

The mediational role of cognitive emotion regulation and mindfulness in the relationship between adult separation anxiety and partner-related obsessive compulsive symptoms

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ABSTRACT

Aims: This study aims to investigate the mediating role of cognitive emotion regulation and mindfulness in the relationship between adult separation anxiety and partner-focused obsessive-compulsive symptoms.

Methods: The study includes a total of 502 adult participants aged over 18, consisting of 293 women and 209 men, who participated on a voluntary basis. The personal information form, partner-related obsessive-compulsive symptoms scale, cognitive emotion regulation questionnaire, adult separation anxiety questionnaire, and mindful attention awareness scale were used in this research. Statistical analyses were conducted using SPSS 27 software.

Results: The results indicate that the self-blame and focusing on thought subscales of the cognitive emotion regulation questionnaire have a mediating role between adult separation anxiety and partner-related obsessive-compulsive symptoms.

Conclusion: Mindfulness serves as a mediator in the relationship between adult separation anxiety and partner-related obsessive-compulsive symptoms.

Keywords: Adult separation anxiety, partner-focused obsessive compulsive symptoms, cognitive emotion regulation, mindfulness

INTRODUCTION

While separation anxiety disorder has long been considered a condition confined to childhood and adolescence, this age-restricted perspective contradicts the broader trends in the classification of anxiety subtypes.¹ There is a growing acknowledgment that many disorders can emerge across a wide age range, encompassing both childhood and adulthood.² In the context of adult separation anxiety, the disorder is characterized by developmentally inappropriate and excessive fear or anxiety concerning separation from attachment figures. On the other hand, obsessive-compulsive disorder (OCD), categorized under obsessive-compulsive and related disorders, is defined by the presence of obsessions and compulsions.³ Obsessions are persistent, recurring thoughts, impulses, or images that are intrusive and cause significant distress and anxiety, often conflicting with the individual's value system and ego-dystonic in nature.^{4,5} Compulsions are defined as mental acts or behaviors that an individual feels driven to perform according to specific rules to reduce the distress and anxiety caused by obsessions and to prevent feared outcomes.^{3,6}

In the context of romantic relationships, obsessive-compulsive symptoms are divided into "relationship-focused obsessive-

compulsive symptoms" (Table 1) and "partner-focused obsessive-compulsive symptoms".⁷ Partner-focused obsessive-compulsive symptoms are characterized by perceived inadequacies, deficiencies, and flaws in the partner,^{8,9} often relating to the partner's physical appearance, sociability, moral and intellectual level, academic or professional success, and social consistency.⁸ Relationship-focused obsessive-compulsive symptoms involve distressing, preoccupying, and persistent thoughts about the relationship itself,^{7,9} which can be observed in parent-child relationships,¹⁰ counseling relationships, and romantic relationships.¹¹ The impact of partner-focused obsessive-compulsive symptoms on adult separation anxiety highlights the significance of this study.

Cognitive emotion regulation, expected to play a mediating role between adult separation anxiety and partner-focused obsessive-compulsive symptoms, is an important variable due to its reliance on cognitive processes for emotion regulation.¹² Cognitive emotion regulation involves the development of cognitive strategies related to the situation encountered before emotional reactions are exhibited, helping individuals manage their emotions effectively.^{13,14} Appropriate emotion regulation positively influences well-being.¹⁵ The inclusion

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Table 1. Relationship between partner-related obsessive compulsive symptoms, Cognitive Emotion Regulation Questionnaire, Adult Separation Anxiety Questionnaire, Mindful Attention Awareness Scale

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Partner-related obsessive compulsive symptom inventory	--																	
Morality	.77**	--																
Sociability	.82**	.54**	--															
Emotional stability	.83**	.63**	.68**	--														
Professional competence	.78**	.54**	.53**	.53**	--													
Appearance	.51**	.27**	.27**	.28**	.24**	--												
Intelligence	.81**	.52**	.62**	.58**	.65**	.32**	--											
Acceptance	-.21**	-.12**	-.22**	-.20**	-.13**	-.14**	-.14**	--										
Positive refocusing	.01	-.02	-.01	.00	.05	.01	.03	-.17**	--									
Refocus on planning	-.10*	-.12**	-.15**	-.13**	.03	-.04	-.03	-.03	.52**	1								
Positive reappraisal	-.11*	-.08	-.13**	-.15**	-.04	.00	-.11*	-.13**	.53**	.77**	1							
Putting into perspective	.00	.02	.02	-.01	.00	.01	-.04	-.27**	.34**	.23**	.36**	1						
Focusing on thought	.36**	.25**	.28**	.33**	.33**	.16**	.28**	-.47**	.00	.12**	.12**	.12**	1					
Self-blame	.25**	.17**	.23**	.24**	.16**	.12**	.19**	-.30**	-.33**	-.32**	-.29**	-.08	.47**	1				
Catastrophizing	.27**	.18**	.25**	.25**	.19**	.12**	.22**	-.25**	-.29**	-.38**	-.26**	-.07	.41**	.54**	1			
Other-blame	.15**	.08	.16**	.12**	.10*	.06	.13**	-.11*	-.35**	-.34**	-.35**	-.34**	.30**	.59**	.56**	1		
Adult separation anxiety questionnaire	.42**	.37**	.33**	.34**	.30**	.20**	.35**	-.05	.01	.01	.04	.07	.31**	.27**	.36**	.18**	1	
Mindful attention awareness scale	-.21**	-.10*	-.19**	-.19**	-.16**	-.13**	-.20**	.16**	.22**	.13**	.17**	.27**	-.25**	-.20**	-.23**	-.19**	-.16**	1

**p<0.01, *p<0.05 Name of the test applied: Pearson correlation test

of cognitive emotion regulation in this study is based on its potential contribution to managing emotions in the context of adult separation anxiety and partner-focused obsessive-compulsive symptoms.

