



RECOGNIZING EMOTIONS, ATTACHMENT AND MENTALIZATION CAPACITY

Tamara Đorđević •

*Preschool Teacher Training College,
Serbia*

Marko M. Đorđević

University of Kragujevac, Serbia

Abstract

The research deals with the establishing of the relation between the recognizing of facial expressions of emotions, attachment, and mentalization capacity. For the recognizing of facial expressions of emotions we used the test JACFEE (Matsumoto and Ekman's Japanese and Caucasian Facial Expressions of Emotion, 1988), for the exploring of attachment we used "Serbian version of modified and Revised Experiences in Close Relationships scale (SM-ECR-R)" (Hanak & Dimitrijević, 2013), whereas the assessment of mentalization capacity was performed using "The Mentalization Scale (MentS)" (Dimitrijević, Hanak, Altaras Dimitrijević, & Jolić Marjanović, 2018). The research sample comprised 206 students of Preschool Teacher Training College in Kruševac. The results have demonstrated there is an association between the attachment dimensions and mentalization capacity, as well as that successfulness at recognizing facial expressions of emotions can be predicted on the grounds of tested predictors which explain 8.6% of dependent-variable variance. The anxiety dimension has a negatively-correlated significant partial contribution to this prediction, as does the total mentalization capacity.

Keywords: facial expressions of emotions; attachment; anxiety; avoidance; mentalization

Introduction

The face has a major communicative potential; even when it is static, it provides information on facial features, its shape, skin tone. All mentioned

Correspondence concerning this paper should be addressed to:

• Preschool Teacher Training College, Kruševac. Address: Ćirila i Metodija 22, 37000 Kruševac, Serbia. E-mail: t.djordjevic@vaspks.edu.rs

facial characteristics pertain to communication signals (Kostić, 2010). Keltner points out facial expressions are important, as, based on them, we can realize the intentions and emotions of a person; they cause emotional reactions in other persons, but they also provide information on the appropriateness of behaviour in certain situation (Keltner, 2003). The most important function of facial expression is the manifesting of emotions (Darwin, 1965; Ekman, 2011). Ekman makes a distinction between seven primary emotions: fear, sadness, joy, contempt, surprise, disgust, and anger and he believes each of them has a universal and characteristic facial expression. Although facial expressions of the mentioned emotions are innate and universal, *i.e.* present in all people, independently of their cultural background, they can be modified under the influence of social learning.

The quality of affective attachment can be one of the important factors for the development of emotions recognition. Research results indicate that affective attachment could have influenced the focusing of attention on emotional stimuli and their deciphering (Tucker & Anders, 1999; Feeney, Noller, & Callan, 1994). The examinees scoring high on avoidance dimension tend to ignore emotional content, while the examinees achieving high score on anxiety dimension, show high emotional sensitivity (Guterman 2006; Niedenthal, Brauer, Robin, & Innes- Ker, 2002).

The capacity to recognize emotions, although biologically predetermined, can be destroyed in early childhood, under the influence of inadequate interaction between children and their parents (Ekman, 2003). Inadequate interaction between children and parents can lead to the forming of insecure pattern of attachment, hence we can assume that children who had parents on whose face they read negative and confusing emotions, and who did not respond adequately to children's needs, will be less successful in facial expressions recognition later in life. Bearing in mind that the attachment pattern formed early in life is usually retained during the whole life, it is assumed that the successfulness in facial expressions recognition will be associated with the attachment quality. Persons who had responsive mothers, that correctly interpreted child's needs and adequately responded to them, belong the safe pattern of attachment. The system for the identification of facial expressions is not disturbed. Such children feel accepted and free to explore emotions on the faces of other people, as well as to express their own emotions. The mothers of confident children manage to correctly identify both positive and negative

emotions and can help the child process and channel those emotions. In this way, mother contributes further development of innate capacity of their children to correctly identify facial expressions of emotions. The avoiding pattern of attachment is formed in persons who had consistently irresponsive mothers, while the preoccupied pattern of attachment is characterized by the mother's selective responsiveness. The system for the correct recognizing of emotions is likely to be compromised, as the babies learn they can get the mother's attention only under certain circumstances. These persons will be less likely to recognize emotions on other persons' faces and be more prone to recognizing only more intense emotions. Disorganized pattern is characterized by negative perception of oneself and negative perception of others, low mentalization capacity, and by disturbed system for the correct recognizing of emotions.

