

## RESEARCH ARTICLE

## The Mediating Role of Impulsivity in The Relationship Between Childhood Traumas and Symptoms Severity in Patients with Obsessive-Compulsive Disorder

Cansu Ünsal Mavi <sup>1</sup> Esra Yalım <sup>2</sup> Mehmet Rıdvan Varlı <sup>3\*</sup> <sup>1</sup> Department of Psychiatry, Kartal Dr  
Lütfi Kırdar City Hospital, Istanbul,  
Türkiye<sup>2</sup> Department of Psychiatry, Çankırı State  
Hospital, Çankırı, Türkiye<sup>3</sup> Department of Psychiatry, Etlik City  
Hospital, Ankara, Türkiye.

Received : 12.05.2025

Revised : 23.05.2025

Accepted : 26.05.2025

\* Correspondence: Mehmet Rıdvan Varlı

Address: Department of Psychiatry, Etlik City  
Hospital, Ankara, Türkiye

E-mail: dr.mvarli@gmail.com

## ABSTRACT

**Background:** Obsessive-compulsive disorder (OCD), marked by persistent obsessions and compulsions, is shaped by genetic, environmental, and psychological factors. Recent research has explored the possible link between childhood trauma and symptom severity. Impulsivity, commonly seen in OCD patients, may worsen symptoms and influence treatment outcomes. This study investigates the link between childhood trauma and OCD severity, focusing on the mediating role of impulsivity.

**Methods:** The study included 85 OCD patients aged 18–65, either newly diagnosed or under follow-up at Silifke State Hospital. Childhood trauma was assessed using the Childhood Trauma Questionnaire (CTQ), and OCD severity with the Yale-Brown Obsessive Compulsive Scale (Y-BOCS). Impulsivity was measured using the Barratt Impulsiveness Scale (BIS). Appropriate statistical methods were applied to the data.

**Results:** The sample (mean age = 29.65 ± 9.24) consisted of 34 female participants, representing 40% of the total sample. A significant positive correlation was observed between CTQ scores (excluding sexual abuse) and Y-BOCS scores. Regression analyses showed that CTQ significantly predicted BIS ( $\beta = 0.506$ ,  $p = 0.047$ ), and BIS significantly predicted Y-BOCS ( $\beta = 0.538$ ,  $p = 0.002$ ). Additionally, while the direct effect of CTQ on Y-BOCS was not statistically significant ( $\beta = 0.309$ ,  $SE = 0.578$ ,  $p = 0.056$ ), BIS was identified as a mediator in the relationship between CTQ and Y-BOCS.

**Conclusions:** Our findings highlight the importance of considering childhood traumas and impulsivity in OCD treatment. Interventions targeting impulsivity may influence the severity of OCD symptoms and could be beneficial when integrated into treatment protocols. More research is needed to uncover the relationship between childhood trauma and OCD.

**Keywords:** Childhood, Compulsion, Impulsivity, Obsession, Trauma

### Introduction

Obsessive-compulsive disorder (OCD) is a persistent psychiatric condition involving unwanted thoughts and ritualistic behaviors, which can significantly interfere with daily functioning and well-being.<sup>1</sup> OCD, widely recognized for its major role in worldwide disease impact, was ranked among the ten most disabling conditions according to the World Health Organization.<sup>2</sup> More recent epidemiological studies conducted with nationally representative samples have shown that the lifetime prevalence of OCD

ranges between 2% and 3%, with this prevalence reported to be higher among women.<sup>3, 4</sup>

Recent research indicates that people diagnosed with OCD tend to show a higher probability of experiencing childhood trauma.<sup>5, 6</sup> It has been suggested that traumatic events in childhood, like emotional neglect, emotional abuse, physical abuse, physical neglect, and sexual abuse, could influence the early development of obsessive thoughts and their evolution into OCD. These types of

**Citation:** Ünsal Mavi C., Yalım E., Varlı MR. The Mediating Role of Impulsivity in The Relationship Between Childhood Traumas and Symptoms Severity in Patients with Obsessive-Compulsive Disorder. Turkish Journal of Traumatic Stress 2025;1(2):98-108. Doi: <https://doi.org/10.63175/tjts.23>

traumas are thought to lead to a rise in how often obsessive thoughts occur and how intense they become, potentially even affecting their content. The literature indicates that childhood traumas have significant effects on the development, course, and severity of OCD symptoms, and may influence the clinical pattern of the disorder.<sup>7, 8</sup>

Individuals exposed to trauma have been reported to experience reduced functioning,<sup>9-11</sup> a more severe course of illness,<sup>12-14</sup> and a heightened likelihood of developing long-term fatigue or persistent pain<sup>15</sup>. However, certain studies have failed to demonstrate a meaningful association between early traumatic experiences and obsessive-compulsive disorder.<sup>16-20</sup>

Impulsivity refers to a predisposition to behave quickly, often without thorough reflection or awareness of potential outcomes. Research has demonstrated that people diagnosed with OCD display greater impulsivity than those in non-clinical comparison groups.<sup>21</sup> The relationship between OCD and impulsivity remains one of the debated topics in the literature. Some studies have shown that individuals with OCD score significantly higher than healthy individuals, particularly in the attention and motor impulsivity subdimensions;<sup>22</sup> this suggests that impulsive tendencies such as distractibility and acting without thinking may accompany the symptomatology of OCD.<sup>23, 24</sup> A study in 2025 by Uzunoğlu et al. involving individuals with untreated OCD reported no meaningful link between impulsivity and symptom intensity. However, the same study demonstrated that higher levels of impulsivity were inversely related to quality of life. It was noted that impulsive reactions, particularly in response to negative emotions, may lead to dysfunctional behaviors as part of maladaptive coping strategies.<sup>25</sup>

