretpostavke lingviste Dejvida Kristala, koji prepoznaje posebnu vrstu govora na mreži, tzv. "Netspeak". Osnovne pretpostavke ovog rada odnose se na postojanje razlike između starosnih kategorija u odnosu na upotrebu i poznavanje rečnika "Netspeak". U istraživanju je učestvovalo 200 ispitanika, korisnika socijalne mreže Facebook. Pored tehnika deskriptivne statistike, korišćene su kros-tabulacije i hi-kvadrat test. Rezultati pokazuju da ne postoje značajne razlike između starosnih kategorija u odnosu na upotrebu emotikona i skraćenica, kao i razlike koje se odnose na poznavanje rečnika karakterističnog za "Netspeak". To vodi do zaključka da stalno prisustvo u online prostoru vodi ljude u smeru socijalizacije jezika, drugim rečima do prihvatanja novih pravila i oblika jezika.

Ključne reči: internet, jezik, društvene mreže, socijalizacija jezika.

SOCIODEMOGRAPHIC DETERMINANTS OF ATTITUDES TOWARDS REALITY SHOWS

Abstract

The main goal of this research is to determine whether and in which way are attitudes toward reality show programs (abbr. RSP) related to certain sociodemographic characteristics. We have also tested the latent structure of attitudes toward reality show programs. The sample consisted of 517 examinees, 381 of which were female and 136 male, aged 17 to 75. Through factor analysis it has been determined that the attitudes toward reality show programs consist of three components: Negative attitude, Positive attitude, and Knowledge about reality show programs. Results indicate that there are differences regarding gender when it comes to those attitudes, whereby men show a more positive attitude. A positive correlation between the level of education and a negative attitude was obtained, while a negative correlation was obtained between a positive attitude and knowledge about RSP. There is no difference in attitudes toward reality show programs in regards to the place of residence. It has been showed that employed people have the most positive attitude toward this format, while college students are the most criticizing of it.

Key words: attitudes, reality show program, sociodemographic indicators

Introduction

It is a common knowledge that the development of television and media in general has brought on both positive and negative to society. The media has become a crucial part of everyday life. They also represent an important agent of socialization. Television remains the strongest agent of socialization among all media. Television has a strong impact on the behavior of people because the behavior shown on television can have an impact on the formation of social norms. The impact of television is also reflected in the fact that the models shown on television are much more detailed, clearer and more concrete, and thus easier to follow than moral lessons or verbal instructions on how to behave (Rot, 1994). Douglas Kellner's assumption is that media culture represents a dominant force of socialization, making it important to

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understand the potentials of the impact of media content (Kellner, 2004, according to Perković and Matović, 2014). On the other hand, there is the opinion that the content that is being broadcasted in the media is exactly what the viewers wanted. It is possible that the viewers have an affinity towards certain negative media content. It is most likely that the impact is cyclic: there is an interest for certain modes of behavior, and that presentation of certain modes further develops and spreads an interest for those behaviors.

Popularity of television has brought on the necessary commercialization which reflected on the quality of content, leading to appearance of new and disappearance of existing TV genres (Jovanović, 2010). Commercial emitters most frequently emit programs of the entertainment character, while the informative program is almost completely neglected or has been transformed into a sensationalist one. Despite the belief that competition in the media sector brings about diversity, recent developments have shown that all competing TV houses use the same strategies. Their only goal being higher viewership, they offer those programs which have the biggest audience (Stojanović, 2014). It is becoming more and more frequent to mix genres, i.e. to create new hybrid TV genres like reality show programs (abbr. RSP) (Jovanović, 2010). 'Reality show is a genre of television programs which is characterized by showing real people and events for the purpose of entertaining viewers' (Stojanović, 2014, p. 287). The key element in reality show programs is broadcasting certain content from the life of participants which will intrigue all viewers and enable the format to be watched in media around the world (Magder, 2004). Reality show programs are a very adaptable and resistant media phenomenon, which is why it is not justified to talk about it as a genre. According to Bignell, important components of reality programs are the participants, who are regarded as regular people (they act authentically), and the purpose of the program which emphasizes the moments of crisis and gives the individual a chance to address the audience (Bignell, 2005, according to Perković and Matović, 2014). A characteristic of this type of program is that participants are real people whose behavior is more or less influenced by the producers. The goal of the producers of reality show programs is to create scenarios of new shows based on the format which was already proven successful, in order to cut down the costs necessary for its realization (Magder, 2004). Of course, in every culture there are small modifications of the format of reality show programs, so as to adapt them to the culture. 'Creators of these programs choose participants from different social classes, parts of the country and of different education to create a natural conflict between the participants' (Jovanović, 2010, page 299). These criteria contributes to identification of viewers with the RSP contestant that is most similar to them.

The research so far examined what motivates people to watch reality show programs. Rose and Wood (2005) have interviewed 15 viewers of certain reality show programs in their research. Participants have written a diary throughout the research in which they have put down their thoughts, feelings, and experiences, which they talked about later. Then they were interviewed a year later, for the purpose of checking whether and to what extent they have continued watching those programs and how

much they were informed about them after the first phase of research. The data obtained suggest that there is a wide spectrum of motivation for watching reality show programs. One of the motives was simple entertainment with the purpose of 'killing' time. Some participants have even reported that they watch these shows because they find the contestants physically attractive, as well as because of the luxurious setting in which the contestants are located. Other participants have reported that they find it easy to relate to the contestants and their problems, and that it even helps them resolve their own problems. Participants also reported that they related to different forms of social interactions, how to overcome cross-class conflicts and establish a harmonious relationship between people who, in reality, would never have spent time together (Rose and Wood, 2005). Ebersole and Woods examined motives for watching reality show programs and distinguished five factors which explain the preference of a certain program. Those factors include: relating to the contestants, entertainment, mood change, 'killing' time, and passive participation (Ebersole and Woods, 2007). We can notice similarity between the factors and motives listed by Rose and Woods (2005). Woods suggests that it's possible that the viewer is motivated by the desire to define, intensify or enhance his own identity through identification or second-hand pleasure through some kind of interactive participation (Ebersole and Woods, 2007).

A small number of researches are concerned with sociodemographic characteristics of viewers of reality show programs. Hill in his research of characteristics of viewers of Big Brother finds that there is practically no difference among them in terms of gender, age, education, ethnicity and social class which they belong to (Hill, 2002). The only research of this type in our area was conducted on a sample of students of Faculty of Philosophy in Niš. The results indicated that women and students with a better socioeconomic status watch reality show programs more often. Also, more educated parents of students participating in this study watched less reality show programs (Stojanović, 2014).

The purpose of this research is to examine the latent structure of attitudes toward reality show programs, as well as to examine the relationship between attitudes toward reality show programs and certain sociodemographic characteristics.

We can assume that there are gender differences in attitudes toward reality show programs. We believe that women will have a more positive attitude toward reality show programs because they are usually more interested in social interactions and psychological aspects of social life. Roose and Woods found that women tend to analyze the participants of reality programs and their mutual relations more than men (Rose and Woods, 2005). It was also hypothesized that participants with a lower level of education will prefer this type of entertainment and that they will show less critical thinking related to this phenomenon. We do not expect any significant differences in attitudes toward reality show programs in relation to the place of residence because we suppose that the ratio of the number of people with a positive and a negative attitude toward this format is, percentagewise, rather close in the country and the city. We expected to find the differences between employed, unemployed, and

students regarding their attitudes toward RSP. It is expected that students will have an affinity for spending their free time in a useful manner, and thus have a more negative attitude than others.

Method

Sample

The sample consisted of 517 participants, 381 (71.7%) of which were females and 136 (26.3%) males. The age of the examinees varied from 17 to 75. In relation to the place of residence, participants divided in 3 groups: 1) village (19.5%), 2) town (17.6%) and 3) city (62.9%). The majority of respondents were from Serbia (81.8%), a smaller number from Croatia (14.9%), and 3.3% from other countries. Most of the examinees finished upper secondary education (64.6%). Other information about the educational status of participants is shown in Table 1. Only 79 participants declared that they watch a certain reality show program (15.3%), while 438 of them have said that they don't watch it (84.7%). The majority of examinees were students (61.1%). The sample was convenient and was gathered by the 'snowball' technique through social media.

Table 1
Descriptive statistics

Educational status	Frequencies	Percent
No elementary school	1	.2
Four grades of elementary school	1	.2
Elementary school	6	1.2
Upper secondary education	334	64.6
Short-cycle tertiary education	52	10.1
Master degree	111	21.5
Higher academic degrees	12	2.3

Instrument

Questionnaire of attitudes toward reality show programs was designed for the purpose of this research. The questionnaire consists of 35 items with five-degree Likert scale (1 – completely disagree, 5 – completely agree). Cronbach's α is .912, showing that the reliability of the questionnaire is excellent.

Results

Explorative factor analysis of the Questionnaire of attitudes toward reality show programs

In order to examine the latent structure of the Questionnaire of attitudes toward reality show programs, factor analysis with principal component method had been

applied. On the basis of preliminary analyses the items with cross-correlations with different factors were left out, and on that basis 23 items remained in the analysis. The criteria for item retention was set on .40. Based on Scree plot criterion, three factors were extracted (Figure 1) and then rotated in Promax position. Three-factor solution explained 51.92% of variance of the initial group of variables (Table 2).

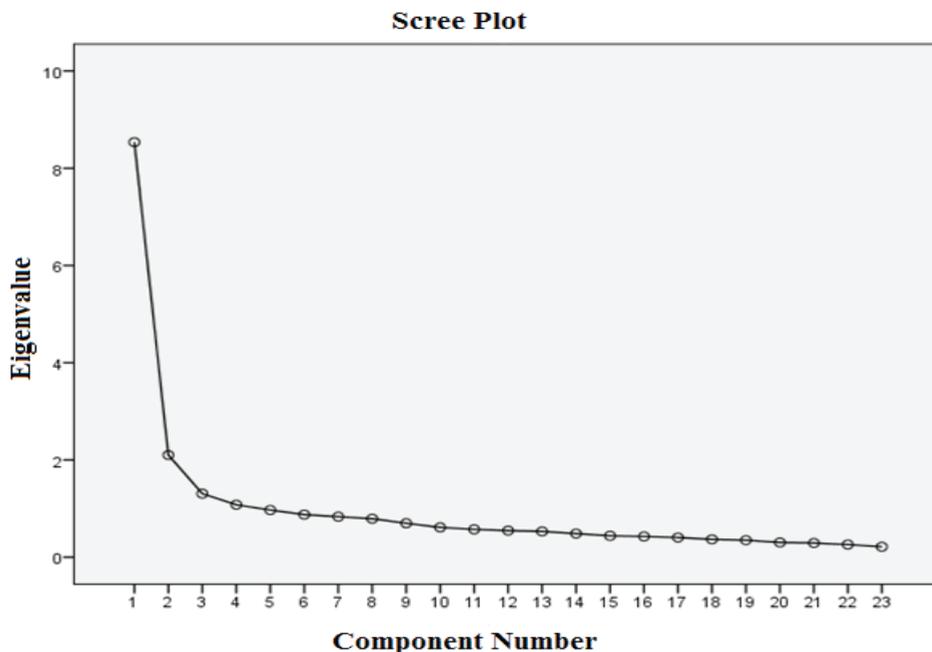


Figure 1
Scree plot

Table 2
Total variance explained

Component	Initial solution			Rotated Solution
	Eigenvalues	% of Variance	Cumulative %	Eigenvalues
1	8.53	37.12	37.12	8.14
2	2.10	9.13	46.24	4.66
3	1.31	5.68	51.92	3.64
4	1.08	4.69	56.61	

The first isolated factor consists of items which describe reality show programs, their contestants, and viewers as immoral, loafers, and responsible for the destruction of the moral values. It is interpreted as the Negative attitude toward reality show programs. The second factor includes items that for the most part contain the emotional component, which is, for example, admiration and it is called the Positive attitude toward reality show programs. The third factor includes items related to the

knowledge and search for information about the contestants and events in reality show programs, as well as exchange of that knowledge with others. This factor is named Knowledge of reality show programs. Pattern matrix is shown in Table 3.

Table 3
Pattern matrix

	Component		
	1	2	3
The idea of endangering someone's privacy is deeply immoral.	.84		
The idea of RSP is inhumane.	.83		
RSP destroy lives of the people in the household and their loved ones.	.81		
I believe that RSP have negative effect on today's youth.	.75		
I feel disgusted by RSP because money is the main incentive for participation.	.72		
Participants in RSP present all the worst sides of the Balkan mentality.	.72		
I am annoyed by the attention that RSP are being given.	.71		
I would discontinue RSP.	.70		
I am horrified by how many people regularly follow RSP.	.67		
RSP glorify an inappropriate system of values.	.67		
All who apply to be on RSP are loafers.	.60		
When I run in to RSP on TV, I change the channel.	.60		
Only those with nothing to do watch RSP.	.58		
I would never apply to be on RSP.	.52		
RSP are rigged.	.43		
I envy those RSP on the fun they are having.		.80	
I admire those who made it in to a RSP.		.74	
The residents on RSP are very likable.		.57	
The idea of RSP is creative.		.41	
I know who the contestants of RSP are.			.80
I am regularly informed in the media about the events on RSP.			.67
I know lot about the private lives of RSP contestants.			.64
I criticize RSP with my loved ones.			.58

The first factor correlates negatively with both second and third factor. The second and third factor have a low positive correlation (Table 4).

Table 4
Intercorrelations of facotrs

Factor	Negative attitude	Positive attitude	Knowledge about RSP
Negative attitude		-.52	-.36
Positive attitude			.32
Knowledge about RSP			

Gender differences in attitudes towards reality show programs

The t-test has shown that there are significant gender differences on the first and second factor. Men have a more positive attitude, while women have a more negative

attitude toward reality show programs. No significant differences between men and women were obtained on the third factor. The results of the t-test are shown in Table 5.

Table 5
Gender differences in attitudes toward reality show programs

	Gender	t-test (515)	Mean	SD	p
Negative attitude	male	-3.98	-.29	1.15	.00
	female		.10	.92	
Positive attitude	male	4.40	.32	1.24	.00
	female		-.11	.87	
Knowledge about RSP	male	1.04	.08	1.06	.30
	female		-.03	.98	

Education and attitudes toward reality show programs

Educational level of participants was transformed into the number of years of education and such a variable was used in the analyses. Pearson’s coefficient of correlation was used to examine the correlations between attitudes toward reality show programs and years of education. The results showed that there’s statistically significant correlation of all three dimensions of attitudes toward reality show programs with education of participants. The dimension Negative attitude obtains a positive correlation with years of education, while dimensions Positive attitude and Knowledge about RSP have a negative correlation with years of education (Table 6).

Table 6
Correlation of attitudes toward RSP and years of education

	Negative attitude	Positive attitude	Awareness of RSP
Level of education	.14*	-.12*	-.12*

* p<.01

Attitudes toward reality show programs and the place of residence

One-way ANOVA was used to compare participants living in cities, towns and villages in their attitudes toward RSP. The results showed that there are no significant differences between the residents of village, town, or city in attitudes toward reality show programs (Table 7).

Table 7
Differences of attitudes toward RSP depending on the place of residence

	F-test (2, 514)	P
Negative attitude	.96	.38
Positive attitude	1.35	.26
Knowledge about RSP	1.70	.18

Attitudes toward reality show programs and employment

One-way ANOVA show that there are no significant differences between those who are unemployed, students or employed on the dimensions Negative attitude and Knowledge about RSP. However, there are significant differences on the dimension Positive attitude (Table 8). Post hoc comparisons with LSD test suggested that there are significant differences between students and those who are employed ($p < .05$), with employed participants having a more positive attitude toward reality show programs (Figure 2).

Table 8
Attitudes toward RSP and employment

	F-test (2, 493)	P
Negative attitude	.88	.41
Positive attitude	4.82	.01
Knowledge about RSP	1.87	.16

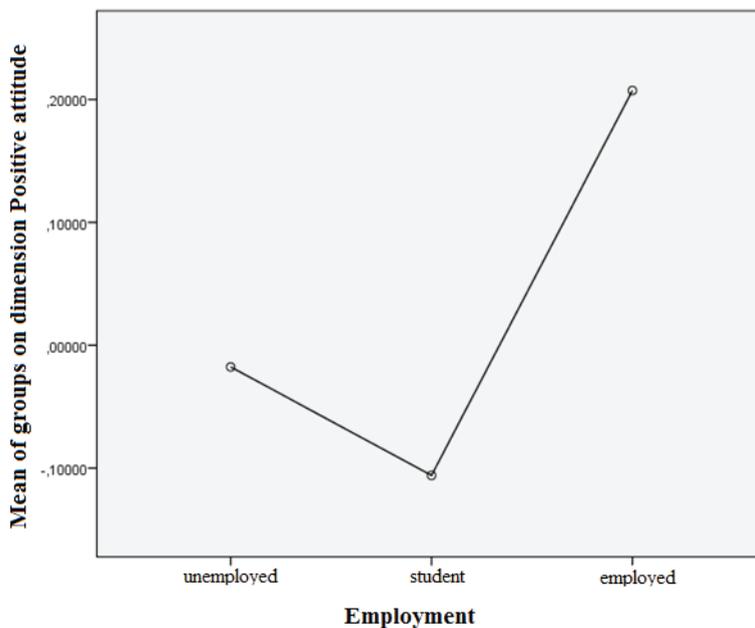


Figure 2
Differences between groups on the dimension Positive attitude toward RSP

Discussion

The large popularity of reality show programs in many countries of the world has incited researchers to examine this phenomenon. Sadly, in our country this phenomenon, although very popular, is not researched enough, so the goal of this

paper was to examine the latent structure of attitudes toward reality show programs and their relationship with sociodemographic characteristics.

The results show that the attitude toward reality show programs contains three components. The first component is Negative attitude and includes the idea that reality show programs are deeply immoral, inhumane and that they represent the worst sides of human mentality. However, it is not limited only to the negative attitude towards the idea of reality show programs, but also the negative characteristics of the contestants, as well as viewers. This component encompasses negative emotions invoked in people by this media content. Taking into consideration all the aspects of this factor, we can say that it relates to the criticism toward the entire concept of reality show programs.

The factor Positive attitude relates to the desire for participation in reality show programs, as well as admiration and some type of jealousy toward the contestants because of the fun they are having. Unlike the factor Negative attitude, this factor supports the opinion that the idea of reality show programs is creative and innovative.

The last extracted factor Knowledge about reality show programs refers to following of current events in reality show programs in the media, as well as interest in the private lives of the contestants. Additionally, this factor includes incorporating reality show programs in their own lives, as a part of a routine.

The gender differences in attitudes toward reality show programs show unusual results—men have a more positive attitude than women, who have a more negative attitude, which is inconsistent with our initial hypothesis. The results could point to the fact that men have a different view of this format, and they do not pay attention to the psychological aspects of reality show programs, so they have a more positive attitude because they are attracted to or disinhibited toward scenes of violence, vulgarity and deviant behavior in general. However, it is possible that women develop a more negative attitude because in reality show programs the participants, especially female ones, often promote immoral behavior that devalues women. Contributing to this, the fact is that the image of women is stereotyped in the media; women are depicted in many inappropriate ways and so they reflect unreal image of the world and women in it (Milivojević, 2004).

The results regarding the relationship of education and attitudes toward reality show programs are consistent with previous research (Hill, 2002.; Stojanović, 2014) and suggest that participants with high education have a more negative attitude, while those with the lower level of education have a more positive attitude and inform themselves more about reality show programs. In most cases, more educated people express more criticism, so it is more likely that they will easily comprehend the negative effect of reality show programs, not only on individuals, but also on society as well. We assumed that the participants with a lower level of education will have a more positive attitude toward reality show programs because they notice similarities with the contestants who foster certain values as they do, and they possess similar characteristics which enables them to identify with them. This assumption is supported by the results of the research of motivation for watching reality show

programs which talk about their ability to connect with the audience in, for them, important ways and the result is the identification of the viewership with the contestants of reality show programs (Ebersole and Woods, 2007).

Results have shown that the place of residence does not differentiate attitudes toward reality show programs because every socio-demographic characteristic is normally distributed between the participants from the village, the city, and the town.

We have obtained some differences between students and employees on the factor Positive attitude. Employees have a significantly more positive attitude toward reality show programs. Unlike those who are employed, students agree the least with the items which saturate the factor Positive attitude. Students, as well as highly educated people, represent the intellectual part of population and have developed critical thinking skills (Stojanović, 2014). The possible motive for employed people to have a more positive attitude toward reality show programs, which makes them watch it more, is that it is a form of entertainment, relaxation, or of 'killing' time (Ebersole and Woods, 2007; Rose and Wood, 2005).

Some limitations of the research should be pointed out. The generalizability of the results obtained in this study is limited because the sample consisted predominantly of students. The sample is also not representative in terms of gender structure, which did not reflect the gender structure of the population of this country and the region. Additionally, it is possible that some participants were not honest in reporting their attitudes because they were responding in a socially desirable manner in order to appear better than they actually are.

Making conclusions on the basis of the obtained data should be approached with caution because this questionnaire was used for the first time. In future research it would be desirable to conduct more detailed statistical analyses to check and establish psychometric properties of the questionnaire. Future research should focus on the relation between attitudes toward RSP and dimensions of personality, in order to establish how personality influences perception and consumption of media contents. In the future, it would be preferable to conduct the research on a representative sample, for the results to be generalizable on the entire population. Nevertheless, this research gave significant contribution to understanding the structure of the audience of reality show programs, which could help us determine how and to whom to adjust the education about cultural values.

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SOCIODEMOGRAFSKE DETERMINANTE STAVOVA PREMA REALITI PROGRAMIMA

Apstrakt

Osnovni cilj ovog istraživanja je utvrđivanje da li je i na koji način povezan pozitivan stav prema reality show programima sa određenim socio-demografskim karakteristikama. Takođe je ispitan sadržaj i latentna struktura stavova prema reality show programim. Uzorak čini 517 ispitanika, od čega je ženskih 381 i 136 muških, starosti u rasponu od 17 do 75 godina. Korišćen je Upitnik stavova prema reality show programima (USRSP) koji je konstruisan za potrebe ovog istraživanja. Faktorskom analizom utvrđeno je da se stavovi prema reality show programima sastoje od tri komponente: Negativanstav, Pozitivanstav i Informisanost o reality show programima. Rezultati ukazuju da postoje polne razlike u stavovima, pri čemu muškarci iskazuju pozitivniji stav. Dobijena je pozitivna korelacija između stepena obrazovanja i Negativnog stava, dok je negativna korelacija dobijena sa Pozitivnim stavom i Informisanošću. Ne postoje razlike u stavovima prema reality show programima u odnosu na mesto stanovanja. Pokazano je da zaposleni imaju najpozitivniji stav prema ovom formatu, dok ga studenti najviše kritikuju. U budućim istraživanjima predlaže se ispitivanje povezanosti stavova prema reality show programima i dimenzija ličnosti na reprezentativnom uzorku, kao i utvrđivanje osetljivih grupa koje su podložne ovoj sve većoj dehumanizaciji društva, da bi se u budućnosti znalo kako i kome prilagoditi edukaciju o kulturnim vrednostima.

Ključne reči: stavovi, reality show program, socio-demografski pokazatelji

MOTIVATION OF YOUTH IN SERBIA FOR POLITICAL DETERMINATION AND ACTION

Abstract

Interest in social events, political action and social values is not only a privilege of the elderly, as some think, but the youth can also have significant role in it. Since our country is undergoing rapid and tumultuous social change and democratic political processes, we were interested in this survey what is the motivation of young people for political determination and for political action, and what impact it has on political affiliation, and how do socio-demographic variables affect this kind of motivation. The study was conducted on a sample of 112 young people in Belgrade who are members of political parties (SNS, DS, DSS, LDP), younger than 35 years. Respondents were members of both sexes, which vary by level of education, economic status and political orientation. The study was conducted as an exploratory-descriptive study, the correlation type. Data were collected through a rating scale of motivation for political determination, which is formulated specifically for this study (SMPOD). To determine significant differences in terms of control of socio-demographic variables we used t-test and analysis of variance and principal components analysis for determining the structure of the tested subjects. Provided that the most important factors influencing the motivation for political determination among young people are: social power, socially important goals, social life, connection with the profession, an opportunity to demonstrate their abilities and recommendations from friends. It also demonstrated that the motivation of respondents with political participation is affected by gender affiliation, economic status, education level and political orientation.

Key words: young people, attitudes, motivation, political determination, political action

Introduction

Interest in social events, political beliefs and social values is not only a privilege of the elderly, as some think, because young people can also have a significant role in those phenomena. Since our country is undergoing rapid and tumultuous social changes and democratic political processes, in this research (study) we were interested in the survey of what is the motivation of young people opting for and belonging to certain political parties, and what impact on this have socio-demographic variables.

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As initial theoretical basis for explaining the motivation for the political determination and actions of young people, we took into consideration some of the famous theories of motives that are based on human needs. In psychological literature numerous theories of motives are cited, so there is a wide range of definitions of this term. For example, Madsen (Madsen, 1961) spent more than 40 years studying the work of more than 20 theorists who studied motives. In most of these works, the motives are defined as needs, but also as those aspects of personality that relate to the objectives and actions directed towards these objectives, especially when considering social motives. According to Emmons, motives “give energy to behavior, and are directed by choosing” (Emmons, 1997, p. 486). According to the large number of researchers (McClelland, 1975.; McClelland and Boyatzis, 1982.; Winter, 1987; Winter and Carlson, 1988; Winter, Hermann, Weintraub and Walker 1991.; Winter and Stewart, 1977), where the most attention was devoted to the motives, and which are called “The Big Three” in psychology, especially in political psychology are: the need for power (ie. need for influence and prestige), the need for companionship and intimacy (ie. need for close relations with others) and the need for achievement (ie. need for personal success and the realization of tasks). Thus, for example, Stewart and Winter (Winter & Stewart, 1977), while studying the motives, concluded that those who have expressed high need for power and low need for companionship were better presidents.

Lane was the firstone who pointed out the connection between human needs and political opinions (Lane, 1959, 1969). He believed that human needs are sources of political ideologies, and that they are “social parents of thoughts” (Lane, 1969, p. 24). In his explanatory model, this author used the concept of holistic needs in Maslow’s terms, considering them to be the organizational principle that mediates the development of political ideologies (Lane, 1973). He also tried to show how the method and scope of satisfying each of those needs affects the distinctive system of individual political beliefs. When a person is constantly facing difficulties to meet their basic needs (for example - for sleep, food, water), they will develop a system of political beliefs which reflect short-term, egoistic and immediate political goals, which will be instrumental to meet those needs. If the need for safety is dominant, it is leading to the formation of political ideologies and attitudes that provide strong subjugation. Similarly, deprivation of the need for belonging leads to the adoption of political beliefs that reflect the distrust of others, hostility, prejudice, introversion, isolation and autism. The need to be appreciated and respected is directly related to the level of political participation (Lane, 1973, p 112). Starting from these principles, it can be considered that a man who has met the basic needs (in Maslow’s sense), will pursue higher motives, and will act in a different way, politically, than a man who is struggling to meet their basic needs. Clearly, as it is shown above, the motivations are different for different people, so their political determination and engagement will be different too.

The idea that human needs are basis of the the adoption of certain attitudes dates even earlier, in the “functional theory” views by Daniel Katz (Katz, 1973).

Between the four functions that the attitudes have for individual adjustment function (or instrumentality thereof) Katz suggests that a number of attitudes are formed in response to objects, people or symbols that is directly relevant to meeting the needs of the individual.

Maslow's theory of personality development threw a completely new light on the question what constitutes the political content of early learning, but it is in a completely different way raised in the works that are characterized by such a theoretical orientation. This approach postulates that a child is a future member of the political society, not just a *tabula rasa* on which political phenomena systematically imprint certain values, beliefs and attitudes that are necessary for its further support to the political system. Starting from such an understanding, Knuston believes that "a citizen who matures is assimilating political teaching in accordance with non-verbal adopted political ideology, which is then an integral part of their personality" (Knuston, 1974, p.8).