The concept of mindfulness^{16,17} involves approaching one's current experiences, internal processes, and external world with an accepting and non-judgmental attitude.^{18,19} The development of mindfulness is driven by the belief that individuals often live within automatic routines, unaware of their actions and behaviors, and fail to form memories of their experiences.¹⁸ The goal of mindfulness is to perceive, notice, and experience events as they are in a clear and vivid manner.²⁰ Individuals with high levels of mindfulness are mentally healthier, have higher relationship satisfaction, and possess a greater capacity to cope with adversities.¹⁹ Research has demonstrated a strong relationship between well-being and mindfulness.²¹⁻²³ The concept of mindfulness, due to its role in the conscious perception of experiences, contributes to mental health and is therefore considered effective in regulating adult separation anxiety and partner-focused obsessive-compulsive symptoms.

METHODS

Ethical approval was received for this study from the Doğuş University Ethics Committee (Date: 26.01.2024, Decision No: 57632). All procedures were carried out in accordance with the ethical rules and the principles of the Declaration of Helsinki.

Research Model

This study was conducted using a correlational survey model to examine the mediating role of cognitive emotion regulation and mindfulness in the relationship between adult separation anxiety and partner-focused obsessive-compulsive symptoms. The results of the relationships between these variables are summarized in Table 1. The correlational survey model is employed to determine the strength and direction of relationships between two or more variables.²⁴ Additionally, the group was evaluated based on sociodemographic characteristics. The main objective of this study is to investigate the mediating role of cognitive emotion regulation and mindfulness in the relationship between adult separation anxiety and partner-focused obsessive-compulsive symptoms.

Sample

The study sample consisted of 502 participants, including 293 women and 209 men, aged between 18 and 57 years. The characteristics of the participants are detailed in Table 1. Participants were selected on a voluntary basis and were informed about the research prior to participation. The sample was accessed randomly without any specific selection criteria, ensuring that participants were self-selected through voluntary participation. When the results of the given findings are examined, most of the participants (58.4) are women. Most of them (65.7) have a Bachelor's degree. Most (53.6) are single. All (100.0) do not have a psychiatric disorder. In addition, the average age of the participants is 27.47±6.06.

Data Collection Tools

The personal information form, Partner-related Obsessive Compulsive Symptom Scale (PROCSS), Cognitive Emotion Regulation Questionnaire (CERQ), adult Separation Anxiety Questionnaire (ASAQ), Mindful Attention Awareness Scale (MAAS) were utilized in the study.

Personal information form: Participants were provided with a Personal Information Form containing questions about age, gender, marital status, education level, and whether they had any psychiatric disorders. Upon examining the results of the findings, the majority of participants (58.4%) were female. Most participants (65.7%) had a bachelor's degree. The majority (53.6%) were single. None of the participants (100.0%) reported having any psychiatric disorders. Additionally, the mean age of the participants was 27.47 ± 6.06 years, with the youngest being 18 and the oldest being 57.

Partner-related Obsessive Compulsive Symptom Scale (PROCSS): PROCSS was developed by Doron et al.⁷ to assess the level of partner-related obsessive-compulsive symptoms. In Turkey, the validity and reliability of the scale were established by Trak and İnözü,²⁵ with a Cronbach's alpha coefficient of 0.95. The scale consists of 28 items rated on a 5-point Likert scale and includes six subscales: sociability, emotional stability, morality, intelligence, appearance, and professional competence. Higher scores indicate a higher level of partner-related obsessive-compulsive symptoms.

Cognitive Emotion Regulation Questionnaire (CERQ): CERQ, originally developed by Garnefski, Kraaij, and Spinhoven,²⁶ aims to identify cognitive emotion regulation strategies individuals use in response to stressful and negative life experiences or situations. Onat and Otrar²⁷ conducted validity and reliability studies for the Turkish adaptation of the scale. The scale is suitable for individuals aged 12 and above and consists of 36 items organized into nine subscales: self-blame, other-blame, acceptance, refocus on planning, positive refocusing, positive reappraisal, putting into perspective, focusing on thought, and catastrophizing. Statistical analyses revealed a Cronbach's alpha value of $\alpha = 0.784$ and a test-retest reliability coefficient of " $r = 1.00$ ". The original version of the scale showed Cronbach's alpha values ranging from 0.67 to 0.81.