Mentalization is a cognitive ability owing to which persons, implicitly or explicitly, interpret their own and other people's behaviour as intentions based on mental states such as desires, beliefs, needs (Bateman & Fonagy, 2002). Mentalization is the basis for our relations with ourselves and other persons as it allows us to understand our own and other people's behaviours and predict future behaviour of other people, and it is also supported by a certain number of specific cognitive skills, such as understanding emotional states, the capacity to pass judgments on subjective conditions, and also to explicitly contemplate mental states (Fonagy, 2006). The association between mentalization and emotional expressions recognition is an issue that has been creating a divide among authors. Some authors believe that these two constructs are closely associated, as the recognition of the mental status of another person involves the assessment of that person's emotional status, as well as one's own reaction to other persons (Ochner, 2008). Taking into consideration the fact that mentalization quality depends on family context, studies have shown that children achieving higher scores in mentalization tests, talk more frequently with their parents about emotions (Ensor & Hughes, 2008; Peterson & Slaughter, 2003). Children living in institutions have poorer perception of all emotional expressions, except for anger, unlike children living in family surroundings (Fries & Pollak, 2004). The mentalization itself directly stimulates affective modulation; if persons are capable of contemplating their own feelings, they manage to control them better, and the better they understand and predict the behaviour of others, the less threatened they feel.

Contrary to that, mentalization failure significantly reduces the capacity to adapt to social surrounding and increases the probability for misunderstandings and conflicts, which also indirectly increases the level of emotional tension. On the one hand, increase in emotional tension leads to decreased mentalization capacity, but mentalization failure also (both directly and indirectly) increases the level of emotional tension (Boričević Maršanić et al., 2017).

It is believed that the origin of mentalization goes back to various psychoanalytical approaches, as well as to Bowlby's attachment theory (Fonagy, 2001; Allen, Fonagy, & Bateman, 2008). Although mentalization capacity is a human trait, authors believe it is not innate, but that it develops in the context of attachment relations (Fonagy, 2006). A developed level of mentalization should be understood as potential; however, it does not mean that mentalization will fully develop. This depends on situations and persons a child interacts with, and more than anything else, on the level of anxiety (according to Boričević Maršanić et al., 2017). The results of the research carried out so far have unequivocally demonstrated that secure attachment is a precondition for mentalization development (Fonagy, Gergely, Jurist, & Target, 2002; Mikulincer, Shaver, & Pereg, 2003).

Fonagy believes that children's attachment to the person taking care of them is the context in which mentalization develops, as only in "secure context" a child can explore the mind of other people (Fonagy, 2008). The secure pattern of attachment provides a child with security in predicting behaviour of close persons. The relationship formed with parents provides children with means with which children approach mental representations of others, so as to control their own behaviour (Ontai & Thompson, 2008). Contrary to that, insecure attachment shall lead to excessive mentalization or its deactivation (Fonagy & Bateman, 2008). For children of preschool age and lower-grades school age, secure attachment is the predictor of successfulness in tasks for mentalization assessment (Fonagy, Redfern, & Charman, 1997). On the other hand, children traumatized by one parent have impaired mentalization capacity and have difficulties understanding thoughts and feelings of other people (Fonagy & Bateman, 2008).

Research topic, problem and objectives

The research problem is the establishing of the association between the successfulness of primary emotions recognition (fear, sadness, joy, contempt,

surprise, disgust and anger), attachment dimensions (anxiety and avoidance), and mentalization capacity.

The basic goal of the research is to examine whether there is an association between the successfulness of primary emotions recognizing (fear, sadness, joy, contempt, surprise, disgust and anger), attachment dimensions (anxiety and avoidance), and mentalization capacity. Starting from this basic research goal, research objectives were defined:

- Verify whether there is a difference in the prominence of successfulness of primary emotions recognizing, attachment dimensions, and mentalization capacity;
- Verify whether there is an association between successfulness in primary emotions recognizing, attachment dimensions, and mentalization capacity;
- Verify whether there is an association between attachment quality, and mentalization capacity;
- Verify the predictive power of attachment dimensions, and mentalization capacity with regard to emotions recognition successfulness.