Certain psychological needs (for example, the need for safety in Maslow's theory, the need for confidence in Erikson's theory, or the need for aggression in Freud's theory) are developed in early childhood and are organized in a dynamic circuit that forms the basis of an individual's personality. "Pre-political ideology" created by the idiosyncratic experiences of the child in meeting these needs and represents what is considered politically relevant preferences. The process of political learning, therefore, is by no means uniform. It is mediated through idiosyncratic needs of personality and "Pre political ideology" that a child adopts long before the formal learning process, which means that certain intrapsychic factors which are characterized by considerable stability and durability, direct the political reactions of individuals throughout the later life (Knuston, 1974, p.8).

During the process of maturation an individual assumes different roles and positions in society, the demands that society puts in front of them constantly vary, which changes the impact of various groups on the political and other beliefs. It is assumed that people in their youth are more prone to liberal beliefs, radical solutions, are open to changes, while, in contrast, older people, in accordance with different social roles, are prone to political conservatism (Knuston, 1974). Our social psychologist Mirjana Vasovic (Vasovic, 2007) assumes that in the process of aging, there are changes that make the former young generation become more like older one, so that these changes in the life cycle of the individual lead to harmonization, and to the continuity, which probably reflects the unification of political beliefs and attitudes.

Starting from the fact that our society is undergoing a process of socio-economic and political transition, including in addition the process of European integration, the question is how does this affect the political beliefs and attitudes of our population. However, unable to spread research and analyze this problem, in this study the focus of our interest is on young people in Serbia, in order to determine which are the manifested differences between them in terms of motivation for political determination and action, and what are the socio-demographic variables

associated with these differences? Research of motivation of young people for political determination and action has special significance, as more and more of them are expected to contribute to the integration process and to the changes in society. In addition, as we already pointed out in the introduction, there are different theoretical models and explanations of political motivation, which raises the question of which of these models are most suitable for explaining the motivation for the political allocation of youth in Serbia towards certain political parties, which could point to their value system and the potential willingness of political and social engagement.

Method

Sample of subjects and test procedure

Testing of the motivation for political determination and actions of young people was conducted on a sample of 112 respondents from the territory of Belgrade, who at the time of the survey were active members of certain political parties (SNS, DS, DSS, LDP). Age of respondents ranged from 18 to 35. The original intention of the researchers was to include a broad range of political parties, so that the sample used in this research would be more representative for the category of young people, and also to minimize certain specifics that could be attributed to some political parties. However, in obtaining approval for conducting this research, there were certain difficulties related to the lack of understanding and general disapproval in certain political parties, for its members to participate in the study, which resulted in the lack of willingness of certain respondents to participate in this study. Therefore, the sample size is relatively small and limited to the major parties, but it seems sufficient for preliminary research (a pilot study) and for answering the main question of research. The data were collected by researchers through the questionnaire which was answered in the premises of the parties that accepted examination.

Variables and testing techniques

In practice, political determination and action can be expressed in various ways, and for the purposes of this study it is limited to membership or belonging to certain political parties, given that our primary objective was to examine what is it that motivates young people in Serbia to become members of political parties in general, and to become more or less politically active. Motivations for one (a young man or a young woman) to join any political party can be very different, ranging from personal qualities, through role models and the ruling ideology, to social motives, values and attitudes, as pointed out in the introductory section of this paper. However, we started from the general assumption that it will be mainly dominated by personal and group instrumental motives, as well as certain ideological motives, which probably derive from the family environment, and the broader cultural value system in which the individual belongs.

Therefore, we constructed a questionnaire of motivation for political action with 18 claims, arguing that the very act of joining a political party is a primary form of political determination and future action. Questions were formulated in the form of a five-point Likert's scale, with multiple choice answers ranging from completely false to completely true. Claims in the questionnaire are related to different social values, situations, circumstances and needs as well as personal needs and preferences that could be a potential motivators for political determination and actions of young people. This questionnaire is formulated on the basis of previous research experience of various authors and existing scales in the literature which examine motivation, as well as in questionnaire of political views in the research applied by social psychologists (Kuzmanović&Petrović, 2007; 2010).

In addition to the issues related to the motivation of young people to become members of certain political parties, the questionnaire also included questions related to specific socio-demographic variables, such as gender, education and economic status of the family. All of the tested independent variables are categorical:

- Gender - male and female: 67 male and 45 female subjects,
- The education level - a lower level of education (completed elementary school or high-school) and higher levels of education (completed college or faculty)
- The economic status of the family - lower economic status of the family (the average monthly income* of family members are under 50,000 RSD) and higher economic status of the family (the average monthly income of the family members are above 50,000 RSD).
- Political affiliation - defined as membership of respondents in political parties, but the subjects are also that divided into two generally accepted categories: those who are politically oriented towards the left center (DS, LDP) and those who are politically oriented towards right center (SNS, DSS).

Leftism, the ideology of the political left; in the broadest sense, indicates advocates of different levels of social, political and economic changes aimed at creating a state of welfare (in terms of social care for individuals). This term indicates that part of the political range that is similar to the ideas and forms of socialism, social democracy and sometimes liberalism. The left usually involves secularization (in terms of separation of state and religion). Moral Left is generally not tied to tradition, nation or continuation of historical sources, but believes that society needs to change and constantly strive for better, more equitable form. Rightism, in the broadest sense, is the idea that the individual and society are obliged to comply with the law (including mostly Christian morality and tradition). The political right is a term that refers to that part of the spectrum of political thought and ideas, which is associated with conservatism, classical economic liberalism and nationalism.

* Average monthly income of family was calculated as the sum of monthly incomes of all family members, which was then divided by their number.

According to the plan, the survey had the character of non-experimental exploratory-descriptive study, using correlation. As noted above, data were collected

through the assessment scales of motivation for political determination, that we specifically formulated for this study (SMPDA– Scale of motivation for political determination and action).

For the statistical analysis we used the methods of descriptive statistics, t-test, analysis of variance and analysis of main components for determining the structure of the motives.

Results

Based on the factor analysis of the data collected by the scale of motivation for political determination and action (SMPDA), we obtained 4 main factors, whose structure is shown in Tables 1 and 2.

Table 1. Factor structure of motivation for political determination and action

Components	Initial eigenvalues		
	Total	% of Variance	Cumulative%
1	5,029	27,937	27,937
2	3,236	17,980	45,918
3	2,312	12,842	58,760
4	1,756	9,754	68,514

Table 2. Characteristic values of components

	Components			
	1	2	3	4
We want to acquire knowledge and experience	,466	,318	,240	-,396
Because of the ideology	-,275	,325	-,029	,616
In order to acquire new experiences	-,363	,554	,313	-,455
To acquire contacts with influential people	,726	,493	,308	-,213
To expand the circle of acquaintances	,699	,369	,355	-,061
Because of socializing and dating	,737	,242	,432	-,071
To change this society	-,567	,518	-,399	-,205
To change the world for the better	-,636	,496	-,197	-,141
The work in the local community	-,521	,456	,256	-,237
An opportunity to express my own capacities	-,202	,343	,383	,269
Upon the recommendation of a friend	,624	-,137	,109	,063
To gain prestige and respect	,568	,476	,147	,479
To help others who are in need	-,323	,738	-,277	-,150
To be respected	,123	,636	-,276	,400
Socially important goals	-,494	,260	,490	,350
To be popular	,522	,325	-,660	,196
To have social power	,598	,266	-,463	,099
To have an exciting life	,550	,072	-,512	-,425

Based on the data presented in the tables shown above, it can be concluded that 4 factors of motivation for political determination and action among young people are isolated, and identified as: the factor of social power (Cronbach's Alpha 0796), the factor of social activism (Cronbach's Alpha 0783), the factor of achievement (Cronbach's Alpha 0747), and the ideological factor (Cronbach's Alpha 0594). These factors are largely consistent with the motives found in the psychology of human motivation that are in general viewed as the "Big Three", particularly in political psychology. As noted in the introductory section of this paper, it is the need for power (ie. for influence and prestige), the need for companionship (ie. for companionship and intimacy, a close relationship with others) and the need for achievement (ie. success rate and the realization of tasks). In addition to these basic motifs, the ideological factor stands out, and it is the content of ideological beliefs and values that are related to the preferred political party.

When we look at the relationship between the factors obtained in our study, we observe that the factor of social power stands out as the most important factor to motivate young people for political determination and action, that is the need for power, which is isolated as the main social motive by series of researchers (McClelland, 1975 ; McClelland and Boyatzis, 1982 ; Winter 1987 and Winter ; Carlson, 1988 ; Winter, Hermann , Weintraub and Walker, 1991; Winter and Stewart, 1977). Knowing that there is the power of political parties and the political elite in our society, it is understandable that young people believe they can meet this motive and have influence on social events, or possibly the realization of personal goals, through political engagement.

Another factor obtained in our study is a factor of social activism, which is similar with the general social need for companionship and belonging. Motives related to this factor are arising from the need for social security and close relationships with others, which confirms the general view that a man is a social being, but at the same time as manifested in practice, a man is being who seeks to change his environment. The motives that are based on psychological needs for which to be achieved it is necessary to be in contact with other people and which are common to many people –are called social motives. It is likely that young people perceive that their social needs for companionship and belonging can be met through political activity, which allows them contact with other people, but also provides the possibility for them to express social activism.

The third factor is the factor of achievement, that suits the need for self-actualization, according to Maslow's general theory of motives. In its essence, this factor is related to one of the individual psychological needs ranging towards proving the achievement in front of others, and to himself, that is, it is the need to have to prove themselves worthy, through the implementation of the objectives and tasks. This need arises from the fact that man and woman are creative beings, which plan and set goals, but also actively try to achieve them. Of course, these goals can be very different, but the person takes action to change the existing reality and influence the course of events. When it comes to young people, it can be considered to be an

important feature of social activism of young people (Knutson, 1974), so they perceive the political party as an opportunity to express and satisfy their needs. It is clear that this factor does not correlate positively with the need to be known and popular, as this factor no longer reflects the aspirations for social power, but represents a human need to express our own capacity and thereby contribute to the realization of our own personality.

The fourth factor that is obtained in this study, is the ideological factor that deviates from the known model - the Big Three - because it is not mentioned as a special motive in most studies of general motivation. However, ideology as a motivation can be understood as a set of harmonized beliefs and commitments towards general issues of life, society and the world. These beliefs include a wide range of activities and influence the behavior. Ideology is often defined as system of values and attitudes of the general, important issues (Shils and Johnson, 1968). Accordingly, it could be considered that young people often accept the programs of political parties for ideological reasons, seeing in it the possibility for them to identify with leaders, the possibility for expressing their own opinions and attitudes, as well as the possibility of obtaining social support and the realization of personal and social values and goals they advocate.

When looking at the differences in the structure of motivation among respondents who belong to different political parties, when we take into account the political affiliation of respondents (Table 3), it can be observed that there are some differences in terms of motivation for political participation. The differences are not extreme, but they are statistically significant, except for the need for achievement, where there were no differences between members of the two observed groups.

Respondents who are politically oriented towards the left center (DS, LDP) declared that their political determination and actions are motivated by the desire to be famous and popular, to gain social power.

According to the general factors of motivation that we have found, we can conclude that the respondents who are politically oriented towards the left center are mostly motivated by the factor of social power, as well as the factor of achievement.

When it comes to the ideological factor as the motive for political determination and action, we can conclude that members of both groups are equally motivated by ideology and programs of their parties.

Table 3. Differences in motivation of respondents classified by political affiliation

Political party	N	M	F-test	Significance	Factors
SNS/DSS	88	2,3409	9,560	,003**	Social power: to be famous and popular
DS/LDP	24	2,8333			
SNS/DSS	88	2,5341	15,025	,000**	Social power: gaining influence in society
DS/LDP	24	2,8333			

The resulting general structure of the political motivation of young people is not independent from certain socio-demographic variables, for which we also assumed

to be associated with the motivation of young people for political determination and action. According to the results of our research it is clear that there are significant differences in the structure of motivation observed in relation to gender ($F = 27,167$; $sig = .000$, $df = 110$), economic status ($F = 17,586$; $sig = .000$, $df = 53$) and level of education of respondents ($F = 5.976$, $sig = .016$, $df = 85$).

The results of our research (Table 4) show that there are statistically significant differences between young men and young women, in terms of motivation for political determination and action, although these differences are not extreme. It can be noted that young women are opting for political determination and action because of social motives, such as the desire for contact with influential people, to expand the circle of acquaintances, to socialize, for gaining reputation and respect, to be valued and prominent in society, and for their life to be more exciting. Observed by the division of the general factors that are obtained in this study, we can conclude that female respondents are mostly motivated by factors of social power and social activism.

In contrast, male respondents mainly declared that for the political determination and action they are motivated by the ideology and program of the party. Observed through the main factors that are obtained in this study, we conclude that the male respondents are mostly motivated by ideological factor.

Table 4. Differences in motivation for political determination and action of respondents, classified by gender

Gender	N	M	F-test	Significance	Factors
M	66	3,3030	5,232	,024*	Ideology: due to the ideology and program of the party
F	46	3,1957			
M	66	3,5455	27,167	,000**	Social power: contacts with influential people
F	46	4,1087			
M	66	3,5758	15,310	,000**	Social power: expand the circle of acquaintances
F	46	4,1522			
M	66	3,6818	5,681	,019*	Social power: socializing and dating
F	46	4,0652			
M	66	2,7424	10,780	,001**	Social power: prestige and respect
F	46	3,1304			
M	66	3,1515	6,798	,010*	Social activism: to be respected and prominent in society
F	46	3,6087			
M	66	3,0455	8,207	,005*	Social power: exciting life
F	46	3,4130			

It is commonly assumed that the political determination and actions of people are influenced by their socio-economic status. Karl Marx, said that “people think the way they live,” thereby underlining the importance of the economic basis for social structure. The results of our research also showed that the respondents’ motivation for political determination and action is affected by the economic status (Table 5) expressed through the height of the average family income, on a monthly basis (up to 50,000 and above 50,000 RSD).

The results show that respondents with lower economic status (average income up to 50,000 RSD) declare that their political determination and actions are motivated by the desire to socialize, and ,in many cases, that they have become party members on the recommendation of a friend. According to the factors that are obtained in this study, we can conclude that respondents with lower economic status of are motivated by the factor of social power.

Table 5. Differences in motivation among respondents, classified by the economic status

Wages	N	M	F-test	Significance	Factors
average salary>50.000RSD	29	2,5862	17,586	,000**	Social power: recommendation of a friend
average salary<50.000RSD	83	3,3976			

The results of our study show that the respondents mostly differ in terms of motivation for political determination and action when viewed through their level of education (Table 6). Respondents who obtained higher levels of education (college or faculty) declared themselves to be motivated by a desire to change the world for the better, as well as for acquiring new knowledge. According to the factors that are obtained in this study, we can conclude that respondents with a higher level of education are mostly motivated by the factor of social activism, while participants with lower levels of education (elementary and highschool level of education) declared that their political determination and actions are motivated by the desire for social power .

Table 6. Differences in motivation for political determination and action of respondents, classified by educational level

M	Education	N	F-test	P	Factors
4,0370	college/faculty	81	4,574	,035*	Social activism: to change the world for the better
3,8387	elementary/highschool	31			
2,5062	college/faculty	81	4,712	,032*	Social power: gaining influence in society
2,8387	elementary/highschool	31			
4,2593	college/faculty	81	5,976	,016*	Social activism: the acquisition of new knowledge and experiences
3,9032	elementary/highschool	31			

Discussion

As pointed out in the introduction of this paper, it was shown that the respondents who are more educated and of better economic status declare that they have higher motives for political determination and action, that they want to change the world for the better. According to factor analysis, this would correspond to motives related to social activism and the need for achievement. Unlike respondents

with lower level of education, and those with lower economic status, who declared that they are motivated by the factor of social power, which would allow them to achieve a better status, but also to meet the more basic motives.

On the whole, the results of this research show that socio-demographic variables affect the motivation for political determination and action among young people, which is visible both in the four main factors of political motivation, and at the level of individual motives expressed through the items of our questionnaire. The resulting structure of motivation for political activism in our research is covering the area of 4 general factors - social power, the need for companionship, the need for achievement, as well as the ideological factor. The first three factors are obviously matching with motives that we discussed in the introduction of this paper: the need for power (ie. for influence and prestige), the need for companionship and intimacy (ie. for close relations with others) and the need for achievement (ie. care about personal success and the realization of tasks), which are considered the "Big Three" that best represent the motivation for social behavior. In this sense, the political activism, or preference for young people to involve themselves in politics, can be seen as instrumental social activity that is aimed at satisfying general social needs, as well as the special needs of young people regarding the ideological affiliation, social attitudes and certain socio-demographic characteristics.

It is also shown that the structure of motivation for political determination and action among young people is ambiguous, and that the connection which is obtained between motivation factors and socio-demographic variables is complex. In this sense, statistically significant differences are related to gender identity, political orientation, economic status and level of education of respondents.

As stated in the introduction of this paper, Lane had made an explanatory model that deals with the influence of human needs on the formation of political attitudes, whereby the author based this model on the concept of holistic needs in Maslow's terms, considering them the organizational principle which mediates the development of political ideologies (Lane, 1973). He also tries to show how the method and scope of satisfying each of those needs affects the distinctive system of individual political beliefs. Thus, the survey we conducted resulted showing that the respondents with lower levels of education, lower economic status, or reduced ability to access social power, are much closer to making an attempt to reach the social power and influence in society through political engagement, than it is among respondents who have a higher level of education, higher economic status, or who otherwise (through preconceived social roles eg.) already have more social power. This second group of respondents, since their need for power was satisfied before engaging into politics, move on to the next level, and declare that the main motivating factor for their political determination and action is the factor of social activism and need for achievement, which can be explained by the premises of Maslow's and Mck Cleland's theories.

Conclusion

When knowing the motives that influence the political determination and action among young people in Serbia, these informations can be used, for example, by political parties in the electional campaign, for example, if social power and social activism are main motivators for females to join a particular political party and activate within the same, then not only the political parties know how to attract a certain structure of the population (men or women, people of different education levels, different material status ..), but also on the basis of certain characteristics of the voters, such as gender or education level, one can predict, with particular certainty with which option they will identify.

One of the limitations of the research is the fact that the pattern is uneven in terms of sub-groups of respondents of the right center and those of the left center (88 right and only 24 left). Thus it is recommended for future researchers in this field to pay attention to this fact, with respect to the topic that authors have dealt with, that is very intriguing and could be an initiation to perform further similar studies in this area.

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MOTIVACIJA KOD MLADIH U SRBIJI ZA POLITIČKO OPREDELJENJE I DELOVANJE

Apstrakt

Interesovanje za društvena zbivanja, političko opredeljenje i socijalne vrednosti nije samo privilegija starijih ljudi, kako neki misle, već značajnu ulogu u tome mogu imati i mladi. Pošto naša zemlja prolazi kroz brze i burne društvene promene i demokratske političke procese, interesovalo nas je u ovom istraživanju kakva je motivacija mladih za političko opredeljenje i delovanje, i kakav uticaj na to ima politička pripadnost i socio-demografske varijable. Ispitivanje je sprovedeno na prigodnom uzorku od 112 mladih u Beogradu koji su članovi političkih stranaka (SNS, DS, DSS, LDP), mladi od 35 godina. Ispitanici su pripadnici oba pola, koji se razlikuju po nivou obrazovanja, ekonomskom statusu i političkoj orijentaciji. Istraživanje ima karakter eksplorativno-deskriptivne studije, gde su za utvrđivanje značajnosti razlika u pogledu motivacije i socio-demografskih varijabli korišćeni t-test i analiza varijanse, kao i analiza glavnih

komponenti za utvrđivanje strukture ispitivanih motiva. Podaci su prikupljeni putem skale procene motivacije za političko opredeljenje, koja je ciljano formulisana za ovo istraživanje (SMPOD). Dobijeno je da su najvažniji faktori koji utiču na motivaciju za političko opredeljenje kod mladih: društvena moć, društveno važni ciljevi, društveni život, povezanost sa profesijom, prilika da iskažu svoje sposobnosti i preporuka prijatelja. Takođe se pokazalo da na motivaciju ispitanika za političko opredeljenje utiče polna pripadnost, ekonomski status, nivo obrazovanja i političku orijentacija.

Ključne reči: mladi, stavovi, motivacija, političko opredeljenje, političkodelovanje

**EDUCATIONAL PSYCHOLOGY
AND
INDIVIDUAL DIFFERENCES**

BULLING PREVENTION AND INTERVENTION ACTION OF THE SCHOOL – RANGES AND LIMITATIONS⁴⁰

Abstract

Bullying is an important problem of existing school practice which requires timely and appropriate prevention and intervention action, because of the seriousness of the consequences it can cause. *Bullying* represents repeated aggressive behavior of physical, verbal and relational nature by individuals who have more power within the peer group and knowingly abuse their power for the sake of injuring a person who is unable to counter, while the victim did nothing to provoke bullying behavior. School, as educational institution in which children spend a significant portion of their time, provides many opportunities for prevention and intervention action aimed to reduce the incidence of bullying. We define *prevention* of bullying in school as a process by which school as an institution implements a series of measures and activities that seek to create favorable conditions for the development of all students. *Intervention* will be defined as the process by which school seeks to influence on the students who are at risk of or have already expressed bullying behavior or victimization. Starting from the perspective of the ecosystem approach to the interpretation of origin and maintenance of bullying behavior/victimization of students, we will try to point out to the possibilities of preventive and interventional influence on various social-ecological levels within the school context. Greater attention in the paper will be given to the effort to realistically examine the role that school, as only one of the contexts of social influence on the child, has in the process of prevention and intervention. We will try to highlight the realistic expectations in regard of prevention and intervention action of the school, to point out to the difficulties which can be found in school practice and the necessary conditions for successful school work in reducing bullying and victimization.

Keywords: school, bullying, prevention, intervention

Introduction

School, as an important and nevertheless irreplaceable educational institution of modern society, represents the context which can have favorable effects on students' personality development in different ways. However, despite the numerous

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opportunities that school context provides, the fact is that the process of the upbringing in school is to a certain extent neglected, i.e. the school primary focus is on students' education. In favor of that fact, most empirical data indicate bullying as a pedagogical problem that is still present among the students' population in our society (Nedimović, 2011; Polovina & Đerić, 2002; Popadić & Plut, 2007; Tomonjić et al., 2010; Trifunović, 2006).

The analysis of a significant number of definitions given by the researchers in the field shows that there is no consensus among them regarding the definition of the key components of bullying. In this paper we define bullying as *repeated aggressive behavior of physical, verbal and relational nature by individuals who have more power within the peer group and knowingly abuse their power for the sake of injuring a person who is unable to counter, while the victim did nothing to provoke bullying behavior* (Besage, 1989, according to Ma et al., 2001: 249; Greene, 2000, according to Griffin and Gross, 2004: 383; Olweus, 1998: 19).

The consequences of bullying

Research evidence indicates to the importance of bullying prevention by showing that it has numerous negative effects not only on victims, but also on bullies and bystanders, as well. Victims experience a great number of internalized psychological problems as consequences of prolonged torture, such as: *low self-esteem* (Nishina, 2004; O'Moore, 2002; Rigby, 2002, 2007; Rivers et al., 2007; Thompson et al., 2002); *depression* (Gordon Murphy, 2009; Nishina, 2004; Rigby, 2002, 2007; Rivers et al., 2007; Thompson et al., 2002); *anxiety* (Gordon Murphy, 2009; Nishina, 2004; Rigby, 2002, 2007; Rivers et al., 2007; Thompson et al., 2002); *post-traumatic stress disorder* (Rivers et al., 2007); *concentration deficit disorders* (Thompson et al., 2002); *oppositional defiant behavior* (Thompson et al., 2002); *suicidal thoughts* (Rigby, 2002, 2007; Thompson et al., 2002); *suicide* (Rigby, 2002, 2007; Rivers et al., 2007); *peer rejection* (Gordon Murphy, 2009; Nishina, 2004; Rigby, 2007); *low school achievement* (Nishina, 2004); *absenteeism* (Nishina, 2004; Rigby, 2002, 2007); *transfer to another school* (Rigby, 2007); *aversion to school* (Nishina, 2004; Rigby, 2002, 2007); *poor physical health* like headaches, abdominal pain, etc. (Rigby, 2007); *delinquency* (Finkelhor, 2008), etc. In order to protect themselves, some victims can join social groups of individuals with behavioral disorders, which can bring them to delinquency (Finkelhor, 2008).

It was found that bullies usually have a great number of problems related to their inadequate behavior, such as: *criminality* (Marsh et al., 2004; Rivers et al., 2007); *delinquency* (Gordon Murphy, 2009; Rigby, 2002, 2007); *intimate partner violence* (with them as perpetrators) (Gordon Murphy, 2009; Rivers et al., 2007); *peer rejection* (Field, 2007; Marsh et al., 2004); *low school achievement* (Field, 2007; Marsh et al., 2004); *depression* (Field, 2007; Marsh et al., 2004; Rigby, 2007); *anxiety* (Field, 2007); *substance addiction* (alcoholism, drugs, etc.) (Gordon Murphy, 2009); *absenteeism* (Field, 2007;

Rigby, 2002); *aversion to school* (Field, 2007; Rigby, 2002); *suicidal thoughts* (Field, 2007; Rigby, 2002); *poor physical health* (bully/victims) (Field, 2007; Gordon Murphy, 2009; Rigby, 2002, 2007; Rivers et al., 2007; Thompson et al., 2002), etc.

Researchers found that bullies also have *low self-esteem* (Nishina, 2004; O'Moore, 2002), especially bully/victims. Schoolchildren who are bully/victims usually have low self-esteem and much stronger feelings of inadequacy in terms of behavioral, intellectual and social status at school, physical appearance, anxiety, popularity and satisfaction than children who are not bullies (O'Moore, 2002).

Potential negative effects related to bullying may occur in *bystanders* as well (children who are not directly involved in bullying), such as negative perception of school climate, which in turn is associated with lower engagement in school (Astor et al., 2002, Dupper & Meyer-Adams, 2002, according to Nishina, 2004). Witnessing bullying in school is also associated with an increase in the daily feelings of anxiety and aversion to school (Nishina & Juvonen, 2003, according to Nishina, 2004). Thus, even when students are not directly involved in bullying they may be subjects to the negative impacts in ways that may interfere with the learning process. Schools with a high prevalence of bullying may therefore have students who are less motivated, less concentrated at school and more prone to avoiding school.

The ecosystem approach to the study of bullying

The ecological approach is a broader theoretical approach based on Bronfenbrenner's ecological systems theory. According to this theoretical approach, the social context in which individual develops consists of multiple levels of influence on the individual, levels between which there is a complex interaction and strong interdependence. Bronfenbrenner considered that there are five ecosystems within which each person develops, and they are: biosystem, microsystem, mesosystem, exosystem and macrosystem. Activities, roles and relationships with other people within the life context determine the development of the individual in a way that wider contexts (e.g. school, country, etc.) cause a change in the macrosystem of the individual, and change in macrosystem consequently leads to behavioral changes. According to this theoretical approach bullying does not happen in isolation. This phenomenon is encouraged and/or inhibited as a result of complex interactions between the individual, family, peer group, school, community and culture (Bronfenbrenner, 1997; Popadić, 2009). Considered in this way, we can see how much it is dependent on non-school influences coming from macrosystem. Therefore, understanding the interaction between the individual and the social environment in which its development takes place is of key importance for understanding social development and for the adequate explanation of the ways of development of the behavior.

