

# FROM PREOCCUPIED ATTACHMENT TO DEPRESSION: SERIAL MEDIATION MODEL EFFECTS ON A SAMPLE OF WOMEN<sup>4</sup>

## ABSTRACT

*Existing studies have confirmed the existence of a relation between depressive symptoms and insecure attachment, an undeveloped ability to mentalize, social anxiety and rumination, as well as their increasingly more frequent presence in the population of women. However, none of the studies have analyzed the mutual relations between the aforementioned phenomena. In this study we tested a multiple serial mediation model in which a preoccupied attachment style has an effect on depressive symptoms among women, mediated by the ability to mentalize one's own state of mind, social anxiety and a tendency towards rumination, successively, in that order. The research was carried out on a geographical cluster sample and included 1258 working-age adults, respondents from 37 urban and rural locations, 20 administrative districts*

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*of Serbia, from which a sample of women was extracted (N= 791). The Relationships Questionnaire – RQ (Bartholomew and Horowitz, 1991), the Mentalization Scale – Ments (Dimitrijević et al., 2015), the Scale of Social Anxiety (Tovilović, 2004) and the Ruminative Thought Style Questionnaire – RTSQ; Brinker and Dozois, 2009) were all used in the study. The results have indicated that there is a significant specific indirect effect of the preoccupied attachment style on depression mediated by all three mediators sequentially (estimated indirect effect = .004, boot-strapped 95% CI = .002 - .007), suggesting that the preoccupied attachment style has an effect on depression by leading to a decrease in the ability to mentalize one's own state of mind, which increases social anxiety, in turn leading to an increase in rumination, which ultimately leads to depression. These findings could be of importance for the treatment of a specific group of female patients with a preoccupied attachment style who suffer from depression.*

## INTRODUCTION

Depression includes symptoms such as: loss of life exuberance, a sense of sadness, melancholy, helplessness, loss of interest, energy and drive, and even a will to live, which can range in intensity from mild forms to clinically diagnosed depression (Dagan, Facompré and Bernard, 2016; Dugal et al., 2018). According to the data of the World Health Organization, by the year 2020 depression was to become the leading cause of death and disability in the female population, and will follow cardiovascular disease and other causes of mortality in the entire population (WHO, 2013). Such a warning is certainly reason enough to study the dynamics of the emergence of this phenomenon. The idea of understanding the potential process of development of depressive symptomatology seems equally important both in the domain of theoretical consideration of the phenomenon, as well as for preventing the emergence of the disorder and the timely intervention in earlier, prodromal phases of its emergence. In order to better understand the aforementioned process, our research included variables which are, each in its own way, and both in a theoretical and empirical manner, already related to the depressive symptomatology. Previous research has confirmed the connection between depressive symptoms and insecure attachment (for example: Carnelley, Pietromonaco and Jaffe, 1994; Patrick et al., 1994), an undeveloped ability to mentalize (Belvederi Murri et al., 2016; Fischer-Kern et al., 2013; Luyten and Fonagy, 2016), social anxiety (Fizke, Buchheim and Juen 2013; Heimberg et al., 2001) and rumination (Gotlib and Joormann, 2010; Nolen-Hoeksema, Wisco and Lyubomirsky, 2008), but none of these studies have analyzed the inter-relations between the aforementioned phenomena, or studied the effects of their mediation between preoccupied attachment and depression.

Based on current findings, depression can be connected to an insecure attachment style: avoidant (Patrik et al., 1994), preoccupied (Carnelley, Pietromonaco and Jaffe, 1994; Cole-Detke and Kobak, 1996; Murphy and Bates, 1997; Rosenstein and Horowitz, 1996; Zuroff and Fitzpatrick, 1995) and fearful (Bolduc et al., 2018), where the mechanisms and dynamics of emergence are quite different. Depression can be caused by an internalized strategy of dealing with problems in which an individual is pronouncedly focused on himself and prone to self-accusation, which is precisely a characteristic of the preoccupied attachment style (Dozier, Stovall-McClough and Albus, 2008). Growing up with caregivers who are selectively available to the needs and signals of the child, a child with a preoccupied attachment style is forced to constantly worry about their availability and attention. Inconsistent availability is a kin to partial reinforcement, which leads to the development of a negative self-image and a positive image of others. In such cases, the child will increasingly focus on others in order to elicit and then keep their affection since they are more important and precious than the child himself is. This kind of survival strategy in an emotional relationship is transferred into adulthood and it permeates all significant relationships. It seems that women are more prone to use this strategy. In truth, preoccupied attachment is more pronounced in a subsample of women (Kirkpatrick and Davis, 1994). This finding is hardly surprising, especially when we take into consideration that the traditional female role includes attempts to please others in order to ensure their love, attention, care or protection and that such forms of behavior were for a long time strongly encouraged among female children.

