RECOGNITION OF EMOTION AND ADULT ATTACHMENT

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ABSTRACT

The main aim of this study was to examine the relationship between affective attachment and accuracy in decoding of facial expressions of basic emotions (anger, contempt, disgust, fear, happiness, sadness and surprise). It was expected that with the higher level of dimensions (anxiety and avoidance), the level of success in identifying facial expressions of emotions would get lower. The sample of respondents included 249 students of different professional orientations at the Faculty of Philosophy, University of Niš, Serbia. The gender structure consisted of 59 (23.7%) males and 190 (76.3%) females. The average age was 22.13 (SD = 1.596) years. Instruments. As a stimulus, we have used a collection of photos, »Matsumoto and Ekman's Japanese and Caucasian Facial Expressions of Emotion« (Matsumoto and Ekman, 1988). Also, we have used the ECR-r- Questionnaire for the evaluation of the pattern of affective attachment (Fraley, Waller and Brennan, 2000). The hypothesis on the connection of dimensions of affective attachment (avoidance and anxiety) and the success in identifying basic emotions (anger, contempt, disgust, fear, happiness, sadness, surprise) has been confirmed. The dimensions of afTatjana Stefanović Stanojević¹ orcid.org/0000-0002-9128-412X

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fective attachment (avoidance and anxiety) are negatively connected with the subjects' success in identifying facial expressions of emotions.

INTRODUCTION

Emotions give a special quality and meaning to human relations. They have the power to change the structure, content and characteristics of those relations. Sometimes, they can form the way in which we perceive and evaluate our social interactions, and the levels of our connection with others. Due to the high expressiveness of the face and the assumption that it is connected to the internal condition of an individual, it represents an important and reliable source of information about emotions (Ekman, 2003; Matsumoto and Hwang, 2011; Kostić and Chadee, 2015; Kostić, 2014). The informative value of the face can have an important role in the exchange of emotions (Ekman, 2003), but also in establishing quality interpersonal relations and developing efficient and successful interpersonal communication (Masten et al., 2008). During the exchange of emotions, expressions of positive and negative emotions represent equally important social information (Ekman, 1993; Darwin and Prodger, 1998; Keltner and Ekman, 2000).

Bearing in mind the importance of information which the face conveys, we can ask the question about the ability of accurate decipherment of complex facial configurations which are connected with the experienced emotions an individual has experienced? Ekman is convinced that human capacities which enable an accurate identification of facial expressions of emotions, are inborn, therefore, biologically predetermined, although in early childhood "preset instructions may be damaged or destroyed by severely disturbed early experience" (Ekman, 2003: 219).

In our attempt to determine factors which could cause damage due to the person's early experience, we usually analyse inadequate family relations, thus avoiding to consider a broader social context, including favourable and unfavourable conditions of growing up in a certain environment. It should not be forgotten that our interviewees, just like their parents, were exposed to traumatic social events and conflict processes in the country they lived in. They were born in the 1990s, and, together with their parents, and in accordance with their capacities of that time, they had to adapt to the consequences of the strong economic crisis, unemployment, inflation, UN sanctions from 1992, isolation, and finally NATO bombing during spring in 1999 (Zundhausen, 2008). It could be asked whether the parents or the individuals who took care of the kids were able to ease the difficulties of growing up in the above-mentioned very negative conditions to satisfy the motive of safety, but also whether they managed to save some of their inborn capacities for perceiving emotions properly.

The experiences which can damage the inborn capacity for an accurate identification of emotions, are, in fact, related to early and unfavourable interactions with caregivers. Therefore, when early childhood is determined by dominant figures which are not sufficiently adequate and responsive, when frightening and confusing signals are perceived on the faces of these figures, the inborn capacity of a child to accurately identify facial expressions of emotions is put to the test. If a child accurately recognises those confusing or frightening emotions, he/she will feel that he/she is in trouble, which he/she is not old enough to solve. Therefore, a child is forced to compromise the system of accurate identification of facial expressions of emotions, that is, in order to survive because he/she does not recognise emotions which frighten him/her, and which he/she cannot handle. Depending on the signal which can be perceived on the faces of the caregiver, a child uses different strategies, some of which significantly and permanently damage the capacity for the accurate identification of facial expressions.

