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Parental Attitudes and Childhood Traumas as Predictors of Obsessive–Compulsive Symptoms in University Students

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ABSTRACT

Background: In this study, we aimed to examine the predictive effects of parental attitudes and childhood traumas on obsessive–compulsive symptoms in university students.

Methods: This cross-sectional and correlational study was performed with the participation of 780 students. The data collection tools were a "Descriptive Information Form," the "Padua Inventory," the "Childhood Trauma Questionnaire-28," and the "Parental Attitude Scale."

Results: The results of the regression analysis revealed that perceived protective/demanding (ß = 0.959; $P < .001$) and authoritarian (ß = 0.439; $P < .001$) parenting attitudes and childhood traumas (emotional neglect ß = 0.905; $P = .049$; physical abuse ß = 1.464; $P = .002$; emotional abuse ß = 2.152; $P < .001$; sexual abuse ß = 0.812; $P = .030$) constituted a positive and significant predictor of obsessive-compulsive symptoms.

Conclusion: Evaluation of parental attitudes and childhood traumas and interventions aimed at predicting the obsessive–compulsive disorder-related consequences of parental attitudes and childhood traumas can help alleviate obsessive–compulsive disorder symptoms. Involving families in treatment approaches such as psychoeducation and psychotherapy for childhood trauma victims with obsessive-compulsive disorder and cooperation with families can positively affect treatment processes. Nurses with the roles of direct care, support, education, and counseling have important standing in running psychoeducation groups. In particular, academic psychiatric nurses can identify risky students and provide counseling and psychoeducation to university students.

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INTRODUCTION

Obsessive–compulsive disorder (OCD), which has been categorized under anxiety disorders for many years and formed a separate diagnosis group with DSM-5, is characterized by behaviors or mental activities without a drive for pleasure that are displayed to prevent feared results or relieve the anxiety caused by intrusive, unwanted, recurrent and continuous thoughts, urges or images (obsession), and mostly created by obsessions that the individual cannot get rid of at their own will (compulsion).[1,2]

In the literature review on OCD that was conducted in this study, it was found that OCD symptoms are primarily seen in the 18-25 age group, which is identified as early adulthood.[3-5] Obsessive–compulsive disorder is a disabling condition with a wide variety of clinical presentations including contamination fears, fear of harm, and relationship-related obsessions.[6] At the same time, OCD is a permanent disorder that negatively affects the familial, academic, professional, and social functioning of the individual.[6]

Parental attitudes are an effective factor in the development of individuals who are mentally and physically in good health, but these attitudes may also be effective in the development of OCD.[7-9] Previous research has shown that parental attitudes adopted while raising children are effective in the development of psychopathologies in children. It has been reported that especially some dysfunctional parental attitudes with certain characteristics have an impact on the development of OCD in children.[10]

Parental attitudes are grouped under 3 categories as democratic, protective/demanding, and authoritarian.[11] It has generally been observed that individuals with OCD or those who do not show any clinical symptoms but display obsessive–compulsive characteristics have parents who exhibit overprotective, perfectionist, demanding, critical, and imputing attitudes.[12] In the study conducted by Yilmaz (2018)[1] on individuals between the ages of 18 and 50 who were not clinically diagnosed, it was reported that individuals who perceived the attitudes of their parents

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as overprotective showed more obsessive-compulsive symptoms. Kamali et al. (2014)[8] suggested that children of authoritarian, permissive, and negligent parents are more likely to experience OCD.

It is known that one of the factors that play a role in the development and permanence of OCD may be childhood traumas.[5,13] Childhood traumas consist of mistreatment that children and young individuals are exposed to starting from early periods of their lives. Mistreatment is defined as behaviors that are displayed toward children by parents, other adults, or peers unwittingly, or on purpose which do not conform to norms, physically or emotionally harm the child, or those that need to be displayed for the child's needs to be met but not exhibited.[6] It was reported that the child's experience of traumatic events in the childhood period, when the individual is defenseless and needs to be protected, is associated with neurobiological changes and an increased risk of developing psychiatric disorders in adulthood, and it constitutes a lifelong predictor of health in addition to psychiatric disorders.[14] In this context, a significant relationship was reported between obsessive-compulsive symptoms and childhood traumas, especially emotional abuse and physical negligence.[4] If we are to make a comprehensive definition with all these aspects, childhood traumas are considered to be stressful situations for individuals, and it has been reported that these traumas are not only involved in the development of OCD but may also be associated with an increase in the frequency and intensity of OCD symptoms.[4,5]

As the onset of OCD is typically within the 18-25 age range, and it particularly includes etiological factors for students such as stress, expectations, responsibilities, and difficulties experienced in life, it is a significant source of anxiety that leads to the emergence of compulsive thoughts and behaviors.[6,8] One may suggest that parental attitudes and childhood traumas of university students make them a significant risk group, especially when these stressors are combined with the difficulties introduced by university life.