Besides the individual, who makes the so called **individual level** of ecological system, we differ four key subsystems of ecological system indicating the existence of four levels of social environmental influence. Those are:

a) microsystem, which includes all those concrete conditions in which the individual lives, works and acts. It consists of a number of elements, among which the most distinguished are families, preschool institutions and schools, peer groups, neighborhood groups and all those groups with which the individual comes into direct social contacts and interactions;

b) mesosystem, which includes the interaction between the elements of the microsystem. This includes a series of formal and informal social connections and relationships which are established between families, educational institutions, neighborhood, peers, and other relevant groups in the immediate environment;

c) exosystem, which refers to a social environment that does not have a direct impact on the development of the individual, but it is in direct interactions with individual's microsystem and thereby causes changes in the microsystem components, thus indirectly influencing the development of the individual. This refers to different educational, social, economic, political, cultural, religious and other institutions, organizations, associations and clubs that operate at the local level;

d) macrosystem, which is the broadest level of social impact, that covers a wide range of value-ideological and cultural characteristics of the environment. These are the ideology, laws, norms, values, religions and customs of a culture that are being transmitted from generation to generation. Macrosystem as the widest social context, includes political, economic, social and legal system within which the elements of the microsystem, mesosystem and exosystem appear as concrete manifestations (Bronfenbrener, 1997; Bronfenbrenner & Morris, according to: Popović-Čitić, 2005; Popović-Čitić & Žunić-Pavlović, 2005). Each of these subsystems or levels of ecological system comprise a number of elements that are interacting, both within an ecological level and between different levels of ecological system.

In addition to these four levels of ecological system relating to the social environment, it is pointed to the existence of another ecosystem called **chronosystem**. It refers to the timeline in which different life events and situations come into play, that cause changes in the individual or its social surrounding. It is a cumulative experience of the individual concerning the processes, events and situations that have taken place during a specific period of time.

Bullying prevention and intervention in the school context

Bullying prevention and intervention are two interrelated and intertwined processes that should be implemented at the same time at school, the immediate and wider community (Walker & Shinn, 2002). However, when it comes to the definition of those terms, as well as the levels of prevention and intervention action it can be said that there is no consensus among the researchers in the field (see Bašić, 2009). For the purposes of our work, *prevention* of bullying at school will be understood as the process by which the school as an institution implements a series of measures and activities in order to create favorable conditions for the development of all students.

We define *intervention* as a process during which the school seeks to influence on students who are at risk of or have already expressed bullying/victimization.

Schools as educational institutions where children spend a significant portion of their time, offer many possibilities for action with regard to bullying prevention. As bullying can leave negative consequences on all students, it is of great importance that the schools seek to reduce its frequency. In doing so, there are a number of measures and activities that can be applied in the school context in order to create more optimal conditions for undisturbed implementation of educational activities and the achievement of the positive effects of such work on all students, not just those directly involved in bullying in the roles of bullies and victim. Some of the measures and activities that can be applied at different levels of influence on students in the school context are:

a) at *the level of whole school*: change of the school climate, the adoption of the school bullying prevention program, the formation of a school team for the protection of students from bullying, encouraging students to report bullying, increasing the security of the school environment, recording bullying incidences, emphasizing the importance of academic achievement, cooperation with parents, cooperation with the local community, and the like;

b) at *the classroom level*: raising students' self-esteem, the development of specific social skills in all students, teachers' direct intervention action, informing other school staff, rewarding students for positive behavior changes etc.;

c) at *the peer level*: measures and activities based on the approach of restorative justice, nonviolent conflict resolution and mediation, peer counseling, peer mentoring, peers' work as researches, work of students' teams within school, etc.;

d) at *the individual level*: writing individual reports on the situation of bullying by bullies and victims, practicing appropriate social skills, transfer of violent/victimized students to another school, cooperation with parents of bullies and victims, counseling for bullies/victims etc. (for more detail see Marković, 2017).

The preconditions of successful application of school bullying preventive and interventive measures and activities

Working on reducing bullying is a long-term, difficult and demanding job that requires genuine commitment of all relevant actors in order to achieve more significant and longer lasting results (Casebeer, 2012; Pepler, Smith & Rigby, 2004; Twemlow, Sacco & Fonagy, 2008). In addition, it is considered that bullying prevention should start very early, at preschool age, because it increases the likelihood of a better adaptation of pupils at the school environment and the possibility of achieving academic success (Walker & Shinn, 2002).

Contemporary prevailing view is that the so-called *whole school approach* represents the most effective way of combating school bullying (Field, 2007; Nishina, 2004; Rigby, 2002; Rivers et al., 2007; Thompson et al., 2002; Walker & Shinn, 2002).

This approach involves the simultaneous application of a number of preventive and intervention measures and activities at different levels of school functioning: at the whole school level, at the classroom level, peer and individual level. The whole school approach involves simultaneous focus on *school as a formal organization* (i.e. on the institutional aspects of the school) and *on school as a community* (i.e. on informal relations and networks of relationships that exist in it). This approach does not only involves the application of appropriate preventive and interventive measures (direct action to reduce bullying), but also refers to the cultivation of the culture of democracy, participation within the school (indirect action to reduce bullying).

It should be borne in mind that there is no unique set of measures and activities to reduce bullying that can be applied in all schools. Each school should assess which preventive and interventive measures best suit to the given school context. In addition, interventive measures should be individualized in each concrete case, i.e. it should be examined what happened and on the basis of the knowledge it should be decided about the measures to be applied (Casebeer, 2012; O'Moore & Minton, 2004). In most cases, only the timely and adequate response of the teacher is sufficient in order to end bullying. However, if it continues appropriate measures should be taken of those planned in school bullying prevention program adopted at the school level (Field, 2007).

The very process of planning of prevention program has three initial phases: a) assessment of readiness, mobilization and organization of the environment, b) assessment of the needs and potential of the environment, c) the choice of program options (Popović-Ćitić & Žunić-Pavlović, 2005). During the process of planning the application of a program aimed at reducing bullying, the program can be designed at institutional level (when the institution makes a decision in regard of selection of a series of measures to be implemented) or institution may opt for the application of one of the existing prevention programs. In the first case it is the creation of the program at institutional level, and in the second it is the takeover and implementation of already existing preventive and/or interventive program.

Generally, certain factors are of particular importance for the school bullying prevention and intervention. Žunić-Pavlović, Popović-Ćitić and Pavlović (2010), referring to the prevention of behavioral disorder, as key factors which determine the successful implementation of prevention programs, indicate the need for: a) a precise and clearly defined program elements, b) strong and continued support of management structures, c) adequate choice of administrator and coordinators of the program, d) awareness, motivation and experience of the program implementers, and e) staff training and ongoing technical support.

Slobodanka Gašić-Pavišić (2004) summarizes the steps for the development of a comprehensive plan to create a safe school in the following way. Such procedure should include: identifying early signs and risk factors for bullying, designing the framework plan of intervention in crisis situations, integrating respect for the law in school, the physical design of the school environment to be safe, the use of appropriate school discipline, implementation of a comprehensive prevention

program, involvement of family and community in its planning and implementation, promoting good citizenship and character education among students and school staff, and evaluation of the applied intervention.

Because of the fact that bullying is a complex phenomenon, which occurs as a result of the action of various negative factors, joint engagement of researchers and practitioners is necessary in studying of the phenomenon in the particular school circumstances, as well as in the process of the selection and application of appropriate preventive and interventive measures and activities to suit the given school context (Casebeer, 2012). Of course, teachers have a crucial role in implementing the adopted measures, from whose commitment the success of the application depends on (Olweus, 2004; Pepler et al., 2004; Popadić, 2009; Twemlow & Sacco, 2008). In order to have positive results, it is necessary to adequately and systematically monitor the effects of the implementation of certain measures and activities integrated within the school bullying prevention program (i.e. to apply formative and summative evaluation) (Smith et al., 2004).

In this regard, we cannot always expect significant results based on the short term specific prevention program or at the beginning of the application of preventive and/or intervention program and we should not give up if the results do not immediately come. Often it takes a long time at the beginning to adopt the code of conduct, to make decisions about the measures to be applied, for procedures settlement and adequate staff and pupils training. This period can be considered as a preparatory period, which is one of the reasons why it often results in modest decline of bullying. With good preparation, in the next phase we can adhere to more intensive application of the envisaged measures and activities, which can lead to the significantly better results and a greater decline of bullying over time. So, it takes a lot of time for the success of the implementation of the preventive and interventive program. Some authors consider as the optimal period of at least two years of the program implementation to be shown as effective (Ma et al., 2001), while others believe that it requires a period of about five years (Smith et al., 2005; Twemlow & Sacco, 2008).

As regards to when to start school bullying prevention action, Jones (2002) believes that with the theme of bullying and the possibility of being victimized by peers, students should be informed immediately on the first school day. Through early prevention and intervention action, it can be contributed not only to the reduction of the incidences of bullying, but also to a better school adaptation and academic achievement.

The obstacles to successful school bullying prevention and intervention action

It is clear that the school work on bullying reduction is not an easy and short-term process. During this process a number of obstacles and difficulties may be encountered that should be overcome. Generally, there are three types of schools: a) those that deny the existence of the problem, b) those that are supposedly trying to

stop bullying (through the adoption of a code of conduct which is not subsequently consistently applied and is not eventually revised), and c) those that are really trying to reduce bylling (Field, 2007). It is necessary to raise the awareness and critically review the situation in a particular school if we want to achieve positive results in the work on reducing bullying. Obstacles to successful school bullying prevention and intervention action can occur at each of the ecological levels (individual, school, peer, family and community level). Therefore, their detection is a necessary step in order to improve the schools action in this regard (Vernberg & Gamm, 2003).

As one of the obstacles, the school staff can develop *resistance towards the implementation of the proposed preventive and interventive measures and activities* (Thompson et al., 2002 Vernberg & Gamm, 2003), which can be primarily prevented through their involvement in the decision-making process on the implementation of appropriate measures at the school level. This includes open discussion of individual resistance to changes (Thompson et al., 2002). In most schools, there are individual members of the school staff who think of preventive and intervention measures and activities as unnecessary, ineffective or even harmful. Therefore, we should be working on changing that attitude, if significant results are to be achieved (Vernberg & Gamm, 2003).

In addition, empirical findings show that a large number of comprehensive, whole school initiatives are *not fully implemented*, resulting in their reduced efficacy (Salmivalli et al., 2005; Vernberg & Gamm, 2003).

Another obstacle that may occur is *principal's too narrow understanding of the school roles*. If principal believes that the school is only responsible for education and that bullying is something others should deal with, he or she is likely to express resistance towards the implementation of the preventive and interventive measures and activities (Vernberg & Gamm, 2003). Also, the *lack of a common vision of the school roles within the school staff and the principal* may be an obstacle to the successful implementation of preventive and interventive measures and activities. Even if among the school staff exists an agreement that the school is obliged to take into account students safety, there may be disagreement among individuals regarding the importance of the school role in the process, regarding what measures should be adopted and how to apply them. For example, some members of the school staff may believe that it is necessary to apply strong measures of punishment for the expression of direct aggression, while others can strive for a more comprehensive approach based on the determination of risk factors and the provision of support rather than punishment. It can be contributed to the change of such a situation by the presence, enthusiasm and support of influential person within the school, which will take the leadership in encouraging and organizing the implementation of the adopted measures. This role should be taken by the principal or any other member of the school staff (with the approval and assistance of the principal in the process of implementation) (Twemlow & Sacco, 2008; Twemlow, Sacco & Fonagy, 2008; Vernberg & Gamm, 2003).

Starting from a psychoanalytical point of view, based on years of experience in working to reduce bullying in schools Twemlow and Sacco (2008) indicate the

following *false beliefs* that can be an obstacle to an attempt to introduce a preventive and interventive measures and activities: 1) the belief that concrete school is too good or too bad, 2) the belief that reducing bullying is something that only the school should address, 3) the application of zero tolerance policy towards bullying, 4) the belief that bullying is not present in smaller schools, 5) the belief that today's children do not differ from adults when they were at their age, 6) the belief that it is sufficient to apply only the measures aimed at bullies to decrease bullying, 7) the belief that successful prevention and intervention require investment of a large sum of money, 8) the belief that there is no bullying in the school on the basis of the low prevalence of physical bullying, 9) the belief that bullying is a normal companion of childhood and adulthood, 10) the belief that concentrating exclusively on children with behavioral problems will lead to the improvement of the school climate, 11) the belief that bullying can be easily and quickly reduced, 12) the belief that one program may correspond all schools, 13) the believe that bullying can be completely eliminated.

Certainly, *limited school resources* in terms of personnel, time, material resources, etc. which represent part of the necessary conditions of successful implementation of preventive and interventive measures and programs, may also represent an obstacle (Colvin et al., 1998; Pepler et al., 2004; Twemlow & Sacco, 2008; Vernberg & Gamm, 2003). Therefore, when deciding on the application of certain interventive and preventive measures and activities the existing resources must be taken into the account. While implementation of some measures may require considerable time, others can be integrated into everyday school routine, and their implementation will require less effort and take less time. We must choose the measures that could be integrated into existing educational and training goals and existing programs so that their implementation would be simpler and less demanding. If school staff can manage to integrate the preventive and interventive measures and activities into the existing programs and/or educational work they will not require additional resources, nor more time (Colvin et al., 1998; Vernberg & Gamm, 2003).

Status hierarchy may occur as another obstacle at the school level (Nishina, 2004; Twemlow & Sacco, 2008; Twemlow, Sacco & Fonagy, 2008). This does not mean that there should be no status hierarchy at the school level. On the contrary, the existence of such a hierarchy and its understanding can provide a sense of order and security to the students. Excessive and unjust differences in statuses in the hierarchy, as well as the abuse of power by those who occupy a higher social status may represent a problem. Before implementing programs against bullying, it should be examined whether there is an abuse of power within school in the form of bullying behavior of people at different hierarchical levels (principal, teachers, students, parents at the family level, parents towards school staff) and whether the presence of bullying is being ignored by the bystanders (directors, teachers, students and parents at the family level), as these conditions are necessary for the success of any program (Twemlow, Sacco & Fonagy, 2008).

Explaining the hierarchy of statuses within peer group, Twemlow and Sacco (2008) indicate that there is a constant, almost daily struggle for power in which

students alternate with each other in the roles of *victim, bully and bystanders*. Authors consider such a process as normal part of everyday “psychopathology” of life. The problem arises when school roles become fixed and long-term. Therefore, they believe that it is of great importance for normal coexistence to teach students how to cope adequately with the process of the daily struggle for power.

Rigby (2007) indicates to the following as *the obstacles for the effective school work to help victims of bullying*: a) the consideration of victim’s personality traits as something permanent and unchangeable, b) it is easier to identify persistently victimized boys than girls, c) it is necessary to invest a lot of time and effort to bring about the changes in the victim.

In addition, *the label of bully or victim is very difficult to change* both among peers and among school staff, despite the changes that may have occurred in the behavior and status. If school staff does not stop perceiving certain students as bullies or victims, despite positive changes in their behavior, it is very difficult to change this attitude among students. Children whose behavioral changes do not meet with the recognition and approval are at the risk of continuance of manifestation of inadequate behavior, which is why these students should be given adequate reinforcement and support in an effort to behave more prosocially (Vernberg & Gamm, 2003).

Conclusion

School has numerous opportunities that can have preventive and interventive character. Certainly, for the preventive and interventive measures to give good results, it is necessary to have *changes at the community level*, in terms of changes in the value system that fosters bullying. Without changes at that level, we cannot expect a significant reduction in bullying, because the social values that are either explicitly or implicitly affirming bullying undermine the preventive and interventive efforts of schools and reduce the possibility of achieving the long-term success in this direction. In addition, the social norms that promote competitiveness, egoism and individualism, also affect the harder operationalization of socio-ecological perspective in bullying prevention. This includes viewing bullying as a normal occurrence on the path of growing up with which every individual should learn to cope independently (Vernberg & Gamm, 2003).

For the success of such an action, it is necessary to have long-lasting and genuine commitment of all relevant actors – principal, counselors, teachers, students, parents and society as a whole. In addition, it is necessary to apply preventive and intervention measures and activities *at all levels of influence on the individual at the same time*: at school level, at class level, at peer level and at the individual level, with changes, inclusion and coordinated action of families, local communities and society as a whole. Some difficulties may occur in this process that need to be objectively assessed and with joint efforts overcome. Only then we can expect positive and long-term effects of the prevention and intervention action on all these levels.

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Marija Marković

PREVENCIJA NASILJA I INTERVENCIJE U ŠKOLI – DOMETI I OGRANIČENJA

Apstrakt

Vršnjačko nasilje predstavlja važan problem postojeće školske prakse, koji zbog ozbiljnosti posledica koje može da izazove zahteva pravovremeno i adekvatno preventivno i interventno delovanje. Pod *vršnjačkim nasiljem* podrazumevamo ponovljeno agresivno ponašanje fizičke, verbalne i relacione prirode od strane pojedinaca koji imaju veću moć u okviru vršnjačke grupe i svesno zlopotrebljavaju svoju moć zarad povređivanja osobe koja je nemoćna da se suprotstavi, pri čemu žrtva ničim nije izazvala takvo ponašanje nasilnika. Škola, kao vaspitno-obrazovna institucija u kojoj deca provode značajniji deo svog vremena, pruža brojne mogućnosti za preventivno i interventno delovanje u pogledu smanjenja učestalosti vršnjačkog nasilja. Pod *prevencijom* vršnjačkog nasilja u školi podrazumevaćemo proces tokom kojeg se u školi kao instituciji realizuje niz mera i aktivnosti kojima se stvaraju povoljniji uslovi za razvoj svih učenika. *Intervenciju* ćemo definisati kao proces tokom koga se nastoji delovati na učenike koji su u riziku ili su već ispoljili nasilničko ponašanje/viktimizaciju. Polazeći od ekosistemskog pristupa u pogledu tumačenja nastanka i održavanja nasilničkog ponašanja učenika, nastojaćemo da ukažemo na mogućnosti preventivnog i interventnog delovanja na različitim socioekološkim nivoima u okviru školskog konteksta. Veća pažnja u radu biće posvećena nastojanju da se realno sagleda uloga koju škola, kao samo jedan od činilaca socijalnog delovanja na dete, ima u procesu prevencije i intervencije. Nastojaćemo da ukažemo na teškoće na koje se u školskoj praksi može naići i da istaknemo neophodne preduslove uspešnog delovanja škole u pravcu smanjenja vršnjačkog nasilja.

Ključne reči: škola, vršnjačko nasilje, prevencija, intervencija

THE LINK BETWEEN PERSONALITY TRAITS AND THE READINESS TO CHANGE OF EMPLOYEES IN PRIMARY SCHOOLS

Abstract

Acceptance of the need for change and individual readiness to change represent one of the factors of professional success of employees in education. The aim of the research is to determine the predictive impact of personality dimensions, measured by BFI questionnaire on readiness to change of employees in primary education, which is measured by an adapted form of the Resistance to Change Scale. Factor analysis defined three subscales: resistance to the search for new solutions, resistance to change of the current status and resistance to the challenges. Nominal variables: gender, workplace and work experience were included, too. The sample consisted of 350 classroom teachers, subject teachers and principals of primary schools in the city of Loznica (70% females). It was found that the nominal variables explain a small amount of variance of resistance to change, and represent a significant predictor of the subscale of resistance to the search for new solutions and resistance to change of the current status. Personality dimensions were significant predictors of resistance to change on all three subscales and explain between 13% to 20% of the variance in different subscale. The research results show significant predictive influence of personality dimensions on the readiness to change and may be useful in the selection process of human resources in primary education and in the choice of methods to motivate existing staff to accept changes.

Key words: personality traits, readiness to change, motivation of employees, primary education

Introduction

Readiness to change, understood as a *psychological disposition*, requires understanding of relevant factors that determine its development, namely: 1. genetic potential for activation response (hereditary tendencies, such as the quest for novelty and avoidance of monotony, then, avoiding damage and dependence of

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awards); 2. the impact of will, motives to achieve change; 3. the existence of positive emotions toward change; 4. positive attitude to change; 5. behaviour necessary for the implementation of changes (Grubić- Nešić, 2005).

Readiness to change, as well as other behaviors in the organization, should be seen as a function of *personal characteristics and an organizational environment* (Grubić- Nešić, 2005). Thus, each system, in order to reach successful operation, due to results of being familiar with personality traits of its members and working conditions, creates a strategy of organizational behavior of employees (ways of communication, job satisfaction, and openness to change). Each person possesses a specific set of personality traits as a permanent and stable characteristics by which it is possible to relatively successfully predict the behavior of individuals in a social group or business organization (Vujić, 2009). *The personality traits* of an individual, ready for the idea and implementation of the changes are originality, independence, intellectual efficiency, curiosity, creativity etc. Such people are convinced that the changes improve the situation. They tend to accept technological innovations and new means that make the job easier, they do not avoid complex situations, but seek a way out of them, they are good planners and creators of visions and have a global approach to problem solving (Kaprara i Červone, 2003).

Implementing changes in the organization covers all aspects of the personality of the employee: *the will*, which moves on creativity and innovation; *knowledge* - the knowledge of their work necessary to create new ideas, as well as positive *emotions* towards work and the organization, which influences innovative people to be persistent in achieving goals despite obstacles and setbacks experienced as a result of external locus of control that can be changed. A person ready to implement innovations is motivated by internal motivation and has "host-like" attitude to the organization and work (awareness about the subject, purpose and outcome of the work, while maintaining positive emotions).

The introduction of personal and organizational changes represents a difficult project that involves overcoming numerous ways of resistance (Đurišić- Bojanović, 2007; Ford et al., 1988; Oreg, 2003; Piderit, 2000). Changes in a person can cause many emotional reactions: fear, anger, anxiety, threat, whereas valence or value a person attaches to change is very important for the intensity of emotions. If the change is observed as insignificant, it may be ignored and neglected, and if the change is significant to the individual, if the individual sees the positive aspects of change, emotions of fear or anger may still occur, because previously adopted values should be abandoned and the individual needs to identify him/herself with the new ones. *Emotional intelligence* (Goleman, 2000), especially empathy, is positively associated with the acceptance and implementation of changes.

According to Judge et al. (1999), people-oriented research in organizational change explored issues of leadership, without considering the psychological traits or predispositions of individuals experiencing the change, which are equally crucial for its success. They argued that individual difference variables, such as locus of control, positive affectivity, openness to experience and tolerance for ambiguity play an

important role in employees' work attitudes, as well as predicting self and supervisory assessments of coping with change. King and Anderson (1995) also indicated the role of individual differences as responsible for high levels of negative attitudes and resistance to change. Rothstein and Goffin (2006) suggested that a few meta-analytic studies have clearly demonstrated that a number of personality dispositions, such as those expressed by the widely used taxonomy of the Five-Factor of personality, may contribute to the successful prediction of job performance criteria. However, it is remarkable that we identified only a few studies exploring the role of personality dispositions and personality assessment for personnel selection as applied in organizational change settings. The literature on the aspects of personality traits and readiness for change seems to be sparse (Saksvik & Hetland, 2009). McCrae and Costa (1997) indicated a positive relationship between Openness to Experience and utilization of effective coping mechanisms in order to deal with stressful events in life and to effective coping and adjustment. Similar findings were obtained by Vakola et al. (2004) who also identified that attitudes to change were positively associated with Openness to Experience. According to Saksvik and Hetland (2009), the only other study on personality traits and response to change was the 2003 study by Oreg, which anticipated a cognitive, affective, and behavioral response to change. While the Oreg (2003) and Saksvik and Hetland (2009) studies confirmed a relationship between personality traits and disposition to respond to change, a recent study by Omazic et al. (2011) explored the relationship between personality traits and readiness for change and did not find a relationship between personality traits and readiness for organizational change, which is not a finding that is consonant with extant literature on personality traits and behavior.

The success of the outcome of the change depends on the *emotional abilities* of the organization, where the organization needs to develop the ability to identify, understand and accept the emotions of employees, which occur during changes. A demonstration of care and concern creates a relationship of trust, commitment and dedication to the organization. Employee, therefore, defends the reputation and name of the organization and outside the operating limits, indicating a high level of employee identification with the new contents of organizational culture. Organizations that apply alexithymia in organizational life deny the emotionality in the workplace: they deny and neglect emotions of employees, keep them under control through fear, guilt or shame, which prevents the acquisition of new knowledge and creativity, which are necessary in the implementation of changes and at the same time they form a *passive approach* to the reality due to long-term inhibitions, failed expectations and fear of life.

Readiness to change must be distinguished from the *possibility of change*, which is a function of the environment, economic, cultural or technical conditions that contribute to the realization of changes, as well as the *readiness to implement changes*, which is a function of *personality traits*. Readiness to change may be formed depending on the features and capabilities to implement changes or it may be a driving force that creates new opportunities and develops new skills.

In the study of readiness to change and resistance to change, there is the difference between the *symptoms* of resistance to change and the *causes* of the resistance, which brings us to indicators of active (error detection, ridicule, fear, manipulation) and passive resistance (verbal agreement but not the true support, obstruction and retention of information).

According to James O'Toole (O'Toole, 1995), the nature of the readiness / resistance to change is associated with human nature, which primarily strives to reach homeostasis and could be presented by the model of a continuum, where the acceptance of change (commitments) is at one end and resistance to change is at the opposite one. The factors of *emotions* lies between, and therefore the evolution and direction of resistance, as well as the influence on its reduction, cannot always be predicted.

Researches of readiness to change in our region, mainly focused on profit organizations (Šapić i sar., 2009, Grubić-Nešić i Čubrilo, 2010), indicate that organizations face numerous *resistance* to change; resistance is behavior that aims to protect the individual from the effects of real and imaginary change, preserving the status quo, despite the pressures for change and fear of change. Strong organizational culture contributes to faster implementation of change, especially if it is the culture that has already incorporated readiness to change in values it cherishes.

Researches of readiness to change in education are rare. Acceptance of the need for change, as well as individual readiness for change has been identified as a factor of professional success of employees (Pavlović, 2012). Đurišić-Bojanović (2007) believes that change management and knowledge become highly important social strategies, and readiness to change, flexible use of knowledge and creativity represent the most important competencies of people in modern organizations. She examines the quality of the current educational system and its possibilities for updating the pluralistic approach to education, which influences the teaching strategy, whose implementation can contribute to the development of young people who will be able to respond to the demands of labor and wider social environment. Certain pedagogic strategies could be derived from a pluralistic approach to education which is recommended by the author: the study of educational topics from the perspective of different sciences and domains of human activity, the use of interactive and cooperative teaching methods, teaching context that develops and supports creativity and cognitive flexibility which are key elements in creating an open, stimulating learning environment, in which the questioning and confrontation of different ideas create the most stimulating intellectual climate. In order to incorporate described strategies into the educational system, it is essential that the immediate stakeholders (teachers and leaders in education) develop readiness to change and openness to continuous professional development within the concept of lifelong learning. Insight into the extent to which employees in education, are willing to work on their professional development, declaratively and operationally, is important in order to improve their operating efficiency and effectiveness, as well as the quality of students' knowledge (Katrina-Mitrović i Nikolić, 2015). In the study of the readiness to change of employees in

primary education (teachers and principals) Katrina-Mitrović and Nikolić (2015) have found that employees generally have a medium level of readiness to change. By focussing on the results of realized research, the authors conclude that the employees in primary education are prepared to accept the challenges, examine and improve their own practice, new methods of work and harmonize their functioning with the settings of a modern educational system.

The aim of this paper is to define the connection between dimensions of personality and the readiness to change of employees in primary education. Defined aim is based on a part of the formula proposed by Grubić-Nešić (2005), according to which the readiness to change should be seen as a function of the personality traits of the individual. In addition, researches on connection between personality traits and the readiness to change have not been implemented in the educational context in our country. It was presumed that certain personality traits would constitute significant predictors of readiness to change.

Sample and procedure

The sample consisted of 350 employees in several primary schools in the town of Loznica (11.1% of principal and their assistants, 59.1% of subject teachers and 29.7% of classroom teachers). Examinees were divided into three categories by length of working experience - 23.4% of employees have up to 10 years of working experience, 30% of employees have from 10 to 20 years of working experience and 46.6% employees have more than 20 years of working experience. Because of the traditional preference of female population to teaching profession, the sample consisted of 70% of female examinees. Employees filled out the questionnaire in the school building, during the break, with secured anonymity.