The child's strategies to cope with the figures that take care of him/her have been studied for decades through the theory of affective attachment (Bowlby, 1958; Ainsworth et al, 1978). Within the theory, a classification of individual differences has been developed, that is, four patterns of affective attachment have been determined.

It could be assumed that the early formed bond between the patterns of affective attachment and (un)successful recognition of facial expressions will persist and also be significant in adulthood of an individual. Although logical, this assumption has not been investigated enough. The research problem is, in fact, focused on the question of relation between the aforementioned phenomena.

The nature and functions of facial expressions of emotions

Due to their openness, availability to be seen and high expressiveness, moving faces always attract attention. Those who observe them always want the same – to find out what the movements of the face tell them, whether they provide information or misinformation, whether they are voluntary or involuntary. The answers to these questions demand some fundamental knowledge on the essential aspects of facial dynamics.

Scientific understanding of facial expressions of emotions relies on the systematic research of their origin and primary functions. In their attempts to figure out the nature of facial emotional behaviour, some scientists have insisted on biological and other scientists on cultural determinants. This has limited their inconsistent and opposed nativistically or relativistically oriented approaches, which have excluded

the possibility of combined effects of biological and cultural factors. However, in order to confirm the validity of both approaches, a serious empirical verification has been required, which has sometimes led to the change in the perspective from which the nature of expressions have been viewed and the abandonment of initial concepts (Ekman, 2003; Kostić, 2014).

Knapp and Hall (2002) list a series of researches conducted where results prove the universality and inborn nature of facial expressions. Trans-cultural researches (Ekman, Sorenson and Friesen, 1969; Ekman and Friesen, 1971; Izard, 1971; Eibl-Eibesfeldt, 1972; Fridlund, Ekman and Oster, 1987; Ekman, 1994), have testified to the universality of facial expressions of emotions because members of different cultures, both civilised and primitive, have interpreted the emotions presented to them in the same way. Besides the results of trans-cultural studies, researchers have also studied blind and deaf children (Pitcairn and Eibl-Eibesfeldt, 1976), new-born babies (Oster and Ekman, 1978), apes (Thorpe, 1972; Chevalier-Skolnikoff, 1973), identical twins (Farber, 1981), and have found new evidence on the evolutionary origin of facial expressions. Based on the review of several researches (studies which are primarily focused on discovering cultural specificities or the universalities of facial expressions, and then, studies which have used spontaneous or staged facial behaviour, as well as studies which have used judgment or the »component« approach), Ekman concludes that there is consistent evidence that »the same facial expressions are associated with the same emotions, regardless of culture or language« (Ekman, 1973:219). However, is that the complete truth about facial expression of basic emotions, despite the fact that empirical evidence on universality cannot be disputed? Do facial expressions of emotions remain untouched and unchanged when encountered with social factors? As Ekman reported (Ekman, 1973), in social situations, due to the existing rules of expression, people use strategies of regulation of emotions in accordance with the demands of their culture.

As a researcher of facial expressions, Ekman claimed (1997, 2003) that facial expressions of emotions were involuntary external manifestations of internal changes in neuro-muscular activity of an individual, and that their function was, primarily, highly informative. Expressions did not result from the intention of an individual to show his/her emotional condition, although similar movements could be made voluntarily and on purpose, and then used as the means of communication. Ekman believes that the division between voluntary and involuntary expressions is really difficult, although very important due to the fundamental understanding of facial expressions of emotions. On the way between basic informative and consequently communicative functions of facial expression of emotion, the manner in which a child gets attached to the dominant figure represents a variable which can facilitate but also significantly hinder this process.