Attachment in early childhood also represents a context in which mentalizing can develop. Mentalization is a mental process through which a person implicitly and explicitly interprets their own behavior and that of others, taking into consideration internal mental states such as desires, needs, feelings and beliefs (Bateman and Fonagy, 2004). This ability enables the child, and later the adult person, to understand and predict the behavior of others, but also to increase awareness of and shape their own experience. The most desirable context for the development of reflective functioning is a secure relation between the child and their mother, and numerous studies have confirmed that mentalization matures sooner among secure children and they remain superior in this ability in comparison with insecure attached children, especially the disorganized ones (Meins, 1997, Meins et al., 1998, Stefanović-Stanojević, Tošić Radev and Bogdanović, 2018). Based on the lack of trust in their own abilities (a negative internal working model of self) and stimulated by a fear of abandonment (a positive internal working model of others), children with a preoccupied attachment style react by resorting to a hyperactivating strategy which implies a reduced regulation of affects, more frequent manifestation of anxiety and, generally, use of numerous strategies for getting attention and affection (Cassidy

and Kobak, 1988). Research findings, including neurological ones, indicate that the activation of an attachment system will simultaneously lead to the deactivation of the areas of the brain tied to mentalization (Fonagy, Bateman and Luyten, 2011; Fonagy and Luyten, 2009), which results in a lower threshold for 'triggering' and a more difficult return to mentalization after the process has ended, as well as to more serious omissions during mentalization (Bateman and Fonagy, 2012). At the same time, this is particularly relevant in specifically stressful situations which provoke the activation of the attachment system (Nolte et al., 2013). The belief that women are more sensitive when it comes to reading the minds of their significant others is confirmed by the existing findings (Krach et al., 2009). Considering that throughout history women were physically and economically weaker than men, the development of the ability to mentalize was an adaptive strategy. However, if the grounds on which mentalization develops is a preoccupied attachment style, it is quite possible that the mentalization will develop in the direction of perceiving one's own unforgivable flaws and other people's unattainable virtues.

Social anxiety is defined by the fact that it occurs in real or imagined social situations (Schlenker and Leary, 1982). It is characterized by significant emotional stress in most social situations and the attachment of great importance to the impression one leaves on their environment. This usually results in withdrawal and shyness in society, anxiety and maladjustment in general. Social anxiety is connected to insecure attachment, especially preoccupied attachment (Brumariu and Kerns, 2008; Read et al., 2018; Öztürk and Mutlu, 2010). Numerous findings have confirmed that a negative internal working model of self is connected to symptoms of social anxiety (Brumariu and Kerns, 2008). On a sample of individuals diagnosed with social anxiety disorder, Heimberg (Heimberg et al. 2001) found that individuals with this disorder mostly meet the description of the preoccupied and secure cluster, where the former show greater social anxiety and avoidance, more pronounced depressive symptoms and a lower sense of satisfaction with life. Studies indicate that social anxiety also occurs more often among women than among men (Weinstock, 1999).

Finally, significant findings were provided in a new study (Read et al., 2018) which, in addition to confirming the connection between a negative model of self and social anxiety, reveals that this connection is mediated by maladaptive strategies of emotional regulation, that is, the use of suppression of emotion and a deficit in or the ineffective use of reappraisal of a situation. Namely, individuals with a high level of anxiety have difficulty withdrawing resources from threatening stimuli, which are believed to exacerbate emotional reactivity. This leads to an inability to modify negative thoughts when faced with socially threatening situations and to the impossibility to see a negative event in a different light.