According to the study by Richard-Lepouriel, Etain, and Perroud (2019), impulsivity is considered a potential outcome of chronic stress and early traumatic experiences. It is specifically proposed that early traumatic experiences may contribute to the emergence of maladaptive coping mechanisms over time, which in turn may result in impulsive behavior patterns.<sup>26</sup> These findings suggest that impulsivity observed in chronic psychiatric disorders such as OCD may not merely be a transient symptom linked to compulsions, but rather a stable trait shaped by past experiences. In this context, assessing impulsivity levels in relation to symptom severity in individuals with OCD gains significance. Impulsivity, which is frequently observed in individuals with OCD, is considered a factor that may exacerbate symptom severity and play a crucial role in treatment processes. This study seeks to explore how childhood trauma relates to symptom severity among individuals diagnosed with OCD and to assess whether impulsivity serves as a mediating factor in this association.

## Materials And Method

This cross-sectional descriptive research was carried out at the Psychiatry Unit of Silifke State Hospital.

## Participants

The sample consisted of individuals who fulfilled the diagnostic criteria for obsessive-compulsive disorder as outlined in the DSM-5. Inclusion criteria involved being aged 18 to 65, having completed at least primary education, attending the outpatient psychiatry clinic, and voluntarily agreeing to participate. Exclusion criteria included diagnoses of intellectual disability, autism spectrum disorder, current psychotic conditions, alcohol or substance dependency, neurocognitive disorders such as

dementia, or acute medical instability. A total of 85 participants were enrolled.

## Procedure

Approval for the study was obtained from the Health Sciences Ethics Committee of Toros University (Approval No: 24/12/2024-212). Data collection took place between December 2024 and February 2025. Individuals diagnosed with OCD according to DSM-5 criteria during outpatient visits or ongoing follow-up at the hospital were invited to participate. OCD diagnoses were confirmed using the SCID-5 structured clinical interview. Each participant completed a sociodemographic form and underwent evaluations with the Yale-Brown Obsessive Compulsive Scale (Y-BOCS), the Childhood Trauma Questionnaire (CTQ), and the Barratt Impulsiveness Scale (BIS-11). Only participants who completed all forms in full were included in the final data analysis. The study was conducted in accordance with the ethical principles stated in the Declaration of Helsinki.

## Measures

**Socio-demographic Information Form:** This semi-structured form collected personal and clinical information such as age, marital status, education level, occupation, psychiatric and medical history, family history of psychiatric and medical illnesses, duration since diagnosis, and medication use.

**Yale-Brown Obsessive Compulsive Scale (Y-BOCS):** The Y-BOCS is a clinician-administered semi-structured tool designed to evaluate the presence and severity of obsessive-compulsive symptoms. It was originally developed by Goodman et al.,<sup>27, 28</sup> and its Turkish validation was completed by Karamustafaloğlu et al.<sup>29</sup> In this study, the 10-item version was used. Items 1 to 5 assess obsessions, while items 6 to 10 assess

compulsions. Each item is rated on a 5-point scale (0–4), with a maximum total score of 40. The scale has demonstrated high internal consistency, with subscale Cronbach's alpha coefficients ranging from 0.93 to 0.96, and an overall coefficient of 0.70 in the Turkish sample.

**Childhood Trauma Questionnaire (CTQ):** Developed by Bernstein et al.<sup>30</sup> and adapted into Turkish by Şar et al.<sup>31</sup> in 2012, the CTQ is a retrospective self-report scale designed to measure childhood abuse and neglect. The short version contains 28 items across five subscales: emotional abuse, physical abuse, sexual abuse, emotional neglect, and physical neglect. Each item is scored on a 5-point Likert scale. Total scores are calculated by summing subscale scores, excluding the minimization/denial items. Some positively phrased items are reverse scored. Subscale scores range from 5 to 25, and total scores from 25 to 125. The Turkish version showed an overall Cronbach's alpha of 0.79.

**Barratt Impulsiveness Scale (BIS-11):** The BIS-11 is a self-report measure created by Patton, Stanford, and Barratt<sup>32</sup> to assess different aspects of impulsivity. The Turkish adaptation and validation were conducted by Güleç et al.<sup>33</sup> The scale consists of 30 items rated on a 4-point Likert scale, covering three subdomains: attentional, motor, and non-planning impulsivity. Scores are calculated for each subscale and a total impulsivity score is derived. Higher scores indicate greater impulsivity levels. In the Turkish validation study, the total Cronbach's alpha was reported as 0.80.

## Statistical Analysis

All statistical procedures were carried out using SPSS version 22.0 and Jamovi software. Descriptive statistics were presented as mean and standard deviation for continuous

variables, and frequency and percentage for categorical variables. Relationships between numerical variables were analyzed using Pearson correlation coefficients.