Adult Separation Anxiety Questionnaire (ASAQ): ASAQ was developed by Manicavasagar et al.²⁸ to assess symptoms of separation anxiety in adulthood. The scale consists of 27 items rated on a 4-point Likert scale.^{28,29} Statistical analyses yielded a test-retest reliability coefficient of " $r = 0.93$ " and a Cronbach's alpha value of " $\alpha = 0.93$ ".

Mindful Attention Awareness Scale (MAAS): MAAS, developed by Brown and Ryan,¹⁸ aims to assess individuals' levels of mindful awareness. The scale was adapted into Turkish by Özyeşil et al.³⁰ It consists of 15 items rated on a 6-point Likert scale, with scores ranging from 15 to 90. Statistical analyses revealed a test-retest correlation value of .86 and a Cronbach's alpha internal consistency value of .80.

Statistical Analysis

In this study, statistical analyses were conducted using SPSS 27 software. Firstly, the reliability level of the scales was evaluated using Cronbach's Alpha coefficients, and it was found that these coefficients were above 0.60. Next, the normal distribution properties of the scales were thoroughly examined, and the kurtosis and skewness coefficients were evaluated. During this examination process, it was observed that the kurtosis and skewness coefficients of the scales met the reference values recommended by George and Mallery,³¹ ranging from -2 to +2. The level and direction of the relationship between the scales were examined using the Pearson Correlation method. For the mediation analysis, the process 4.2 macro plugin was preferred. All these statistical analyses were conducted with a confidence interval of 95%, and a significance level of 0.05 was used for the p-value.

RESULTS

As shown in Table 1, when the results of the given findings are examined, low-level negative correlations were found between acceptance and partner-related obsessive compulsive symptoms inventory ($r = -.21, p < 0.01$), refocus on planning and partner-related obsessive compulsive symptom inventory ($r = -.10, p < 0.05$), positive reappraisal and partner-related obsessive compulsive symptom inventory ($r = -.11, p < 0.05$), low-level negative correlations between putting into perspective and partner-related obsessive compulsive symptoms inventory ($r = .26, p < 0.01$), focusing on thought and partner-related obsessive compulsive symptoms inventory ($r = .36, p < 0.01$), self-blame and partner-related obsessive compulsive symptoms inventory ($r = .25, p < 0.01$), catastrophizing and partner-related obsessive compulsive symptoms inventory ($r = .27, p < 0.01$), other-blame and partner-related obsessive compulsive symptoms inventory ($r = .15, p < 0.01$), low and moderate positive correlations between adult separation anxiety questionnaire and partner-related obsessive compulsive symptom inventory ($r = .42, p < 0.01$), and low and moderate negative correlations between mindful attention awareness scale and partner-related obsessive compulsive symptom inventory ($r = -.12, p < 0.01$).

There are low level negative correlations between acceptance and morality ($r = -.12, p < 0.01$), refocusing on the planning and morality ($r = -.12, p < 0.01$), putting into perspective and morality ($r = .23, p < 0.01$), focusing on thought and morality ($r = .25, p < 0.01$), self-blame and morality ($r = .17, p < 0.01$), catastrophizing and morality ($r = .18, p < 0.01$), and adult separation anxiety questionnaire and morality ($r = .37, p < 0.01$).

There were low-level negative correlations between acceptance and sociability ($r = -.22, p < 0.01$), refocus on planning and sociability ($r = -.15, p < 0.01$), positive reappraisal and sociability ($r = -.13, p < 0.01$), low-level negative correlations between putting into perspective and sociability ($r = .22, p < 0.01$), focusing on thought and sociability ($r = .28, p < 0.01$), self-blame and sociability ($r = .23, p < 0.01$), catastrophizing and sociability ($r = .25, p < 0.01$), other-blame and sociability ($r = .16, p < 0.01$), low and moderate positive correlations between

adult separation anxiety questionnaire and sociability ($r=.33$, $p<0.01$), and low and moderate negative correlations between mindful attention awareness scale and sociability ($r=-.12$, $p<0.01$).

Acceptance and emotional stability ($r=-.20$, $p<0.01$), refocus on planning and emotional stability ($r=-.13$, $p<0.01$), positive reappraisal and emotional stability ($r=-.15$, $p<0.01$), low-level negative correlations between putting into perspective and emotional stability ($r=.18$, $p<0.01$), focusing on thought and emotional stability ($r=.33$, $p<0.01$), self-blame and emotional stability ($r=.24$, $p<0.01$), catastrophizing and emotional stability ($r=.25$, $p<0.01$), other-blame and emotional stability ($r=.12$, $p<0.01$), adult separation anxiety questionnaire and emotional stability ($r=.34$, $p<0.01$), and a low and medium level negative correlation was found between the mindful attention awareness scale and emotional stability ($r=-.13$, $p<0.01$).

There is a low level negative correlation between acceptance and professional competence ($r=-.13$, $p<0.01$), a low level negative correlation between putting into perspective and professional competence ($r=.22$, $p<0.01$), focusing on thought and professional competence ($r=.33$, $p<0.01$), self-blame and professional competence ($r=.16$, $p<0.01$), catastrophizing and professional competence ($r=.19$, $p<0.01$), other-blame and professional competence ($r=.10$, $p<0.05$), adult separation anxiety questionnaire and professional competence ($r=.30$, $p<0.01$).