Research hypotheses

H1: It is expected that the successfulness in primary emotions recognizing (fear, sadness, joy, contempt, surprise, disgust and anger) will relate with the better quality of attachment (lower level of anxiety and avoidance) and (H1a) higher mentalization capacity.

The hypothesis is based on the results of the researches conducted so far which indicate that attachment could influence the focusing of attention on emotional stimuli and their deciphering (Tucker & Anders, 1999; Feeney, Noller, & Callan, 1994). Ekman believes that the capacity to recognize emotions on other people faces is inborn, but that it can be destroyed in early childhood, under the influence of inadequate interaction between children and their parents (Ekman, 2003). Bearing in mind that the attachment pattern formed early in life is usually retained during the whole life, it is assumed that the successfulness in facial expressions recognition will also be associated with the affective attachment quality. The research findings have revealed that the persons scoring high on avoidance dimension, tend to ignore emotional content, while the examinees achieving high score on anxiety dimension, show high emotional sensitivity (Guterman 2006; Niedenthal, Brauer, Robin, & Innes-Ker, 2002).

H1a: Some authors believe that facial expressions recognizing and mentalization are two closely-related constructs, as the recognition of the mental status of another person involves both the assessment of that person's emotional status, and one's own reaction to other persons (Ochner, 2008). It is believed that mentalization directly stimulates affective modulation; since if persons are capable of contemplating their own feelings, they will be able to control them better, and the better they understand and predict the behaviour of others, the less threatened they feel. Contrary to that, failure to mentalize significantly reduces the capacity to adapt to social surrounding and increases the probability for misunderstandings and conflicts, which also indirectly increases the level of emotional tension. On the one hand, increase in emotional tension leads to decreased mentalization capacity, but mentalization failure also (both directly and indirectly) increases the level of emotional tension (Boričević Maršanić et al., 2017).

H2: It is expected that better attachment quality (lower level of anxiety and avoidance) will be related with statistical significance to a greater mentalization capacity.

The hypothesis is based on the results of the research carried out so far and which have consistently shown that secure attachment is a precondition for mentalization development (Fonagy, Gergely, Jurist, & Target, 2002; Mikulincer, Shaver, & Pereg, 2003). Fonagy believes that children's attachment to the person taking care of them is the context in which mentalization develops, as only in "secure context" a child can explore the mind of other people, whereas insecure attachment can lead to excessive activation of mentalization or its deactivation (Fonagy, 2008).

H3: It is expected that attachment dimensions and mentalization capacity can be significant predictors of the of primary emotions recognition successfulness.

Method

Sample and procedure

The research was conducted at the Preschool Teacher Training College in Kruševac in December 2018. The research was anonymous, conducted in a group, and the goal and purpose of the research were explained to the students. A total of 206 college students were tested. Those students attended the first,

second or third year of their studies at different departments (13(6.3%) from the Department for teachers working with children in residences or homes), 182(88.3%) from the Preschool teachers department and 11(5.3%) from the Department for nursery teachers). When it comes to the gender structure, 22(10.7%) male and 184(89.3%) female students participated in the research. The youngest student was 18, and the oldest one was 38 years old. The average age was 20.09 years of age (SD=1.791).

Research variables and instruments

1. For the assessment of the successfulness of emotional expressions recognition the test used is: “JACFEE“ (*Matsumoto and Ekman's Japanese and Caucasian Facial Expressions of Emotion, 1988*). The test consists from 56 colour photos showing facial expressions of seven primary emotions: anger, contempt, disgust, fear, sadness, joy, and surprise. On the tested sample, on the level of the whole subscale, we have obtained high reliability ($\alpha=.83$), while the subscales have shown low to high reliability (Anger $\alpha=.52$; Contempt $\alpha=.82$; Disgust $\alpha=.70$; Fear $\alpha=.73$; Sadness $\alpha=.56$; Joy $\alpha=.57$; Surprise $\alpha=.69$).