Instruments

Resistance to change scale - is an adapted form of the scale that was used in the study of readiness to change of employees in four business organizations in Vojvodina (Grubić - Nešić, 2005). Linguistic corrections were applied in several items and they were adapted to the school context. The questionnaire contains 20 statements in the form of a five-point Likert scale, and the answers are allocated from “strongly agree” to “strongly disagree”. Reliability of the scale in our sample was satisfactory ($\alpha = .84$). Original version of the scale observed readiness for change as a single dimension (summative scale), whereas we applied factor analysis with Varimax rotation in our research. After more proven solutions (unifactor, two-factor) the three factors that explain 43% of variance are retained. The first factor is called resistance to the search for new solutions and it is defined by seven items, such as: *I like to question new ideas and new approaches to the problem* (it is scored conversely). Another factor, which is

also defined by seven items, is called the resistance to change of the current status (*In order to avoid the risk of failure nothing should be changed in school; It is better to keep things as they are*-it is scored conversely). The third factor, called the resistance to the challenges, is defined based on four items, such as: *I like to work on the problems that others considered to be a problem* (it is scored conversely). In this way, the three subscales of resistance to change were defined, and adding the value of the items of all three subscales derived variable of resistance to change in education. A higher score on a scale defines a higher degree of resistance to change (and conversely, a lower level of readiness to change).

The Big Five Inventory BFI (John et al., 2008) is a five-point Likert scale with which personalty traits of Big Five model are operationalized. The scale consists of 44 statements, and examinees should determine the level of agreement with each statement on a continuum from “*strongly disagree*” to “*strongly agree*”. Factorization of items in our sample isolated five subscales, as well as in many previous studies: openness to experience, neuroticism, conscientiousness, extraversion, agreeableness. Reliability of the scale is satisfactory ($\alpha=.78$).

Results

Predictors of resistance to the search for new solutions

In order to determine the predictive impact of nominal variables: gender, workplace, length of working experience, as well as of the personality traits on the resistance to the search for new solutions, we applied a hierarchical multiple regression analysis. The first set consisted of nominal variables and the second set consisted of personality traits, i.e. scores on each of the five subscales obtained by factorization. Table 1 shows the entire model whose total percentage of explanation of variance is 23.9%. Nominal variables explain only 3.1% of the variance, while the model which includes these variables and personality dimensions explain 23.9%.

Table 1. *Explained variance of the entire model*

Model	R	R ²	Adjusted R ²	Std. Error of the Estimate
1	.177	.031	.023	3.96869
2	.489	.239	.222	3.54224

Note: 1-gender, workplace, length of work experience; 2-gender workplace, length of work experience, openness to experience, neuroticism, conscientiousness, extraversion, agreeableness.

Results in Table 2 indicate that both models are statistically significant: $F = 3.720$, $df = 3$; $p = .012$, for the first set of variables, and $F = 13.416$, $df = 8$, $p = .000$, for the second set of variables.

Table 2. *Assessment of the significance of the model*

Model		Sum of Squares	Df	Mean Square	F	p
1	Regression	175.754	3	58.585	3.720	.012a
	Residual	5449.663	346	15.750		
	Total	5625.417	349			
2	Regression	1346.731	8	168.341	13.416	.000b
	Residual	4278.686	341	12.547		
	Total	5625.417	349			

Partial contributions of predictors are shown in Table 3.

Table 3. *Partial contribution of predictors on the resistance to the search for new solutions*

Model	Unstandardized Coefficients		Standardized Coefficients	t	p
	B	Std. Error	β		
Gender	-1.343	.467	-.153	-2.873	.004
Workplace	.535	.349	.082	1.535	.126
Length of work experience	.237	.265	.047	.892	.373
Gender	-.979	.422	-.112	-2.319	.021
Workplace	.769	.323	.117	2.379	.018
Length of work experience	.063	.241	.013	.263	.793
Openness to experience	-.326	.057	-.387	-5.708	.000
Neuroticism	.136	.051	.146	2.687	.008
Conscientiousness	-.182	.067	-.187	-2.739	.006
Extraversion	.107	.091	.057	1.168	.244
Agreeableness	.059	.057	.054	1.027	.305

In the first step regression analysis showed a significant influence of gender on the resistance to the search for new solutions ($\beta = -.153$, $p = .004$), whereas primary school teachers and male teachers showed higher level of resistance. . When the personality traits are introduced, influence of gender variable is still significant ($\beta = -.112$, $p = .021$), and there is also a significant predictive influence of the workplace (.117, $p = .018$). When it comes to personality traits, we observed significant predictive influence of openness to experience ($\beta = -.387$, $p = .000$), neuroticism ($\beta = .146$, $p = .008$), and conscientiousness ($\beta = -.187$, $p = .006$). Smaller openness to experience and conscientiousness, and higher degree of neuroticism indicate greater resistance to the search for new solutions.

Predictors of resistance to change of the current status

The same procedure is applied to the second isolated factor - resistance to the change of the current status. Results in Table 4 show that the overall model explains 18.5% of variance. Nominal variables explain 5.1% of the variance, while the model including nominal variables and personality dimensions explains 18.5%.

Table 4. *Explained variance of the entire model*

Model	R	R ²	Adjusted R ²	Std. Error of the Estimate
1	.226	.051	.043	4.66907
2	.430	.185	.166	4.35968

Note: 1-gender, workplace, length of work experience; 2- gender workplace, length of work experience, openness to experience, neuroticism, conscientiousness, extraversion, agreeableness

Both models are statistically significant: $F = 6.223$, $df = 3$, $p = .000$, for the first set of categorical variables, and $F = 9.658$, $df = 8$, $p = .000$, for personality dimension variables. The results are shown in Table 5.

Table 5. *Assessment of the significance of the model*

Model		Sum of Squares	df	Mean Square	F	p
1	Regression	406.991	3	135.664	6.223	.000a
	Residual	7542.883	346	21.800		
	Total	7949.874	349			
2	Regression	1468.539	8	183.567	9.658	.000b
	Residual	6481.335	341	19.007		
	Total	7949.874	349			

Partial contributions of both sets of predictors are shown in Table 6.

Table 6. *Partial contributions of predictors on the resistance to change of the current status*

Model	Unstandardized Standardized Coefficients		Coefficient β	t	p
	B	Std. Error			
Gender	-1.720	.550	-.165	-3.128	.002
Workplace	1.326	.410	.170	3.233	.001
Length of work experience	.062	.312	.010	.199	.842
Gender	-1.679	.520	-.161	-3.231	.001
Workplace	1.109	.398	.142	2.788	.006
Length of work experience	-.192	.297	-.032	-.649	.517
Openess to experience	-.188	.070	-.188	-2.671	.008
Neuroticism	-.016	.062	-.014	-.251	.802
Conscientiousness	.174	.082	.149	2.120	.035
Extraversion	-.378	.113	-.170	-3.353	.001
Agreeableness	-.382	.071	-.294	-5.402	.000

Nominal variables - gender and the workplace have a significant predictive influence on the resistance to change of the current status ($\beta = -.165$, $p = .002$; ($\beta =$

.170, $p = .001$). Male teachers show a higher resistance to the change of current status. In terms of workplace there are significant differences between the three groups - principals, subject teachers and classroom teachers ($F = 2.350 = 4.801$, $df = 2$, $p = .009$). Tukey HSD post hoc test showed that principals show a significantly lower resistance to the change of current status in comparison to subject teachers ($p = .05$) and classroom teachers ($p = .009$), whereas there were no statistically significant differences between subject teachers and classroom teachers of lower grades ($p = .391$). When personality dimension variables were included in the model, gender and workplace variables remained a significant impact on the criterion variable. The following dimensions had a significant predictive influence: openness to experience ($\beta = -.188$, $p = .008$), conscientiousness ($\beta = .149$, $p = .035$), extroversion ($\beta = -.170$, $p = .001$) and agreeableness ($\beta = -.294$, $p = .000$) in the following direction: the lower openness to experience, extraversion and agreeableness are, whereas conscientiousness is higher, the resistance to the change of the current status is greater.

Predictors of resistance to challenges

The predictive impact of the nominal variables and of personality dimensions is determined in relation to the third factor, called the resistance to the challenges. Results of hierarchical regression analysis (Table 7) show that the total explained variance of the entire model is 14.8%. Nominal variables explain only 1.7% of the variance.

Table 7. *Explained variance of the entire model*

Model	R	R ²	Adjusted R ²	Std. Error of the Estimate
1	.129	.017	.008	2.89662
2	.385	.148	.128	2.71526

Note: 1- gender, workplace, length of work experience; 2- gender workplace, length of work experience, openness to experience, neuroticism, conscientiousness, extraversion, agreeableness

The results in Table 8 suggest that the predictive influence of nominal variables on the resistance to challenges was not statistically significant ($F = 1.948$; $p = .122$), while the predictive influence of the second set of variables – including both nominal variables and personality dimensions, is significant ($F = 7.427$; $p = .000$).

Table 8. *Assessment of the significance of the model*

Model		Sum of Squares	Df	Mean Square	F	p
1	Regression	49.033	3	16.344	1.948	.122a
	Residual	2903.084	346	8.390		
	Total	2952.117	349			
2	Regression	438.045	8	54.756	7.427	.000b
	Residual	2514.072	341	7.373		
	Total	2952.117	349			

Partial contributions of predictor variables are shown in Table 9.

Table 9. *Partial contributions of predictors on the resistance to the challenges*

Model	Unstandardized		Coefficients	t	P
	Standardized Coefficients	Std. Error			
	B		β		
Gender	-.413	.341	-.065	-1.211	.227
Workplace	.128	.254	.027	.504	.614
Length of work experience	.375	.194	.104	1.940	.053
Gender	-.218	.324	-.034	-.672	.502
Workplace	.178	.248	.038	.719	.473
Length of work experience	.279	.185	.077	1.508	.132
Openness to experience	-.102	.044	-.167	-2.329	.020
Neuroticism	.148	.039	.219	3.815	.000
Conscientiousness	-.171	.051	-.241	-3.349	.001
Extraversion	-.155	.070	-.115	2.215	.027
Agreeableness	-.047	.044	-.060	-1.077	.282

Personality dimensions that achieve significant predictive contribution to the resistance to the challenges are: openness to experience ($\beta = -.167$, $p = .020$), neuroticism ($\beta = .219$, $p = .000$), conscientiousness ($\beta = -.241$; $p = .001$) and extroversion ($\beta = .155$, $p = .027$). Lower openness to experience, conscientiousness and extroversion contribute to greater resistance to the challenges. On the other hand higher neuroticism also provides greater resistance to the challenges.

Discussion

Having considered the research goals - estimating relations between personality traits of employees in primary education and the readiness to change, it can be said that the working hypothesis has been confirmed. Personality dimensions showed significant predictive influence on all three scales of resistance to change ($p < .001$). 13% to 20% of the variance of the readiness to change is explained by the measures of personality traits of teachers, which represents the influence of moderate intensity (Cohen, 1992). On the other hand, the nominal variables generate significant predictive effect on the scale of resistance to the search for new solutions and resistance to change of the current status. Despite the fact that defined effects are of low intensity since they explain only 1.7% to 5.1% of the variance of resistance to changes/readiness to change (Cohen, 1992), it is important to emphasize that higher resistance to the search for new solutions and change of the current status is identified with male teachers. Although because of the gender asymmetry of the sample these findings should be interpreted with caution, it is important to pay attention to male teachers and try to identify some of the mechanisms that represent the basis of their

resistance to change. The finding which showed that principals showed greater readiness to change the current status in comparison to teachers, is useful, too. As a part of the changes in education that necessarily arise from a number of personal and social factors, and can be placed in the context of lifelong learning, it is important to include principals in the process of permanent education based on innovations. Their readiness to change the current status should be reflected upon other employees, through various elements of the organizational culture.

The analysis of the relation between personality traits and strength of resistance to change showed that the conventional types of people (closed to the experience, who have narrow intellectual focus, who are not necessarily authoritarian, who prefer familiar environment) express stronger resistance to change. On the contrary, employees who are open to experience, have broader interest and curious mind, discuss new approaches to the problem, evaluate emotions and are prone to introspection, are also more willing to change and do not show resistance, at none of the three factors of the applied scale. The results are compatible with findings presented by Judge et al., (1999) and Vakola et al. (2004), that a positive attitude to changes is positively related to openness to experience. If we consider the interpretation suggested by Judge et al (1999), and McCrae and Costa (1997) that there is a positive correlation between openness to changes and effective mechanisms for coping with stress and ability to adapt, it is recommended that stress coping mechanisms should be taken into account in future studies that would focus on investigation of connection between personality traits and readiness for change. Employees who are more prone to experiencing negative and disturbing emotions (high neuroticism), show stronger resistance in the quest to new solutions and new challenges, while more flexible people, on the contrary, are more willing to accept new solutions and challenges. Conscientious, ambitious, hard working and well organized teachers are more likely to search for new solutions and challenges, but more resistant to changing the current status. Plausible explanation could be in the fact that conscientious and ambitious employees in our test sample have already achieved appropriate and important goals, and they do not have a need to change the current status. It is also possible that these personality types prefer familiar environment, without a lot of changes, in which they can express their characteristics and improve their practices. Employees who are prone to positive emotions, who are assertive and enjoy social contacts, are more willing to change the current status, as well as employees who are friendly and cooperative. A higher level of extraversion is connected with the readiness to challenges.

The realization of such research in the field of primary education is significant in terms of creating practices in human resource management and their selection, as well as in fostering motivation and strengthening of employees' will to adopt new models and principles of work in the classroom and encourage active participation of employees in the conceptual and operational level in implementation of innovations. In this way the feeling of personal satisfaction, self-esteem and self-awareness of employees are encouraged and the possibility to achieve better operating effectiveness of the employees in education through final results and the success of students, is opened.

Understanding of the connection between dimensions of personality and the readiness to change can contribute to the definition of useful and desirable motivational maneuvers, which would encourage employees to achieve quality work and get greater job satisfaction. It is of great importance in the business practice that the employees have an active attitude towards work, problem solving and openness to innovation. Therefore, it is useful to consider the traits of the individual in the selection of staff and delegating work assignments. It is essential that managers in schools focus on understanding complex human nature, personality traits, motivation and desire for change, because it creates a fertile and useful organizational climate in which the capacities of employees can be maximally utilized.

Replications of the research with a larger sample and a wider territory are required, as well as the inclusion of a wider set of variables (particularly from the field of organizational culture) in order to determine predictor impact and contribution of the personality dimensions and these variables in explaining the readiness to change of employees in education. Also, the research of readiness to change should include all levels of education and entire employment hierarchy.

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POVEZANOST IZMEĐU OSOBINA LIČNOSTI I SPREMNOSTI ZA PROMENE KOD ZAPOSLENIH U OSNOVNIM ŠKOLAMA

Apstrakt

Prihvatanje nužnosti promene, kao i individualna spremnost na promene predstavljaju jedan od faktora profesionalne uspešnosti zaposlenih u obrazovanju. Cilj istraživanja je da se utvrdi prediktivni uticaj dimenzija ličnosti, merenih BFI upitnikom na spremnost na promene zaposlenih u osnovnom obrazovanju, koja je merena adaptiranom Skalom otpora prema promenama. Faktorskom analizom definisane su tri supskale: otpor prema traganju za novim rešenjima, otpor prema promeni postojećeg statusa i otpor

prema izazovima. Uvršćene su i kategorijalne varijable: pol, radno mesto i radni staž. Uzorak je činilo 350 učitelja, nastavnika i direktora zaposlenih u osnovnim školama na teritoriji grada Loznice (70% ženskih ispitanika). Utvrđeno je da kategorijalne varijable objašnjavaju malu količinu varijanse otpora prema promenama, i predstavljaju značajan prediktor skorova na supskali otpora prema traganju za novim rešenjima i otpora prema promeni postojećeg statusa. Dimenzije ličnosti predstavljaju značajne prediktore otpora prema promenama na sve tri supskale i objašnjavaju između 13% i 20% varijanse na različitim supskalama. Rezultati istraživanja ukazuju na značajnu prediktivnu moć dimenzija ličnosti u odnosu na spremnost na promene, pa mogu biti od koristi u procesu selekcije ljudskih resursa u osnovnom obrazovanju i prilikom izbora metoda motivisanja postojećih kadrova za prihvatanje promena.

Ključne reči: osobine ličnosti, spremnost na promene, motivisanje zaposlenih, osnovno obrazovanje

PERSONAL CHARACTERISTICS, VISUAL MERCHANDISING AND IMPULSE BUYING

Abstract

The objective of this study was to: primarily, determine if personality traits of the Big 5 model and visual merchandising define the impulse buying tendency; also to determine if there are statistically significant differences in impulse buying of persons who have different socio-demographic characteristics. The research included 379 respondents (77.6% female). We used Impulsive Buying Tendency Scale (Verplanken & Herabadi, 2001), the Big Five Questionnaire (John, Donahue & Kentle, 1991), the Visual Merchandising Questionnaire (Kim, 1991) and the Socio-Demographic Questionnaire. The data processing was done using Hierarchical regression analysis, Mann-Whitney Test, One way ANOVA and post hoc test – LSD. The results show that the personality traits of the Big 5 model and visual merchandising define the impulse buying tendency. The personality traits: extroversion and conscientiousness, and visual merchandising practices: window display and in-store design, are significant predictors of impulse buying tendency. The results also indicate a statistically significant difference in impulsive buying tendency based on gender, age and material status; whereby women, people aged 18 to 35 and the persons of the above-average material status are most prone to impulsive buying. Research has shown that personality traits of the Big 5 model, visual merchandising and socio-demographic characteristics of buyers are significant determinants of impulse buying tendency.

Keywords: impulse buying, personality traits of the Big 5 model, visual merchandising, socio-demographic characteristics

Introduction

Impulse buying behaviour

Impulse buying includes purchase with no pre-shopping intentions or thinking about it (Beatty & Ferrell, 1998; Rook & Fisher, 1995; Verplanken & Herabadi, 2001). Impulse buying has been defined as a spontaneous, immediate purchase without pre-shopping intentions either to buy a specific product category or to fulfill a specific buying task (Beatty & Ferrell, 1998; Rook & Fisher, 1995). Basically, impulse

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buying is relatively quick decision-making and passion to own something instantly (Beatty & Ferrell, 1998; Rook & Fisher, 1995). Two important elements to determine impulse buying are: 1) lack of planning and intention to buy a certain product, and 2) emotional reaction that can occur before, during or after the purchase which can be positive, but also negative – for example, due to the money spent on the purchase or dissatisfaction with the product that was impulsively chosen (Verplanken & Herabadi, 2001).

Since impulsive buyers are not actively looking for a certain product and don't have prior plans or intention to make a purchase, internal and external factors can serve as cues to trigger their impulse behavior (Beatty & Ferrell, 1998; Weun, Jones & Beatty, 1998). Internal factors of impulse buying refer to consumer's personality traits, internal cues such as emotional states, mood and self-feelings, the consumer's normative evaluation of impulse buying engagement, and demographic factors (Kacen & Lee, 2002). External factors of impulse buying refer to marketing cues or store stimuli that are placed and controlled by the marketer in attempt to lure consumers into purchase behavior (Youn & Faber, 2000).

Personality traits and impulse buying behaviour

A look through the literature suggests that attempt to investigate the relationship between personality traits and impulse buying behaviour began in sixties itself by Kollat and Willett (1967), and later on by Cobb and Hoyer (1986), however, nothing significant was revealed until Youn and Faber (2000) reported that impulse buying behaviour was found significantly related to the personality variable „lack of control“. However, the seminal work by Verplanken and Herabadi (2001), wherein, it was reported that a general impulse buying tendency is strongly rooted in personality, showed considerable scope of studying the personality facets in relation to impulse buying behaviour. Also, Herabadi (2003) demonstrated that whilst conscientiousness and agreeableness correlated negatively with the impulse buying tendency, neuroticism was positively associated with the impulse buying tendency. Shahjehan, Qureshi, Zeb and Saifullah (2012) aslo reported that impulsive buying positively correlated with neuroticism and extraversion. Likewise, study by Bratko, Bandl and Bosnjak (2013) showed that extraversion correlated positively with the impulse buying tendency, while conscientiousness correlated negatively with the impulse buying tendency.

Socio-demographic characteristics and impulse buying behaviour

The literature is inconsistent with respect to the role of gender on impulse buying. Some studies declare that women are more impulsive in buying as compared to men (Dittmar, Beattie & Friese, 1996; Ghani, Imran & Jan, 2011; Kollat & Willett, 1967; Lin & Lin, 2005; Richins & Dawson, 1992; Rindfleisch, Burroughs & Denton, 1997;

Wood, 1998), while the others maintain that men show more impulse purchasing than women (Cobb & Hoyer, 1986; Mai, Jung, Lantz & Loeb, 2003).

When it comes to the age, many studies (Bellenger, Robertson & Hirschman, 1978; Gutierrez, 2004; Rawlings, Boldero & Wiseman 1995; Wood, 1998) indicated a negative correlation between the age and impulse buying tendency. Buendicho (2003) pointed out that the consumers aged 16 to 24 are more prone to impulse buying. Wooden (1998) found enhanced impulse shopping in age bracket 18 to 39, and a gradual decline thereafter. Bellenger et al. (1978) found that shoppers under 36 were more prone to impulse buying compared to those over 36 years old.

As for the education, Rana and Tirthani (2012) found that consumer education negatively influences on impulse buying behavior which means that less educated customers are more impulsive in taking their buying decisions than more educated ones. Also, Wood (1998) observed that people of higher educational status make less of impulse purchases. More educated people tend to make planned purchases. Mitchell (1994) described that people with lower education levels tend to exhibit more impulsivity in buying in order to emulate the „good life“.

In terms of revenues and their association with impulsive purchase, some studies (Bratko, et al., 2013; Tirmizi, Rehman & Saif, 2009) have shown that the higher disposable income of consumers do not lead to a greater impulse buying tendency. Abratt and Goodey (1990) found a positive relationship between income and impulse buying and they pointed out that one of the reasons for more impulse buying by consumers in US than the other countries is the higher income level of American consumers.

Visual merchandising and impulse buying behaviour

Visual merchandising is effective presentation of products that impacts customers purchase (Walters & White, 1987). Visual merchandising is defined as “the presentation of a store/brand and its merchandise to the customer through the teamwork of the store’s advertising, display, special events, fashion coordination, and merchandising departments in order to sell the goods and services offered by the store” (Mills, Paul & Moorman, 1995, p. 2). Visual merchandising ranges from window/exterior displays to interior displays including form displays and floor/wall merchandising as well as promotion signage. Four distinctive visual merchandising practices that largely influence a buying tendency are window display, in-store design, floor merchandising, and promotional signage (Kim, 2003). Window display is a medium which creates first impression in customer’s mind to enter the store. Good store interior interests customers and hence, reduces psychological defense and help purchase (Bitner, 1992; Davies & Ward, 2002; Kotler, 1974; Omar, 1999; Walters & White, 1987). The more the store stimuli, such as visual merchandising, serves as a shopping aid, the more likely the possibility of a desire or need arising and finally creating an impulse purchase (Han, Morgan, Kotsiopoulos & Kang-Park, 1991). Sujata, Bhawna & Anju, (2012) found a strong positive correlation between window display and impulse buying, and low

positive correlation between floor merchandising and impulse buying. Also, Khurram and Seemab (2014) found a positive relationship between floor merchandising and impulse buying. Gudonavičiene and Alijošiene (2015) found a strong positive correlation between window display and in-store design and impulse buying tendency.

The objective

Existing research indicates a significant correlation between personality traits of the Big 5 model, visual merchandising and impulse buying tendency. The impact of demographic characteristics on impulsive buying proved to be a rather unclear, because researches in this area often provide contradictory results.

The objective of this study was to: primarily, determine if personality traits of the Big 5 model and visual merchandising define the impulse buying tendency; also to determine if there are statistically significant differences in impulse buying of persons who have different socio-demographic characteristics.

Method

Sample and procedure

The research was conducted on a sample of 379 respondents from Banja Luka, Prijedor, Doboj, Derвента, Trebinje and Bijeljina. The sample structure according to the gender, age, level of education, material circumstances and place of residence is shown in Table 1.

Table 1. Structure of the Sample by Gender, Age, Level of Education and Material Circumstances

		Frequency	Percent
Gender	Male	85	22.4
	Female	294	77.6
	Total	379	100.0
Age	18 - 25 years	228	60.2
	26 - 35 years	64	16.9
	36 and more years	87	23
	Total	379	100.00
Level of education	High school degree	289	76.2
	College degree	18	4.7
	University degree or higher	72	19.0
	Total	379	100.0
Material circumstances	Below the average	56	14.8
	Average	281	74.1
	Above the average	42	11.1
	Total	379	100.00

Data collection was performed since March to May 2016, through the paper/pencil method. Completing questionnaire was conducted individually, and it lasted for about 15 minutes, in the shopping malls where the respondents were doing their shopping. Participation was on voluntary and anonymous basis. The respondents were familiar with the fact that the collected data will be used for scientific purposes only.

Instruments

Impulse Buying Tendency Scale (Verplanken & Herabadi, 2001). The scale consisted of 20 items. On a 5-point Likert scale ranging from disagree strongly to agree strongly respondents were asked the extent to which individual items related to them. Cronbach's Alpha was .88.

The Big Five Inventory (John, Donahue & Kentle, 1991). The questionnaire consisted of 44 items grouped into five subscales used to examine five personality traits, which included extraversion, agreeableness, openness, conscientiousness and neuroticism. Its items were short, descriptive phrases that respondents rate on a 5-point Likert scale ranging from disagree strongly to agree strongly. Cronbach's Alpha was .84 for the Extraversion Scale, .72 for the Agreeableness Scale, .80 for the Openness Scale, .79 for the Conscientiousness Scale and .70 for the Neuroticism Scale.

Visual Merchandising Questionnaire (Kim, 1991). The questionnaire consisted of 14 items grouped into four subscales used to examine four distinctive visual merchandising practices that influence buying tendency: window display, in-store design, floor merchandising and promotional signage. On a 5-point Likert scale ranging from disagree strongly to agree strongly respondents were asked the extent to which individual items related to them. Cronbach's Alpha was .79 for the Window Display Scale, .82 for the In-Store Design Scale, .69 for the Floor Merchandising Scale and .85 for the Promotional Signage Scale.

Socio-Demographic Characteristics Questionnaire. The questionnaire consisted of five questions about the following socio-demographic characteristics: gender, age, level of education and material circumstances.

Data analysis

Data analysis was performed using the statistical software package SPSS for Windows, version 20.0. The data analysis used the following statistical procedures: Hierarchical regression analysis, Mann-Whitney Test, One way ANOVA and post hoc test – LSD.

Results

Descriptive and correlation analysis

Table 2 presents the descriptive statistical measures for variables used in the study. The check of normality of respondents' results distribution has been conducted by using Kolmogorov-Smirnov Test.

Table 2. Descriptive statistical measures for variables used in the study

	Min	Max	M	SD	Skewness	Kurtosis	K-S Test
Impulse buying	20	117	70.90	18.32	-.020	-.267	.035*
Extraversion	12	40	28.79	5.67	-.190	-.306	.055*
Agreeableness	19	41	32.23	3.90	-.354	.477	.103**
Openness	17	50	35.83	5.91	-.142	-.035	.054*
Conscientiousness	13	40	29.68	4.82	-.137	-.252	.066**
Neuroticism	9	36	21.96	4.56	.100	.182	.090**
Window display	3	15	8.67	3.014	-.058	-.606	.095**
In-store design	4	19	9.99	3.52	-.095	-.795	.108**
Floor merchandising	3	15	8.85	2.50	-.329	-.083	.096**
Promotional signage	4	20	14.10	3.65	-.555	.189	.111**

* $p < 0.05$ ** $p < 0.01$

Results respondents obtained on Impulse buying Scale, Extraversion Scale, Agreeableness Scale, Openness Scale, Conscientiousness Scale, Window display Scale, In-store design Scale, Floor Merchandising Scale and Promotional Signage Scale were pushed towards higher values (Tenjović, 2000), with the interindividual differences occurring at Impulse buying Scale, Extraversion Scale, Openness Scale, Conscientiousness Scale, Window display Scale, In-store design Scale and Floor Merchandising Scale (Tenjović, 2000).