There was a low level negative correlation between acceptance and appearance ($r=-.14$, $p<0.01$), a low level negative correlation between putting into perspective and appearance ($r=.16$, $p<0.01$), focusing on thought and appearance ($r=.16$, $p<0.01$), self-blame and appearance ($r=.12$, $p<0.01$), catastrophizing and appearance ($r=.12$, $p<0.01$), and adult separation anxiety questionnaire and appearance ($r=.20$, $p<0.01$).

There are low level negative correlations between acceptance and intelligence ($r=-.14$, $p<0.01$), positive refocusing and intelligence ($r=-.11$, $p<0.05$), putting into perspective and intelligence ($r=.18$, $p<0.01$), focusing on thought and intelligence ($r=.28$, $p<0.01$), self-blame and intelligence ($r=.19$, $p<0.01$), catastrophizing and intelligence ($r=.22$, $p<0.01$), other-blame and intelligence ($r=.13$, $p<0.01$), low and medium level positive correlations between adult separation anxiety questionnaire and intelligence ($r=.35$, $p<0.01$), and low level negative correlations between mindful attention awareness scale and intelligence ($r=-.11$, $p<0.05$).

A low level positive correlation was found between the variables of the mindful attention awareness scale and acceptance ($r=.14$, $p<0.01$).

A low level positive correlation was detected between the variables of the mindful attention awareness scale and positive refocusing ($r=.24$, $p<0.01$).

A low level positive correlation was detected between the variables of the mindful attention awareness scale and refocus on planning ($r=.14$, $p<0.01$).

A low level positive correlation was found between the variables of the mindful attention awareness scale and positive reappraisal ($r=.17$, $p<0.01$).

Low level negative correlations were found between acceptance and putting into perspective ($r=-.27$, $p<0.01$), low and medium level positive correlations were found between positive refocusing and putting into perspective ($r=.34$, $p<0.01$), refocus on planning and putting into perspective ($r=.23$, $p<0.01$), and positive reappraisal and putting into perspective ($r=.36$, $p<0.01$).

There was a moderate positive correlation between adult separation anxiety questionnaire and focusing on thought ($r=.31$, $p<0.01$), and a low negative correlation between mindful attention awareness scale and focusing on thought ($r=-.22$, $p<0.01$).

There was a low level positive correlation between adult separation anxiety questionnaire and self-blame ($r=.27$, $p<0.01$), and a low level negative correlation between mindful attention awareness scale and self-blame ($r=-.22$, $p<0.01$).

There was a moderate positive correlation between adult separation anxiety questionnaire and catastrophizing ($r=.36$, $p<0.01$), and a low negative correlation between mindful attention awareness scale and catastrophizing ($r=-.22$, $p<0.01$).

There was a low level positive correlation between adult separation anxiety questionnaire and other-blame ($r=.18$, $p<0.01$), and a low level negative correlation between mindful attention awareness scale and other-blame ($r=-.19$, $p<0.01$).

Partner-related obsessive compulsive symptom inventory and mindful attention awareness scale ($r=-.21$, $p<0.01$), morality and mindful attention awareness scale ($r=-.10$, $p<0.05$), social skills and mindful attention awareness scale ($r=-.19$, $p<0.01$), emotional stability and mindful attention awareness scale ($r=-.19$, $p<0.01$), professional competence and mindful attention awareness scale ($r=-.16$, $p<0.01$), appearance and mindful attention awareness scale ($r=-.13$, $p<0.01$), intelligence and mindful attention awareness scale ($r=-.20$, $p<0.01$), acceptance and mindful attention awareness scale ($r=.16$, $p<0.01$), positive refocusing and mindful attention awareness scale ($r=.22$, $p<0.01$), refocus on planning and mindful attention awareness scale ($r=.13$, $p<0.01$), positive reappraisal and mindful attention awareness scale ($r=.17$, $p<0.01$), putting into perspective and mindful attention awareness scale ($r=.27$, $p<0.01$), low level positive correlations between the variables, focusing on thought and mindful attention awareness scale ($r=-.25$, $p<0.01$), self-blame and mindful attention awareness scale ($r=-.20$, $p<0.01$), catastrophizing and mindful attention awareness scale ($r=-.23$, $p<0.01$), other-blame and mindful attention awareness scale ($r=-.19$, $p<0.01$), adult separation anxiety questionnaire and mindful attention awareness scale ($r=-.16$, $p<0.01$).