In accordance with the hypothesis of the study, the effect of BIS-11 on the relationship between CTQ and Y-BOCS was tested with AMOS 24 package program. If the effect of another variable on the effect of one independent variable on another is investigated, it is recommended to conduct a mediator variable analysis.<sup>35</sup> In our study, this analysis was preferred in order to examine to what extent the relationships between the variables can be explained within the scope of the hypothesis-based model. Mediation refers to the process through which the connection between an independent variable and a dependent variable is explained or clarified.<sup>36-38</sup> In order to conduct the analyses, the normality and linearity values, extreme values, and multiple connectivity status of the data were checked. In order to ensure the assumption of normality in the analyses performed, extreme values were calculated. In this context, variables were evaluated based on Mahalanobis distance, and necessary exclusions were made to ensure that the assumptions of the analysis were met. Afterwards, the necessary regression analyses were performed (a, b, c, c'). In order to examine the significance of the mediation role, a bootstrap test (1000) was performed to compare the effects of multi-faceted mediator variables on a single model. The bootstrap method was used because it provides more valid and reliable results because the kurtosis and skewness related to the data distribution are corrected.<sup>36, 37</sup>

## Results

Descriptive statistics for the sociodemographic and clinical variables of the participants are presented in Table 1. According to the table, the

**Table 1.** Participants' sociodemographic characteristics among the study groups

Variable	
Age; year, mean±SD	29.65±9.24
Age of Disease Onset; year, mean±SD	19.15±8.48
Age at First Treatment; year, mean±SD	23.45±7.35
Gender; Female, n(%)	34 (40)
Marital Status; Married n(%)	31 (36.5)
Occupational Status; Employed n(%)	37 (43.5)
Smoking; n(%)	24 (28.2)
Substance use; n(%)	2 (2.4)
Obsession type; n(%)	
Washing	29 (34.1)
Religious	12 (14.1)
Sexual	11 (12.9)
Aggressive	9 (10.6)
Repetitive	1 (1.2)
Other	22 (25.9)
Symmetry	1 (1.2)
Y-BOCS; mean±SD	22.36±6.93
Y-BOCS total	11.04±5.44
Obsession	11.30±4.25
Compulsion	
BIS-11; mean±SD	
Impulse control level	58.97±10.33
Attentional impulsivity	16.37±4.30
Motor impulsivity	17.52±3.96
Non-planning impulsivity	25.07±5.03
CTQ; mean±SD	
Total	37.36±8.32
Emotional Abuse	7.58±2.89
Emotional Neglect	11.44±4.50
Physical Abuse	5.22±0.60
Physical Neglect	7.05±2.08
Sexual Abuse	6.04±1.75

\*: p≤0.05, Y-BOCS: Yale-Brown Obsessive Compulsive Scale, BIS-11: The Barratt Impulsiveness Scale-11, CTQ: Childhood Trauma Questionnaire

mean age of the participants was 29.659 years, the mean age at onset of the disorder was 19.153 years, and the mean age at first treatment was 23.459 years. Additionally, 40 % of the participants were female (n = 34) and were single (n = 54). Among the participants, 28.2% were smokers (n = 24), and 2.4% reported substance use (n = 2). In terms of obsession types, the most frequently reported was contamination/washing obsessions, accounting for 34.1% (n = 29) of the sample. This was followed by religious obsessions (14.1%; n = 12), sexual obsessions (12.9%; n = 11), aggressive obsessions (10.6%; n = 9), repetition obsessions (1.2%; n = 1), other types of obsessions (25.9%; n = 22), and symmetry obsessions (1.2%; n = 1). The mean total score

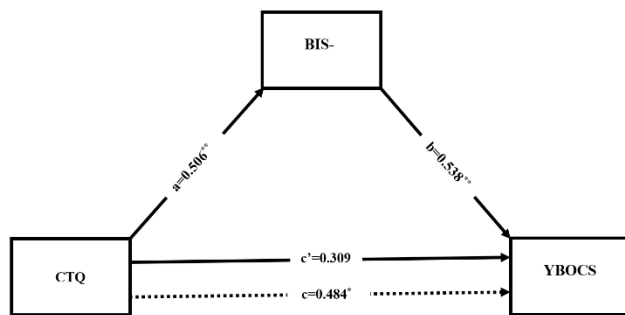
**Table 2.** Correlation Matrix of Sociodemographic Variables, Impulsivity Subdimensions, Childhood Trauma, and OCD Severity