2. For the assessment of the affective attachment quality we have used “*Serbian version of modified and Revised Experiences in Close Relationships scale (SM-ECR-R)*“ (Hanak & Dimitrijević, 2013). The scale is a translated and validated version of the most famous instrument for the attachment quality assessment: “*Experiences in Close Relationships Scale - ECR-R*“ (Brennan, Clark, & Shaver, 1998). On the current sample we have obtained high and satisfying reliability for both subscales (Avoidance $\alpha=.71$; Anxiety $\alpha=.85$).

3. For the mentalization capacity assessment we have used: “*The Mentalization Scale (MentS)*” (Dimitrijević, Hanak, Altaras Dimitrijević, Jolić, & Marjanović, 2018). This questionnaire assesses three aspects of mentalization capacity - mentalization of one ‘s own states (Self-Related Mentalization), mentalization of other persons’ states (Other-Related Mentalization), and motivation to mentalize- and it also provides one global score. On the current sample, a satisfying level of reliability has been achieved ($\alpha=.74$), for the whole scale, as well as for two out of three subscales (Self-Related Mentalization self $\alpha=.73$; Other-Related Mentalization $\alpha=.77$; Motivation to Mentalize $\alpha=.60$).

4. Gender - male and female.

Results and discussion

Research findings

When checking the normal distribution of dimensions of affective attachment questionnaire, a significant deviation from normal distribution was recorded regarding the avoidance dimension (KS=0.070, $p<.02$), where as for anxiety dimension the distribution does not deviate from the normal one (KS=0.061, $p=.06$). The results of the Kolmogorov-Smirnov normality test applied to the subscales of the mentalization assessment questionnaire indicate there is a significant deviation in all three questionnaire dimensions (Self-Related Mentalization (KS=0.080, $p<.00$), Other-Related Mentalization (KS=0.076, $p<.01$) and Motivation to Mentalize (KS=.082, $p<.00$). The results of the check of the normality of distribution of the questionnaire used for the assessment of facial expressions of emotions, show the answers were not normally distributed for none of the subscales (anger (KS=0.164, $p<.00$), contempt (KS=0.198, $p<.00$), disgust (KS=0.120, $p<.00$), fear (KS=0.158, $p<.00$), sadness (KS=0.170, $p<.00$), joy (KS=0.256, $p<.00$), surprise (KS=0.196, $p<.00$).

Descriptive indicators

The most correctly perceived emotion is joy (AS=7.10), followed by surprise (AS=6.24), whereas the lowest number of correct answers was recorded regarding the emotion of contempt (AS=2.77). The Table 1 indicates that the lowest number of correct answers 13, while the highest one is 55.

Table 1. Successfulness regarding facial expressions of emotions recognition

	N	Min	Max	AS	SD
ANGER	206	1	8	4.99	1.522
CONTEMPT	206	0	8	2.77	2.499
DISGUST	206	0	8	4.78	2.182
FEAR	206	0	8	5.09	2.238
SADNESS	206	0	8	5.81	1.748
JOY	206	0	8	7,10	1.257
SURPRISE	206	1	8	6.24	1.404
SUCCESSFULNESS	206	13	55	36.77	7.735

In table 2, we have presented the descriptive indicators of the attachment dimensions prominence. On the anxiety dimension, the students

have scored lower on average (AS=3.13; SD=1.14), than on the avoidance dimension (AS=3.45; SD=0.57). One can conclude that secure pattern is the most common one among the tested sample (low prominence of avoidance and anxiety dimensions).

Table 2. Prominence of attachment dimensions

	N	Min	Max	AS	SD
AVOIDANCE	206	2	5	3.45	.57
ANXIETY	206	1	6	3.13	.97

The prominence of mentalization capacity dimensions is shown in Table 3. The most prominent subscale is Other-Related Mentalization (AS=3.92, SD=.53), while the Self-Related Mentalization subscale is the least prominent one (AS=3.28, SD=.72). It can be concluded that all of three subscales are highly prominent, as well as their total result.