This characteristic strategy of emotional regulation, that is, its deficit, is very close to the concept of rumination. Rumination is connected with depression and anxiety (Gotlib and Joormann, 2010), longer episodes of depression and prolonged treatment (Nolen-Hoeksema, Wisco and Lyubomirsky, 2008) and can also be viewed as a symptom of social anxiety (Brozovich and Heimberg, 2008). The inadequate strategies of emotional reactions of individuals with a preoccupied attachment style have already been mentioned, to which we should add that preoccupation can precisely take on the form of rumination (Caldwell and Shaver, 2012; Nolen-Hoeksema, Wisco and Lyubomirsky, 2008; Reynolds, Searight and Ratwik, 2014). And truly, preoccupied individuals find themselves in a context which is ideal for rumination: a negative self-image, an excessive need for others, unresolved childhood memories, poor mentalization or preoccupation with one's own state of mind, hyperactivation and a feeling of being overwhelmed. Namely, it is precisely through excessive emotional responses and later even through rumination that they maintain their attachment system constantly active. To that context we can add the expected findings that women are more prone to such a passive approach to problems (Nolen-Hoeksema and Jackson, 2001).

Bearing in mind the aforementioned findings, the aim of the research was to study the path of development of depressive symptomatology among women, beginning with a negative self-image, typical of persons with a preoccupied attachment style. We assumed that a serial mediation model, in which preoccupied attachment leads to a deficit in the ability to mentalize, further causes social anxiety, followed by rumination, and finally results in depressive symptomatology.

## THE METHOD

### Procedure

This research was carried out on a geographical cluster sample from the general population of Serbia within the project funded by the Ministry of Education, Science and Technological Development of the Republic of Serbia. Paid survey researchers went to the field to collect data in 37 urban and rural locations within 20 administrative districts of Serbia. All of the respondents were contacted in person in their homes and they completed the battery of tests, after giving informed consent to participate in the study. No data that could personally identify participants were recorded. Ethics committee of the Serbian Psychological Society at the Faculty of Philosophy in Niš approved this study.

## The sample

The total sample consisted of 1258 working-age adults, while this study was carried out on a subsample of women, who made up 63% of the sample of respondents (N= 791). The sample included women from urban and rural areas, proportional to their representation in the population, aged 19 - 78 (M = 39 yrs). Most of the women were married (50.3%) or in a romantic relationship (16.7%), approximately 15.9% of them were single, and the remaining percentage accounted for divorced women and widows. Most of the female respondents do not have children (37.8%), followed by women with two children (35.9%) and those with one child (20.2%), while a small percentage of women from the sample (6.1%) have three or more children. The distribution of levels of education follows the curve of normal distribution. Most of the women had a high school education (43.6%), only 13.4% claimed to be dependent individuals, and most of them were employed (70.9%) or worked honorary or part-time jobs (20.7%).

## The measuring instruments

*The Relationships Questionnaire – RQ* (Bartholomew and Horowitz, 1991) is a single item measure made up of four short paragraphs, each describing one of four attachment styles. For example, preoccupation is characterized by the following description: «*I want to be completely emotionally intimate with others, but I often find that others are reluctant to get as close as I would like*», «*I am uncomfortable being without close relationships, but I sometimes worry that others don't value me as much as I value them*». The respondents were asked to rate the extent of their agreement with each prototype on a 7-point scale. The results on the scale provide insight into the level of manifestation of characteristic beliefs for each attachment style among individual respondents, as well as the dominant attachment style in close personal relationships: secure, avoidant, preoccupied and fearful. We used only the score on the paragraph depicting preoccupation because it provides continuous measure on that dimension. Existing findings, obtained by a test-retest method, indicate a satisfactory reliability of the scale (average stability of .53 for females, and .49 for males), similar to other techniques of self-evaluation of attachment (Scharfe and Bartholomew, 1994.). Neither test-retest, nor internal consistency coefficient reliability calculations was not applicable for our sample, since one-item nature of the scale and the fact we had only one measurement.