		Age	Age at first treatment	YBOCS total	Y-BOCS-O	Y-BOCS-C	BIS-Total	BIS-Attention	BIS-Motor	BIS-Non-Planning	CTQ-Total	CTQ-EA	CTQ-EN	CTQ-PA	CTQ-PN
Age	r	—													
	p	—													
Age at first treatment	r	0.625	—												
	p	<.001	—												
YBOCS total	r	0.002	-0.040	—											
	p	0.987	0.716	—											
Y-BOCS-O	r	0.046	-0.019	0.790	—										
	p	0.677	0.859	<.001	—										
Y-BOCS-C	r	-0.063	-0.042	0.617	0.006	—									
	p	0.567	0.706	<.001	0.960	—									
BIS-Total	r	-0.029	-0.008	0.584	0.542	0.258	—								
	p	0.794	0.945	<.001	<.001	0.017	—								
BIS-Attention	r	-0.201	-0.173	0.386	0.355	0.174	0.715	—							
	p	0.065	0.113	<.001	<.001	0.112	<.001	—							
BIS-Motor	r	0.035	0.139	0.578	0.418	0.406	0.781	0.352	—						
	p	0.747	0.205	<.001	<.001	<.001	<.001	<.001	—						
BIS-Non-Planning	r	0.085	0.023	0.414	0.478	0.060	0.825	0.336	0.514	—					
	p	0.440	0.834	<.001	<.001	0.585	<.001	0.002	<.001	—					
CTQ-Total	r	-0.151	-0.001	0.598	0.462	0.384	0.479	0.430	0.411	0.292	—				
	p	0.168	0.991	<.001	<.001	<.001	<.001	<.001	<.001	0.007	—				
CTQ-EA	r	-0.325	-0.319	0.394	0.167	0.427	0.281	0.352	0.255	0.074	0.631	—			
	p	0.002	0.003	<.001	0.127	<.001	0.009	<.001	0.019	0.501	<.001	—			
CTQ-EN	r	-0.021	0.167	0.594	0.509	0.316	0.445	0.326	0.395	0.323	0.880	0.284	—		
	p	0.845	0.126	<.001	<.001	0.003	<.001	0.002	<.001	0.003	<.001	0.008	—		
CTQ-PA	r	-0.212	-0.243	0.310	0.225	0.218	0.130	0.127	0.064	0.108	0.265	0.176	0.195	—	
	p	0.052	0.025	0.004	0.039	0.045	0.235	0.246	0.560	0.325	0.014	0.108	0.074	—	
CTQ-PN	r	0.051	0.199	0.333	0.298	0.163	0.464	0.286	0.480	0.330	0.677	0.113	0.655	0.084	—
	p	0.642	0.067	0.002	0.006	0.136	<.001	0.008	<.001	0.002	<.001	0.304	<.001	0.445	—
CTQ-SA	r	-0.113	-0.061	0.163	0.179	0.038	0.073	0.240	-0.075	0.005	0.550	0.418	0.295	0.024	0.129
	p	0.302	0.578	0.137	0.101	0.731	0.504	0.027	0.494	0.964	<.001	<.001	0.006	0.831	0.239

YBOCS Total: Yale-Brown Obsessive Compulsive Scale Total Score; Y-BOCS-O: Yale-Brown Obsessive Compulsive Scale Obsession Subscale; Y-BOCS-C: Yale-Brown Obsessive Compulsive Scale Compulsion Subscale; BIS Attention: Barratt Impulsiveness Scale – Attentional Impulsivity; BIS Motor: Barratt Impulsiveness Scale – Motor Impulsivity; BIS Non-Planning: Barratt Impulsiveness Scale – Non-Planning Impulsivity; CTQ Total: Childhood Trauma Questionnaire – Total Score; CTQ EA: Childhood Trauma Questionnaire – Emotional Abuse; CTQ EN: Childhood Trauma Questionnaire – Emotional Neglect; CTQ PA: Childhood Trauma Questionnaire – Physical Abuse; CTQ PN: Childhood Trauma Questionnaire – Physical Neglect; CTQ SA: Childhood Trauma Questionnaire – Sexual Abuse.

on the Y-BOCS was 22.365. The mean obsession subscore was 11.047, and the compulsion subscore was 11.306. The total score on the BIS-11 was 58.976. Subscale scores were as follows: attentional impulsivity = 16.376, motor impulsivity = 17.529, and non-planning

impulsivity = 25.071. The total score on the CTQ was 37.365. Subscale means were: emotional abuse = 7.588, emotional neglect = 11.447, physical abuse = 5.224, physical neglect = 7.059, and sexual abuse = 6.047.



**Figure 1.** The mediating role of the CTQ in the relationship between the BIS and YBOCS.

The correlation analysis presented in Table 2 indicated a significant and positive association between the total scores of the Y-BOCS and the CTQ ( $r = 0.598$ ,  $p < .001$ ). Further analysis revealed that Y-BOCS total scores were significantly and positively associated with overall impulsivity, as measured by BIS-11 ( $r = 0.584$ ,  $p < .001$ ). This relationship extended across all BIS-11 subdimensions, including attentional impulsivity ( $r=0.386$ ,  $p<0.001$ ), motor impulsivity ( $r=0.578$ ,  $p < 0.001$ ), and non-planning impulsivity ( $r = 0.414$ ,  $p < 0.001$ ). When examining specific symptom clusters, attentional impulsivity showed a significant correlation with the obsession subscale of the Y-BOCS ( $r = 0.355$ ,  $p < 0.001$ ). In terms of trauma subtypes, both emotional abuse and emotional neglect were significantly related to OCD severity and impulsivity. Notably, emotional abuse exhibited a positive correlation with attentional impulsivity ( $r=0.352$ ,  $p<0.001$ ) and motor impulsivity ( $r=0.255$ ,  $p=0.019$ ), while emotional neglect was strongly associated with overall OCD symptoms ( $r = 0.594$ ,  $p<0.001$ ), as well as with all BIS-11 subscales (all  $p<0.01$ ). Total CTQ scores were also positively associated with each dimension of impulsivity (e.g., attentional:  $r=0.430$ , motor:  $r=0.411$ , non-planning:  $r = 0.292$ ; all  $p<0.01$ ).