Table 3. The prominence of mentalization capacity dimensions

	N	Min	Max	AS	SD
SELF-RELATED MENTALIZATION	206	1	5	3.28	.72
OTHER-RELATED MENTALIZATION	206	1	5	3.92	.53
MOTIVATION TO MENTALIZE	206	2	5	3.64	.54
MENTALIZATION – TOTAL	206	2	5	3.63	.42

Testing the significance of differences

In Table 4 one can perceive there are statistically significant differences between male and female respondents when it comes to the successfulness of emotions recognition ($p < .02$), with women performing better. Women are more successful than men with regard to recognizing the emotions of fear ($p < .00$) and sadness ($p < .03$). One should take into consideration that the number of students was not level gender-wise and that female students constituted larger part of the sample. The differences between male and female students concerning other emotions, as well as concerning dimensions of attachment and mentalization capacity have not been presented, as they were not statistically significant.

Table 4. Prominence of successfulness in emotions recognition as per gender

	Gender	N	U test	p	Average ranking
FEAR	M	22	1227.50	.00	67.30
	F	184			107.83**
SADNESS	M	22	1473.00	.03	78.45
	F	184			106.49*
SUCCESSFULNESS	M	22	1393.50	.02	74.84
	F	184			106.93*

Note: *Statistically significant at the level of $p < 0.05$; **Statistically significant at the level of $p < 0.01$

Examining associations

H1: It is expected that the successfulness in primary emotions recognizing (fear, sadness, joy, contempt, surprise, disgust and anger) will relate with the better quality of attachment (lower level of anxiety and avoidance) and (H1a) with higher mentalization capacity.

Table 5 shows there is a statistically significant correlation between anxiety as a dimension of attachment and successfulness in recognizing facial expressions of emotions. Anxiety dimension has a significant association with the emotions of contempt, disgust, fear, and sadness. There is also a low and negative association with all stated emotions, which means that with the increase of anxiety there is a significant decrease of successfulness in emotions recognizing and vice versa. On the other hand, avoidance dimensions does not relate with the successfulness in emotions recognition. As concerns mentalization capacity and its association with the successfulness of emotions recognition, the Table shows there is a relation with the recognizing of the facial expression of sadness, but its significance is marginal, and the association is negligible and positively correlated.

Table 5. Association of primary emotions recognizing, attachment dimensions and mentalization capacity

	ANXIETY		AVOIDANCE		MENTALIZATION - TOTAL	
	Spearman's Rank Correlation Coefficient	P	Spearman's Rank Correlation Coefficient	P	Spearman's Rank Correlation Coefficient	p
ANGER	-.13	.07	.01	.85	.02	.81
CONTEMPT	-.20**	.00	.12	.09	.09	.19

Table 5. Association of primary emotions recognizing, attachment dimensions and mentalization capacity - *continued*

	ANXIETY		AVOIDANCE		MENTALIZATION - TOTAL	
	Spearman's Rank Correlation Coefficient	P	Spearman's Rank Correlation Coefficient	P	Spearman's Rank Correlation Coefficient	p
DISGUST	-.21**	.00	.05	.47	.09	.21
FEAR	-.140*	.05	-.03	.70	.10	.18
SADNESS	-.18**	.01	.09	.19	.14*	.05
JOY	.00	.97	.02	.77	.09	.18
SURPRISE	-.09	.21	.05	.44	-.03	.64
SUCCESSFULNESS	-.23**	.00	.01	.85	.13	.06

Note: *Statistically significant at the level of $p < 0,05$; **Statistically significant at the level of $p < 0,01$

H2: It is expected that better attachment quality (lower level of anxiety and avoidance) will be related with statistical significance to a greater mentalization capacity.

With regard to the testing of the association between the attachment dimensions and mentalization capacity, Table 6 shows there is a significant association between the anxiety dimension and self-related mentalization. This association is of medium intensity and negatively correlated, which means that with the increase of values of anxiety dimension, there is decrease on the subscale of self-related mentalization and vice versa. Likewise, there is a positive correlation between anxiety dimension and motivation to mentalize, which is negligible, but significant. Avoidance dimension is statistically significantly related with the total mentalization capacity, as well as with all subscales. The association is of weak intensity and negatively correlated.