*A Self - Report Measure for the Assessment of Mentalizing Capacity – MentS* (Dimitrijević, Hanak, Altaras Dimitrijević and Jolić Marjanović, 2015) is an instrument

which evaluates three aspects of the ability to mentalize: Self-Related Mentalization, Other-Related Mentalization, and Motivation to Mentalize, and offers a global score, used herein. The questionnaire consists of 28 claims and the respondents indicate their agreement or disagreement with them on a five-item scale. Our research relied only on the subscale of Self-Related Mentalization in accordance with our intention for the focus of the research to be on the internal image of self. This subscale consists of 8 items (e.g. «*I am often confused by what it is I am exactly feeling*») and has a satisfactory reliability for our sample ( $\alpha = .79$ ).

*The Scale of Social Anxiety* (Tovilović, 2004) is an instrument meant to study social anxiety as a dimension of personality. Although the scale consists of four dimensions: social-evaluative anxiety, inhibition in socially uncertain situations, low self-esteem and hypersensitivity to rejection, our study will only analyze the global score. The instrument consists of 25 items (e.g. «*I feel uncomfortable in the presence of unfamiliar people*») which are evaluated on a five-point Likert scale. A higher score on the scale indicates a more pronounced presence of indicators of social anxiety. Similarly to the existing findings, the scale of social anxiety demonstrated high reliability in this study as well ( $\alpha = .90$ ).

*The Ruminative Thought Style Questionnaire - RTSQ* (Brinker and Dozois, 2009) is a 20-item self-report questionnaire that assesses the overall tendency to think repetitively, recurrently, and intrusively (e.g. «*I tend to replay past events as I would have liked them to happen*»). The items are rated on a seven-point Likert scale ranging from 1 to 7, with higher scores indicating more rumination. On our sample, the instrument showed excellent reliability ( $\alpha = .95$ ).

*The Patient Health Questionnaire (PHQ - 9)* (Kroenke, Spitzer and Williams, 2001) is a 9-item self-administered questionnaire designed to evaluate the presence of depressive symptoms two weeks prior to the survey. The nine items of the PHQ-9 are based directly on the nine diagnostic criteria for major depressive disorder in the Diagnostic and Statistical Manual Fourth Edition (DSM-IV) (e.g. bad mood, poor appetite, fatigue). The PHQ-9 score can range from 0 to 27, since each of the 9 items can be given a score from 0 (not at all) to 3 (nearly every day). For our sample, an identical level of instrument reliability was obtained ( $\alpha = .86$ )

## Data analysis

The statistical analysis was carried out in the SPSS 24 program. For the multiple serial mediation analysis, we used the Process macro addition (model 6) (Hayes, 2017). The missing data were processed using the expectation maximization methods. The bootstrap method, by generating 5000 random samples, was used when calculating

the indirect effects and the 95% (bias-corrected) confidence intervals were constructed. The model tests whether the indirect effects are statistically significantly greater than 0. The values are considered statistically significant at the .01 level when a 95% confidence interval does not include the value 0.

## THE RESULTS

First, with the aim of analyzing the manifestation and the connections that hold between the variables in the research, descriptive and correlation analyses were calculated.

The descriptive analysis indicates that the extent of the manifestation of the variables which were the subject matter of this research is low for depression and medium for Self-Related Mentalization, social anxiety and rumination.