Figure 1 Figure 1 evaluates the mediating role of CTQ in the relationship between BIS and YBOCS. In the first regression analysis, CTQ scores significantly predicted the BIS mediator variable ( $\beta = 0.506$ ,  $SE = 1.060$ ,  $p = 0.047$ ). In the second regression analysis, BIS was found to have a significant effect on Y-BOCS scores ( $\beta = 0.538$ ,  $SE = 3.047$ ,  $p = 0.002$ ). Additionally, while the direct effect of CTQ on Y-BOCS was not statistically significant ( $\beta = 0.309$ ,  $SE = 0.578$ ,  $p = 0.056$ ), BIS was identified as a mediator in the relationship between CTQ and Y-BOCS.

## Discussion

This study examined how childhood trauma influences symptom severity in individuals diagnosed with OCD and assessed whether impulsivity functions as a mediator in this association. The most striking and clinically meaningful finding was that the effect of childhood trauma on OCD symptom severity can be explained through individuals' levels of impulsivity. Specifically, the first regression analysis demonstrated that scores on the CTQ significantly predicted impulsivity levels as measured by the BIS-11 ( $p = 0.047$ ). In the second analysis, BIS-11 scores, reflecting impulsivity, were found to significantly influence the intensity of OCD symptoms as assessed using the Y-BOCS ( $p = 0.002$ ). These findings strongly suggest that impulsivity is not merely a comorbid trait, but a key psychological mediating mechanism through which childhood trauma exerts its influence on OCD symptoms.

Despite inconsistent evidence regarding the relationship between childhood trauma and OCD symptom severity, limited research has investigated the potential pathways through which such a link might operate.<sup>38, 39</sup> In particular, this study is one of the few that has systematically tested impulsivity as a mediating factor in this relationship. While the

existing literature largely demonstrates associations between these variables, it lacks experimental or model-based data to clarify the causal pathways. To address this gap, the current study employed statistical modeling to empirically examine the mediating role of impulsivity in the link between childhood trauma and OCD symptom severity, and clearly demonstrated this mediating effect. Previous research has also suggested a notable overlap between obsessive-compulsive symptoms and impulsivity; in this context, difficulty in suppressing repetitive behaviors is a common feature observed in both the obsession-compulsion dynamic and impulsive responses.<sup>40</sup> Additionally, people with a diagnosis of obsessive-compulsive disorder have been found to display elevated impulsivity levels in comparison to healthy control participants.<sup>41</sup> In our study, the significant positive correlation found between attentional impulsivity and the Y-BOCS obsession subscale is consistent with the findings of Boisseau et al.,<sup>42</sup> who examined the association between attentional impulsivity and OCD symptoms. Furthermore, the observed correlation between the total BIS-11 score and the overall score of the PI-WSUR (Padua Inventory – Washington State University Revision), which evaluates obsessive thinking, aligns with the findings reported by Snorrason et al.<sup>43</sup>

Previous studies examining how childhood trauma connects to obsessive-compulsive symptomatology also support our current findings.<sup>19, 20, 39, 44</sup> A meta-analysis conducted by Wenwen Ou and colleagues<sup>46</sup> identified a positive association between childhood maltreatment (CM) and the intensity of obsessive-compulsive symptoms. The study highlighted that emotional abuse (CEA) and sexual abuse (CSA), specifically, were more strongly linked to the severity of obsessive-

compulsive symptoms than other forms of childhood maltreatment. Similarly, in a study conducted by Demirci,<sup>45</sup> a significant positive correlation was found between the total score of the CTQ and the total score of the Padua Inventory (PI). The same study also reported significant correlations between the PI total score and the CTQ subscales of emotional neglect, emotional abuse, and sexual abuse. Mathew and colleagues<sup>46</sup> also reported a positive association between emotional abuse and OCD symptoms. In our study, significant positive correlations were observed between all CTQ subscales, except for sexual abuse, and the total Y-BOCS score. In our study, significant positive correlations were observed between all CTQ subscales, except for sexual abuse, and the total Y-BOCS score. The lack of a significant correlation with the sexual abuse subscale may be attributed to underreporting, as sexual abuse is often a highly stigmatized phenomenon. Participants may have been reluctant to disclose such experiences due to feelings of shame, fear, or social stigma, which could have led to an underestimation of its association with OCD symptom severity. Collectively, these findings indicate that childhood exposure to traumatic events may elevate the likelihood of experiencing obsessive-compulsive symptoms in later stages of life.

Previous research has also suggested a notable overlap between obsessive-compulsive symptoms and impulsivity, a finding that is supported by various results in the literature.<sup>41, 47-50</sup> For instance, research has shown that individuals reporting elevated levels of childhood trauma also tend to display increased impulsivity scores. Childhood abuse has been shown to contribute to impulsivity by impairing individuals' self-regulation abilities.<sup>48</sup> Additionally, Brodsky and colleagues reported that individuals who



experienced physical or sexual abuse during childhood were not only more impulsive but also had a higher likelihood of attempting suicide.<sup>49</sup> A study by Evren and colleagues demonstrated that impulsivity acted as a mediator in the association between childhood trauma and dissociative symptoms.<sup>50</sup> In the research conducted by Çoban and colleagues, it was found that OCD patients with a trauma history exhibited elevated scores not only in total impulsivity but also across the subdomains of attentional, motor, and non-planning impulsivity.<sup>41</sup> These findings are consistent with and support the results of the present study.