Table 6. Connection between attachment quality and mentalization capacity

	ANXIETY		AVOIDANCE	
	Spearman's Rank Correlation Coefficient	P	Spearman's Rank Correlation Coefficient	P
SELF-RELATED MENTALIZATION	-.40**	.00	-.23**	.00
OTHER-RELATED MENTALIZATION	.05	.44	-.22**	.00
MOTIVATION TO MENTALIZE	.16*	.02	-.18**	.01
MENTALIZATION - TOTAL	-.10	.14	-.29**	.00

Note: *Statistically significant at the level of $p < 0,05$; **Statistically significant at the level of $p < 0,01$

Regression analysis

H3: It is expected that attachment dimensions and mentalization capacity can be significant predictors of the of primary emotions recognition successfulness.

The successfulness of facial expressions recognition, as criterion variable, can be predicted based on examined predictors (Table 7), as the regression model is statistically significant ($F_{(205)}=6.01$; $p<.00$). Attachment dimensions and mentalization capacity explain 8.6% of dependent variable variance. The anxiety dimension has a significant partial contribution to this prediction with negative correlation ($\beta=-0,22$; $p<.01$), whereas the avoidance dimension did not significantly contribute to the predictive model. The total mentalization capacity, also significantly contributes to the predictive power of the model ($\beta=0.14$; $p<.05$).

Table 7. Regression analysis (Enter procedure): Predicting successfulness of facial expressions of emotions recognition based on attachment dimensions and mentalization capacity

EMOTIONS RECOGNITION SUCCESSFULNESS		
R=0,29; R ² =0,08; Adjusted R=0,07; F=6,01; df=205; p=.00)		
PREDICTORS	B	P
ANXIETY	-.22**	.01
AVOIDANCE	.12	.09
MENTALIZATION - TOTAL	.14*	.04

Note: *Statistically significant at the level of $p<0,05$; **Statistically significant at the level of $p<0,01$

Conclusions

The research deals with the establishing of the relations between the recognizing of facial expressions of emotions, attachment and mentalization capacity.

Students were most successful in recognizing the emotion of joy, followed by surprise, while they were least successful in recognizing the facial expressions of contempt. The successfulness in recognizing the facial expression of joy is in accordance with numerous foreign (Gosselin, Kirouac, & Doré, 1995; Ekman & Friesen, 1986) and domestic studies (Kostić, 1995; Gregorić et al., 2014). Thus, beside joy, surprise is another successfully recognized emotion, which is confirmed by various studies (Gosselin, Kirouac, & Doré, 1995; Edwards, Jackson, & Pattison, 2002). The respondents had most difficulties with recognizing the emotion of contempt, and studies show it is

hard for respondents to recognize this emotion, and that recognizing is successful only when the respondents are informed that the emotion of contempt is present among other emotions (Fischer, 2011). On the one hand, authors believe the emotion of contempt has specific facial expression and that it can be recognized across different cultures (Ekman & Friesen, 1986), while, on the other hand, Russell believes the emotion of contempt depends on culture (Russell, 1993).

The assumption on weakly pronounced anxiety and avoidance dimensions has been confirmed. The majority of students belong to the secure pattern of attachment. Such result is expected and in line with previous research (Stefanović-Stanojević, 2010; Đorđević, 2016). Dimitrijević compared the students who chose helping and non-helping professional vocation and came to the conclusion that the presence of secure pattern was higher among the students of helping professions (Dimitrijević, Hanak, & Milojević, 2011).

The high scores obtained in the Questionnaire for mentalization assessment suggest students have well developed capacity for self-related and other-related mentalization, as well as for the motivation to mentalize. Persons having well developed mentalization capacity manage to understand their own and other people's behaviour, as well as to predict the behaviour of other persons (Fonagy, 2006).

By checking the differences between male and female students with regard to successfulness of emotions recognition, we have established significant differences favouring women. Namely, the female students were much more successful than male ones in the recognizing of emotions, in particular the emotions of fear and sadness. Previous findings confirmed the superiority of women regarding the recognizing of facial expressions of emotions (Hall, 1978; Hall & Matsumoto, 2004). Authors believe the origin of these differences can be found in the different socialization process in female persons, which is directed towards decoding emotions, or in the possible "better equippedness" of the female brain for emotions recognition. In our country, the differences between men and women have also been confirmed with regard to recognizing the emotions of disgust, anger and joy, which the author explains by social learning (Kostić, 1995). One should bear in mind that in this research the number of male and female respondents was not levelled; the share of female respondents in the sample was substantially higher, so these findings by all means need to be verified in future studies.