Considering the findings of the mediating role analysis, it is seen that the independent variable of adult separation anxiety predicts the dependent variable of obsessive and compulsive symptoms are presented in [Table 2](#) and [Figure 1](#) related to the partner in a significantly positive way, and the R2 value is .17. It is also seen that the predictors explain 17% of the variance in the outcome variable. ($\beta=.42$, $t=10.25$, $p<.001$) After the mediator variable, focus on thought, was included in the model, the independent variable, adult separation anxiety, maintained its predictive effect on partner-related obsessive and compulsive symptoms, and the R2 value was .23, and it was seen that the predictors explained 23% of the variance in the outcome variable. ($\beta=.34$, $t=8.13$, $p<.001$)

Table 2. Findings on the mediating role of focusing on thought in the relationship between adult separation anxiety and partner-related obsessive compulsive symptoms

						95% Confidence interval		F	R ²	
Modal		B	SH	β	t	p	Lower limit	Higher limit		
(Constant)		7.33	1.06		6.94	<.001***	5.25	9.40	105.11***	.17
1	Adult Separation Anxiety Questionnaire	0.39	0.04	0.42	10.25	<.001***	0.31	0.46		
(Constant)		-3.49	2.00		-1.74	0.082	-7.42	0.44	76.28***	.23
	Adult Separation Anxiety Questionnaire	0.31	0.04	0.34	8.13	<.001***	0.24	0.39		
2	Focusing on thought	1.05	0.17	0.26	6.28	<.001***	0.72	1.38		
	Indirect effect (intermediary role)	0.08	0.02				0.05	0.11		

***p<.001, **p<.01, *p<.05 test used: process macro 4.2

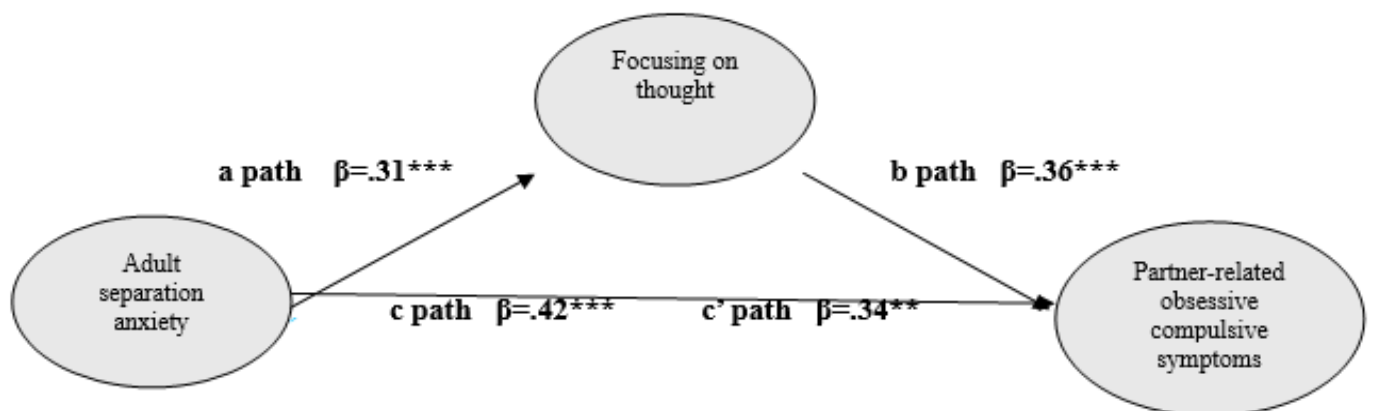


Figure 1. Graph on the mediating role of focusing on thought in the relationship between adult separation anxiety and partner-related obsessive and compulsive symptoms

After the mediator variable was included in the model, the difference in variance explained between the models was found to be .06. The β coefficient of the independent variable of adult separation anxiety decreased from 0.42 to 0.34 and since it did not lose statistical significance, it was observed to have a partial mediating role. The total partial mediation effect of the mediating variable was obtained as [$\beta=.08, p<.05, 95\% (.05, .11)$].

Table 3 and Figure 2 show the mediating role findings, it was seen that the independent variable of adult separation anxiety significantly positively predicted the dependent variable of obsessive and compulsive symptoms regarding the partner; the R2 value was .17, and the predictors explained 17% of the variance in the outcome variable ($\beta=0.42, t=10.25, p<0.001$). After the mediator variable, self-blame, was included in the model, it was observed that the independent variable, adult separation anxiety, maintained its predictive effect on partner-related obsessive and compulsive symptoms; the R2 value was .19, and the predictors explained 19% of the variance in the outcome variable. ($\beta=0.38, t=9.03, p<0.001$)

After the mediator variable was included in the model, the difference in variance explained between the models was found to be .02. The β coefficient of the independent variable of Adult separation anxiety decreased from 0.42 to 0.38 and since it did not lose statistical significance, it was observed to have a partial mediating role. The total partial mediation effect of the mediating variable was obtained as [$\beta=.04, p<.05, 95\% (.02, .06)$].

Considering the findings of the mediating role analysis, it is seen that the independent variable of adult separation anxiety predicts the dependent variable of, partner-related obsessive compulsive symptoms, in a significantly positive way, and the R2 value is .17, and it is seen that the predictors explain 17% of the variance in the outcome variable ($\beta=.42, t=10.25, p<.001$). The results concerning the mediating role of catastrophizing are detailed in Table 4 and Figure 3. After the mediator variable, the destruction variable, was included in the model, the independent variable, adult separation anxiety, maintained its predictive effect on partner-related obsessive and compulsive symptoms, and the R2 value was .19, and it was seen that the predictors explained 19% of the variance in the outcome variable ($\beta=.37, t=8.49, p<.001$)