THEORY OF AFFECTIVE ATTACHMENT AND CLASSIFICATION OF INDIVIDUAL DIFFERENCES

The classification of individual differences within the concept of attachment was the task of Mary Ainsworth (Ainsworth et al., 1978) who used observational and laboratory procedures to create the first, tripartite classification of individual differences. This classification included: the pattern of secure affective attachment, the pattern of avoidant affective attachment and the pattern of ambivalent affective attachment. A couple of decades later, Mary Ainsworth's associate, Mary Main, introduced the fourth type of affective attachment: disorganised/disoriented (Main and Solomon, 1986). The identification of the new pattern of attachment was based on identifying specific behaviour of children in a laboratory environment, in a strange situation (Ainsworth and Wittig, 1969). These children seemed scared, and their behaviour was a bit bizarre and hardly understandable. Being that Mary Main used the fourth pattern to identify children who were frightened, that is, traumatised, her next step was to find out who the Scary Parents were. In this way, in 1982, a famous Adult Attachment Interview (George, Kaplan and Main, 1985) was created, which opened a new area of research: affective attachment of adults. In this area two approaches are dominant: developmental-clinical and socio-individual. Kim Bartholomew is the one who has contributed a lot to the improvement of the second approach (Bartholomew and Horowitz, 1991). Her model of four patterns of attachment is based on Bowlby's definitions of internal working models – IWMs (1969) and empirical findings on the two dimensions which lie in the base of patterns of affective attachment of adults (Griffin and Bartholomew, 1994). As defined by Bowlby (1969, 1973), internal working models of the relational world are dynamic cognitive/affective mental structures whose initial construction precedes the acquisition of language (Bretherton, 1996).

The classification of individual difference will also be presented from the perspective of early and adult attachment and from the perspective of accuracy of identification of facial expressions of emotions.

The relation of patterns of affective attachment of subjects and their success in identification of facial expressions of emotions

The pattern of secure affective attachment: Children who have responsive and adequate caregivers form a positive image about the world (positive IWM of others) and a positive image about the self (positive IWM of the self). In this type of

secure environment, the inborn system for the identification of facial expressions of emotions is not jeopardised and it will not be compromised. The feeling of acceptance makes these children feel secure and gives them freedom to explore emotions on the faces of others, and to send other people messages about their own feelings. It is particularly important to point out that children who belong to the secure pattern can also have problems. The essential difference between this and all other patterns of attachment is that an individual who takes care of the child will have an adequate response, which means that he/she will accurately identify the given emotion and will help the child to process it. The caregiver will close negative experiences in a positive way. With this kind of attitude, the parent contributes to the further development of the child's inborn capacity to accurately identify facial expressions of emotions.

The pattern of ambivalent/preoccupied affective attachment is formed by children who have selectively responsive caregivers. Being that this is also selective affirmation, children will be prone to excessive attachment and practically a symbiotic relationship with the other that will be so valuable and not available enough (positive IWM of others). On the other hand, because the parent only occasionally and under certain circumstances notices them, children will conclude that they are not worthy enough on their own (negative IWM of the self). These children will have a contaminated system for the accurate identification of facial expression of emotions, because they will only learn how to recognise emotions which warn about leaving, and to express only emotions which secure the parents 'return.

The pattern of avoidant affective attachment is formed in children who have consistently unresponsive caregivers. Their caregivers do not respond to signals which the children send them (which does not mean that they do not take care of children, but they do it in the manner which suits them), so these children go through the PDD - Protest, Despair, Denial (Stefanović Stanojević, 2010; Stefanovic-Stanojevic and Andjelkovic, 2010) and, soon after, they develop the strategy of ignoring emotions which could frighten them and which no one would process for them. It is logical that they form a negative image of others (negative IWM of others) and it is good for them that, in order to defend themselves, they form a positive image of themselves (positive IWM of the self). Due to the function of the survival instinct, they learn to identify emotions of others as accurately as possible, because these children have decided that living is fighting, and they are winners. In accordance with the concept of fight and victory, we could expect them to more accurately recognise those emotions which invite them to action (anger, fear, surprise). These individuals have overcome rejection and have decided to take revenge with victory for not being loved and responded to. Their motivation for accurately identifying facial expression of emotions does not come from the need to belong to and connect

with others. It comes from their need to win. Nevertheless, they will be successful in identifying most of the facial expressions of emotions. The price of success is sometimes loneliness and, therefore, the emotion of sadness – the emotion which they find the most difficult to identify.

The pattern of disorganised affective attachment is formed in children with frightening or fearful parents. These children are in the most unfavourable position and without any strategy for survival. The dominant figure of affective attachment is at the same time the figure who endangers them, that is, the same individual represents the one they love and the one who is supposed to love them, but also the one they are scared of and who does not love them. This is very hard to integrate in adulthood as well, while for children it is practically impossible. They develop a negative IWM of the self and others. They try not to identify hazardous emotions and thus survive. The price for their survival is dissociation. This means that, in their adulthood as well, they have a low capacity for mentalisation, that is, their reflexive functions are not developed. Defensive inhibition is their most common defence mechanism which also plays the part of inhibition for a successful identification of facial expressions.