**Table 1.** The connection between all the research variables

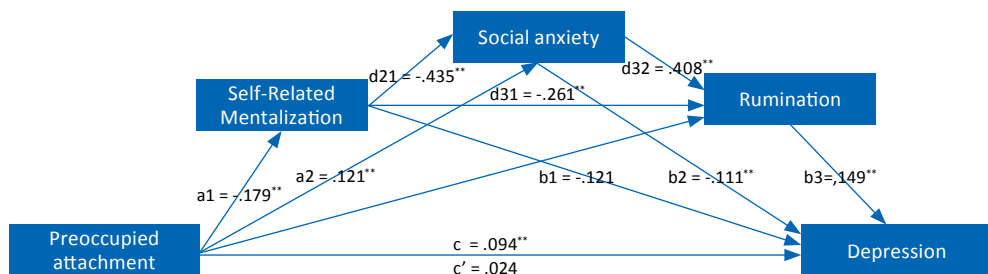
	<b>M</b>	<b>SD</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>
<b>Preoccupied attachment I</b>	2.35	1.39	1				
<b>Self-Related Mentalization II</b>	3.34	.83	-.28**	1			
<b>Social anxiety III</b>	2.30	.85	.31**	-.47**	1		
<b>Rumination IV</b>	2.96	.83	.27**	-.47**	.56**	1	
<b>Depression V</b>	0.70	.60	.20**	-.35**	.36**	.39**	1
<b>N=760</b>							

When it comes to the connection between the variables, we see that correlations can be noted, both statistically significant and in the expected direction. This allows us to continue with the next step in the analysis, calculating a regression analysis to evaluate the predictive power both of the predictor itself and of the potential mediators, self-related mentalization, social anxiety and rumination. The predictor variable, preoccupied attachment, is a significant predictor of depression ( $R^2 = .04$ ,  $\beta = 0.20$ ,  $p < .001$ ), and of the potential mediators—self-related mentalization ( $R^2 = .08$ ,  $\beta = -0.28$ ,  $p < .001$ ), social anxiety ( $R^2 = .10$ ,  $\beta = 0.31$ ,  $p < .001$ ) and rumination ( $R^2 = .07$ ,  $\beta = 0.27$ ,  $p < .001$ ). Following the suggestions of Hayes (2017), according to which serial mediation can be achieved if the mediators remain connected even when the effect of the variable which potentially causes (X) is controlled, we calculated the partial correlation between the self-related mentalization (M1), social anxiety (M2) and rumination (M3), controlling for preoccupied attachment. All of the



relations between the mediator variables, as the analysis indicates, remain statistically significant. There is a negative correlation between self-related mentalization and social anxiety ( $r = -0.42$ ,  $N = 760$ ,  $p < .001$ ) and rumination ( $r = -0.44$ ,  $N = 760$ ,  $p < .001$ ), while there is a positive correlation between social anxiety and rumination ( $r = 0.52$ ,  $N = 760$ ,  $p < .001$ ).

Once we confirmed that all the conditions have been met, we applied the statistical procedure of serial multiple mediation. Thus, we analyzed, based on the available literature, the assumption that the relation between preoccupied attachment and depression is mediated by the self-related mentalization, social anxiety and rumination, as serial mediator variables. The multiple serial mediator analysis (model 6) enables the evaluation of the overall effect of the predictor variable and the mediator variables on the criterion variable (c), the direct effect of the predictor variable on the criterion variable, following the introduction of a mediator (c'), as well as the indirect effect of the predictor variable on the criterion variable achieved by each mediator, and achieved by all three mediators in the proposed sequence. The mediation is complete when the direct effect of the predictor on the criterion variable is no longer significant following the introduction of a mediator, while the indirect effect (achieved by a mediator) is significant.



\*\*  $p < 0.01$

**Graph 1.** Serial multiple mediation model

Graph 1 shows the serial multiple mediation model in which the preoccupied attachment style has an effect on depression following the aforementioned paths (a1b1 – the effect of preoccupied attachment on depression mediated by mentalization, a2b2 – the effect of preoccupied attachment on depression mediated by social anxiety, a3b3 – the effect of preoccupied attachment on depression mediated by rumination, a1d21d32b3, the effect of preoccupied attachment on depression mediated by mentalization, social anxiety and rumination, a1d21b2, the effect of

preoccupied attachment on depression mediated by mentalization and social anxiety,  $a_1d_3b_3$ , the effect of preoccupied attachment on depression mediated by mentalization and rumination,  $a_2d_3b_3$  – the effect of preoccupied attachment on depression mediated by social anxiety and rumination and  $c'$  – the overall effect of preoccupied attachment on depression). The arrows indicate the direction of the path, whereas  $a_1, a_2, a_3, b_1, b_2, b_3, d_{21}, d_{32}, d_{31}, c$  and  $c'$ , are the path coefficients.