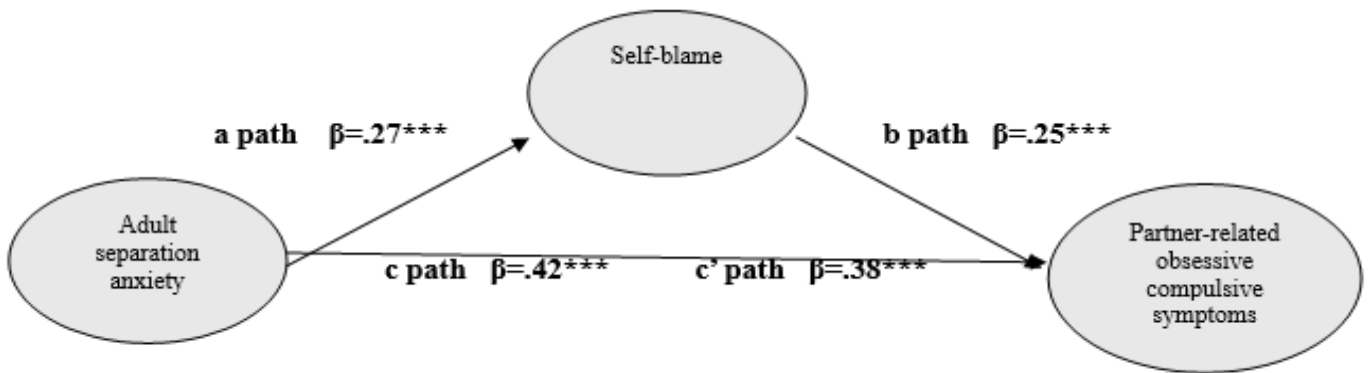
After the mediator variable was included in the model, the difference in variance explained between the models was found to be .02. The β coefficient of the independent variable of adult separation anxiety decreased from 0.42 to 0.37 and since it did not lose statistical significance, it was observed to have a partial mediating role. In total, the partial mediation effect of the mediating variable was obtained as [$\beta=.05, p<.05, 95\% (.02, .08)$].

Considering the findings of the mediating role analysis, it is seen that the independent variable of adult separation anxiety predicts the dependent variable of obsessive and compulsive symptoms related to the partner in a significantly positive way, and the R2 value is .17, and it is seen that the predictors explain 17% of the variance in the outcome variable ($\beta=.42,$

Table 3. Result on the mediating role of self-blame in the relationship between adult separation anxiety and partner-related obsessive and compulsive symptoms

		95% Confidence interval								
Modal		B	SH	β	t	p	Lower limit	Higher limit	F	R ²
	(Constant)	7.33	1.06		6.94	<.001***	5.25	9.40	105.11***	.17
1	Adult Separation Anxiety Questionnaire	0.39	0.04	0.42	10.25	<.001***	0.31	0.46		
	(Constant)	2.73	1.70		1.61	0.108	-0.61	6.07	59.56***	.19
	Adult Separation Anxiety Questionnaire	0.35	0.04	0.38	9.03	<.001***	0.28	0.43		
2	Self-blame	0.60	0.18	0.14	3.43	0.001**	0.26	0.95		
	Indirect effect (intermediary role)	0.04	0.01				0.02	0.06		

***p<.001, **p<.01, *p<.05 test used: process macro 4



***p<.001, **p<.01, *p<.05

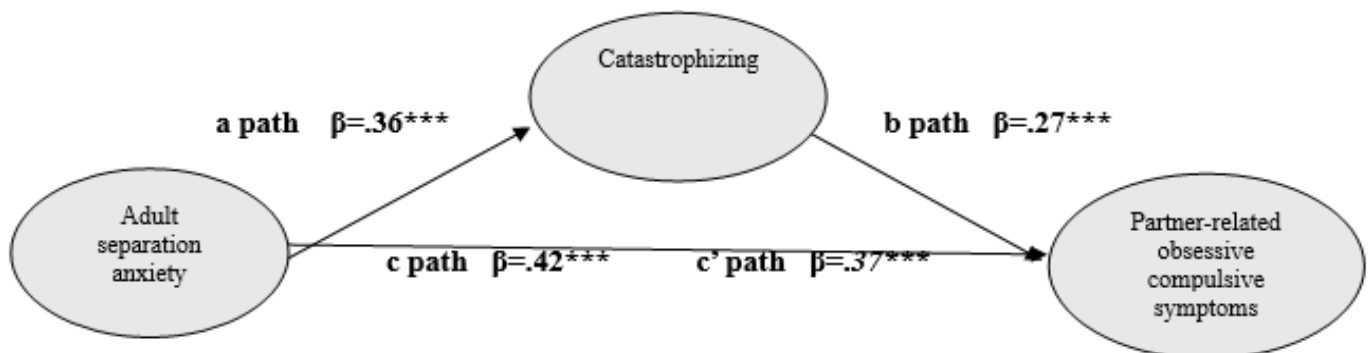
Figure 2. Graph on the mediating role of self-blame in the relationship between adult separation anxiety and partner-related obsessive and compulsive symptoms

Table 4. Findings on the mediating role of destruction in the relationship between adult separation anxiety and partner-related obsessive and compulsive symptoms