RESEARCH PROBLEM

The basic research problem refers to the question of interrelation between dimensions and patterns of affective attachment of subjects and their success in identifying facial expressions of basic emotions (anger, contempt, disgust, fear, happiness, sadness and surprise).

Research hypotheses:

- H1: A connection between dimensions of affective attachment (avoidance and anxiety) and subjects' success in identifying primary emotions (anger, contempt, disgust, fear, happiness, sadness, surprise) is expected. More precisely, it is expected that with the higher level of dimensions (anxiety and avoidance) the level of success in identifying facial expressions of emotions will get lower.
- H2: The existence of differences between the patterns of affective attachment in view of the subjects' success in identifying basic emotions (anger, contempt, disgust, fear, happiness, sadness, surprise). Namely, it is expected that the respondents who belong to the pattern of secure affective attachment will be more successful than the subjects who belong to all other patterns of attachment. First of all, due to the positive internal working models of the self and others which are brought from childhood and which point out the lack of the need to compromise the system for identification of facial expressions of emotions. On the other hand, it is assumed that the respondents who belong

to the disorganised pattern of affective attachment will be the least successful in identifying facial expressions of emotions.

METHOD

Research design

This research represents a pilot study of a simple design and with the aim of inspiring future studies on the important relation between the inborn ability to recognise primary emotions and the affective attachment of adults. Namely, this universal ability of correct observation of emotions can be compromised by existing neglect and traumatic experiences during childhood (Ekman, 2003), viewed through the development of inner working models of the secure-insecure pattern which determine and explain affective relations of adults. Understanding the nature of this relation has practical implications for the work of experts in helping professions.

Sample

The sample included 249 students at the Faculty of Philosophy in Niš. The gender structure consisted of 59 (23.7%) males and 190 (76.3%) females. The youngest students were 19 years old and the oldest 30 years. The average age was 22.13 (SD = 1.596) years.

Instruments

Stimulus set: »JACFEE« (»Matsumoto and Ekman's Japanese and Caucasian Facial Expressions of Emotion«, 1988).

The research used the stimulus set »JACFEE«. The collection includes 56 colour photographs which show facial expressions of seven primary emotions (anger, contempt, disgust, fear, sadness, happiness and surprise). Each emotion mentioned is presented on eight photographs of the set. The number of male and female stimulus individuals is equal, as well as the number of subjects of different racial background (Japanese or Caucasian). Each individual stimulus appears only in one photograph in the collection. The development of this stimulus set implied the training of models to contract and relax, according to instructions, different muscles of their face which are relevant for the expressions of the seven basic emotions.

»ECR-r- Questionnaire for the evaluation of the pattern of Affective Attachment« (Fraley, Waller & Brennan, 2000). The experiences in close relationships-revised

(ECR-r) is one of the most commonly used self-report instruments of attachment. It consists of 36 items which are generated by the factor analysis of most measures of affective attachment of adults based on self-report.

The analysis of the ECR-r reveal that the questionnaire items can be grouped into two dimensions of attachment. One group of questionnaire items deals with how anxious a person is about their relationship. These items serve as a scale for anxiety. The remaining items deal with how avoidant a person is in their relationship. These items serve as a scale for avoidance. Both subscales have high internal consistency, anxiety scale Cronbach's alpha is 0.91 and avoidance scale Cronbach's alpha is 0.92. Scores on the anxiety and avoidance scales can still be used to classify people into the four adult attachment styles. The four styles of attachment defined in Bartholomew and Horowitz's model were based on thoughts about the self and thoughts about partners.

Procedure

The research was anonymous and conducted in April 2017 with previous consideration and approval of the Ethical Committee of the Faculty of Philosophy of the University in Niš. The whole procedure of introducing respondents to the aim of the research and their role, including tasks, lasted 60 minutes, without any recorded problems. The collection of data was performed in groups. Firstly, a set of 56 images of expressions of primary emotions (JACFEE) was presented. After each image, the respondents chose the one which they believed was the best representation of the presented facial behaviour from among the list of terms offered. This part of the research lasted 30 minutes. Then, the respondents were asked to fill in the questionnaire on affective attachment and to check whether they provided answers for all the items.

RESULTS

The data analysis used the measures of descriptive statistics (frequencies, percentage, arithmetic means and standard deviation), correlation techniques for relations and the One-way ANOVA for differences between different patterns of Affective Attachment.