Table 3. Correlations between variables

	1	2	3	4	5	6	7	8	9
1 Impulse buying	1								
2 Extraversion	.13*	1							
3 Agreeableness	-.08	.22**	1						
4 Openness	.07	.38**	.09	1					
5 Conscientiousness	-.17**	.49**	.40**	.20**	1				
6 Neuroticism	.07	-.41**	-.36**	-.22**	-.40**	1			
7 Window display	.45**	.24**	.06	.07	.07	-.10*	1		
8 In-store design	.40**	.05	-.09	-.09	-.04	.06	.47**	1	
9 Floor merchandising	.24**	.11*	-.08	.01	-.07	-.08	.32**	.48**	1
10 Promotional signage	.29**	.13*	.10*	.04	.06	.04	.49**	.33**	.28**

* $p < 0.05$ ** $p < 0.01$

Considering the correlations between the Big 5 personality traits model and impulse buying tendency (Table 3), we can see that extraversion is in a significant positive relation to impulse buying tendency ($r = .13$, $p < 0.05$), while the conscientiousness is in significant negative relation to impulse buying ($r = -.17$, $p < 0.01$). Analysis of correlations between visual merchandising and impulse buying tendency shows that all relations are significant and positive ($.24 < r < .45$; $p < .01$).

Impulse buying tendency is in the most intensive positive relation to window display ($r = .45, p < .01$).

Predictability of impulse buying tendency based on the Big 5 personality traits model and visual merchandising

Hierarchical regression analysis was used to examine the possibility to predict the impulse buying tendency based on the Big 5 personality traits model and visual merchandising, and to determine the individual contribution of predictor variables in explaining impulse buying tendency.

Table 4. Hierarchical regression analysis of personality traits and visual merchandising for impulse buying tendency

Model		B	t	p	
1	Extraversion	.295	4.660	.000	R ² =.097 F(5.353)=7.590 p=.000
	Agreeableness	-.001	-.015	.988	
	Openness	.038	.686	.493	
	Conscientiousness	-.288	-4.616	.000	
	Neuroticism	.083	1.399	.163	
2	Extraversion	.168	2.945	.003	R ² =.316 F(9.349)=17.947 p=.000 ΔR ² =.219 ΔF=27.993 (p)ΔF=.000
	Agreeableness	.001	.028	.978	
	Openness	.074	1.526	.128	
	Conscientiousness	-.257	-4.654	.000	
	Neuroticism	.062	1.175	.241	
	Window display	.285	5.032	.000	
	In-store design	.239	4.268	.000	
Floor merchandising	-.013	-.251	.802		
Promotional signage	.066	1.256	.210		

The obtained results (Table 4) show that personality traits of the Big 5 model, included in the first phase, explain 9.7% of variance impulse buying tendency ($R^2 = .097, F(5.353) = 7.590; p < 0.01$). By introducing visual merchandising in the second phase, model, as an entity, explains 31.6% of variance impulse buying tendency ($R^2 = .316, F(9.349) = 17.947; p < 0.01$). Visual merchandising explained the additional 21.9% of variance impulse buying tendency ($\Delta R^2 = .219, \Delta F = 27.993, p < .001$). In the final model a significant partial contribution to the explanation of impulse buying tendency is given by extraversion ($\beta = .168, p < .01$), conscientiousness ($\beta = -.257, p < .001$), window display ($\beta = .285, p < .001$) and in-store design ($\beta = .239, p < .001$).

Differences in impulse buying tendency due to the socio-demographic characteristics of respondents

Mann-Whitney Test, One way ANOVA and post hoc test – LSD test were used to examine differences in impulse buying tendencies considering the socio-demographic characteristics of respondents.

Table 5. Mann-Whitney test for gender and impulse buying tendency

	Gender	N	Mean Rank	Mann-Whitney U	p
Impulse buying	Male	85	147.46	8689.000	.001
	Female	294	192.69		

Statistically significant difference was determined ($U = 8689.000$, $p < 0.01$) in impulse buying tendency considering the gender of respondents. Women are more prone to impulse buying than men (Table 5).

Table 6. Results of One way ANOVA for age and impulse buying tendency

	Age	N	M	SD	F	df	p	η^2
Impulse buying	18 - 25 years	228	72.63	17.72	3.262	2,376	.039	.02
	26 - 35 years	64	70.81	18.86				
	36 and more years	87	66.57	18.92				

Statistically significant difference was determined ($F(2,376) = 3.262$, $p < 0.05$, $\eta^2 = .02$) in impulse buying tendency considering the age of respondents (Table 6).

Table 7. Results of LSD test for age and impulse buying tendency

	(I)	(J)	Mean Difference (I-J)	Std. Error	p
Impulse buying	18 - 25 years	26 - 35 years	1.822	2.658	.493
		36 and more years	6.066*	2.376	.011
	26 - 35 years	18 - 25 years	-1.822	2.658	.493
		36 and more years	4.244	3.1267	.176
	36 and more years	18 - 25 years	-6.066*	2.376	.011
		26 - 35 years	-4.244	3.127	.176

* $p < .05$

Subsequent comparisons using LSD test (Table 7), show statistically significant difference between respondents aged 18-25, who are the most prone to impulse buying ($M = 72.63$, $SD = 17.72$), and respondents aged over 36, who are the least prone to impulse buying ($M = 66.57$, $SD = 18.92$).

Table 8. Results of One way ANOVA for level of education and impulse buying tendency

	Level of education	N	M	SD	F	df	p
Impulse buying	High school degree	289	71.01	18.24	.058	2,376	.944
	College degree	18	71.69	15.76			
	University degree or higher	72	70.28	19.77			

Statistically significant difference in impulse buying tendency considering the level of education of respondents (Table 8) was not determined ($F(2,376) = .058$, $p > 0.05$).

Table 9. Results of One way ANOVA for material circumstances and impulse buying tendency

	Material circumstances	N	M	SD	F	df	p	η^2
Impulse buying	Below the average	56	68.52	19.15	4.980	2,376	.007	.03
	Average	281	70.13	18.25				
	Above the average	42	79.19	16.40				

Statistically significant difference ($F(2,376) = 4.980, p < 0.01, \eta^2 = .03$) was determined in impulse buying tendency considering the material circumstances of respondents (Table 9).

Table 10. Results of LSD test for material circumstances and impulse buying tendency

	(I)	(J)	Mean Difference (I-J)	Std. Error	p
Impulse buying	Below the average	Average	-1.613	2.674	.818
		Above the average	-10.677*	3.740	.013
	Average	Below the average	1.613	2.674	.818
		Above the average	-9.064*	3.052	.009
	Above the average	Below the average	10.677*	3.740	.013
		Average	9.064*	3.052	.009

* $p < .05$

Subsequent comparisons using LSD test (Table 10), indicate a statistically significant difference between respondents of the above the average material circumstances, who are most prone to impulse buying ($M = 79.19, SD = 16.40$), and respondents of the average material circumstances ($M = 70.13, SD = 18.25$) and the below the average material circumstances ($M = 68.52, SD = 19.15$) who are less prone to impulse buying.

Discussion

The obtained results showed that visual merchandising more determines the impulse buying tendency than the Big 5 personality traits model. These results were expected. Visual merchandising is one of the key marketing tools that are primarily used to increase unplanned purchases of products. The results of our study indicated that window display and in-store design represents significant positive predictors of impulse buying tendency. These results are in accordance with the results obtained by Gudonavičiene and Alijošiene (2015). Today more retailers are placing increased importance on window display and in-store design to attract passerby's attention and ultimately to transform shoppers into consumers (Diamond & Diamond, 1996).

As for the relation between the personality traits of the Big 5 model and impulse buying tendency, the results of our study indicated that conscientiousness represents significant negative, and extraversion significant positive predictor of impulse buying tendency. These results were expected and in accordance with the results obtained by Bratko et al. (2013), Herabadi (2003), Verplanken and Herabadi (2001) and Shahjehan et al. (2012). Persons who got high scores on the Conscientiousness dimension are organized and responsible, and therefore plan ahead their actions and take care of the consequences these actions may have. On the other hand, low score on the Conscientiousness dimension indicates the irresponsibility, lack of organization and planning, and precisely the lack of planning and non-existence of the intention to purchase are the main determinants of impulse buying (Verplanken & Herabadi, 2001). The link between extraversion and impulse buying can be interpreted in the context of the biological basis on which rests the dimension of Extraversion. Namely, one of the most significant differences between extrovert and introvert people is that the extroverts have lower suboptimal level of cortical arousal, and therefore seek stimuli which could raise the arousal level to the optimal level. Impulse buying may serve for exactly that purpose – achieving the optimal level of cortical arousal which is different for different people. Besides, the relation between extraversion and positive emotions can contribute to the connection between extraversion and impulse buying (Watson & Clark, 1997). In fact, the presence of positive emotions increases the probability of impulse buying (Beatty & Ferrell, 1998).

As for the differences in impulse buying tendency considering the socio-demographic characteristics of buyers, the results of our study showed that women are more prone to impulse buying than men. This has been confirmed by numerous other studies conducted earlier, such as Dittmar et al. (1996), Ghani et al. (2011), Kollat and Willett (1967), Lin and Lin (2005), Richins and Dawson, (1992), Rindfleisch et al. (1997) and Wood (1998). Men generally do not assume pleasure in procuring as much as women typically do; this reduces the chances to buy impulsively (Dittmar, 2000). Women usually buy self-expressive and symbolic stuff which represent to their emotional aspects and appearance. Thus, girls have a larger tendency to buy impulsively (Dittmar, 2000; Dittmar et al., 1996).

When it comes to the age, the results of our study showed that younger persons are more prone to buy impulsively than the older ones. Herabadi (2003) also indicated that the previous studies determined a significant negative correlation between the age and impulse buying tendency. Our results showed that the most prone to buying impulsively are the persons aged 18 to 26, and the least prone are the persons aged over 36. Bellenger et al. (1978) also found that the consumers younger than 36 are more prone to impulse buying. Buendicho (2003) pointed out that the consumers aged 16 to 24 are more prone to impulse buying. Younger individuals score higher on measures of impulsivity compared to older people (Eysenck, Pearson, Easting & Allsopp, 1985) and demonstrate less self-control (Logue & Chavarro, 1992). These findings suggest that, as consumer's age, they learn to control their impulsive buying tendencies.

As for the financial status, the results of our study showed that the persons whose material circumstances are above the average are more prone to impulse buying than the persons whose material circumstances are average or below the average. Such result may be explained by the caution of the respondents with average and below the average material circumstances, whose limited available resources make them have rational and thoughtful purchases, which is additionally increased by the current economic situation in our country. This assertion confirms those of Mai, Jung, Lantz and Loeb (2003) when they argued that consumers with higher income have less constraint in acting on their impulses as they have less difficulty in making payments for them. In a similar way, Abratt and Goodey (1990) also found a positive relationship between income and impulse buying and they pointed out that one of the reasons for more impulsive buying by consumers in US than the other countries is the higher income level of American consumers.

Conclusion

Finally, the results of this study showed that personality traits of the Big 5 model, such as extroversion and conscientiousness together visual merchandising practices, such as window display and in-store design, are significant determinants of impulse buying tendency. The results also indicate a significant difference in impulsive buying tendency based on gender, age, and material status.

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KARAKTERISTIKE LIČNOSTI, VIZUELNI MERČENDAŽING I IMPULSIVNA KUPOVINA

Apstrakt

Ovo istraživanje imalo je za cilj: prvo, utvrditi da li dimenzije ličnosti modela Velikih pet i vizuelni merčendažing određuju sklonost impulsivnoj kupovini; drugo, utvrditi da li postoje statistički značajne razlike u sklonost impulsivnoj kupovini osoba koji se razlikuju prema socio-demografskim obilježjima. Istraživanje je obuhvatilo 379 ispitanika (77,6% žena). Korišena je Skala impulsivne kupovine (Verplanken & Herabadi, 2001), Inventar Velikih pet (John, Donahue & Kentle, 1991), Upitnik vizuelnog merčendažinga (Kim, 1991) i Upitnik socio-demografskih karakteristika. U obradi podataka korištena je Hijerarhijska regresiona analiza, Mann-Whitney Test, One way ANOVA i post hoc test - LSD. Rezultati pokazuju da dimenzije ličnosti modela Velikih pet i vizuelni merčendažing određuju sklonost impulsivnoj kupovini. Kao značajni prediktori sklonosti impulsivnoj kupovini izdvojile su se dimenzije: otvorenost, savesnost, te vizuelni merčendažing praksa: izlog prodavnice i unutrašnje uređenje prodavnice. Takođe, rezultati ukazuju na statistički značajne razlike u sklonost impulsivnoj kupovini s obzirom na pol, starost i materijalni status; pri čemu su žene, osobe starosti od 18 do 35 god. i osobe iznadprosječnog materijalnog statusa najsklonije impulsivnoj kupovini. Istraživanje je pokazalo da dimenzije ličnosti modela Velikih pet, vizuelni merčendažing i socio-demografska obilježja predstavljaju značajne determinante sklonosti impulsivnoj kupovini.

Ključne riječi: impulsivna kupovina, dimenzije ličnosti modela Velikih pet, vizuelni merčendažing, socio-demografske karakteristike

PROSOCIAL ORIENTATION OF STUDENTS OF DIFFERENT PROFESSIONAL CHOICES⁴⁵

Abstract

The aim of the research was to examine whether there are differences in prosocial orientation between students of different professional choices. The sample consisted of 300 participants divided into three groups of 100 students of social, biomedical and technical sciences respectively. Empathy, interpersonal orientation and prosocial behaviour were treated as the indicators of students' prosocial orientation. Empathy, conceptualized as a multidimensional construct with affective and cognitive components, was measured by Davis's Interpersonal Reactivity Index. Philanthropic (Friendship, Need for people) and Misanthropic orientation (Distrust, Social isolation) of students were measured by Scale of interpersonal orientation. Prosocial behaviour was assessed by questionnaire designed for research purposes. Results showed that social sciences students scored higher on empathy than the other two students groups. No differences were found in the level of Philanthropic orientation while Misanthropic orientation was higher in technical sciences students compared to others. Self-reported prosocial behaviour was quite low in all student subsamples. In sum, students of humanities were to a greater extent oriented towards people than the others which is in accordance with profession they have chosen. The findings were discussed from the perspective of requirements needed to be successful in the future professional work.

Key words: *prosocial orientation; empathy; misanthropy and philanthropy; prosocial behaviour; students' professional choice*

Introduction

Prosocial behaviour

Theoretical analyses of the nature of altruism and prosocial orientation builds on debates on the matter whether human nature is inherently good and to what

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extent people are ready to help others. The authors engaged in this area sometimes express contrasting views when it comes to basic concepts defining. The differences in defining related concepts, prosocial behaviour and altruism, derive mostly from disagreements among authors about what is the basic or main motive of such behaviour. Besides, there is another important dilemma in this field which can be referred to the source of consistency in human behaviour. On the one hand, time-stable personality dispositions, i.e. personality traits are treated as the source of consistency in human behaviour (dispositional model); on the other hand, a situationist model holds that behaviour is determined mainly by external factors that come from the environment and situational factors (Joksimović, 1993; Joksimović and Vasović, 1990; Stojiljković, 1997).

Regardless of the differences, theorists agree that the most important characteristics of altruism and prosocial orientation is *orientation towards the well-being of others*. An altruistic act is a form of prosocial behaviour defined as a voluntary and deliberate action focusing on the welfare of others, and it does not involve external award expectations. Prosocial behaviour is also defined as voluntary and deliberate behaviour that results in welfare of others, but where the motive for such behaviour is unknown or unspecified (Eisenberg & Miller, 1987). So far, the prevailing view is that prosocial behaviour is a broader concept and that it does not necessarily imply excluding some personal benefit when doing good deeds (Staub, 1978; Wispe, 1978; according to Stojiljković, 1997).

Surveys conducted during the seventies of the 20th century have shown that situational factors have a greater predictive power than the personal factors in predicting prosocial behavior; thus, the research focus was shifted to the examination of situational factors. Some of personal factors being examined at that time were intelligence, anomy, religiousness, self-respect, submissiveness, autonomy, and social desirability. None of these factors proved separately to be a significant predictor of altruistic behaviour. On the other hand, situational factors such as the degree of need for help, number of spectators, physical appearances of the victim, the helper's similarity to the victim, and the current helper's mood are proved to be good predictors of prosocial behaviour.

Conclusion about the importance of personal features in this field was changed when Staub (Staub, 1974, according to: Batson & Powell, 2003) showed that combining more personal factors could increase their predictive power. Staub has provided sufficient grounds for assuming that there is a wide prosocial orientation of personality that include the following: positive attitude towards people, taking care of others, adopting moral and humane values, the feeling of personal responsibility for the other people's welfare (Staub, 1974, according to: Joksimović, 1993). All these variables taken together constitute a broad factor that correlates positively with various forms of helping behavior. Postulation of such a personality based prosocial orientation has been a shift in the interpretation of behavior aimed at the welfare of others.

Encompassing study, which were conducted in Serbia by Joksimović and Vasović (1990) in a large sample of the pupils' population, spoke in favor of that view.

The authors considered that research in this field have to encompass feelings, values, beliefs as well as personality traits which are the origins of prosocial orientation of a person. So, they investigated the level of pupils' empathy, taking care of others, social responsibility, humanitarian interest, altruistic value orientation, willingness to help people who are in trouble, and sociodemographic characteristics also. Conducted factor analysis showed that there was one broad latent variable that was called „motivational syndrom of altruistic predispositions“, or the syndrom of prosocial orientation. Joksimović and Vasović hold that their findings are in accordance with aforementioned Staub's point of view.

Empathy

The definitions of empathy, regardless of differences, can be divided into two groups, depending on whether they highlight its affective or cognitive component. The definitions emphasizing affective element describe it as immediate experiencing the other person's emotional state. In such definitions the emphasis is on 'sharing affect' with the other person, which is considered to be an essential empathy characteristic (Stojiljković, 2002). From the cognitivist view, empathy is defined as an awareness of feelings, needs, opinions and intentions of other people that does not result in emotional participation. Cognitive interpretation of someone else's emotional state does not involve the appearance of spectator's emotions. Precisely, empathy is seen as the ability of putting yourself in someone else's position, which enables better understanding of their behaviour (Stojiljković, 2002).

In his theoretical model, Hoffman (Hoffman, 1978; 2003) integrated both affective and cognitive element of empathy. Empathic experience depends on how developed the awareness of others is, as well as on the ability to recognize and understand the other people's feelings. Hoffman believes that both egoistic and altruistic motives are the basis of empathy. Egoism is referred to the possibility of people to find certain contentment in providing help, that is to free themselves from their own empathic inconvenience that occurs as a result of someone else's distress. However, gaining personal pleasure is not the main aim of taken action, but it appears only after the activities that are aimed at contributing to the other person's well-being. This information as well as the fact that empathic inconvenience is provoked by the other person's pain and suffering indicate the altruistic motivation of empathy (Hoffman, 1978; 2003). It should be emphasized that only awareness that someone needs help would not bring about prosocial behaviour, empathy is necessary precondition and motivator of prosocial and moral behaviour (Hoffman, 1978; 2003; Stojiljković, 2002).

Batson (Batson, 1991, according to: Hakansson, 2003) defines empathy as the feeling of emotional engagement that is in accordance with but does not have to be identical to the other person's emotions, while altruism is defined as a motivational state the aim of which is to increase the other people's well-being. In his research, Batson tries to determine whether the altruism is a part of human nature and what motives inspire us to help other people who are in distress. Batson's empathic-

altruistic hypothesis implies that the feeling of empathy is the driving force behind altruistic motivation. The assumption is that when we feel empathy towards some person, we will try to help out of purely altruistic reasons, regardless of whether we can gain something out of it. According to this hypothesis, motivation to help someone else in distress is truly altruistic only if it is preceded by empathic concern for the other person. Accordingly, the greater empathy generates the increase in altruistic motivation. Batson didn't deny the presence of personal benefit when helping others. He pointed out that, in situations when empathy is the driving force behind altruistic motivation, these benefits are the consequence of behaviour aimed at the other people's welfare.

Interpersonal orientation

The context of growing up and the way a child experiences his/her interactions with parents are the basis for the child's attitude towards other people from the environment. Later on, that early model can generalised and thus it remains effective even in interpersonal relationships of an adult.

The concept of interpersonal orientation is understood from the viewpoint of Karen Horney (1950, according to: Hornaj, 2004). She emphasized the importance of relationships with 'significant others' for the child's development. In adequate conditions and environment that provides support, love and safety, the child will develop into a healthy and mature person. If the developmental conditions are unsupportive, the child will not be able to develop in accordance with his/her true Self, which can cause *basic anxiety*. This concept represents the child's feeling of being isolated and helpless in a potentially hostile world (Horney, 1942, according to: Horney, 1991).

The anxious child uses different tactics trying to deal with unpleasant feelings of abandonment and helplessness. The child may become emotionally distant, overly obedient in order to recover love, or will try to struggle against those people who hurt him/her. Each of these tactics for resolving difficulties is unrealistic but can assume the role of instincts or needs in personality dynamics. Horney calls them *neurotic needs* because they are irrational solutions that inevitably clash and lead to inner conflicts (Horney, 1950, according to: Hornaj, 2004). The child sticks firmly to a certain position even though it is not appropriate one which brings about contradictory attitudes towards others and basic conflicts. Horney described three attitudes towards the generalized others: moving towards, away from and against others. Each of the group represents basic orientation towards oneself and others and towards life in general, and that is why they can be considered as 'interpersonal orientations' (Horney, 1945, according to: Pavićević and Stojiljković, 2016).

Moving towards people is typical for people who, due to the feeling of helplessness, have a strong need for love and approval, and they constantly try to find a person who will fulfill that need. The question they often ask themselves is: Will other people be fond of me?

Moving against people manifests as a constant distrust of other people's intentions and willingness to struggle with others. Living in belief that life is a struggle where

the strongest win, these people need to control, take advantage of and submit other people in order to achieve success and appreciation. They often ask themselves: How strong is the opponent and can other people be of use to me?

Moving away from people is typical for people who are trying to avoid any kind of attachment and connectedness; they refuse to cooperate and also to compete with other people. They manifest a great level of independence and self-sufficiency and they do not care to conform to social norms. They often ask themselves: Will I be bothered by other people?

Methodology

Problem and aim of the research

The aim of the research was to determine whether there are differences in prosocial orientation between students of different professional choices. Starting assumption was belief that prosocial orientation is based on general personality dispositions, which are more or less present in people, such as personality traits, empathy, broad interpersonal orientation and so on. What is more, such personality orientation can be attributed for doing pro-socially oriented activities. Precisely, in this research, empathy, interpersonal orientation and prosocial behavior were treated as the indicators of the widely understood concept of prosocial personality orientation. Students' professional choice was also included taking into account the standpoint about connection between personality traits, occupational interests and the choice of future job (Holland, 1997, according to: Hedrih, 2009).

Variables and instruments

Empathy. It is seen as an ability to observe and respond to experiences and emotional states of other people, according to the 'organizational empathy model' of Mark Davis (1983). Empathic sensitivity of a person involves four interconnected components, two of which are cognitive (PT, F), while the other two are affective (EC, PD). Davis developed the questionnaire *Interpersonal Reactivity Index- IRI* (Davis, 1980), that has been used all over the world. Alpha Cronbach coefficient in our sample was .82. IRI is a 5-point Likert scale, and consists of 28 items arranged into the following 4 subscales (7 items each):

Perspective taking - a tendency to accept spontaneously the other person's psychological point of view in everyday life (Before I condemn someone, I'm usually trying to imagine how I would feel in his place); *Fantasy* - being ready for imagination and imagining oneself in different fictional situations (I daydream and fantasize - quite often - about things that could only happen to me); *Empathic concern* - the ability to feel sympathy and compassion with others in distress, (When I see someone take advantage of, I feel a need to protect him); *Personal distress* - a tendency to experience discomfort in response to suffering and embarrassment of other people, sometimes referred to as a disposition for 'emotional contagion' (When I see someone who is in trouble and needs help, I usually feel like a 'paralyzed').

Interpersonal orientation. It is understood as an attitude towards oneself and generalized others, according to Karen Horney's standpoint. That attitude can be positive and based on trust, rejecting and hostile, or distant and imbued with the tendency towards self-sufficiency. Starting from Horney's distinction, a questionnaire was designed for assessing the predominant interpersonal relationship patterns of a person.

IO – Interpersonal Orientation Scale (Bezinović, 2002) consisted of 29 statements in total, arranged into four subscales. The respondents were asked to assess their agreement with each of statements on 5-point Likert scales (0=not at all agree, 4=totally agree). Author singled out two general factors. The first one, named *philanthropic orientation*, contains *need for people* (8 items, e.g. For me, it is important that I can always be with other people) and *friendship* (8 items, e.g. I am fully committed to my friends) and it represents moving 'towards people'. The second factor, named *misanthropic orientation*, includes *distrust* (7 items, moving 'against people', e.g. People are cruel and I do not have enough confidence in them) and *social isolation* (6 items, moving „away from people“, e.g. I feel the best when I'm all alone). Cronbach's Alpha reliability coefficients in our sample were: for philanthropic orientation .85 and .90 for the misanthropic one; friendship .71, distrust .84, social isolation .83, and need for people .77).

Prosocial behaviour. It was defined as a behaviour the aim of which is the well-being of other people performed in specific helping situations. Because of the lack of instruments for measuring altruism and related constructs we decided to use the questionnaire designed for measuring of volunteers' prosocial humanitarian activities for high school and college students in Serbia (designed by Perić and Stojiljković, Perić, 2011). It refers to the situations where concern and taking care of others are directly shown (*I have delivered leaflets about the dangers of tobacco, I helped my friends in learning, I am a voluntary blood donor*). It consists of 14 items and its reliability were good enough for research purposes (Alpha coefficient =.70).

Students' professional choice. It was operationalized as the choice of faculty and studying one of the three groups of scientific disciplines – social, biomedical and technical sciences.

Sample and procedure

The sample consisted of 300 students (4th and 5th year of study), divided into three groups consisting of 100 students of social, biomedical and technical sciences. The sample included 50 students from each of the following faculties of the University of Niš: Faculty of Philosophy (Psychology), Faculty of Law, Electronic Engineering, Mechanical Engineering, Faculty of Medicine and Faculty of Dentistry.

The respondents were informed about the purpose of the research and that data will be kept in accordance with the Code of Ethics of Psychologists of Serbia. They voluntarily agreed to participate, so informed consent of the subjects was gathered. The questionnaires were given in groups of respondents during the classes and testing was anonymous.

The data were processed by the statistical package for social sciences SPSS.

Results and discussion

Having in mind objectives of this study, testing the differences in the level of prosocial orientation between student subsamples was in the focus. Before that, descriptive data about the level of empathy, interpersonal orientation and prosocial behaviour were shown (tables 1 and 2).