Findings concerning the mediating role of catastrophizing

		95% Confidence interval								
Modal		B	SH	β	t	p	Lower limit	Higher limit	F	R ²
	(Constant)	7.33	1.06		6.94	<.001***	5.25	9.40	105.11***	.17
1	Adult separation anxiety questionnaire	0.39	0.04	0.42	10.25	<.001***	0.31	0.46		
	(Constant)	3.83	1.52		2.51	0.012*	0.83	6.82	58.51***	.19
	Adult separation anxiety questionnaire	0.34	0.04	0.37	8.49	<.001***	0.26	0.42		
2	Catastrophizing	0.54	0.17	0.14	3.16	0.002**	0.20	0.87		
	Indirect effect (intermediary role)	0.05	0.02				0.02	0.08		

***p<.001, **p<.01, *p<.05 test used: process macro 4.2



***p<.001, **p<.01, *p<.05

Figure 3. Graph on the mediating role of catastrophizing in the relationship between adult separation anxiety and partner-related obsessive and compulsive symptoms

t =10.25, p<.001) Table 5 and Figure 4 present the findings on the mediating role of mindfulness, was included in the model, the independent variable, adult separation anxiety, maintained its predictive effect on partner-related obsessive and compulsive symptoms, and the R2 value was .19, and it was seen that the predictors explained 19% of the variance in the outcome variable ($\beta=.39$, t=9.64, p<.001).

After the mediator variable was included in the model, the difference in variance explained between the models was determined to be .02. The β coefficient of the independent variable of adult separation anxiety decreased from 0.42 to 0.39, and it was observed that it had a partial mediator role since it did not lose its statistical significance. The total partial mediation effect of the mediator variable was obtained as [$\beta=.03$, p<.05, 95% (.01, .05)].

DISCUSSION

This study attempts to reveal the mediating role of cognitive emotion regulation and mindfulness in the relationship between adult separation anxiety and partner-related obsessive-compulsive symptoms. In this context, the relationship between the variables will be examined and the comparison of the findings will be discussed.

Examining the Relationship Between Adult Separation Anxiety and Partner-Related Obsessive Compulsive Symptoms

According to the findings in Table 1, a positive correlation was found between adult separation anxiety and sociability,

morality, emotional stability, competence, and appearance, which are sub-dimensions of partner-related obsessive-compulsive symptoms. However, no relationship was found with intelligence, which is also a sub-dimension of partner-related obsessive-compulsive symptoms.

According to the findings from Karahisar's³² study, adult separation anxiety and partner-related obsessive compulsive symptoms did not show a significant relationship according to genders, and no significant relationship was found between adult separation anxiety and romantic relationship obsessions and compulsions. This result does not support the findings from the study.

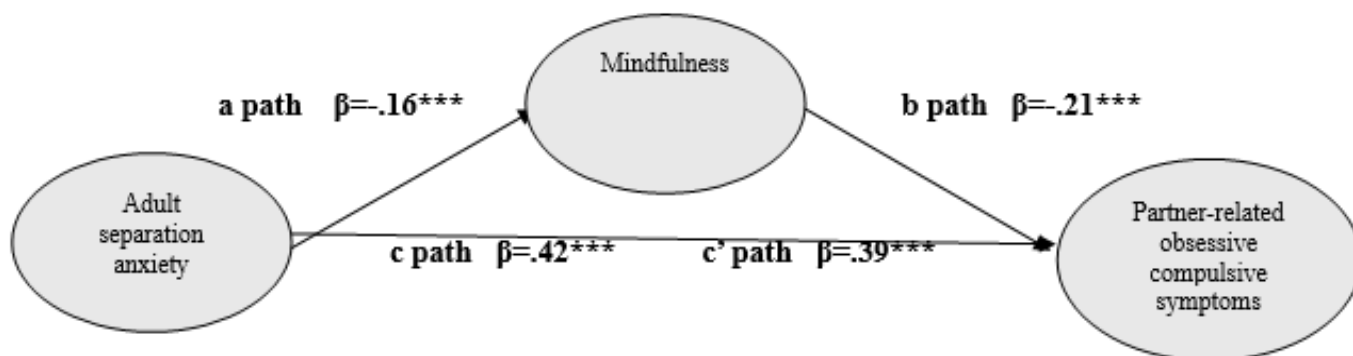
It was concluded that separation anxiety is associated with romantic relationship obsessive compulsive symptoms.³³ At the same time, obsessive-compulsive symptoms in a romantic relationship are interpreted as a threat to individuals' relationships with their partners, and experiencing events as a trigger for obsessive-compulsive symptoms in a romantic relationship³⁴. On the other hand, exaggerated perception of danger is also associated with obsessive-compulsive symptoms in romantic relationships.⁸

Examining the Mediating Role of Cognitive Emotion Regulation and Mindful Attention Awareness in the Relationship Between Adult Separation Anxiety and Partner-Related Obsessive Compulsive Symptoms

Figures 1, 2, 3, and 4 illustrate the mediating roles of focusing on thought, self-blame and catastrophizing, which are sub-