We can note that the overall effect of preoccupied attachment on depression is significant ( $c = .09, p < .01$ ). This effect decreases and loses its statistical significance when mediators are introduced into the model – self-related mentalization, social anxiety and rumination ( $c' = .02, p > .05$ ), indicating the significance of the indirect effects.

The path coefficients within the model between the mediators themselves ( $d_{21}, d_{32}, d_{31}$ ) indicate that the theoretically presented model of relations, where low mentalization contributes to social anxiety ( $d_{21} = -.43$ ) and social anxiety to rumination ( $d_{32} = .40$ ), as indicated by the data, is a possible model. Path coefficients between the mediators and criterion variable ( $b_1 = -.12, b_2 = .11, b_3 = .14$ ) are also significant.

**Table 2.** Total, direct and indirect effect of preoccupied attachment (X) on depression (Y) and the mediating role of mentalizing (M1), social anxiety (M2) and rumination (M3)

Effect	Point Estimate	SE	T	P	Lower	Upper
Total effect	.094*	.016	5.68	.000	.061	.127
Direct effect	.024	.016	1.52	.125	-.007	.056
Total indirect effect	.069*	.010			.050	.090
Indirect effect X→M1→Y	.021*	.006			.009	.035
Indirect effect X→M2→Y	.013*	.004			.005	.024
Indirect effect X→M3→Y	.006*	.003			.000	.013
Indirect effect X→M1→M2→Y	.008*	.003			.003	.014
Indirect effect X→M1→M3→Y	.007*	.0018			.003	.011
Indirect effect X→M2→M3→Y	.007*	.0019			.003	.012
Indirect effect X→M1→M2→M3→Y	.004*	.0013			.002	.007

\*  $p < .01$ .

The results confirm that the total indirect effect, that is, the effect of the mediator in the relation between preoccupied attachment and depression, is statistically

significant ( $ab = .069$ ), as shown in Table 2. In addition, individual indirect effects of preoccupied attachment on depression and the mediating role of mentalization ( $X \rightarrow M1 \rightarrow Y$ ,  $a1b1 = -.021$ ), social anxiety ( $X \rightarrow M2 \rightarrow Y$ ,  $a2b2 = .013$ ) and rumination ( $X \rightarrow M3 \rightarrow Y$ ,  $a3b3 = -0.006$ ) are also statistically significant.

Finally, statistically significant indirect effects include the sequential relations between mediators, including the indirect effect of preoccupied attachment on depression and the mediating role of all three mediators in a row ( $X \rightarrow M1 \rightarrow M2 \rightarrow M3 \rightarrow Y$ ,  $a1d21d32b3 = .004$ ). These findings suggest that a preoccupied attachment style could have a significant indirect effect on depression by affecting a decreased capacity for self-related mentalization, which increases social anxiety and leads to an increase in rumination, ultimately resulting in depression. Thus, the model which the authors have evaluated, proposed based on theoretical implications, could be compliant with reality. However, the statistical analysis cannot exclude the existence of other possible, alternative models of the relations between these variables. As seen in Table 2, models which sequentially include two mediators are also statistically significant.

## DISCUSSION

In this study we tested a model of multiple serial mediation in which a preoccupied attachment style was found to have an effect on depressive symptoms, mediated by the ability to mentalize own states of mind, social anxiety and a tendency for rumination, successively, in that order. Based on the empirical evidence of the connection between the variables included in the model and the finding that all the variables, primarily preoccupied attachment and depression are more pronounced among women (Kirkpatrick and Davis, 1994), the model has been tested and empirically verified on a subsample of women.

Following the assumed path, we began with a preoccupied attachment style. The available research on attachment styles and depression mostly analyzed styles with a negative internal working model of self, preoccupied and fearful. Since research has confirmed the existence of significant differences between the aforementioned modalities, as well as their relations to depression, we have decided to focus our attention specifically on the preoccupied attachment style. Namely, if we know the dynamics of the emergence of various attachment styles, it is difficult to overcome the essential differences between them and to assume a similar configuration of mediators for different styles.