When evaluating the statistical outputs of the model, it was found that the CTQ significantly predicted the BIS-11 ( $p = 0.047$ ), and the BIS-11, in turn, significantly predicted the Y-BOCS ( $p = 0.002$ ). However, the direct effect of childhood trauma on Y-BOCS scores (path  $c'$ ) was not statistically significant ( $p = 0.506$ ). These results imply that impulsivity could function as an intermediary mechanism linking childhood trauma to the severity of obsessive-compulsive symptoms. Indeed, although a significant correlation was observed between CTQ and Y-BOCS scores, the loss of significance in the direct effect within the structural equation model implies that this relationship may largely operate through impulsivity. The fact that some participants were undergoing treatment and the relatively low mean Y-BOCS score (22.3) may have influenced the significance level of the direct effect.

The results of this study suggest that considering both trauma history and impulsivity levels is essential when designing treatment strategies for individuals with OCD. Intervention approaches targeting impulsivity may represent effective strategies for reducing symptom severity. In particular, the integration of techniques aimed at managing

impulsivity within the framework of cognitive-behavioral therapy (CBT) may lead to a significant improvement in quality of life. Additional studies are required to gain deeper insight into how childhood trauma is linked to obsessive-compulsive disorder.

However, certain limitations of the study should not be overlooked. Firstly, the study's cross-sectional nature limits the ability to determine causality among the variables. This limits the ability to thoroughly test the cause-and-effect dynamics among childhood trauma, impulsivity, and OCD symptom severity. Second, the use of self-report measures introduces the possibility of recall bias, as participants may have inaccurately remembered or interpreted their past experiences. Additionally, the fact that some participants were undergoing treatment at the time of data collection may have led to underreporting of symptom severity. Another limitation is that OCD is a heterogeneous disorder comprising various symptom subgroups (e.g., checking, symmetry, contamination), and no classification was made in this study based on these subtypes. As a result, potential differences in the relationship between impulsivity and specific symptom clusters may have been overlooked.

Despite these limitations, one of the strengths of the study is that it was conducted with a clinical sample. In this respect, it stands among the pioneering studies that elucidate the mediating role of impulsivity in the relationship between childhood trauma and OCD symptom severity, thereby making a valuable contribution to the literature.

## Conclusion

This research offers an original contribution to the literature by exploring how impulsivity mediates the connection between childhood trauma and symptom severity in individuals



with OCD. The results indicate that the link between early trauma and OCD symptom intensity may be explained, in part, by variations in impulsivity. Regression analyses revealed that childhood trauma significantly predicted impulsivity, and in turn, impulsivity significantly predicted OCD symptom severity. These results offer important clinical and theoretical implications for understanding intermediary mechanisms in psychopathology. They highlight the need for treatment planning in individuals diagnosed with OCD to go beyond symptom management and incorporate consideration of personal history and impulsivity levels. Future research should aim to examine this relationship more comprehensively through longitudinal designs, biological markers, and across different OCD subtypes, potentially yielding insights that can directly inform and enhance therapeutic interventions.

**Acknowledgment:** This study was presented as an oral presentation at the 16th International Congress on Psychopharmacology & Child and Adolescent Psychopharmacology / Psychotherapy.

**Funding:** This research received no specific grant and financial support from any funding agency in the public, commercial, or not-for-profit sectors.

**Conflict of Interest:** The authors declare that there is no conflict of interest.

**Ethical Approval:** Ethical approval for the research was obtained from the Health Sciences Ethics Committee of Toros University. (Date: 24.12.2024, Number: 212).

**Informed Consent:** Informed consent was obtained from all participants.

**Use of AI for Writing Assistance:** Not declared.

**Peer-review:** Externally peer-reviewed.

## REFERENCES

1. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders. 5th ed. Arlington, VA: American Psychiatric Association; 2013: 947. doi:10.1176/appi.books.9780890425596
2. Eisen JL, Mancebo MA, Pinto A, et al. Impact of obsessive-compulsive disorder on quality of life. *Compr Psychiatry*. 2006;47(4):270-275. doi:10.1016/j.comppsych.2005.11.006
3. Bogetto F, Venturello S, Albert U, Maina G, Ravizza L. Gender-related clinical differences in obsessive-compulsive disorder. *Eur Psychiatry*. 1999;14(8):434-441. doi:10.1016/S0924-9338(99)00224-2
4. Fineberg NA, Hengartner MP, Bergbaum CE, et al. A prospective population-based cohort study of the prevalence, incidence and impact of obsessive-compulsive symptomatology. *Int J Psychiatry Clin Pract*. 2013;17(3):170-178. doi:10.3109/13651501.2012.755206
5. Hartl TL, Duffany SR, Allen GJ, Steketee G, Frost RO. Relationships among compulsive hoarding, trauma, and attention-deficit/hyperactivity disorder. *Behav Res Ther*. 2005;43(2):269-276. doi:10.1016/j.brat.2004.02.002
6. Lochner C, du Toit PL, Zungu-Dirwayi N, et al. Childhood trauma in obsessive-compulsive disorder, trichotillomania, and controls. *Depress Anxiety*. 2002;15(2):66-68. doi:10.1002/da.10028
7. Demirci K. The investigation of relationship between childhood trauma and obsessive-compulsive symptoms. *Psychiatry Behav Sci*. 2016;6(1):7
8. Barzilay R, Patrick A, Calkins ME, Moore TM, Gur RC, Gur RE. Association between early-life trauma and obsessive compulsive symptoms in community youth. *Depress Anxiety*. 2019;36(7):586-595. doi:10.1002/da.22907
9. Cloitre M, Cohen LR, Edelman RE, Han H. Posttraumatic stress disorder and extent of trauma exposure as correlates of medical problems and perceived health among women with childhood abuse. *Womens Health (Lond Engl)*. 2001;34(3):1-17. doi:10.1300/J013v34n03\_01
10. Perry JC, Roy CA, Simon B. Gross overall psychological trauma in relationship to Axes I and II and overall functioning. *Can J Psychoanal*. 2004;12(2):252
11. Kessler RC, McLaughlin KA, Green JG, et al. Childhood adversities and adult psychopathology in the WHO World Mental Health Surveys. *Br J Psychiatry*. 2010;197(5):378-385. doi:10.1192/bjp.bp.110.080499
12. Kessler RC, Davis CG, Kendler KS. Childhood adversity and adult psychiatric disorder in the US National Comorbidity Survey. *Psychol Med*. 1997;27(5):1101-1119. doi:10.1017/S0033291797005588