Table 1. Average accuracy in identifying facial expressions of emotions

	N	min	max	М	SD
Anger	249	0	8	5.46	2.310
Contempt	249	0	8	4.65	3.097
Disgust	249	0	8	5.80	2.389
Fear	249	0	8	5.14	2.253
Happiness	249	0	8	7.06	2.248
Sadness	249	0	8	6.71	2.316
Surprise	249	0	8	6.22	2.269
Total	249	3	56	41.04	13.719

Note: Total = total number of accurate identifications

Table 1 indicates that there were students who accurately identified none of the emotions on any of the faces, and there were students who accurately identified all the emotions. The maximum possible number of accurate responses was 56. The table shows that there were students with the maximum possible identification accuracy of facial expressions of emotions. The most accurately identified single emotion was happiness (M= 7.06), while the lowest number of accurate identifications was noted for the emotion of contempt (M= 4.65).

Table 2. Average expression of dimensions of Affective Attachment

	N	min	max	М	SD
Avoidance	249	19	106	58.49	15.609
Anxiety	249	18	114	52.03	18.936

Table 2 shows that the average value of the avoidance dimension is 58.49, while the average value for the anxiety dimension is 52.03.

Table 3. Distribution of patterns of Affective Attachment

	f	%
Avoidant	. 37	14.9
Secure	172	69.1
Preoccupied	27	10.8
Disorganised	13	5.2

Out of the sample of students examined, the pattern of secure affective attachment (Table 3) included 172 respondents (69.1%). The pattern of avoidant attachment included 37 respondents (14.9%), the pattern of preoccupied attachment 27 respondents (10.8%) and the pattern of disorganised affective attachment 13 respondents (5.2%). This kind of distribution is similar to distributions obtained in almost all cultures examined, secure attachment was the most common type of attachment, while the disorganised pattern is the least common (van Ijzendoorn and Kroonenberg, 1988; Bakermans-Kranenburg and Van Ijzendoorn, 2009; Mesman, van IJzendoorn and Sagi-Schwartz, 2016).

Table 4. Interrelation among the dimensions of affective attachment and the accuracy of identification of emotions

	Avoidance	Anxiety
Anger	160*	297**
Contempt	071	294**
Disgust	194**	263**
Fear	113	249**
Happiness	199**	253**
Sadness	204**	298**
Surprise	139*	233**
Accurate identification	186**	333**

^{*}p < 0.05; **p < 0.01

The first fact that can be noticed in Table 4 is the negative sign in front of all correlations between dimensions of affective attachment and the accuracy of identification of facial expressions of the seven primary emotions, as well as the total number of accurate identifications. Higher scores on the dimensions of avoidance and anxiety correspond to the lower accuracy of identification of facial expressions of emotions.

Table 5. Average values of the accuracy of identification of emotions in relation to the patterns of Adult Attachment

Patterns of Adult Attachment	Avoi	Avoidant		Secure		Preoccupied		Disorganised	
	М	SD	M	SD	М	SD	М	SD	
Anger	5.08	2.431	5.78	2.151	4.56	2.439	4.08	2.813	
Contempt	4.65	3.190	4.92	3.039	3.52	3.068	3.38	3.176	
Disgust	4.95	2.391	6.1	2.206	5.56	2.708	4.69	3.250	
Fear	4.78	2.440	5.4	2.104	4.56	2.359	3.92	2.871	
Happiness	6.62	2.742	7.37	1.845	6.48	2.751	5.46	3.382	
Sadness	6.11	2.654	7.07	1.954	6.00	2.760	5.23	3.516	
Surprise	5.92	2.822	6.43	1.994	5.85	2.316	5.08	3.402	
Accurate	38.11	15.650	43.08	11.895	36.52	15.490	31.85	19.887	

The results in Table 5 show that those respondents who have the secure pattern of affective attachment have higher average values for the identification of all facial expressions of emotions in relation to respondents who belong to other patterns of affective attachment. This finding confirms the theoretical assumption that the individuals with the secure style of attachment are the most successful in using inborn, universal capacity for interpreting emotions, that is, their system for identification of facial expressions is not compromised.