A preoccupied attachment style, in the proposed path model, has a negative effect on the ability for self related mentalization. Specifically, women with a preoccupied attachment style have a lower ability to understand their own states of

mind and their own behavior. Based on a negative self-image and a positive image of others, as well as the constant need to fight to satisfy their own emotional needs, these individuals “choose” to be preoccupied with others and remain insufficiently dedicated to understanding their own selves. It is quite possible that the ability to mentalize other’s states of mind would not be damaged or would even be more developed among these individuals, but being preoccupied with one’s own states of mind is certainly inhibited or accompanied by numerous omissions, due to the constant activation of the system of attachment, which has been confirmed in neurological studies as well (Fonagy and Luyten, 2009; Bateman and Fonagy, 2012; Fonagy, Bateman and Luyten, 2011.).

Based on a feeling of low self-worth and a damaged ability to mentalize one’s own states of mind, a fear develops that this will be recognized by others, which results in social anxiety. This is particularly relevant if we take into consideration the positive image of others and the necessity to prevent being rejected by more worthy others, who individuals with a preoccupied attachment style rely on to compensate for their shortcomings. Our findings confirm that a lower ability for self – related mentalization predicts a more pronounced social anxiety. That is why each social situation, each situation where one is exposed to the attention of others, presents a new risk. Research has also confirmed the significant mediating role of social anxiety. Social anxiety is accompanied and exacerbated by numerous symptoms. Individuals with high levels of anxiety have difficulty withdrawing resources from threatening stimuli, which are believed to exacerbate emotional reactivity, and which leads to the inability to modify negative thoughts when faced with situations which are perceived as socially threatening and to see the negative events in a different light. The described maladaptive strategies of emotional regulation, primarily the ineffective use of reappraisal of the situation are included in the concept of rumination. The path and sequence of the relations, from social anxiety to rumination, has been confirmed in our research. Rumination is important in our context, both due to its relations to social anxiety and depression, and also due to its susceptibility to psychotherapeutic or preventive action (Matthews and Wells, 2004).

As part of the final step on the path, rumination leads an individual into depression. There are findings from numerous studies which indicate that rumination maintains and increases feelings of depression (Nolen-Hoeksema and Morrow, 1993; Nolen-Hoeksema, Parker and Larson, 1994) and that it is a predictor of higher levels of depressive symptoms (Just and Alloy, 1997), as well as major depressive episodes (Kuehner and Weber, 1999).

These findings should still not be taken at face value. What speaks in favor of the serial multiple mediation model are the existing theoretical and psychotherapeutic findings, as well as statistical indicators which give it priority over alternative

models (parallel, or models with a different order of mediators). However, these are complex phenomena with very intricate interrelations, and one should be wary of oversimplified conclusions. Only a study based on an idiographic, longitudinal approach could produce fully valid results.

In addition, there are numerous factors which contribute to depression. Our intention was to present the connection between the aforementioned phenomena among women who in their earliest childhood build a negative image of themselves and thus pave the way for depression by not dealing with their own mental states, and experiencing social anxiety and rumination. Our findings are statistically significant, and offer us some extent of confirmation; however, the obtained coefficients indicate that the effect is weak, which means that preoccupation in attachment styles is not the only, or maybe not even the main cause of depressive symptoms. In the very few studies on potential mediators in the relationship between attachment styles and depression, the findings indicate that the relationship between insecure attachment and depression is indirect and mediated by shame, social support, low self-esteem (Arcuri, 2009), high self-criticism, self-sacrifice, insufficient self-control (Shah and Waller, 2000), introversion, distress, and emotional instability (Avagianou and Zafiropoulou, 2008), emotional regulation and mindfulness (Pickard, Caputi and Grenyer, 2016). By pointing out in various ways the role of emotion regulation strategies and coping styles, as well as self-centered constructs, including mindfulness, previous results are consistent with our conclusion regarding the indirect relationships between attachment and depression, mediated by low mentalization of the self and high social anxiety and rumination.