Differences by gender with regard to the prominence of attachment dimensions do not exist. Ainsworth did not find any gender differences in children when it comes to attachment (Ainsworth, 1978), and the differences were not found in older population groups (according to Nikić & Travica, 2007). However, different results were obtained in a big study in which our country participated as well. Namely, in the majority of countries, men belong to the rejecting pattern of attachment (according to Nikić & Travica, 2007). Should we interpret the obtained results using the dimensional approach, we could conclude that men have achieved high scores for anxiety and avoidance dimensions. The results obtained in this research, apart from being the reflection of an uneven ratio between male and female subsample, can also be explained by the psychological characteristics of persons choosing helping professions, hence Dimitrijević and associates conclude that the presence of secure pattern is higher in students with helping professional vocations (Dimitrijević, Hanak, & Milojević, 2011).

The results demonstrate that students have equally developed mentalization capacity, regardless of their gender. This result is not in line with earlier findings, where women achieve higher scores in the Questionnaire for the mentalization capacity assessment (Harton & Lyons, 2003; Rueckert & Naybar, 2008). However, by applying canonical analysis, Dimitrijević and associates, explicate that gender does not explain to a sufficient extent the differences between helpers and non-helpers, as in the structure matrix of discriminatory function gender is at fourth place, while the mentalization capacity is at the top (Dimitrijević, Hanak, & Milojević, 2011). Considering the stated results, the capacity for mentalization is well developed in our sample, which is probably related with their choice of profession, while gender proved not to be decisive.

The first hypothesis referred to the testing of associations between examined variables. The results show that when it comes to the association between attachment and recognizing of facial expressions of emotions, the correlation exists only regarding the anxiety dimension, but not regarding the avoidance dimension. Anxiety dimension has a significant correlation with the emotions of contempt, disgust, fear, and sadness. There is also a low and negative association with all stated emotions, which means that with the increase of anxiety there is a significant decrease of successfulness in emotions recognizing and vice versa. Avoidance dimension refers to the perception of

others and in this case there is no significant association with success in emotions recognizing. The hypothesis can be considered as partially confirmed.

As concerns the mentalization capacity and the association with the successfulness of emotions recognition, one can conclude there is no statistically significant relation. Some authors believe that facial expressions recognition and mentalization are two closely-related constructs, as the recognition of the mental status of another person also involves the assessment of that person's emotional status, as well as one's own reaction to other persons (Ochner, 2008), which has not been confirmed by this study.

With regard to the testing of the connection between the attachment dimensions and mentalization capacity, significant association has been confirmed between the anxiety dimension and self-related mentalization. Low levels of anxiety had positive effect on one's image of self, while self-related mentalization referred to the ability of recognizing and naming one's own mental statuses. Persons having a positive image of themselves will be able to understand their own mental statuses. Likewise, there is a positive correlation between anxiety dimension and motivation to mentalize, which is negligible, but significant, meaning that with the increase of anxiety dimension, the motivation to mentalize also grows. Avoidance dimension is statistically significantly related with the total mentalization capacity, as well as with all subscales. The association is of weak intensity and negatively correlated. The results support the position that secure attachment favours mentalizing of perceived behaviours and states (Fonagy, Gergely, Jurist, & Target, 2002). The association between the positive model of self (low anxiety) and mentalization of one's own actions seems particularly significant. The hypothesis can be considered as confirmed.

The third hypothesis referred to the possibility of predicting the successfulness of facial expressions of emotions recognition based on attachment dimensions and mentalization capacity. The successfulness of facial expressions recognition, as criterion variable, can be predicted based on examined predictors that account for 8.6% of variance-dependant variable. Anxiety dimension has significant contribution to this prediction with negative correlation while avoidance dimension has not contributed significantly to the predictive model. The total mentalization capacity also significantly contributes to the predictive power of the model.

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