Table 1. The level of empathy in students of social, biomedical and technical sciences

IRI Scales	Group of science	Empirical Min	Empirical Max	Scores range	Mean	SD
Interpersonal Reactivity Index- total	Social	73	122	28-140	98.64	12.36
	Biomedical	63	126		97.08	13.83
	Technical	65	111		88.32	10.55
Perspective taking	Social	12	33	7-35	25.90	3.97
	Biomedical	14	33		24.46	4.39
	Technical	14	35		23.71	3.86
Fantasy	Social	10	35	7-35	26.74	5.63
	Biomedical	7	35		23.85	5.92
	Technical	12	35		21.08	4.85
Empathic concern	Social	12	33	7-35	26.88	3.74
	Biomedical	16	33		24.62	3.89
	Technical	9	32		23.36	3.83
Personal distress	Social	8	31	7-35	19.12	5.44
	Biomedical	8	29		18.15	4.75
	Technical	10	32		20.17	4.54

Table 2. The level of forms of interpersonal orientation in student subsamples

IO Scales	Group of science	Empirical Min	Empirical Max	Scores range	Mean	SD
Need for people	Social	2	29	0-32	17.58	5.88
	Biomedical	8	30		18.60	4.98
	Technical	7	32		18.67	4.80
Friendship	Social	11	30	0-32	20.83	4.67
	Biomedical	11	32		20.95	4.57
	Technical	12	32		20.43	4.32
Distrust	Social	0	26	0-28	7.90	5.48
	Biomedical	0	22		8.47	5.24
	Technical	0	28		11.45	6.50
Social isolation	Social	0	20	0-24	6.28	4.34
	Biomedical	0	17		5.52	3.89
	Technical	0	24		9.98	5.97
Philanthropic orientation	Social	14	57	0-64	38.41	9.87
	Biomedical	21	58		38.55	8.75
	Technical	21	64		39.10	8.63
Misanthropic orientation	Social	0	43	0-52	14.18	9.14
	Biomedical	0	36		13.99	8.18
	Technical	1	52		21.43	12.06

By estimating the frequency of prosocial forms of behaviour in student subsamples it wasn't found that they differ ($F_{(299)} = 0.035$, $p > 0.01$). The average means were almost equal in all subsamples, as follows - social science students: $M=24.02$, $SD=6.968$; technical science students: $M=24.01$, $SD=7.50$, biomedical science students: $M=24.24$, $SD=6.36$. This result indicated that frequency of prosocially oriented actions were quite low in all sample. Having in mind that the questionnaire is designed to measure willingness to help in certain realistic or hypothetical situations, maybe our respondents didn't have the opportunity to be in such a situation that provoke the need of helping behavior. Also, it is known that behaviour is less stable than personality dispositions and influenced by many situational factors.

Differences in the level of empathy

In order to determine whether students of different professional choices differ concerning empathy, Analysis of variance was computed. ANOVA indicated significant differences between the students subsamples on overall empathy ($F_{(299)} = 18.809$, $p < 0.01$), and all of its aspects: perspective taking ($F_{(299)} = 7.450$, $p < 0.01$), fantasy ($F_{(299)} = 26.619$, $p < 0.01$), empathic concern ($F_{(299)} = 21.802$, $p < 0.01$) and personal distress ($F_{(299)} = 4.207$, $p < 0.05$).

Table 3. Differences in the level of empathy between students subsamples (Post hoc test)

IRI scales	Group of science	Group of science	Mean Difference	p
Empathy (overall)	Social	Technical	10.32	0.000
		Biomedical	7.56	0.000
Perspective taking	Social	Technical	2.19	0.000
		Biomedical	1.44	0.013
Fantasy	Social	Technical	5.66	0.000
		Biomedical	2.89	0.000
	Biomedical	Technical	2.77	0.000
Empathic concern	Social	Technical	3.52	0.000
		Biomedical	2.26	0.000
Personal distress	Biomedical	Technical	1.26	0.020
		Technical	-2.02	0.004

Overall empathy was significantly higher in the students of social sciences compared to the students of technical and biomedical sciences. The differences were found on both cognitive and affective aspects of empathy, except personal distress. Students of biomedical sciences have higher level of fantasy and empathic concern and lower personal distress than students of technical sciences. Generally, students of technical science were lower on all aspects of empathy, except personal distress, comparing to others; this indicated that they felt a kind of discomfort when were faced to other people's feelings, especially if people have showing suffer and sadness. The results were mainly in accordance with specific professional requirements for some kind of jobs and previous findings in the field. For better understanding of research findings we just selected a few recently conducted surveys in our country

(Dimitrijević, Hanak and Milojević, 2011; Hedrih, 2009; Hedrih & Šverko, 2007; Radovanović, 2011; Stanković Đorđević, 2012; Stojiljković, 2014; Stojiljković, Djigić, Zlatković, 2012; Stojiljković, Stojanović & Dosković, 2012).

The ability to feel sympathy and compassion with people in trouble, and capability to imagine the emotional state of others (including characters from novels and movies) are capacities that could be viewed desirable and necessary for people whose profession involves working with people. A capability to identify the other person's emotions and to recognize someone else's feelings as well as the skill of active listening have to be developed in students of humanities. In addition, taking other people perspective and putting oneself in their place is required for students who pass the training for job in the field of so-called helping professions. Besides, during the study, the students of social sciences have been guided to gain experience important for understanding of personality functioning. Usually, they are expected to improve communication skills necessary for keeping adequate relationships with collaborators and prospective clients. In this way, social science students can improve their empathic sensitivity to other people, which is important for successfully carrying out future work.

Empathy of the students of biomedical sciences was significantly lower compared to social sciences students but their empathic sensitivity is still quite high. Some research findings pointed to the alarming data about the decreasing capacity for empathy in recent years. Longitudinal study in the field of medical education (Bellini, Baime, & Shea, 2002; Bellini & Shea, 2005) indicated the worrying tendency of empathy decreasing among students. The authors' explanation is based on the fact that studying itself requires making efforts, to be responsible, competitive and completely committed. In their practical work medical students were dealing with stressful and emotionally demanding situations causing them to keep a certain emotional distance as a coping mechanism. This phenomenon of too intensive empathic reaction was called the fatigue in experiencing compassion (Hoffman, 2003).

Members of so-called helping professions usually showed moderately high empathy, as was reported by numerous studies, out of which we single out the newest ones (Radovanović, 2011; Stanković Đorđević, 2012; Stojiljković, 2014; Stojiljković, Djigić, Zlatković, 2012; Stojiljković, Stojanović & Dosković, 2012). This level of empathic sensitivity toward people considered to be functional because professional (doctor, teacher, medical and social worker) should remain sufficiently distant while working with those who are in distress in order to help them adequately. What is more, it is considered appropriate coping mechanisms for preventing burnout syndrome in 'helpers'.

The obtained results can be seen from the perspective of Holland's RIASEC model (1997, according to: Hedrih, 2009) which assumes that people choose professions with regard to their personality traits. Accordingly, people who are empathic, sociable and ready to help other people will choose the profession that coincide with the above mentioned qualities, including studies of humanities. These people belong to so-called social type of interests. People who prefer working on the

machines instead of being referred to the direct contact with people (like the students of technical sciences), will choose professions where their practicality will be most desirable quality and which do not require either communication and interpersonal skills. This is supported by the increased number of surveys conducted in the region with the aim to test Holland's view that personality qualities contribute to the choice of future profession (Hedrih, 2009; Hedrih & Šverko, 2007).

Differences concerning philanthropic and misanthropic interpersonal orientation of students

Analysis of variance showed that no differences were found between students of social, biomedical and technical sciences concerning the philanthropic orientation. ANOVA has also indicated statistically significant differences in the level of distrust ($F_{(299)} = 10.927$, $p < 0.01$), social isolation ($F_{(299)} = 24.559$, $p < 0.01$), and overall misanthropic orientation ($F_{(299)} = 18.235$, $p < 0.01$): students of technical science scored higher than other two groups of students.

Considering the average level of some forms of interpersonal orientation (table 2), it is clear that quite high philanthropic orientation characterized all students while misanthropic orientation were low. In more detail, the need for people and friendship were quite high while distrust and social isolation were quite low on the entire sample of students. So, we can conclude that moving towards people is more dominant interpersonal orientation than moving against and moving away from people and this is true for all student subsamples.

Table 4. Differences in the level of misanthropic interpersonal orientation between the students of social, biomedical and technical sciences (Post hoc test)

Scales	Group of science	Group of science	Mean Difference	p
Distrust	Technical	Social	3.55	0.000
		Biomedical	2.98	0.000
Social isolation	Technical	Social	3.70	0.000
		Biomedical	4.46	0.000
<i>Misanthropic orientation</i>	Technical	Social	7.25	0.000
		Biomedical	7.44	0.000

Results also showed that misanthropic orientation was significantly higher in technical science subsample in comparison with the students of social and biomedical sciences. According to Karen Horney's theory, distrust represents orientation against people which can be seen as distrust of other people's intentions and readiness to struggle with others. The struggle against the world can become a primary life motto of these people; they are persistent and use their intellect in order to win the others. Sometimes they choose realistic way of competition with others and develop their efficiency to perfection and thus succeed in their work. Social isolation, the other aspect of misanthropic orientation, indicated someone feeling of self-sufficiency and

tendency to withdrawal from people (“be away from people“). The main characteristic of these people is a strong need for independence and keeping emotional distance between themselves and the world, which sometimes looks like a need for loneliness. In many cases, this means that they don't want to be emotionally engaged either in cooperation or in competition with others.

It is important to emphasize that above mentioned characteristics were not high although were higher in students of technical sciences than in students of social and biomedical sciences. This can be partly explained from the perspective of Holland's RIASEC typology of interests (Holland 1997, according to: Hedrih, 2009) and his findings about connectedness between personality characteristics and professional choices. There are reasons to believe that technical science students belong mainly to so-called realistic type that characterized by interest in working with things, manipulation of material objects, tools, machines and technical devices; concerning personality traits it's important to single out their practicality, un-insightfulness, hardheadedness. In addition, technical studies required the characteristics of conventional Holland's type (interest in implementing procedures and activities that include clearly structured tasks, practical-minded) and lesser investigative type (analytical, intellectual, ambitious people with interest for applying of logical abilities in solving problems) Finally, it should be noted that the future work of students of technical science does not necessarily involve constant communication with people, which is certainly the most important for occupations in the field of humanities. So studying technical sciences requires students to be rational, quite independent and practical-minded, their focus is on practical instead of abstract problems, while students of social and biomedical sciences have to be communicative, cooperative, empathetic and people-oriented.

Conclusion

The obtained results indicate the differences between the students studying biomedical, technical and social sciences in two of three examined dimensions of prosocial orientation. Taking into account the level of development of the studied psychological phenomena, as well as the direction of the obtained difference, it is possible to draw several main conclusions.

Empathy, understood as the sensitivity to other people emotional states, the ability to take perspective of others and putting oneself in the place of other people, primarily characterized social science students. This, to a lesser extent, may be true for students of biomedical and technical science. However, students of social and biomedical sciences, as representatives of the humanities, showed a greater empathy than students of technical faculties. This is an important finding because it can be considered as a necessary requirement for dealing with so-called helping professions (psychologists, teachers, doctors, jurists, social workers...).

There were reasons for expecting differences in interpersonal orientation between student of different professional choices and findings from our sample are

quite interesting. Philanthropic orientation is quite high developed on the entire sample of respondents, and, it is important to emphasize, philanthropy is significantly higher than misanthropic orientation in all student groups. In general, orientation 'towards people' is more prevalent characteristic of students than moving 'away from' and 'against the people'. This data indicate positive value orientation of student population in our surroundings. Although there were no differences in the level of need for people and friendship, distrust and tendency to social isolation is found to be lower in the students of humanities than in technical sciences students. In this way, it is indirectly demonstrated once again that orientation towards people is largely characterized students of socio-humanistic sciences, which is one of requirements for doing successfully jobs within the helping professions.

Further, our findings are in line with previous empirical evidence and the assumptions resulting from theoretical conceptions about the connection between personality characteristics, professional interests and choice of profession.

Taking into account the importance of empathy for certain jobs and the fact that empathic abilities could develop throughout one's life, the obtained results can indicate the direction that educational interventions should be taken in order to improve empathic capacities of students. Specially designed courses within studying programs and specific practice could contribute to the development of communication skills and empathic listening, which are necessary prerequisites for successful interpersonal interaction. From the standpoint of long-term interests of society, it is very important to promote prosocial orientation and awareness of social responsibility of each individual as a member of the community.

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PROSOCIJALNA ORIJENTACIJA STUDENATA RAZLIČITOG PROFESIONALNOG USMERENJA

Apstrakt

Cilj istraživanja je bio da se ispita da li postoje razlike u prosocijalnoj orijentaciji studenata različitog profesionalnog usmerenja. Uzorak je činilo 300 subjekata, podeljenih u tri grupe od po 100 studenata društvenih, biomedicinskih i tehničkih nauka. Empatija, interpersonalna orijentacija i prosocijalno ponašanje su tretirani kao indikatori prosocijalne orijentacije. Empatija, shvaćena kao multidimenzionalni konstrukt sa afektivnim i kognitivnim komponentama, merena je upitnikom Interpersonal Reactivity Index M. Dejvisa. Filantropska (Prijateljstvo, Potreba za ljudima) i Mizantropska orijentacija studenata (Nepoverenje, Socijalna izolacija) merene su Skalom interpersonalne orijentacije. Prosocijalno ponašanje je procenjivano upitnikom konstruisanim za potrebe ovog istraživanja. Rezultati su pokazali da studenti društvenih nauka imaju višu empatiju od studenata druge dve grupe. Nisu nađene razlike u filantropskoj orijentaciji studenata dok je mizantropska orijentacija bila viša kod studenata tehničkih nauka nego kod ostalih. Prosocijalno ponašanje je prilično nisko procinjeno u svim poduzorcima studenata. Ukupno uzev, studenti humanističkih nauka su u većoj meri orijentisani ka ljudima nego ostali, što je u skladu sa izborom profesije. Nalazi su diskutovani sa stanovišta zahteva koji su potrebni za uspešno obavljanje buduće profesije.

Ključne reči: *prosocijalna orijentacija; empatija; mizantropija i filantropija; prosocijalno ponašanje; profesionalni izbor studenata*

PERSONALITY TRAITS AND EMPATHY AS PREDICTORS OF HUMOR STYLES ON HIGH SCHOOL STUDENTS SAMPLE⁴⁷

Abstract

The aim of this research was to examine to what extent different humor styles of high school students can be predicted by personality traits and empathy. The sample consisted of high school students (N=217), aged from 16 to 20 (M=17.51). The respondents completed three questionnaires: Humor Styles Questionnaire - HSQ (measuring four humor styles), Big Five Plus Two (measuring seven personality traits) and Interpersonal Reactivity Index - IRI (measuring four aspects of empathy). The data was processed using method of hierarchical regression analysis. Personality traits and empathy were treated as predictors and humor styles were criterion variables. All regression models, except one, were statistically significant. Significant predictors of Affiliative humor were personality traits Aggressiveness, Extraversion and Conscientiousness. Significant predictors of Self-enhancing humor were Extraversion, Openness to experience and Perspective taking, aspect of empathy. Aggressive humor was predicted by Negative valence and Conscientiousness. Significant predictors of Self-defeating humor were Neuroticism and Perspective taking. The results show that Affiliative humor had a highest percentage of explained variance. Personality traits were much better predictors of humor styles than empathy (only one aspect of empathy slightly contributes to the prediction of the surveyed humor styles in respondents).

Key words: humor styles, personality traits, empathy, high school students, regression analysis

Introduction

Humor and laughter are universal forms of human functioning. They are present in all cultures and more or less typical for all members of the human race (Lefcourt, 2001, according to Vukobrat, 2013). Humor and laughter represent an

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emotional complex which refers to the entertainment and pleasure (Kreč i Kračfeld / Krech and Crutchfield, 1976).

Humor is a phenomenon that has been considered since ancient times, and therefore there are a number of explanations or attempted explanations of humor, ranging from Plato and Aristotle, to Freud and Bergson. What is common for these explanations is that they were focused on specification of the situations that leads to laughter, but they were not oriented towards individuals. More specifically, these studies didn't try to explain why some people laugh at certain situations, while to another person the same situation isn't funny (Martin, 1998).

Freud considered that the basic feature of every joke is a sudden twist. He believed that through joke people express sexual or aggressive impulses (Freud, 1905, according to Komlenić, 2013). With the development of psychoanalytic theory fear has also been pointed out on as possible explanation of humor. Flugel (1954, according to Krech and Crutchfield, 1976) gives his theory of laughter, suggesting that humor allows individuals to express superiority, aggression and sexuality in a socially acceptable way and to defend themselves from dangers that lurk in reality. Basically, what is causing humor, according to this theory, is perception of failure of other people, institutions or behavior that we don't love or we hate. Laughter, according to this author, is an expression of triumph, superiority, contempt or ridicule.

Svebak (1974, according to Martin, 1998) is one of the first authors who ended with the traditional way of examining humor and who started research of this phenomenon through questionnaires. There were also attempts to construct a questionnaire in order to examine different styles of humor. One of them is widely used HQS (Humor styles questionnaire) designed by Martin and his associates (Martin, Puhlik-Doris, Larsen, Gray & Weir, 2003). This questionnaire assumes existence of following four humor styles:

Affiliative humor - focused on improving relations with other people. Individuals who have high scores on this humor style tend to say funny things, jokes, in order to amuse others. They also tend to tell jokes about themselves, and not take themselves overly seriously while maintaining a sense of self-acceptance.

Self-enhancing humor - focused on achieving personal welfare but not at the expense of others. This humor style includes a generally humorous outlook on life. Also, this style can be used as a coping mechanism.

Aggressive humor - directed at achieving personal welfare but at the expense of others. This humor style relates to use of sarcasm, teasing, ridicule, derision „putting someone down“ and similar.

Self-defeating humor - focused on improving interpersonal relations but at the expense of one's personal welfare. This humor style includes attempts to amuse others by doing or saying funny things at one's own expense as means of gaining approval or being accepted by others.

Authors emphasized that first two styles represent adaptive and the other two maladaptive forms of humor (Martin et al., 2003).

Previous studies on connection between personality traits, empathy and humor styles

For purposes of this research, results of previous studies concerning connection between personality traits, empathy and humor styles, will be presented. Martin and his associates reported that Extraversion, as a personality trait, has shown the strongest correlation with Affiliative humor and that this relationship has been consistently registered. Extraversion was also correlated with Self-enhancing humor. Agreeableness and Conscientiousness were negatively correlated with Aggressive and Self-defeating humor. Results also suggested a correlation between Neuroticism and Aggressive and Self-enhancing humor. Openness to experience has statistically significant correlation with Affiliative and Self-enhancing humor (Martin et al., 2003).

Some authors examined the connection between humor styles and personality traits using questionnaires HSQ and Five-factor personality inventory. Findings from this study suggest that the adaptive forms of humor, specifically the Affiliative and Self-enhancing humor were negatively correlated with Neuroticism while positive correlation was found between adaptive forms of humor and Extraversion, Openness to experience, Agreeableness and Conscientiousness. Maladaptive forms of humor, Aggressive and Self-defeating humor were positively correlated with Neuroticism and negatively correlated with the other four dimensions of personality (Zareh, Zarch and Nasab, 2010; according to Vukobrat, 2013). Some studies have shown that the tendency to certain humor styles was associated with Sensation Seeking (Arnett, 1994; according to Johnson and McCord, 2010) and Extraversion (Buchanan, 2001, according to Johnson and McCord, 2010). Eysenck also pointed out on the connection between humor and Extraversion (Eysenck and Eysenck, 1985 according to Martin, 1998).

When it comes to the relation between empathy and humor styles it has been noticed that only a few authors have examined this relation. One recently conducted study that was dealing with this connection was found. Hampes (2010), in his study, found a statistically significant correlation between some dimensions of empathy and humor styles. More precisely, the following statistically significant correlations were found: positive correlation between Empathic concern and Affiliative humor; positive correlation between Perspective taking and Self-enhancing humor; negative correlation between the same humor style and Personal distress; negative correlation between Aggressive humor and three aspects of empathy, Perspective taking, Empathic concern and Personal distress. Only Self-defeating humor wasn't correlated to any of the dimensions of empathy.

Methodology

Problem and aim of the research

The problem of this study was to investigate the relationship between personality traits, empathy and humor styles. The main objective was to examine whether basic personality dimensions and aspects of empathy are statistically significant predictors of humor styles among high school students.

Variables and instruments

Humor styles. People experience and express humor in many different ways. The usual way of expressing and experiencing humor Rod Martin (1998) defined as a dominant humor style of an individual. He believes that it is possible to distinguish between adaptive and maladaptive forms of humor. Martin described four humor styles: Affiliative humor, Self-enhancing humor, Aggressive humor and Self-defeating humor.

Affiliative humor is focused on improving relations with other people; it represents adaptive form of humor;

Self-enhancing humor is focused on achieving personal welfare but not at the expense of others; because of which it also represents adaptive form of humor;

Aggressive humor is directed at achieving personal welfare but at the expense of others; it represents maladaptive form of humor;

Self-defeating humor is focused on improving interpersonal relations but at the expense of one's personal welfare; it also represents maladaptive form of humor.

Martin and his associates developed instrument for measuring above mentioned humor styles. ***Humor Styles Questionnaire*** (HSQ: Martin et al., 2003) contains a list of statements describing different ways in which humor might be experienced. More precisely, it consists of 32 statements, which are arranged into 4 subscales of 8 items each. Originally designed as seven-degree scale, it was adapted for the purposes of this study to five-point Likert type scale (from 1 – I completely disagree to 5 – I completely agree). We believed that the five-point scale is sensitive enough for respondents to express the level of their agreement with each statement. Reliability of these subscales was lower from the one in original version of the scale (Cronbach's Alpha coefficients were: for Affiliative humor 0.74, for Self-enhancing humor 0.77, for Aggressive humor 0.59 and for Self-defeating humor 0.504).

Personality traits were defined in accordance with Big Five plus Two model (Smederevac, Mitrović i Čolović, 2010) which is based on psycho-lexical paradigm and it was developed in Serbia. Authors considered that personality can be described using seven basic personality dimensions, i.e. general dispositions, and five of them are similar to the widely known five-factor model (Digman, 1990). Smederevac et al. (2010) identified the following seven personality dimensions:

Neuroticism refers to the negative affect, depression and anxiety;

Extraversion refers to sociability and cordiality, and to positive affect too;

Openness to experience primarily refers to intellectual activity, namely intellectual curiosity, and on a novelty seeking;

Aggressiveness refers to feelings of anger, “difficult character” of individuals and to intransigence; people with high scores were not suitable for team work, they do not trust other people;

Conscientiousness refers to persistence, perseverance and responsibility to commitments. Contrary to that, low Conscientiousness indicates laziness and lack of self-discipline, namely, the inability to delay current hedonistic impulses for the sake of long-term goals;

Positive valence refers to narcissistic tendencies and to positive self-image;

Negative valence dominantly describes a tendency towards manipulative behavior, and negative self-image.

In order to measure seven personality traits, authors developed questionnaire Big Five plus Two (Smederevac et al., 2010). For research purposes short version of this instrument, consisted of 70 items, was used. Respondents were asked to indicate the level of agreement with each statement on a five-point Likert type scale. Reliability of each subscale was adequate. Cronbach's Alpha coefficients were: for Neuroticism 0.87; for Extraversion 0.83; for Openness to experience 0.60; for Aggressiveness 0.86; for Conscientiousness 0.85; for Positive Valence 0.86; and for Negative Valence 0.74.

Empathy. The term „empathy“ refers to the sensitivity and understanding of other people (Smith, 2006). This term is usually associated with Lipps, psychologist who used the term “blending” to describe empathy of an observer with objects that he estimates aesthetically. Later he applied this term to the perception of affective state of another person. Hoffman defined empathy as an „unwilling and sometimes intensive experience of someone else's emotional state“ (Hoffman, 1978, according to Stojiljković 2009).

One of the most accepted conception of empathy is related to the work of Mark Davis and his “organizational model of empathy” (Davis, 1980, according to Stojiljković et al., 2012; Davis, 1983). He defines empathy as „reactions of one individual to the observed experiences of another“. According to Davis, empathy is multidimensional construct with two cognitive (Perspective Taking and Fantasy) and two affective components (Empathic concern and Personal distress).

Interpersonal Reactivity Index (IRI: Davis, 1980) was used to measure four aspects of empathy. This is a five-point Likert type scale, which consists of 28 items arranged into 4 subscales consisted of 7 items each:

Perspective taking is defined as the tendency to spontaneously adopt the psychological point of view of other people;

Fantasy is described as a tendency to transpose oneself imaginatively into the feelings and actions of fictitious characters from books, movies, and plays;

Empathic concern refers to “other-oriented” feelings of sympathy and concern for unfortunate others;

Personal distress refers to “self-oriented” feelings of personal anxiety and unease in tense interpersonal settings.

Reliability of these subscales, estimated by Cronbach' Alpha coefficient, was as follows: for Perspective Taking 0.596, for Fantasy 0.668, for Empathic Concern 0.564 and for Personal Distress 0.695.

Sample

The sample consisted of high school students from technical high school, art high school and regular high school, from the city of Niš and Leskovac. There were 217 respondents in total, aged from 16 to 20 years (the average age was 17.51). Testing was anonymous, with informed consent of the subjects. It was carried out in May 2016 in the schools located in the city of Nis and Leskovac.

Results and discussion

Data was analyzed using SPSS program, version 20. Four hierarchical regression analysis were done, whereas predictors were personality traits and dimensions of empathy, while criterion variables were four humor styles.

Table 1. Correlations between Humor styles, Personality traits and Empathy

Variables	Affiliative humor	Self-enhancing humor	Aggressive humor	Self-defeating humor
Aggressiveness	-0.134	-0.228**	0.182**	0.188**
Extraversion	0.536**	0.402**	-0.092	-0.012
Neuroticism	-0.159*	-0.264**	0.112	0.271**
Negative valence	-0.038	-0.147*	0.459**	0.159*
Openness to experience	0.204**	0.306**	-0.076	0.007
Positive valence	0.258**	0.206**	0.137*	-0.003
Conscientiousness	-0.056	0.133	-0.300**	-0.085
Fantasy	0.134	0.061	-0.021	0.085
Empathic Concern	0.106	0.055	-0.230**	0.092
Perspective taking	0.110	0.235**	-0.230**	0.118
Personal distress	-0.130	-0.171*	-0.080	0.089

** statistically significant on level of 0.001
* statistically significant on level of 0.05

From the table above it can be seen that Aggressiveness is negatively correlated with Self-enhancing humor, while positively correlated with Aggressive and Self-defeating humor. Extraversion is positively correlated with Affiliative and Self-enhancing humor. Negative Valence is negatively correlated with Self-enhancing humor, which is understandable if we take into account that Negative valence includes negative self-image, which is not in accordance with Self-enhancing humor. It can be assumed that people will be more inclined to help themselves in tense situations, in a way which is not harmful for themselves or for others, only if they have a positive self-image. Negative valence is positively correlated with Aggressive humor. This relation is understandable given the fact that both Negative valence and Aggressive humor involve a certain amount of manipulative tendencies towards other people. When it comes to positive correlation between Negative valence and Self-defeating humor, this relation is also understandable given the fact that both constructs include negative self-image.

A statistically significant positive correlation exists between the Positive valence and Affiliative and Self-enhancing humor. This result was expected given the fact that all three constructs include positive self-image. From the table it can also be seen that there is a statistically significant positive correlation between Openness to experience and Affiliative and Self-enhancing humor.

Conscientiousness, Empathic concern and Perspective taking are negatively correlated with Aggressive humor. Also, there is a statistically significant positive correlation between Perspective taking and Self-enhancing humor, as well as negative correlation between this humor style and Personal distress.

Most of results given in the table above represent confirmation of results from previous studies (Martin et al., 2003; Zareh, Zarch and Nasab, 2010, according to Vukobrat, 2013; (Eysenck and Eysenck, 1985 according to Martin, 1998; Hampes, 2010).