Thus, we should not conclude that all patients suffering from depression, or even all patients with a preoccupied attachment style, have followed this particular path of developing symptomatology, but it would be beneficial to identify those who have. Therapeutic work with female patients with a preoccupied attachment style suffering from depression could be based on their acceptance or better understanding of themselves or on their breaking the vicious circle of rumination in which incessant preoccupation with the self provides a suitable context for the development of depression. Naturally, the aforementioned psychotherapeutic intervention does not refer to the so-called major depressive episodes, but to a milder form of depression which is observable in the general population.

## CONCLUSION

With the aim of determining the path which leads to depressive symptomatology in the context of a developed preoccupied attachment style, within a model which we assumed was more typical of women, we studied the role of a sequence of mediators: mentalization, social anxiety and rumination. The findings from previous studies confirm the expected dynamics of the onset of depressive symptoms. A negative self-image and a positive image of others lead us to a weakened ability to consider our own state of mind. Any conclusions in which we perceive ourselves as beings who do not possess sufficient worth, unconditionally and irrespective of the circumstances, render us vulnerable in social situations and lead to an increase in social anxiety. Furthermore, in a desire to understand the anxiety which makes us unsuccessful, we resort to analyses which boil down to rumination, the constant repetition of negative thoughts and conclusions, which creates a favorable context for the development of depressive symptomatology.

In addition to the findings which confirm our expectations, the importance of understanding all the points along the path to depression lies in the timely psychotherapeutic response. We will only mention the possibility of a cognitive behavioral approach in which an individual with a preoccupied attachment style could have the opportunity to learn to accept or better understand oneself, to lower their anxiety in situations when mistakes are possible and visible to others, as well as to replace the strategy of rumination with more constructive ways of dealing with problems.

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## OD PREOKUPIRAJUĆEG VEZIVANJA DO DEPRESIJE: SERIJSKI MEDIJACIJSKI MODEL NA UZORKU ŽENA

### SAŽETAK

Postojeće studije potvrdile su postojanje povezanosti između simptoma depresije i nesigurnog vezivanja, nerazvijene sposobnosti za mentalizaciju, socijalne anksioznosti i ruminacije, kao i njihovu sve češću prisutnost u ženskoj populaciji. Ipak, nijedna studija nije analizirala uzajamne odnose između navedenih pojava. U ovom istraživanju testirali smo serijski medijacijski model u kojem preokupirajući stil vezivanja ima učinak na simptome depresije kod žena, kojima posreduju sposobnost mentalizacije vlastitog stanja uma, socijalna anksioznost i sklonost ruminaciji. Istraživanje je provedeno na geografskom klsterskom uzorku i uključilo je 1 258 radno sposobnih odraslih osoba, ispitanika iz 37 urbanih i ruralnih lokacija iz 20 upravnih okruga Srbije, iz kojeg je izdvojen uzorak žena (N=791). U istraživanju su korišteni Upitnik o odnosima – The Relationship Questionnaire (Bartholomew i Horowitz, 1991.), Upitnik za procjenu mentalizacije – the Mentalization Scale - MentS (Dimitrijević i sur., 2015.), Skala socijalne anksioznosti – the Scale of Social Anxiety (Tovilović, 2004.) i Skala ruminativnog stila mišljenja – the Ruminative Thought Style Questionnaire – RTSQ (Brinker i Dozois, 2009.). Rezultati ukazuju da postoji značajan specifični neizravni učinak preokupirajućeg stila vezivanja na depresiju kojem posreduju sva tri medijatora redom (procijenjeni neizravni učinak ,004, samodopunjavanje 95% CI = ,002 - ,007), što ukazuje da preokupirani stil vezivanja ima učinak na depresiju jer vodi do smanjivanja sposobnosti mentalizacije vlastitog stanja uma, što povećava socijalnu anksioznost, te zatim vodi do povećane ruminacije i naposljetku do depresije. Ovi zaključci mogli bi biti od važnosti za liječenje specifične grupe pacijentica s preokupiranim stilom vezivanja koje boluju od depresije.

**Ključne riječi:** depresija, vezivanje, mentalizacija, socijalna anksioznost, ruminacija.



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