Table 6. Patterns of affective attachment as the difference factor in the accuracy of identification of emotions

	F
Anger	4.588**
Contempt	2.395
Disgust	3.646**
Fear	2.983*
Happiness	4.549**
Sadness	5.065**
Surprise	2.072
Total	4.977**

Note: Total = total number of accurate identifications

^{*}p < 0.05; **p < 0.01

As it has been assumed, there are significant differences in the accuracy of identifying facial expressions of emotions depending on the patterns of affective attachment (Table 6). For five emotions (anger, disgust, fear, happiness, sadness), as well as for the total number of accurate responses, it can be said that the patterns of attachment represent a noteworthy risk factor. There are no differences among the patterns of affective attachment in relation to the success in identifying facial expressions only when it comes to two emotions (contempt and surprise).

Statistically significant individual differences (p < 0.05) of the patterns of Adult Attachment in identifying emotions, as shown by the post-hoc analyses, primarily show that there are significant differences in the success in identifying all the presented emotions between the respondents with the secure pattern and the respondents who belong to all other patterns of affective attachment.

The greatest differences exist between the secure pattern and the disorganised pattern. Respondents with the secure pattern of affective attachment are significantly more successful than those with the disorganised pattern, regarding the identification of almost all emotions (anger, disgust, fear, happiness, sadness, surprise) and, on average, they have a higher total number of accurate responses.

DISCUSSION

Although emotional expressions have the key role in the formation of attachment (Tomkins, 1991; Ekman, 1992), even if it is natural to expect that early attachment shapes the ability to identify and interpret facial expressions of adults, the relation between attachment and accurate interpretation of facial expressions has not yet been explored very much. However, there are some studies, although rare. Steele and Steele (2008) have established that early attachment can be the predictor of successful identification of basic emotions in children, although, during their growing-up years, the influence of attachment lowers and weakens. This research has been very inspiring for us, because it has encouraged us to ask: what happens with the relation between attachment and identification of emotions in adulthood? Silvan Tomkins (1991) also pointed out how important it is to systematically explore this relation, noting that the emotional expressive face of the figure who nurtures the child is a very powerful means for learning emotions in childhood. Bowlby's approach was also under the influence of Tomkins' Affect Theory (1962).

Let us start the discussion of our results. The hypothesis on the connection of dimensions of affective attachment (avoidance and anxiety) and the success in identifying basic emotions (anger, contempt, disgust, fear, happiness, sadness, surprise) has been confirmed. If the respondents achieve higher scores on the dimensions of avoidance and anxiety, their IWMs of the self and others are more negative, and the

chances of successfully identifying facial expressions of emotions are lower. Besides the correlation which refers to the dimension of avoidance and the accuracy in identifying contempt and fear, all correlations are statistically significant, negative and they have low intensity.

Kohut and Wolf (1978) state that insecurely attached individuals, regardless of the fact that they have a higher score on the avoidance dimension or the anxiety dimension, have trouble forming an integrated, balanced image on one's own value and maintaining a stable level of self-esteem. Mikulincer and Shaver (2007) believe that they both have the same lack of self-cohesion, but they do not use the same secondary strategies. These selected strategies, along with other mental processes, can cause different disorders of the self. The aforementioned authors (2007) emphasise that individuals with a higher score on the dimension of anxiety, use hyperactivating strategies which strengthen insecurity in one's own value and abilities, as well as sensitivity to being rejected and unaccepted. The strategies of hyperactivations reduce the accuracy of social perception, which also implies less successful perception of emotions, especially the negative ones. Highly anxious subjects in our research are not successful in identifying the emotions mentioned (sadness, anger and contempt, disgust, happiness, fear, surprise).

Contrary to this, individuals who have higher scores on the avoidance dimension have chosen deactivating strategies which represent their attempt to remove their suspicions that they will be rejected. Narcissistic behaviour, defensive reactions, learning that they are not interested in threat signals and the support of others, completely fit in the constructed image of self-reliance and invincibility (Mikulincer and Shaver, 2007). Due to their self-focus, it is clear that they cannot be expected to have empathy, nor interest in observing other people's emotional states. The negative image of others even calls into question the existence of the need of these individuals to deal with observing external manifestations of internal states of others, which, in a way, compromises the universal ability to accurately identify emotions. The results obtained have also confirmed our hypothesis on the assumed differences between different patterns of affective attachment and the success in identifying basic emotions (anger, contempt, disgust, fear, happiness, sadness, surprise) (Tables 5 and 6).