Table 2. Hierarchical regression analysis: criterion variable - Affiliative humor

Model	Predictors	R ²	β	p
1				0.000
	Aggressiveness		-0.173	0.021
	Extraversion		0.574	0.000
	Neuroticism	35.7%	-0.006	0.935
	Negative valence		0.089	0.249
	Openness to experience		0.015	0.814
	Positive valence		0.030	0.676
	Conscientiousness		-0.221	0.001
				0.000
		Aggressiveness		-0.155
	Extraversion		0.584	0.000
2	Neuroticism	37.7%	0.030	0.699
	Negative valence		0.087	0.283
	Openness to experience		-0.063	0.381
	Positive valence		0.054	0.453
	Conscientiousness		-0.218	0.001
	Fantasy		0.120	0.059
	Emphatic concern		-0.011	0.876
	Perspective taking		0.048	0.448
	Personal Distress		-0.097	0.151

From the table above it can be seen that statistically significant predictors of Affiliative humor are: Aggressiveness, Extraversion and Conscientiousness. When it comes to connection between Affiliative humor and Extraversion, that relation was expected based on the results from previous studies, on the other hand negative correlation between Affiliative humor and Conscientiousness is contrary to those results (Martin et al., 2003; Zareh, Zarch and Nasab, 2010, according to Vukobrat, 2013).

Aggressiveness has a negative correlation with Affiliative humor, which is understandable considering that Aggressiveness concerns, among other things,

violent behavior towards other people and Affiliative humor is focused on reducing interpersonal tensions and improving interpersonal relationships. Extraversion has a positive correlation with Affiliative humor. This correlation was expected based on the results of previous studies. Conscientiousness has a negative correlation with this Humor Style, which can be explained by the fact Conscientiousness involves primarily order and discipline which is the opposite of spontaneity that characterizes Affiliative humor.

None of the dimensions of Empathy have been singled out as statistically significant predictors of Affiliative humor.

Total percentage of explained variance of this Humor Style was 35.7% in the first model, and 37.7% in the second model.

Table 3. Hierarchical regression analysis: Criterion variable - Self-enhancing humor

Model	Predictors	R ²	β	p
1				0.000
	Aggressiveness		-0.156	0.057
	Extraversion		0.271	0.001
	Neuroticism	23.1%	-0.113	0.153
	Negative valence		0.009	0.918
	Openness to experience		0.189	0.008
	Positive valence		0.042	0.588
2	Conscientiousness		-0.068	0.346
				0.019
	Aggressiveness		-0.141	0.086
	Extraversion		0.271	0.001
	Neuroticism		-0.112	0.195
	Negative valence		0.022	0.804
	Openness to experience	24.7%	0.149	0.061
	Positive valence		0.059	0.457
	Conscientiousness		-0.085	0.250
	Fantasy		-0.012	0.865
	Emphatic concern		-0.031	0.683
Perspective taking		0.144	0.039	
Personal Distress		-0.011	0.884	

From the table above it can be seen that in the first model statistically significant predictors of Self-enhancing humor are Extraversion and Openness to experience, as expected based on the results from previous studies (Martin et al., 2003; Zareh, Zarch and Nasab, 2010, according to Vukobrat, 2013). Extraversion refers, beside other things, to positive affect, for which it can be assumed that also characterizes Self-enhancing humor. Similarly to what is stated in the section regarding correlations, it can be assumed that individuals will have a tendency to help themselves and others harmlessly if one of their characteristics is positive affect.

In the second model, one dimension of empathy is singled out as statistically significant predictor of Self-enhancing humor, that dimension is Perspective taking, which is in accordance with results from previous study (Hampes, 2010). But in this

model Openness to experience ceases to be a statistically significant predictor. This can be explained by the assumption that Openness to experience and Perspective taking explain same part of overall variance of Self-enhancing humor, but that Perspective taking explains it better than Openness to experience. More precisely, that Openness to experience explains that part of the variance of Self-enhancing humor which refers to openness towards taking the perspective of others.

Total percentage of explained variance of Self-enhancing humor in first model is 23.1% and 24.7% in the second model.

Table 4. Hierarchical regression analysis: Criterion variable - Aggressive humor

Model	Predictors	R ²	β	p
1				0.000
	Aggressiveness		-0.050	0.538
	Extraversion		-0.012	0.880
	Neuroticism	24.5%	-0.085	0.274
	Negative valence		0.426	0.000
	Openness to experience		-0.032	0.646
	Positive valence		0.076	0.325
2	Conscientiousness		-0.180	0.013
				0.000
	Aggressiveness		-0.042	0.599
	Extraversion		0.024	0.763
	Neuroticism		0.002	0.983
	Negative valence		0.363	0.000
	Openness to experience	27.3%	-0.055	0.481
	Positive valence		0.068	0.386
	Conscientiousness		-0.185	0.011
	Fantasy		0.073	0.287
Emphatic concern		-0.081	0.271	
Perspective taking		-0.080	0.241	
Personal Distress		-0.140	0.056	

From the table above it can be seen that statistically significant predictors of Aggressive humor in first model are Negative valence and Conscientiousness. Negative valence, like Aggressive humor, partially refers to manipulative tendencies towards others. Regarding that, Negative valence as predictor of this humor style was expected. Conscientiousness has negative correlation with this humor style, which is understandable and expected based on results from previous studies (Martin et al., 2003; Zareh, Zarch and Nasab, 2010, according to Vukobrat, 2013). Conscientiousness refers to responsibility towards obligations, and one of the obligations of human beings can be respect towards social norms referring to respect towards others, non-manipulative and polite behavior. Aggressiveness implies the opposite.

None of the dimensions of empathy were singled out as statistically significant predictors of Aggressive humor.

Total percentage of explained variance of Aggressive humor is 24.5% in the first model and 27.3% in the second model.

Table 5. Hierarchical regression analysis: Criterion variable - Self-defeating humor

Model	Predictors	R ²	β	p
1				0.005
	Aggressiveness		0.031	0.723
	Extraversion		0.099	0.243
	Neuroticism		0.256	0.003
	Negative valence	8.5%	0.088	0.342
	Openness to experience		-0.005	0.948
	Positive valence		-0.049	0.563
	Conscientiousness		0.031	0.697
2				0.312
	Aggressiveness		0.050	0.576
	Extraversion		0.081	0.348
	Neuroticism		0.248	0.008
	Negative valence		0.133	0.166
	Openness to experience	12.0%	-0.096	0.263
	Positive valence		-0.007	0.936
	Conscientiousness		0.025	0.753
	Fantasy		0.062	0.412
	Emphatic concern		0.051	0.531
Perspective taking		0.168	0.026	
Personal Distress		-0.047	0.557	

From the table above it can be seen that statistically significant predictors of Self-defeating humor in the first model is Neuroticism which was expected based on the results from previous studies (Martin et al., 2003; Zareh, Zarch and Nasab, 2010, according to Vukobrat, 2013). Neuroticism refers to negative affect, depression and anxiety. It can also be assumed that individuals who use this form of humor have negative self-image, more precisely, image that includes the same content to which Neuroticism refers. Regarding this, positive correlation between these two constructs is understandable.

In the second model besides Neuroticism, statistically significant predictor is also Perspective taking, which is contrary to results of previous study, which suggest that none of the dimensions of empathy are statistically significant predictors of Self-defeating humor. Positive correlation between Self-defeating humor and Perspective taking can be understood if it is assumed that individuals using this humor style have the ability to take someone else's point of view. These people have tendency to fit in in the society at all costs. Because of this tendency, those individuals could learn how to understand others in order to subjugate them, their desires and expectations in order to fit in.

Total percentage of explained variance is 8.5% in the first model and 12% in the second model. In should be stated that second model isn't statistically significant, which means that all predictors from this model taken together can't predict variance of Self-defeating humor.

Conclusion

The problem of this study was to investigate the relationship between personality traits, empathy and humor styles among adolescents. The main objective of the study was to find out whether the usual ways of expressing and understanding humor can be predicted by seven personality traits and four aspects of empathy.

In general, personality traits were better predictors of humor styles than empathy. Only one dimension of empathy (Perspective taking) is singled out as statistically significant predictor of two humor styles (Self-enhancing and Self-defeating humor). This finding can be explained by the assumption that personality traits have already explained same part of variance which was explained by empathy in previous study (Hampes, 2010), and that personality traits explain better this proportion of total variance of humor styles. In sum, our findings do not support results from Hampes's study.

It can be concluded that results referring to personality traits mainly confirm results from previous studies, especially Martin's findings (Martin et al., 2003). Some differences in the proportion of explained variance could be explained by the fact that instruments used in our and in earlier studies were not the same; reliability of some subscales wasn't quite adequate in this study. Affiliative humor was the form that is best explained by personality traits, Aggressive and Self-enhancing humor are similar when compared by the predictive power of personality traits. When it comes to Self-defeating humor, a very low percentage of variance of this humor style was explained by the predictors in this research. In all regression models, contribution of empathy to the explanation of overall variance of humor styles was really low or it wasn't statistically significant. It is important to emphasize that, taken together, adaptive forms of humor were better explained than maladaptive forms of humor. In general, findings from this study could be considered as consistent to the results of earlier studies.

Finally, the most important finding is the following: personality traits, as stable dispositions of personality, are better predictors of humor styles than empathy. This could be explained by the fact that empathy could be treated as a part of some of these seven basic dimensions of personality surveyed in this research.

Further research is needed in order to increase knowledge about the personality characteristics and situational factors on the basis of which we can explain the specific way of expressing and experiencing humor in people. It could be suggested to use additional instruments for personality domain and to encompass cognitive side of personality in the future.

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CRTE LIČNOSTI I EMPATIJA KAO PREDIKTORI STILOVA HUMORA KOD SREDNJOŠKOLACA

Apstrakt

Cilj istraživanja je bio da se ispita u kojoj meri se mogu predvideti stilovi humora srednjoškolca na osnovu crta ličnosti i empatije. Uzorak su činili srednjoškolci (N=217), uzrasta 16 do 20 godina (M=17.51). Ispitanici su popunili tri upitnika: Humor Styles Questionnaire-HSQ (za merenje četiri stila humora), Velikih Pet plus Dva (za merenje sedam crta ličnosti) i Indeks Interpersonalne Reaktivnosti-IRI (za merenje četiri aspekta empatije). Podaci su obrađeni postupkom hijerarhijske regresione analize. Crte ličnosti i empatija su tretirani kao prediktori, a stilovi humora kao

kriterijumske varijable. Svi regresioni modeli, osim jednog, bili su statistički značajni. Značajni prediktori afilijativnog humora su crte ličnosti Agresivnost, Ekstraverzija i Savesnost. Značajni prediktori samo-veličajućeg humora su Ekstraverzija, Otvorenost za iskustvo i Zauzimanje tuđeg stanovišta, kao aspekta empatije. Agresivni humor se može predvideti na osnovu Negativne valence i Savesnosti. Značajni prediktori samoporažavajućeg humora su Neuroticizam i Zauzimanje tuđeg stanovišta. Rezultati su pokazali da afilijativni humor ima najveći procenat objašnjene varijanse. Crte ličnosti su mnogo bolji prediktori stilova humora nego empatija (samo jedan aspekt empatije slabo doprinosi predikciji ispitivanih stilova humora kod ispitanika).

Ključne reči: stilovi humora, crte ličnosti, srednjoškolci, regresiona analiza

PREDICTING BURNOUT AMONG EMPLOYEES IN GERONTOLOGY CENTER ON THE BASIS OF PERSONALITY TRAITS, COPING STRATEGIES AND THE TYPE OF WORK

Abstract

The main aim of the study is to examine the possibilities of prediction of stress (burnout) in employees on the basis of the type of work, personality traits, and coping strategies. A total number of the 125 respondents participated in the study. The average age of respondents was about 43 years old. Based on the type of work respondents were divided into two groups: 1) employees who work with users and 2) employees who do not work with users. The used instruments are Big Five Plus Two Questionnaire (VP + 2) (Čolović et al., 2014), Coping strategies Indicator (CSI-Amirkhan, 1990) and the Scale that measures the physical and psychological exhaustion related to work (Work Burnout-WB) (Borritz et al., 2005). Results of the hierarchical regression analysis have shown that the type of work is a significant predictor of burnout but explains a very small percentage of variance burnout. Personality traits have additional predictive validity, but conversely coping strategies have no additional predictive validity in relation to personality traits and type of work. The results indicate that partially, personality traits: Neuroticism and Positive valence and coping strategies: Avoidance, are identified as significant predictors in the prediction of burnout. Apart from conceptualization variables and their relationships, the results of this research could contribute to the formulation of guidelines for research and the fight against occupational stress in Helping Professions.

Keywords: personality traits, coping strategies, stress indicator, employees

Introduction

The research of stress is the subject of interest of many researchers in different areas. Their goal is to expand knowledge about human functioning in personal and professional roles, as well as changes in individuals that include: activation, excitement, tension, anxiety, conflict, emotional changes and frustration under the influence of stress.

According to the synthetic method, the stressors are any physical or social conditions or internal demands that a person perceived as actually or potentially harmful or threatening (Zotović, 2002).

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Following the model McGrath (McGrath, 1976) working environment becomes stressful when one perceives it as threatening, and sources of stress arise from the nature of given tasks, behaviors, environment, physical and technical conditions of work, work roles, poor interpersonal relationships and predisposition to stress in the structure of personality.

Much research deals with stress of professional helpers (Jenić, 2002; Ljubotina & Družić, 1996; Škrinjar, 1996). Over 50 years ago it was shown that psychosocial stressors can lead to the same biochemical-physiological processes as stressors of physical nature. Most researchers were involved in the consequences of changes in the form of somatic disorders and diseases. (Selye, 1956). Selye has made a huge contribution to the study of the essence, ie. etiology and pathogenesis of psychosomatic diseases and disorders. Therefore, important issues related to research, life stress and its impact on health, refer to the moderator of stress (eg, social support) and closer determining of the physiological mechanisms (eg. The role of the immune system) through which stress causes its effects.

In accordance with that, a need to expand the knowledge about stress in one specific helper profession proved to be justified - employees in the Gerontology Center, who are in their daily work exposed to large and complex professional requirements which may become the source of their professional stress.

Definition of burnout syndrome

Burnout syndrome is one of the most unfavorable results of exposure to professional stress. This construct was first defined by Kristina Maslach and Susan Jackson in the seventies (Maslach and Jackson, 1984). According Maslach, burnout is a phenomenon which is particularly present in the humanities professions and where interpersonal relations are of crucial importance. These include: health workers, social workers, psychologists, teachers, etc. (Maslach et al., 2001).

Burnout at work is a state of physical, emotional and mental exhaustion caused by long-term involvement in emotionally demanding situations (Pines and Arison 1988 by Figley, 1995).

Employees in social welfare usually work with the elderly and disabled population. Forsgårde conducted a research with social workers and nurses who work with the elderly and disabled people in nursing homes in Sweden. It was shown that the biggest source of stress is lack of support from colleagues. Sources of burnout among employees in social welfare arise from the characteristics of the work environment, work organization, the mode of communication in the organization and the lack of support from colleagues (Forsgårde et al., 2002).

Previous research of sources of burnout syndrome among workers in social welfare

Service beneficiaries of social welfare are the people who are usually in a crisis which is reflected in their behavior: the aggressiveness, impulsivity, or in: the decline in self-esteem, passivity and dependence of the person from which assistance is requested. According to Škrinjar (Škrinjar, 1996), people who decide

on a helper occupation and who are employed in social welfare are often enthusiasts and perfectionists with high expectations and they are very susceptible to burnout. Sources of burnout in social welfare are various. The most common are:

Inside sources: unrealistic expectations of the job, the identification of the beneficiaries and their problems, high need for control, poor organization, reduced experience of professional competence;

Resources related to working conditions: inadequately equipped space, a tight space due to the large number of beneficiaries;

Sources related to the organization of work: not enough time to comply with the deadlines, insufficient number of team members in relation to the tasks, overlapping responsibilities, lack of professional training, lack of time or initiative for supervising;

Resources related to relationships with others in the organization: a rigid, authoritarian style of leadership, suspiciousness, closed to external experiences and information, encouraging the spirit of communion neglect, denial of feedback, lack of professional and personal support system;

Sources related to the specificity by excessive number of beneficiaries who are in need of full-day intensive care, the possibility that the beneficiary physically attacks, the similarity of the traumatic experiences of users with personal experience of the employee, the constant awareness of the great needs of beneficiaries, a large number of problems without a satisfactory solution.

According Havelka (Havelka, 1999), the most common sources of stress for employees in social welfare are:

- feeling of too much responsibility for discretion in making important decisions for the life of the user;
- working in severe cases of social misery and poverty;
- problems in interpersonal relationships;
- frequent exposure to public criticism of professionals;
- work with clients of various problems and pathology;
- inability to meet customer's demands for objective reasons (lack of funds, institutions, etc.);
- uncertainty about the outcome of the provided advice and assistance.

In the pilot research performed in 2005 at the Gerontology Centre "Novi Sad", it was shown that the expression of burnout is influenced by the following factors: greater working experience in the institution, less satisfaction with personal income, fewer hours of sleep and less satisfaction with the accommodation facility in which they work. As many as 75% of the employees that had a very strong risk of burnout are from the group that works with dependent service beneficiaries. These results are consistent with studies that Pines and Maslach conducted in 1978 (according to Mandic, 2003). Regarding the impact of the workplace on the risk of burnout, the most vulnerable are employed in stations that are in contact with dying beneficiaries and with beneficiaries who are suffering from dementia. Viewed in relation to type of work, most disadvantaged are nurses, and then the nurses in care. More than half of them are classified into high risk categories.

Stress and coping strategies

In relation to the short-term and long-term effects of stress on the psychological well-being, it is important to understand the ways in which people deal with stress, which has a great theoretical and practical significance. Recent research (Popov et al., 2013) has confirmed the association between coping strategies and quality of mental health.

It is observed that there is great potential in reducing the negative consequences of stressful situations by improving coping strategies.

Amirkhan (Amirkhan, 1990) has come to the following three coping strategies: problem solving, seeking social support, and avoidance. Problem solving includes active efforts of an individual to solve the problematic situation, modify the stressful situation, or minimize its effects. Seeking support is defined as efforts to gain help and understanding of other people, as well as by seeking additional information related to the problem situation. Avoidance is a strategy that includes behavior of avoiding problematic situations either at the cognitive or behavioral level, or both.

Personality traits and coping strategies

It was shown (Ghorpade et al., 2003) that the burnout syndrome occurs in employees in the helping professions, but burnout does not occur with all employees equally, even though they are operating under the same circumstances. On that basis, the question is whether, in addition to the nature of work, personality traits play an important role in the appearance of burnout syndrome.

McCrae and colleagues, in the so called Baltimore longitudinal study, were examining the existence of connections between determinants of coping strategies and personality traits, starting with the five-factor model. According to the five-factor model, (McCrae, 1992), most of the personality traits can be taken as an aspect of one of the five basic dimensions: Neuroticism (N), Extraversion (E), Openness to experience (O), Aggressiveness (A) and Conscientiousness (C). The results of the mentioned studies show the existence of consistency between personality traits and coping strategies. The personality traits that are distinguished as significant are Neuroticism - a person with expressed neuroticism reacts negatively to stress, blames themselves and attacks others, while people with the expressed Extraversion usually seek help from others when coping with stress, joke and look for company. The above mentioned factors also appear in the personality questionnaire that was used in this study as the reference frame for testing personality traits (Čolović, Smederevac & Mitrović, 2014).

Therefore, the main objective of this study was to investigate the relation between personality traits, coping strategies and type of work with burnout. Respectively, we wanted to test the prediction of burnout on the basis of all these variables. Thus, we can determine the contribution of those predictors in assessing the degree of burning of employees in GC "Novi Sad.

Method

Sample and procedure

The research was conducted on a convenience sample of 125 respondents (97 female) with an average age of 43 and it ranges from 23 to 61 years of age. The sample consisted of employees of the Gerontology Centre “Novi Sad”. Criteria for inclusion of respondents in the group was direct or indirect work with beneficiaries. Based on the above, respondents were divided into two groups: Group 1 – staff who works with the beneficiaries (N = 63), group 2 - staff who does not work directly with the beneficiaries (N = 62). A more detailed description of the sample according to demographic characteristics is presented in Table 1.

Data collection was completed at the beginning of 2016. Respecting ethical requirements, all respondents were familiar with the basic objectives of the research and the fact that information that will be obtained will be used only for scientific purposes, as well as the guarantee of anonymity of all received data and the identity of the respondents.

Table 1. *Descriptive statistics for demographic variables in the research*

Variables	Description of the groups according to demographic characteristics
Gender	Female (N=97; 78%), male (N=28; 22%)
Age	- 25 (N=3; 2%), 26-35 (N=16; 13%), 36-45 (N=36; 29%), 46-55 (N=53; 42%), 56 + (N=17; 14%)
Level of education	Elementary school (N=9; 7%), secondary school (N=89; 71%), university educated (N=27; 22%)
The amount of salaries	Below 30.000 (N=84; 67%), 30.000-40.000 (N=38; 31%), above 40.000 (N=3; 2%)
Profession	Professional workers (N=14; 11%), health workers (N=27; 22%), nurses (N=18; 14%), hygienists (N=23; 18%); administration (N=43; 35%)
Type of work	Direct work with dependent beneficiaries (N = 63; 51%), no direct work with beneficiaries (N = 62; 49%)

Instruments

In this research, we used three instruments:

Short version of Big Five Plus Two Questionnaire (VP+2-70: Čolović, Smederevac & Mitrović, 2014) is the questionnaire for the assessment of basic personality dimensions and consists of 70 items with a Likert five-point scale. On the basis of correlations between the items contained in the integral version (184 items) and principal components of higher-order scales, seven 10-item scales were constructed. Five basic dimensions of this questionnaire measured are: Extraversion-Introversion, Neuroticism-Emotional Stability, Conscientiousness-Impulsivity, Agreeableness-Aggression and Openness to Experience-Conventionality. Each dimension consists of two or three subdimensions.

Two additional dimensions related to the process of self-evaluation are Positive and Negative valence. This paper will use scores on seven dimensions of personality.

Work Burnout (WB: Borritz et al., 2005). WB scale was created within the PUMA project (Project on Burnout, Motivation, and Job Satisfaction) and it is part of the Copenhagen Burnout Inventory (Kristensen et al., 2005b). Work burnout scale measures the physical and psychological exhaustion related to work. It consists of 7 items (e.g. “Do you find your job emotionally exhausting?”). The task of the respondents was to give their answers on the five-point Likert-type response format (from almost not at all to a great extent). Hereinafter, this variable is called burnout, and higher scores indicate a higher degree of burnout.

Coping Strategies Indicator (CSI: Amirkhan, 1990). CSI is a multidimensional instrument for the assessment of general coping strategies. It consists of three different dimensions (problem solving, seeking social support and avoidance) and 33 items (11 items for each subscale) with a three-point response format (a lot, a little, and not at all). In each item, the respondents had to decide on the level in which they tried to resolve the problem (e.g. “... rearrange things in your life so that your problem has a great chance to be resolved.”), sought social support (e.g. “shared ... your feelings with a friend.”), or avoided the situation (e.g. “tried to get your mind off of the problem.”). Higher scores on each subscale indicate more intensive use of the coping strategy represented by the subscale. The translation of the questionnaire to Serbian language was developed with a reverse translation into English (Žuljević, 2009), in consultation with the author of the original instrument. Metric characteristics of the original and the translated questionnaire proved to be satisfactory (Clark et al., 1995; Žuljević & Gavrilov-Jerković, 2008b, according Žuljević 2009).

Variables

All variables used in the research are shown in Table 2 (except demographic which are presented in sub-section of the sample)..

Table 2. *Descriptive indicators examined variables in research (a number of items in each scale given in parentheses)*

Variables	M	SD	Sk	K
1.Work Burnout (7)	44.40	22.19	.40	-.23
2.Problem solving (11)	16.60	5.70	1.40	1.24
3.Seeking social support (11)	22.56	5.72	.21	-.33
4.Avoidance (11)	25.29	4.26	-.08	-.41
5. Aggressiveness (10)	21.62	7.18	.54	-.06
6. Extraversion (10)	40.12	7.52	.95	9.31
7.Neuroticism (10)	22.04	7.44	.45	.22
8. Negative valence (10)	14.12	4.07	1.24	1.03
9. Openness to experience (10)	37.32	6.14	-.49	-.19
10. Positive valence (10)	30.41	6.66	-.23	-.37
11. Conscientiousness (10)	42.63	5.83	-.99	1.56

To answer the research questions we have conducted several statistical analysis. First, the discriminant analysis examined the structure of type of work in a multivariate space of burnout as an indicator of stress at work. In this analysis, the

predictor variables were: summative score on a scale of burnout and three types of coping strategies. In the analysis of the variables hierarchical regression was applied in order to determine whether the type of work, coping strategies and personality traits may be important in predicting burnout for employees in Gerontology Center.

Results

The differences in the indicators of stress in relation to the type of work.

The results of the discriminant analysis, with the aim to examine the structure of the type of the work in the expression of indicators of stress and coping strategies, are presented in Table 3.

Table 3a *Function 1*

Function	Wilk's Lambda	Chi-square	df	p	Rc
1	.90	11.49	4	.02	.30

Table 3b *Structure Matrix*

Function 1	
Avoidance	.97
Seeking social support	.30
Problem solving	.14
Work Burnout	-.08

Table 3c *Function at Group Centroids*

Type of work	Function 1
Group 1 – work with beneficiaries	.311
Group 2 – does not work with beneficiaries	-.316

From the results it can be seen that the discriminant function is significant at $p < .05$, although the coefficient of canonical correlation is not high ($Rc = .30$; Table 3a). From the structure matrix (table 3b) it can be seen that feature is most saturated by scores on Avoidance dimension and Seeking social support. Centroids indicate that employees who work directly with beneficiaries achieve higher scores on discriminant function (Table 3c).

The differences between groups of employees in relation to the type of work were obtained and the subsequent series of t-tests. Employees who work directly with beneficiaries have achieved significantly higher scores on Avoidance dimension $t(123) = 4.28$, $p < .05$, On the other variables differences are above the significance $p > .10$.

Type of work and prediction of burnout as an indicator of stress at work when controlling personality traits and coping strategies

In the analysis of the variables hierarchical regression analysis was applied in order to determine whether using the type of work, personality traits and coping strategies can be significant to predict burnout at the Gerontology Center.

In the analysis, the criterion variable was summative score on a scale Work Burnout, while categorical predictors were introduced into the analysis step by step. In the first model (step), the variable which has two categories formed on the basis of direct work with the beneficiaries of the Gerontology Center has been introduced as a predictor types of work (belonging to a group). In the second step coping strategies (Summation scores on the dimensions of the questionnaire - Coping Strategies Indicator (CSI)) are introduced, and in the third step personality traits as a quantitative predictor (Summation scores on the dimensions of the questionnaire Big Five Plus Two) are introduced.

As presented in Table 4 and Table 5, when coping strategies as predictors are introduced in the second step, only Avoidance coping strategy is presented as a significant predictor of burnout.

Table 4. *Characteristics of the model in a hierarchical linear regression*

Model	R	R ²	Adjusted R ²	SE of the Estimate	R ² Change	F	df1	df2	p
1	.024	.001	-.008	22.28	.001	.070	1	123	.792
2	.261	.068	.037	21.78	.068	2.91	3	120	.037
3	.504	.254	.182	20.08	.186	4.03	7	113	.001

Table 5. *Characteristics of predictors in a hierarchical linear regression*

Model		Beta	t	p
1	Type of work	.024	.264	.792
	Type of work	-.051	-.551	.583
2	Problem solving	.064	.636	.536
	Seeking social support	-.159	-1.554	.123
	Avoidance	-.212	-2.261	.026
	Type of work	-.101	-1.135	.259
3	Problem solving	.101	1.026	.307
	Seeking social support	-.168	-1.741	.084
	Avoidance	-.056	-.597	.552
	Aggressiveness	.218	1.897	.060
	Extraversion	.203	1.549	.124
	Neuroticism	.321	3.063	.003
	Negative valence	-.176	-1.560	.121
3	Openness to experience	-.112	-1.129	.261
	Positive valence	-.254	-2.193	.030
	Conscientiousness	.000	.003	.997

However, when in a third step, in addition to coping strategies, the dimension of personality traits as predictors is introduced, individual personality traits generate a contribution in explained variances of criteria over and above the coping strategies. In this model (with 11 predictor variables in the set) the two significant predictors consist of two different dimensions of personality: Neuroticism and Positive valence.