13. Cox BJ, MacPherson PS, Enns MW. Psychiatric correlates of childhood shyness in a nationally representative sample. *Behav Res Ther.* 2005;43(8):1019–1027.
14. Green JG, McLaughlin KA, Berglund PA, et al. Childhood adversities and adult psychiatric disorders in the National Comorbidity Survey Replication I: associations with first onset of DSM-IV disorders. *Arch Gen Psychiatry.* 2010;67(2):113–123. doi:10.1001/archgenpsychiatry.2009.186
15. Kempke S, Luyten P, Claes S, et al. The prevalence and impact of early childhood trauma in chronic fatigue syndrome. *J Psychiatr Res.* 2013;47(5):664–669. doi:10.1016/j.jpsychires.2013.01.021
16. Özdemir PG, Selvi Y, Aydın A. Impulsivity and Its Treatment *Clin Anal Psychiatr.* 2012;4(3):293–314. doi:10.5455/cap.20120418
17. Belli H, Ural C, Yesilyurt S, Vardart MK, Akbudak M, Oncu F. Childhood trauma and dissociation in patients with obsessive compulsive disorder. *West Indian Med J.* 2013;62(1):39–44.
18. Visser HA, van Minnen A, van Megen H, et al. The relationship between adverse childhood experiences and symptom severity, chronicity, and comorbidity in patients with obsessive-compulsive disorder. *J Clin Psychiatry.* 2014;75(10):1034–1039. doi:10.4088/JCP.13m08825
19. Bey K, Lennertz L, Riesel A, et al. Harm avoidance and childhood adversities in patients with obsessive-compulsive disorder and their unaffected first-degree relatives. *Acta Psychiatr Scand.* 2017;135(4):328–338. doi:10.1111/acps.12707
20. Kart A, Türkçapar H. The effects of childhood emotional abuse on aggressive obsessions among patients with obsessive compulsive disorder may be mediated by symptoms of depression and anxiety. *Psychiatry Clin Psychopharmacol.* 2019;29(4):411–417. doi:10.1080/24750573.2019.1636483
21. Namlı Z, Tamam L, Demirkol ME, Karaytuğ MO, Sun T. The relationship among autistic traits, impulsivity, and functionality in patients with obsessive-compulsive disorder. *J Nerv Ment Dis.* 2023;211(3):195–202. doi:10.1097/NMD.0000000000001601
22. Sohn SY, Kang JI, Namkoong K, Kim SJ. Multidimensional measures of impulsivity in obsessive-compulsive disorder: cannot wait and stop. *PLoS One.* 2014;9(11):e111739. doi:10.1371/journal.pone.0111739
23. Benatti B, Dell’Osso B, Arici C, Hollander E, Altamura AC. Characterizing impulsivity profile in patients with obsessive-compulsive disorder. *Int J Psychiatry Clin Pract.* 2014;18(3):156–160. doi:10.3109/13651501.2013.855792
24. Summerfeldt LJ, Hood K, Antony MM, Richter MA, Swinson RP. Impulsivity in obsessive-compulsive disorder: comparisons with other anxiety disorders and within tic-related subgroups. *Pers Individ Dif.* 2004;36(3):539–544. doi:10.1016/S0191-8869(03)00113-2
25. Uzunoğlu SY, Beştepe EE, Ayık B. Evaluation of the relationship between disease severity and difficulties in emotion regulation, impulsivity, and quality of life in untreated patients diagnosed with obsessive-compulsive disorder. *Psychiatry Investig.* 2025;22(3):320–329. doi:10.30773/pi.2024.0261
26. Richard-Lepouriel H, Kung AL, Hasler R, et al. Impulsivity and its association with childhood trauma experiences across bipolar disorder, attention deficit hyperactivity disorder and borderline personality disorder. *J Affect Disord.* 2019;244:33–41. doi:10.1016/j.jad.2018.07.060
27. Goodman WK, Price LH, Rasmussen SA, Mazure C, Fleischmann RL, Hill CL, et al. The Yale-Brown Obsessive Compulsive Scale. I. Development, use, and reliability. *Arch Gen Psychiatry.* 1989;46(11):1006–1011. doi:10.1001/archpsyc.1989.01810110048007
28. Goodman WK, Price LH, Rasmussen SA, et al. The Yale-Brown Obsessive Compulsive Scale. II. Validity. *Arch Gen Psychiatry.* 1989;46(11):1012–1016. doi:10.1001/archpsyc.1989.01810110054008
29. Koçoğlu F, Safrançı Bahtiyar B. Yale-Brown Obsession Compulsion Scale–Turkish Self Report Form: a study of reliability and validity. *Klin Psikol Derg.* 2021;5(1):1. doi:10.5455/kpd.26024438m000047
30. Bernstein DP, Fink L, Handelsman L, Foote J, Lovejoy M, Wenzel K, et al. Initial reliability and validity of a new retrospective measure of child abuse and neglect. *Am J Psychiatry.* 1994;151(8):1132–1136. doi:10.1176/ajp.151.8.1132
31. Şar V, Öztürk E, İkikardeş E. Validity and reliability of the Turkish version of Childhood Trauma Questionnaire. *Turk Klin J Med Sci.* 2012;32(4):1054–1063. doi:10.5336/medsci.2011-26947
32. Patton JH, Stanford MS, Barratt ES. Factor structure of the Barratt Impulsiveness Scale. *J Clin Psychol.* 1995;51(6):768–774.
33. Güleç H, Tamam L, Yazıcı-Güleç M, et al. Psychometric properties of the Turkish version of the Barratt Impulsiveness Scale-11. *Klin Psikofarmakol Bul.* 2008;18(3):251–258.
34. IBM Corp. IBM SPSS Statistics for Windows, Version 22.0. Armonk, NY: IBM Corp.; 2013.
35. Hayes AF. Introduction to mediation, moderation, and conditional process analysis: a regression-based approach. New York, NY: Guilford Press; 2013.
36. Gürbüz S. Mediator, moderator and situational effect analyses in social sciences. Ankara, Turkey: Seçkin Publishing; 2019.
37. Preacher KJ, Hayes AF. Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behav Res Methods.* 2008;40(3):879–891.
38. De Rossi E, Imperatori C, Sciancalepore F, et al. Childhood trauma, mentalization and obsessive compulsive symptoms in a non-clinical sample: a mediation analysis study. *Clin Neuropsychiatry.* 2024;21(3):195–204. doi:10.36131/cnfioritieditore20240305
39. Boger S, Ehring T, Schwarzkopf W, Werner GG. Potential mediators of the association between childhood maltreatment and obsessive-compulsive disorder in adulthood. *J Obsessive-Compuls Relat Disord.* 2020;27:100587. doi:10.1016/j.jocrd.2020.100587
40. Hollander E, Wong CM. Obsessive-compulsive spectrum disorders. *J Clin Psychiatry.* 1995;56(suppl 4):3–55.
41. Çoban A, Tan O. Attention Deficit Hyperactivity Disorder, Impulsivity, Anxiety, and Depression Symptoms Mediating the Relationship Between Childhood Trauma and Symptoms Severity of Obsessive-Compulsive Disorder. *Noro Psikiyatr Ars.* 2020;57(1):37–42. doi:10.29399/npa.23654
42. Boisseau CL, Thompson-Brenner H, Caldwell-Harris C, Pratt E, Farchione T, Barlow DH. Behavioral and cognitive impulsivity in obsessive-compulsive disorder and eating disorders. *Psychiatry Res.* 2012;200(2–3):1062–1066. doi:10.1016/j.psychres.2012.06.005