The greatest differences have been obtained between secure and disorganised patterns. The finding that respondents who have the secure pattern of attachment are better at identifying five emotions than respondents who have the disorganised pattern confirms the expectation that respondents with the secure pattern of attachment have preserved their inborn capacity for the accurate identification of facial expressions to a larger extent. We could say that the positive IWM of the self and the positive IWM made them adequately equipped for facing others as well

as themselves. At the same time, the obtained differences potentially confirm that the respondents with the disorganised pattern of affective attachment during growing-up years were forced to develop defensive inhibition of numerous capacities, as well as capacities for identifying facial expressions of emotions. The most problematic aspect of this situation, in the developmental sense, is that a child develops defensive inhibition of the capacities for mentalisation, whose goal is to avoid insight into the fact that a parent might want to hurt him/her, so in his/her further development it will be harder or even impossible to process his/her own experiences and to modulate emotions (Stefanović Stanojević, Tošić Radev and Bogdanović, 2018). Of course, within the damaged capacity for mentalisation, the capacity for accurate identification of facial expression of emotions is also blocked. In a few words, dissociation is the price that they pay for survival.

According to the amount of differences obtained, the next one is between secure and preoccupied patterns of affective attachment. Students with the secure pattern of affective attachment are significantly more successful than students with the preoccupied pattern regarding the identification of three emotions (anger, contempt and sadness), which also implies the significantly larger total number of accurate responses from these students. This refers to the accurate decoding of unpleasant, negative strong emotions which these subjects are not afraid of, because they have already learned to actively regulate them, while being calm. Mikulincer, Shaver and Pereg (2003) believe that individuals with the secure pattern have creative and constructive capacities, which help them to remove real and potential negative effects of stress, with a proper response. The analysis of emotions which are more difficult to recognise for respondents with the pattern of preoccupied affective attachment could be connected with their negative image of themselves, the constant pessimistic doubt in their own value, self-centrism, but also with a strong need to be showered with attention and loved by others. By using the strategies of hyperactivation (Mikulincer, Dolev and Shaver, 2004), subjects with the preoccupied pattern make a huge effort to receive social support, with visible resistance towards the identification of unpleasant stimuli, with rejection to see in other people what could hurt them (contempt) and to recognise emotions which exuded from them in childhood (anger, sadness).

The smallest differences have been obtained among students who belong to the secure pattern and students who belong to the avoidant pattern of affective attachment. This refers to only two emotions (disgust and sadness) and to the score on the level of the total number of accurate responses. The finding which supports the greatest similarity between the secure and the avoidant attachment styles, could be explained by the fact that only these two patterns have a positive image of the self, which makes them more successful in identifying emotions, that is, it makes their

capacity for identifying emotions the least compromised. The differences between the secure and the avoidant patterns can be found in the step which follows the identification of facial expressions of emotions. The subjects with secure affective attachment will use the accurately identified emotion on another individual's face as a signal which contributes to the stronger bond, interdependence, cooperation and comfortable closeness with others. Contrary to that, subjects with avoidant attachment will consider an accurately identified emotion as a signal which points to the weakness of others (a negative image of others) and, as a consequence, to the way in which they can defeat and deny them, because, in fact, they are not able to achieve a significant level of intimacy and emotional investment in being close to other persons, and the emotional distance from them represents the area of self-protection.

As it has been shown, independently of attachment dimensions, students have recognised happiness most accurately, and contempt most inaccurately. The success in identification of happiness is in accordance with many studies. Namely, relevant cross-cultural studies (Ekman & Friesen, 1971; Izard, 1971; Ekman, 1972), indicated that the members of different cultures have shown great agreement in decoding facial expressions of happiness (95% - 100%). The results of recent studies also indicate that the identification of happy expressions has advantage over identifying expressions of negative emotions because happiness is perceived on a lower level of activation in relation to other emotions.

As has been mentioned, the emotion of contempt has been identified most successfully in this research. It is usually stated in the literature that there have been a lot of disagreement around its universal or culturally-specific nature. Contempt is the emotion which has been added last in the collection of the six universal basic emotions. Taking into account the results of studies in 10 different cultures, Ekman and Friesen (1986) claim that this emotion has its own specific facial expression (unilateral lip corner tightened and raised) and high universal recognisability (75%), although it does not obtain the level of agreement which is obtained in the evaluation of happiness. Similar conclusions have also been reached by Matsumoto (1992).