Table 5. Findings on the mediating role of mindfulness in the relationship between adult separation anxiety and partner-related obsessive and compulsive symptoms										
Modal		B	SH	β	t	p	95% Confidence interval		F	R ²
							Lower limit	Higher limit		
	(Constant)	7.33	1.06		6.94	<.001***	5.25	9.40	105.11***	.17
1	Adult Separation Anxiety Questionnaire	0.39	0.04	0.42	10.25	<.001***	0.31	0.46		
	(Constant)	13.62	1.99		6.83	<.001***	9.70	17.53	60.76***	.19
	Adult Separation Anxiety Questionnaire	0.37	0.04	0.39	9.64	<.001***	0.29	0.44		
2	Mindfulness	-0.11	0.03	-0.15	-3.70	<.001***	-0.17	-0.05		
	Indirect effect (intermediary role)	0.02	0.01				0.01	0.05		

***p<.001, **p<.01, *p<.05 test used: process macro 4.2



***p<.001, **p<.01, *p<.05

Figure 4. Graph on the mediating role of mindfulness in the relationship between adult separation anxiety and partner-related obsessive and compulsive symptoms

dimensions of mindful attention awareness and cognitive emotion regulation scale, have a mediating role between adult separation anxiety and the dependent variable of obsessive and compulsive symptoms related to the partner. Considering the explanations for adult separation anxiety, separation anxiety disorder is characterized by the presence of developmentally inappropriate and excessive fear or anxiety about separation from attachment figures, while obsessive-compulsive disorder, which is included in the category of Obsessive-Compulsive and related disorders, is defined as a disorder in which obsessions and compulsions are observed.³

According to the findings obtained from the study, self-blame and destruction, which are sub-dimensions of mindful attention awareness and the cognitive emotion regulation questionnaire, have a mediating role between adult separation anxiety and the dependent variable of, partner-related obsessive compulsive symptoms, Considering the explanations for adult separation anxiety, separation anxiety disorder is characterized by the presence of developmentally inappropriate and excessive fear or anxiety about separation from attachment figures, while obsessive-compulsive disorder (OCD), which is included in the category of Obsessive-Compulsive and focused disorders, is defined as a disorder in which obsessions and compulsions are observed.³ Cognitive emotion regulation strategies include sub-dimensions such as self-blame, where the individuals blames him/herself for his/her experiences,³⁵ and catastrophizing, which means that the individual focuses on the worst point in his/her experiences,³⁶ and the individual's attention approaches everything that is happening at the moment, his/her internal processes, and the external world in an accepting and uncritical manner.^{18,19} It has been observed that mindfulness has a mediating role on adult separation anxiety and partner-related obsessive and compulsive symptoms.

Examining the Relationship Between Cognitive Emotion Regulation and Partner-Related Obsessive Compulsive Symptoms

According to the findings obtained from the study, there is a negative relationship between partner-related obsessive-compulsive symptoms and acceptance, Refocus on Planning, and positive reappraisal, which are sub-dimensions of cognitive emotion regulation. There is a positive relationship with focusing on thoughts, self-blame, catastrophizing and other-blame. No relationship was found between positive refocusing and putting into perspective.

According to the findings obtained from Güven and Ünal's study,³⁷ there was a significant relationship between cognitive emotion regulation strategies and irrational beliefs about romantic relationships.³⁷ In addition, the findings obtained from Mısırlı and Kaynak's study³⁸ show that as the intensity of relationship-related obsessive-compulsive symptoms increases, there is a related increase in emotion regulation difficulties. Ayan also found a positive and significant relationship between relationship-related obsessive-compulsive symptoms and emotion regulation difficulties.³⁹ These findings support the results obtained in this study.

Limitations

The study is limited to 502 participants, 293 women and 209 men. The findings obtained in the study are limited to what is measured by the scales used.

CONCLUSION

According to the results of the study, there is a positive correlation between the partner-focused obsessive-compulsive symptoms and the adult separation anxiety; a negative correlation between the mindfulness scale and the Partner-Focused Obsessive-Compulsive Symptoms Scale; and a negative correlation between the Mindfulness Scale and the Adult Separation Anxiety Scale. The sub-dimensions of the Cognitive Emotion Regulation Scale, namely self-blame and rumination, have a mediating role in the relationship between adult separation anxiety and partner-related obsessive-compulsive symptoms. This study is limited to 502 non-clinical samples and the qualities measured by the scales. The data of this study were collected online. Another limitation of the study is that the number of men and women is not equal. It is recommended that this study be conducted by increasing the number of samples. It should be investigated with other variables. Studies can be conducted where the numbers of men and women are closer. Mindfulness also has a mediating role in the relationship between adult separation anxiety and partner-related obsessive-compulsive symptoms.

ETHICAL DECLARATIONS

Ethics Committee Approval

Ethical approval was received for this study from Doğuş University Ethics Committee (Date: 26.01.2024, Decision No: 57632).

Informed Consent

All participants saw the informed consent form on their screen and confirmed by clicking before answering scale.

Referee Evaluation Process

Externally peer-reviewed.

Conflict of Interest Statement

The author has no conflicts of interest to declare.

Financial Disclosure

The study has received no financial support.

Author Contributions

All of the authors declare that they all participated in the design, execution, and analysis of the paper, and that they have approved the final version.

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