Personality traits have additional predictive validity (compared to coping strategies and the type of work), while the reverse coping strategies in the prediction of burnout have no additional predictive validity in relation to personality and the type of work.

The third model showed that all three predictors (type of work, coping strategies and personality traits), explaining 25% of the variance of the dependent variable (burnout).

The results indicate that partially: personality traits Neuroticism ($\beta = .321$, $p < .01$) and Positive valence ($\beta = -.254$, $p < .05$), and coping strategy Avoidance ($\beta = -.212$, $p < .05$), are perceived as significant predictors in the prediction of burnout as an indicator of stress at work.

The results indicate that the level of burnout in the tested population is associated with exposure to direct work with beneficiaries of the Gerontology Center and personality traits. Also, it was shown that partial and individual personality traits and coping strategies generate significant contribution in explaining burnout syndrome of employees in Gerontology Center.

Discussion and concluding remarks

In this research we tried to identify potential predictors of burnout syndrome of employees in Gerontology Center through personality traits and coping strategies on the basis of type of work.

Since it has been shown that personality traits: Neuroticism and Positive valence and coping strategies Avoidance can achieve a significant multivariate effect, it can be said that the above extract appears as significant predictor in the prediction of burnout. This is consistent with earlier findings (Vorkapić & Lončarić, 2013) that the personality traits (Neuroticism) are good predictors of burnout.

Based on these results we can say that people with high scores on a scale of Neuroticism and low scores on the scale Positive valence develop a higher level of burnout, which is in accordance with the supposed predictions. As people with high scores on a scale of Neuroticism are characterized by high reactivity to a threatening stimulus, and a tendency to experience negative emotions: anxiety (especially social anxiety), depressed mood, bitterness, alienation, feelings of inferiority and negative affectivity, it is quite understandable that the lower scores on this contribute to a higher scale burnout as demonstrated by the results of this research.

Traits Neuroticism and Positive valence were distinguished as important for the prediction of certain aspects of the degree of burnout. Whereas the people who

achieve high scores on the Neuroticism scale emotional instability as the results of this study show that they will be exposed to a higher level of burnout. These results suggest that perhaps people with symptoms of burnout will have feelings such as: more exhaustion, job dissatisfaction and dissatisfaction with the choice of profession.

In accordance with the results (Forsgårde et al., 2002) partial and particular personality traits (Neuroticism and Positive valence) achieve a significant contribution in explaining burnout syndrome of employees in Gerontology Center.

The results indicate that the level of burnout is linked to the type of work performed by employees, personality traits and coping strategies. In general, it has been shown that, on the one hand, the personality dimensions: Neuroticism and Positive valence generate the largest number of contributions in explaining burnout, and that, on the other hand, Avoidance coping strategy contributes to the explanation of the highest burnout.

In addition to the conceptualization of variables and their relationships, the results of this research could contribute to the formulation of additional guidelines in the research and fight against occupational stress in Helping Professions.

This contributes to reduction of the quality of services in social welfare and because of that results suggest the need for systematic and continuous investigation of the problem of burnout of employees in the helping professions in the ways of preventing, or at least reducing, the effects of burnout syndrome.

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PREDIKCIJA IZGARANJA KOD ZAPOSLENIH U GERONTOLOŠKOM CENTRU NA OSNOVU OSOBINA LIČNOSTI, STRATEGIJA PREVLAĐAVANJA I VRSTE POSLA

Apstrakt

Osnovni cilj istraživanja je ispitivanje mogućnosti predikcije stresa na radu (izgaranja) kod zaposlenih na osnovu vrste posla, osobina ličnosti i strategija prevladavanja. Ispitivanje je sprovedeno na prigodnom uzorku zaposlenih (N=125). Prosečna starost ispitanika je oko 43 godine. Na osnovu vrste posla ispitanici su podeljeni u dve grupe: 1) zaposleni koji direktno rade sa korisnicima i 2) zaposleni koji ne rade sa korisnicima. Korišćeni su instrumenti: Upitnik za ispitivanje osobina ličnosti (VP+2) (Ćolovic i sar, 2014), Indikator strategija prevladavanja (CSI) (Amirkhan, 1990) i Skala koja meri fizičku i psihološku iscrpljenost u vezi sa poslom (Work Burnout-WB) (Borritz i sar., 2005). Primenjena je hijerarhijska regresiona analiza. Pokazano je da je vrsta posla značajan prediktor izgaranja ali da samostalno objašnjava veoma mali procenat varijanse izgaranja. Osobine ličnosti imaju dodatnu prediktivnu valjanost, dok obrnuto strategije prevladavanja nemaju dodatnu prediktivnu valjanost u odnosu na osobine ličnosti i vrstu posla. Rezultati ukazuju da su parcijalno, osobine ličnosti: Neuroticizam i Pozitivna valenca i strategija prevladavanja: Izbegavanje, uočeni kao značajni prediktori u predikciji izgaranja. Osim konceptualizacije varijabli i njihovog odnosa, rezultati ovog istraživanja mogli bi da doprinesu formulisanju smernica u istraživanju i borbi protiv profesionalnog stresa kod pomagačkih profesija.

Ključne reči: osobine ličnosti, strategije prevladavanja, indikator stresa, zaposleni

RELATIONS BETWEEN IRRATIONAL BELIEFS AND SELF-ESTEEM IN STUDENTS: SELF-DOWNING AS A PREDICTOR OF LOW SELF-ESTEEM

Abstract

In a sample of 131 students through online testing, using the Shortened General Attitude and Belief Scale (SGABS) which was constructed by Lindner, Kirkby, Wertheim & Birch (Lindner et al, 1999) and the Rosenberg Self-Esteem Scale (Rosenberg, 1965), REBT theory hypothesis about relationship between irrational beliefs and self-esteem was being tested. We expected that people with higher scores on the scale of irrational beliefs would have lower self-esteem. Scales used in this research showed a high reliability (for Shortened General Attitude and Belief Scale $\alpha = .864$ and for Rosenberg Self-Esteem Scale $\alpha = .875$). The results showed statistically significant negative correlation between the level of irrational beliefs intensity and the degree of self-esteem measured by total scores on the scales ($F(1/129) = 5,719, p < .05, r = -.206$). Based on regression analysis it was obtained that irrational beliefs are significant predictor for self-esteem ($F(1,129) = 5.719, p < .05, r^2 = .042$). After examining the scores on the subscales SGABS-a, it is obtained that the self-esteem negatively correlated with three subscales of irrational beliefs: rationality ($r = -.172$), need for approval ($r = -.239$) and self-downing ($r = -.449$). Amongst these subscales, self-downing was proven to be a significant predictor of self-esteem in the model ($R = .297, r^2 = .089; F(3/127) = 4.110, p < .05; \beta = -.272; t = -2.961, p < .05$).

Keywords: REBT, irrational beliefs, self-esteem, SGABS, self-downing

Introduction

According to Ellis (Valen i sar., 2014), the founder of rational emotive behavior therapy (REBT), there are two types of belief systems (B), which he called rational and irrational beliefs, that come from evaluating reality. Irrational beliefs are not susceptible to empirical approach, they are logically inconsistent and contain absolutistic demands. Firm and established irrational beliefs can consequently produce dysfunctional emotions, behaviors and the lack of self-acceptance. Self-acceptance in REBT theory means unconditional acceptance of oneself, apart from behaving competently or

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correctly and being respected and accepted by other people (Davies, 2007). Self-esteem, commonly measured by using the Rosenberg Self-Esteem Scale (Rosenberg, 1965), involves affective and evaluative aspects of the self-schema through the individual's assessment of their competence and assessment by significant others. Since this is a complex construct that consists of different aspects of the self, that is, a general integrated sense of self, Rosenberg named it global self-esteem. In our country, there is a large number of articles dedicated to study irrational beliefs, mainly related to anxiety, depression, aggression, as well as their relation with the various aspects of personality, but a small part of these articles associated them with self-esteem. In the following paragraphs, results of previous studies specifically related to ours will be detailed.

In a sample of high school students, relation between neuroticism and irrational beliefs was studied (Vukičević et al, 2012). It turned out that not all dimensions of neuroticism are associated with every form of irrational beliefs. Students that had stronger irrational beliefs about love were also more depressed, more impulsive and more vulnerable, while depression and anxiety are more related to the absolutist demands of ourselves and devaluing.

To explain cognitive reactivity to sad mood, Peruničić, Vukosavljević-Gvozden and Marić (2012) have examined the relation and the role of irrational beliefs and basic dimensions of personality. They came to the conclusion that the negative cognitive perception of their sad feelings is more likely to be experienced by people who typically tend to show self-downing and have personal predisposition to experience negative emotions, and also to test and evaluate them in those moments.

According to Novović (Novović, 2007), three interactive elements contribute to the increased intensity of unpleasant dysfunctional emotions (general negative emotional state and angry emotions), and those are: significance of the objective, negative feedback and irrational beliefs. It turned out when the irrational beliefs were stronger, intensity of anxiety and depression was higher.

Research that adressed the relation between perfectionism, self esteem and depression among students, showed that there is an association between some of the positive aspects of perfectionism and global self-esteem, as well as the association between the negative aspects of perfectionism and depression in students (Todorović et al, 2009). It has been shown that maladaptive perfectionism is a significant predictor of tolerance to frustration and unconditional self-acceptance, and higher scores on maladaptive perfectionism were accompanied by decreased unconditional self-acceptance and lower tolerance to frustration (Stanković et al, 2015).

In an interesting study by Tovilović (Tovilović, 2004), relation between irrational beliefs and anxiety was studied. This study found three pairs of significant canonical factors between irrational beliefs and social anxiety. This study is significant because the results indicated that the lack of confidence, shown as the fear of criticism and rejection, highly correlated to catastrophizing when behaving badly, and to the tendency of self-downing due to failure, that is, having a low self-esteem.

Davies (2006) explored the relation between unconditional self-acceptance and irrational beliefs, and found a significant negative correlation. However, this study was only correlational, so it could not be concluded that it is irrational or rational thinking the

cause of unconditional or conditional self-acceptance. To further check this, a new study was conducted (Davies, 2007), where self-esteem was only indirectly involved, since it was not expected for rational or irrational beliefs to directly affect the self-esteem, but it was expected that conditional or unconditional self-acceptance would affect confidence due to the fact that there is a close relation between them (from Davies, 2007, according to Chamberlain & Haaga, 2001). Examining the relation between different GABS subscales (DiGiussepe et al, 1988) and unconditional self-acceptance, assuming that irrational beliefs affect the self-esteem, not directly, but through the unconditional self-acceptance, Davies found in two studies (Davies, 2008), a correlational and an experimental, on a sample of students, that the most important predictors of unconditional self-acceptance are the need for success, need for approval and self-downing.

Main problem of this research is the question of relation between irrational beliefs and self-esteem in students. Since irrational beliefs can cause dysfunctional emotional states, which are often repeatedly renewed by reinforcing irrational beliefs about yourself, according to the theory of REBT, there is a potential threat of low self-esteem. Therefore, the problem of research is examining the relation between irrational beliefs and self-esteem.

Goal of this study was to determine the nature of the relation between the construct of irrational beliefs from REBT theory measured by The Shortened General Attitude and Belief Scale (Lindner et al, 1999) and the level of self-esteem measured by Rosenberg Self-esteem Scale (Rosenberg, 1965)

Our first assumption is that there is a negative correlation between irrational beliefs and self-esteem, that is, the greater presence of irrational beliefs is associated with lower levels of self-esteem. This is one of the foundations of the REBT theory, according to which irrational beliefs that are represented to a greater extent cause negative emotional manifestations, which affect the self-evaluation, ie. self-esteem.

Then, we will relate irrational beliefs and self-esteem to gender and estimated importance of success in studies, assuming that self-esteem is lower in females, as indicated by many studies, and that the irrational beliefs are present in higher intensity in students who think that their success in studies is very important.

Method

Sample

The sample consisted of 131 students from various universities in Serbia, 38 (29%) males and 93 (71%) females, aged 20 to 40 years ($M = 23.71$, $SD = 2.63$). Sampling type was non-random, volunteer.

Variables

Irrational beliefs are predictor (independent) variable, and the criterion (dependent) variable is self-esteem. Independent variables are also gender and the importance of success in studies.

Instruments

Shortened General Attitude and Belief Scale - SGABS (Lindner, Kirkby, Wertheim, & Birch, 1999) - Irrational beliefs were measured using Shortened General Attitude and Belief Scale (SGABS) (Lindner et al, 1999) that includes 26 items. It is a five-point Likert scale with responses ranked from 1 (completely disagree) to 5 (strongly agree). A higher score on the scale indicates stronger presence of irrational beliefs.

Rosenberg Self-Esteem Scale (Rosenberg, 1965) - Instrument that was used to study self-esteem is a modified version of the Rosenberg Self-Esteem Scale (Rosenberg, 1965) with 10 five-point items. A higher score on this scale indicates more developed self-esteem.

Table 1. *Reliability of the scales used in the study Shortened General Attitude and Belief Scale (SGABS) and the Rosenberg Self-Esteem Scale*

Name of the scale used in the study	Cronbach's α
Shortened General Attitude and Belief Scale (SGABS)	.848
Rosenberg Self-Esteem Scale	.875

Reliability of used scales was studied by applying Cronbach's α coefficient. The scales used in this study showed a high level of reliability, which is for the scale irrational beliefs (SGABS) $\alpha = 0.848$ and for Rosenberg scale self-esteem- $\alpha = 0.875$.

The importance of success on studies was examined on the based on students' replies to the question how much the success on studies is important for them. The answers are ranked from 1 (not important at all) to 5 (very important).

Procedure

The survey was conducted online, with students filling out two scales. These scales were consisted of series of items where students gave answers of 1-5 according to their discretion. It took, on average, 10 minutes for the respondents to provide their answers.

Results

We examined the correlation between irrational beliefs (by determining the total score on SGABS scale) and self-esteem in students, using bivariate correlation analysis, expressed by Pearson correlation coefficient. Descriptive data for the variables used in the study are shown in Table 2. In rows, numbered 1 to 3, the three scales used in study were presented. All scales are 5-point Likert scales. The columns contain descriptive data for those scales (M- mean, SD- standard deviations) and intercorrelation coefficients. For all scales, higher scores are indicative of more extreme responding in the direction of the construct assessed. Inter-correlation were

expressed by Pearson correlation coefficients below the diagonal. Results indicate moderate to high mean scores on the self-esteem scale (M=2.51, Min=2; Max=5). On irrational beliefs in average respondents were shown lower scores (M=4.10, Min=2, Max=4).

Table 2. *Descriptive data and inter-correlations for irrational beliefs (total scores on SGABS scale), global self-esteem and the importance of success on studies*

Variables	M	SD	IB	GSE	ISS
1. Irrational beliefs (IB)	2.51	.527	1		
2. Global Self-esteem (GSE)	4.10	.697	-.206*	1	
3. The importance of success on studies (ISS)	3.95	.968	.213*	.10	1

N=131. * p<.05

As expected, results showed statistically significant negative, but low correlation between the total score on a SGABS scale and Rosenberg Self-esteem Scale (r = -.206; p <.05). This result confirms earlier research which showed negative correlation between irrational beliefs and self-esteem (r = -.46) (Davies, 2008).

In order to complete the previous results and acquire additional insight into the relation between the tested variables, regression analysis was conducted to check whether irrational beliefs significantly predict self-esteem, wherein self-esteem was used as a criterion (dependent) and irrational beliefs (measured by the total score on SGABS scale) were used as a predictor (independent) variables. Table 3 shows the results of the regression analyse conducted for prediction of self esteem by irrational beliefs.

Table 3 . *Regression coefficients for irrational beliefs (total scores on SGABS scale) as a predictor of Global self-esteem*

	Coefficients ^a				
	Unstandardized coefficient		β	T	Sig.
	B	Std. Error Mean			
Irrational Beliefs	-.272	.114	-.206	-2.391	.018

^a Dependent variable: Global self-esteem

Note. B- unstandardized regression coefficient; Std. Error Mean- standard error of mean of unstandardized regression coefficient; β- standardized regression coefficient; t-test- parameter for assessing the statistical significance of the regression model; Sig. - statistical significance of the regression model; z.o.- zero-order correlations; partial-partial correlations between variables in the model; part- semipartial correlations between variables in the model.

It has been shown that the irrational beliefs (measured by the total score on SGABS scale) are significant, but low predictor of global self-esteem (R² = .042, F (1,129) = 5.719, p <.05). Obtained findings confirmed earlier research which showed that irrational beliefs are significant predictor of unconditional self-acceptance (Davies, 2008).

In order to examine the nature of these relations in more details, correlation between SGABS subscale and self-esteem was tested, using bivariate correlation analysis expressed by Pearson correlation coefficient. The results are shown in Table 4.

Table 4. Results of Pearson Correlations Coefficient between scores on SGABS subscales and global self-esteem

SGABS subscales	Coefficient of correlation (r) Between scores on SGABS subscales and Global self-esteem
Achievement	-.095
Approval	-.172*
Comfort	-.118
Fairness	.088
Self-downing	-.449**
Other downing	.042
Rationality	-.239**

Note. $N=131$. * $p<.05$, ** $p<.01$.

The results indicated that the self esteem is negatively correlated with the three subscales of SGABS: rationality ($r = -.239$), need for approval ($r = -.172$) and self-downing ($r = -.449$). Related results were obtained in research that dealt with correlations between irrational beliefs, unconditional self-acceptance and self-esteem. They pointed out that when the unconditional self-acceptance was controlled by regression analysis method partialisation, statistical significance exists only with self-esteem and self-downing ($r = -.29$) and self-esteem and need for approval ($r = -.17$) (Davies, 2008).

By regression analysis it was checked the self-esteem predictors through SGABS subscales (Table 5). For this analysis, as predictors were used only SGABS subscales for which previously results showed significant correlation with self-esteem.

Table 5. Results of regression analysis for prediction of global self-esteem through the SGABS subscales

	Coefficients ^a				
	Unstandardized coefficient		β	t	Sig.
	B	Std. Error Mean			
Need for approval	-.272	.114	-.019	-.188	.851
Self downing			-.272	-2.691	.008
Rationality			-.085	-.967	.335

$R=.297$, $R^2=.089$, $F(3/127)=4.11$, $p<.01$

Note. R - regression coefficient; R^2 - coefficient of determination of prediction of the criteria by predictors; F - F-test for regression; B - unstandardized regression coefficient; $Std. Error Mean$ - standard error of mean of unstandardized regression coefficient; β - standardized regression coefficient; t -test- parameter for assessing the statistical significance of the regression model; $Sig.$ - statistical significance of the regression model;

z.o.- zero-order correlations; partial- partial correlations between variables in the model; part- semipartial correlations between variables in the model.

Amongst these subscales, self-downing was proven to be a significant predictor of self-esteem in the model ($R = .297, R^2 = .089; F(3/127) = 4.110, p < .05; \beta = -.272; t = -2.961, p < .05$).

After the correlation-regression analysis it was checked whether there is a difference in the irrational beliefs and self-esteem in students in relation to the gender using T-test for independent samples (Table 6).

Table 6. *Results of the t-test analysis for independent samples for testing the difference in mean in global self-esteem in relation to the gender*

	Gender	N	M	SD	Std. Error Mean	t	df	Sig.
Global self-esteem	Male	38	3.82	.77	.12	-3.107	129	.002
	Female	93	4.22	.63	.06			

Note. N- number of respondents, M- mean, SD- standard deviation, Std. Error Mean- standard error for estimation of mean, t-t-test for independent samples, df- degrees of freedom, Sig.- statistical significance for differences in mean

There is a statistically significant difference in the level of self-esteem among the students in relation to the gender ($t(129) = -3,107, p < .05$), which is lower in the male students ($M = 3.82$) compared to the female ($M = 4.22$). Although this finding refutes the initial hypothesis, and although there are some studies that suggest that self-esteem is lower among girls, the result obtained in this study is consistent with findings of research that showed significant difference in academic achievement between students male and female, where male students had much lower results compared to the female students (Diseth et al., 2014).

In order to check whether there are differences in irrational beliefs and self-esteem in students in relation to how they assess the importance of success in studies, one-way ANOVA was used (Table 7).

Table 7. *Results of the One-way ANOVA applied for testing differences in irrational beliefs (SGABS scale) in students in relation to how they assess the importance of success on studies*

Success on studies	N	M	SD	Std. Error Mean	df	F	Sig.
not important at all	9	2.52	.542	.181	2	3.893	.023
Undecided	28	2.38	.453	.086	128		
very important	94	2.67	.501	.052	130		

Note: N- number of subjects, M-mean, SD-standard deviation, Std. Error Mean-standard error for Mean, df- degrees of freedom, F-F-test, Sig.- statistical significance of difference

The results show a tendency of students, in relation to how assess the importance of success on the studies, to have statistically significant difference in the prevalence of irrational beliefs ($F(2/128) = 3,893, p < .05$), wherein irrational beliefs are the most frequent in students who believe that their success on studies is very important ($M = 2.67$).

Results indicate that irrational beliefs are associated with the assessment of the importance of academic achievement, and that those who tend to attribute higher importance to the success on the studies, have pronounced irrational beliefs. These results are consistent with the theory to Ellis (Valen et al, 2014) according to which achievement is of one of the four contextual areas where irrational process are applied. There was no statistically significant differences in self-esteem in students in relation to how they assess the importance of the success on the studies ($F(4,126) = 0.479, p > .05$).

Discussion and conclusion

This study examined theoretical assumptions from REBT theory about the relation between irrational beliefs and self-esteem in students. Irrational beliefs and self-esteem have also been linked to gender and the assessment of importance of success on studies.

Results of this study confirmed the initial assumption that there is a statistically significant negative correlation between irrational beliefs and self-esteem, that is, stronger presence of the irrational beliefs is associated with the lower level of self-esteem. Correlation between irrational beliefs and self-esteem obtained in our study was low, but statistically significant. This result requires that we look back to Davies' study (Davies, 2008) in the explanation. Namely, his research was focused on studying relation between self-esteem, irrational beliefs and unconditional self-acceptance. Keeping unconditional self-acceptance under control by using partialisation method in regression analysis, he had found, like we did, low correlation between irrational beliefs and self-esteem ($r = -.16, p < .05$, Davis, 2008, pp.106, line 18). In further interpretation of this result, we can refer to the study which examined some aspects of perfectionism and global self-esteem, that had also found low negative correlation between self-esteem and negative beliefs about yourself. In this study, it was concluded that people who tend to negatively react to their own personal mistakes and rarely are satisfied with their success, tend to attribute less value and respect to themselves (Todorović et al, 2009).

It turned out that the three subscales of irrational beliefs negatively correlated with self-esteem, based on scores on SGABS subscales, namely: rationality, need for approval and self-downing. In a study that addressed relation between irrational beliefs, unconditional self-acceptance and self-esteem, similar results have been found, which showed that when having the unconditional self-acceptance controlled, self-esteem was significantly associated with self-downing and need for approval (Davies, 2008).

Only self-downing was proven to be a significant predictor of self-esteem in the model. This result supports the REBT theory per which the unconditional acceptance of yourself is one of the main goals to achieve general psychological resilience. Accordingly, a human being cannot be characterized by a global assessment, it is valued by its very existence, and not based on good or bad actions. Given that our research was conducted on a sample of students, it is possible that students evaluate themselves in relation to their success and achievement, therefore, further research should be directed towards testing clinical populations.

The findings confirmed earlier research which showed that irrational beliefs were a significant predictor of unconditional self-acceptance (Davies, 2008). Results of study conducted by Peruničić, Vukosavljević-Gvozden and Marić (Peruničić et al., 2012) showed that irrational beliefs provide significant contribution to the explanation of cognitive reactivity to sad mood in relation to personality. Namely, people who are emotionally unstable, more open to experience and prone to self-devaluation, tend to have a reaction of negative self-assessment when experiencing sad mood.

Linking the irrational beliefs and self-esteem to gender, results showed statistically significant difference between gender in the level of self-esteem (low effect of significance), indicative of a lower level of self-esteem in male students. Examining the relation of irrational beliefs and self-esteem with the evaluation of the importance of success on studies, our results indicate that, depending on how they assess the importance of success on studies, students statistically differ with respect to the level of intensity of irrational beliefs, wherein the most frequently irrational beliefs are present among students that assess the importance of their success on studies as very important.

Since this study found a small effect of significance in differences, considering that the third category of estimated importance of success (this category believes that the success on the studies is completely irrelevant) consisted of only 9 subjects, this result shows a tendency and requires additional studies to verify its stability. Previous studies have shown that as children grow, the difference in the level of self-esteem increases, in favor of males (Rosenfield, 1999, per Burić et al., 2007). However, some other studies showed no statistically significant difference in the degree of self-esteem between genders among students (Swanson and Lease, 1990, by: Swenson, 2003). This is explained by the fact that girls build their identity earlier and also adapt to change (especially physical) earlier, and their self-esteem increases between high school and college, when it is no significantly different compared to males. However, a recent study paradoxically suggests that, although there is a significant difference in academic achievement between male and female students, male students have relatively much lower scores, and female students have lower self-esteem (Diseth et al., 2014). While the relation between self-esteem and academic achievement is rather weak, it turned out that beliefs about yourself are a significant predictor of academic achievement. Students' beliefs about their own academic capabilities become an internal source of their academic efforts (Puklek Levpušček, Zupančić, 2009).

Given the lack of studies in our country that address the relation between irrational beliefs and self-esteem, these results may be important for therapeutic work with students, primarily for challenging their irrational beliefs. Attention should be especially focused on self-downing, in accordance with the obtained prediction, and irrational beliefs should also be studied in different domains. We believe that further development of research on this topic should be directed in relation to different aspects of personality. Despite the high reliability of used instruments, additional instruments should be used for measurements, to find more significant relation between the studied variables. It would be also important to examine the specific dimensions of self-esteem, in addition to the global self-esteem.

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POVEZANOST IRACIONALNIH UVERENJA I SAMOPOŠTOVANJA KOD STUDENATA: SAMOOBEZVREĐIVANJE KAO PREDIKTOR NISKOG SAMOPOŠTOVANJA

Apstrakt

U radu je proveravana teza REBT teorije o povezanosti iracionalnih uverenja i samopoštovanja, pri čemu je očekivano da osobe sa višim skorovima na skali iracionalnih uverenja imaju niže samopoštovanje. Uzorak je obuhvatao 131 studenta, testiranih online, zadavanjem Skraćene skale opštih stavova i uverenja (SGABS) i Rozenbergove skale samopoštovanja. Skale su pokazale visoku pouzdanost (za Skraćenu skalu opštih stavova i uverenja $\alpha = .864$ i za Rozenbergovu skalu samopoštovanja $\alpha = .875$). Rezultati su ukazali na to da postoji statistički značajna negativna korelacija između intenziteta zastupljenosti iracionalnih uverenja i stepena samopoštovanja merenih ukupnim skorovima na skalama ($F(1/129)=5,719, p<.05, r=-.206, r^2=.042$). Prema regresionoj analizi dobijeno je da su iracionalna uverenja značajan prediktor samopoštovanja ($F(1,129) = 5.719, p < .05, r^2 = .042$). Uvidom u skorove na subskalama

SGABS-a otkriveno je da je samopoštovanje u negativnoj korelaciji sa tri subskale iracionalnih uverenja: racionalnost ($r=-.172$), potreba za odobravanjem ($r=-.239$), i samoobezvređivanje ($r=-.449$). Od ovih subskala, samo samoobezvređivanje se u modelu pokazalo kao značajan prediktor samopoštovanja ($R=.297$, $r^2 = F(3/127)=4.110$, $p<.05$; $b=-.272$; $t=-2.961$, $p<.05$).

Ključne reči: REBT, iracionalna uverenja, samopoštovanje, SGABS, samoobezvređivanje

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