43. Snorrason Í, Smári J, Ólafsson RP. Motor inhibition, reflection impulsivity, and trait impulsivity in pathological skin picking. *Behav Ther.* 2011;42(3):521–532. doi:10.1016/j.beth.2010.12.002
44. Ou W, Li Z, Zheng Q, Chen W, Liu J, Liu B, Zhang Y. Association between childhood maltreatment and symptoms of obsessive-compulsive disorder: a meta-analysis. *Front Psychiatry.* 2021;11:612586. doi:10.3389/fpsy.2020.612586
45. Demirci K. The investigation of relationship between childhood trauma and obsessive-compulsive symptoms. *Journal of Mood Disorders.* 2016;6(1):7-13. Doi: 10.5455/jmood.20160303113111
46. Mathews CA, Kaur N, Stein MB. Childhood trauma and obsessive-compulsive symptoms. *Depress Anxiety.* 2008;25(9):742–746. doi:10.1002/da.20316
47. Kim JH, Choi JY. Influence of childhood trauma and post-traumatic stress symptoms on impulsivity: focusing on differences according to the dimensions of impulsivity. *Eur J Psychotraumatol.* 2020;11(1):1796276. doi:10.1080/20008198.2020.1796276
48. Agnew R, Thaxton S, Brezina T. Does victimization reduce self-control? A longitudinal analysis. *J Crim Justice.* 2011;39(3):169–174. doi:10.1016/j.jcrimjus.2011.01.005
49. Brodsky BS, Oquendo M, Ellis SP, Haas GL, Malone KM, Mann JJ. The relationship of childhood abuse to impulsivity and suicidal behavior in adults with major depression. *Am J Psychiatry.* 2001;158(11):1871–1877. doi:10.1176/appi.ajp.158.11.1871
50. Evren C, Cınar Ö, Evren B, Ulku M, Karabulut V, Umut G. The mediator roles of trait anxiety, hostility, and impulsivity in the association between childhood trauma and dissociation in male substance-dependent inpatients. *Compr Psychiatry.* 2013;54(2):158–166. doi:10.1016/j.comppsy.2012.06.013