A completely opposite point of view about the cultural conditionality of contempt and the impossibility of universal decoding of its facial expression was stated by Russell (1991). Criticising the methodology of Ekman and Friesen's research (the use of a forced-choice format), Russell thought that the accurate identification of this unilaterally expressed emotion is highly connected to the social context and culture in general. Ekman (1994) responded to Russell's critique by pointing out that he has misrepresented the meaning of universality and incorrectly interpreted earlier empirical findings, without considering all important aspects of the methodological framework of the studies which he criticised. Nevertheless, cross-cultural

studies of literate and preliterate cultures have provided undisputable evidence of the universal identification of contempt.

Although sometimes, due to certain similar facial aspects, it can occur that contempt is perceived and labelled as disgust, antecedents of these emotions are completely different. In an individual who, due to a certain reason, feels superior in a given situation, the experience of contempt is caused by individuals and their behaviour, and not by unpleasant touches, smells, tastes and sights which cause disgust (Ekman, 2003). The lack of a high level of agreement in decoding the expressions of contempt can also be the consequence of the phenomenon of perceptive defence which implies the resistance to perceive the stimuli which are connected with earlier or current unpleasant experiences (the appearance of contempt on the interlocutor's face can cause unpleasantness due to the belief that this reaction has been directed exactly towards us).

CONCLUSION

Based on the aforementioned, it can be concluded that:

- 1. The dimensions of affective attachment (avoidance and anxiety) are negatively connected with the subjects' success in identifying facial expressions of emotions. Therefore, one of the conditions for the accuracy of identification of emotions could be a low level of anxiety and avoidance.
- 2. The patterns of affective attachment are a significant factor when it comes to the differences regarding the success of identification of facial expressions of emotions (five emotions).

Subjects who belong to the secure pattern are more successful when it comes to the accuracy in the identification of facial expressions of emotions than subjects who belong to: the disorganised pattern (six emotions), the preoccupied pattern (three emotions) and the avoidant pattern (two emotions). Therefore, one of the conditions for the accuracy of identifying emotions could be the pattern of secure affective attachment.

THE LIMITS OF THE RESEARCH AND POSSIBLE IMPLICATIONS

The most significant limitation of the research conducted is most certainly the size of the sample. Concern that we are on a thin line between interpretation and speculation has been the reason why the authors have not insisted on the interpretation of differences regarding the accuracy of identification of certain emotions. Only a larger sample could confirm or deny the differences obtained.

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PREPOZNAVANJE EMOCIJA I PRIVRŽENOST KOD ODRASLIH

SAŽETAK

Glavni cilj istraživanja bio je utvrditi odnos između afektivne privrženosti i točnosti u dekodiranju facijalnih ekspresija osnovnih emocija (ljutnja, prezir, gađenje, strah, sreća, tuga i iznenađenost). Pretpostavka je bila da će kod viših razina dimenzija (anksioznost i izbjegavanje) biti niža razina uspješnosti prepoznavanja facijalnih ekspresija. U istraživanju je sudjelovalo 249 studenata različitih profesionalnih orijentacija s Filozofskog fakulteta Sveučilišta u Nišu, Srbija. U spolnoj strukturi muškarci su bili zastupljeni s 23,7 % (59 muškaraca), a žene sa 76,3 % (190 žena). Prosječna dob iznosila je 22,13 (SD = 1,596) godina. Instrumenti - Kao podražaj upotrijebili smo zbirku fotografija, Matsumoto and Ekman's Japanese and Caucasian Facial Expressions of Emotion (JACFEE, 1988.). Primijenjen je i ECR-r upitnik za evaluaciju obrazaca afektivne privrženosti (Fraley, Waller i Brennan, 2000.). Potvrđena je hipoteza o vezi između dimenzija afektivne privrženosti (izbjegavanje i anksioznost) i uspješnosti u prepoznavanju osnovnih emocija (ljutnja, prezir, gađenje, strah, sreća, tuga i iznenađenost). Dimenzije afektivne privrženosti (izbjegavanje i anksioznost) negativno su povezane s uspješnosti ispitanika u prepoznavanju facijalnih ekspresija emocija.

Ključne riječi: prepoznavanje emocija, privrženost kod odraslih, facijalne ekspresije.



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