MAIN POINTS

- Previous research has shown that parental attitudes adopted while raising children are effective in the development of psychopathologies in children.
- It has been reported that especially some dysfunctional parental attitudes with certain characteristics have an impact on the development of OCD in children.
- It is known that one of the factors that play a role in the development and permanence of OCD may be childhood traumas.
- The findings of this study contribute to the findings of previous studies which showed the relationships between childhood traumas and parental attitudes with OCD symptoms.
- From a clinical point of view, evaluations of specific childhood traumas may help predict the outcomes of OCD, and interventions aimed at childhood traumas can help alleviate OCD symptoms. Considering the impact of parental attitudes on OCD, involving families in treatment in the psychotherapy process and cooperating with families can positively affect the treatment process.

For years, OCD has mostly been examined in patients who presented to clinics for treatment. No information has been obtained about the onset, symptoms, and natural progress of the disorder in individuals in society who have not been diagnosed and treated.[15] Nevertheless, previous studies have demonstrated that obsessive-compulsive symptoms are similar between clinical and nonclinical samples.[15,16] In this study, the focus was not on individuals with OCD but on obsessive-compulsive symptoms that could be observed in healthy individuals who had not been diagnosed with OCD. While the literature review in this study revealed other studies which examined the relationship between childhood traumas and parental attitudes with obsessive-compulsive symptoms separately, no studies were found to deal with these 3 variables together. Discussing these 3 variables together by considering the effect of parental attitudes on both childhood traumas and obsessive-compulsive symptoms will shed light on the nature of OCD. Additionally, the fact that OCD is reported to be common in the 18-25 age group increases the value of our study. Determining early symptoms of OCD, which considerably reduces the quality of life of university students, lays the ground for other mental problems, and causes problems experienced in academic achievement, social functions, and familial and friendly relationships, and identifying the factors that lead to an increase in the frequency and severity of these symptoms is important in terms of providing support programs for university students and regarding OCD treatment in the early period.

It was aimed in this study to determine the predictive roles of parental attitudes and childhood traumas on obsessive-compulsive symptoms in university students, and the research questions in this regard were as follows:

1. Is there a relationship between parental attitudes and obsessive-compulsive symptoms?
2. Is there a relationship between childhood traumas and obsessive-compulsive symptoms?
3. Do parental attitudes predict obsessive-compulsive symptoms?
4. Do childhood traumas predict obsessive-compulsive symptoms?

MATERIAL AND METHODS

Study Design

This study, which was aimed to determine the predictive roles of perceived parental attitudes and childhood traumas in obsessive-compulsive symptoms observed in university students, was carried out with a descriptive and correlational design.

Participants and Setting

The population of the study consisted of a total of 37 380 students studying at Kastamonu University located in the West Blacksea in the fall semester of the academic year 2021-2022. In accordance with the method of sampling with a known population, the sample size was calculated according to the formula of $n = Nt2pq/d2(N - 1) + t2pq$.[17] By using the sampling formula, the required sample size for this population without a homogeneous structure was calculated as $n = 37\ 380\ (1.96)2\ (0.5)\ (0.5)/(0.5)2\ (37\ 380 - 1) + (1.96)2\ (0.5)\ (0.5) = 380$ in a 95% CI and with a $\pm$ 5% margin of error. The minimum sample size that would represent the population made up of 37 380 individuals was calculated to be 380, and the study was completed with the participation of 779 students. In selecting the students, the students studying in different faculties (Health Faculty, Forestry Faculty, Education Faculty etc.) of the university were reached using the simple random sampling method.

While university students between the ages of 18 and 65 who had not been diagnosed with any psychiatric disorders and voluntarily agreed to participate in the study were included, those who were younger than 18 years old or older than 65 years old, those who had been diagnosed with a psychiatric disorder, and those who did not agree to participate in the study were excluded. Prior to the implementation of the study, permission was obtained from faculty members, and the date and time of the implementation were determined together. The measurement tools used in the research were distributed face-to-face to the students in the classroom environment by the researchers. The verbal and written consent of the participants was obtained before the 20-25 min long data collection.

Data Collection Tools

Descriptive Information Form: This form included 3 questions related to the participants' age, gender, and year of study.

Padua Inventory: It is a self-report scale developed by Sanavio[18] to measure the distribution and severity of obsessions and compulsions in OCD patients and healthy individuals. Padua Inventory is a scale that helps determine both the severity of the disorder in OCD patients with OCD and the distribution of the dominant symptoms. It also enables researchers to evaluate implicit or mental behaviors as well as observable compulsive behaviors (cleaning/checking). As it is a self-report scale, it can also be used in field of research. It is the most frequently used self-report scale in studies on OCD. The score range of each item in the 5-point Likert-type scale is 0-4. A score of "0" in each item indicates that the stated symptom has never been experienced or is not disturbing at all, and a score of "4" shows that the symptom is experienced on an extreme level or is extremely disturbing. The total score of a subscale is calculated by summing the responses corresponding to each item in the subscale, and the total score of PI is obtained by summing the scores obtained from all subscales. Higher PI scores are directly proportional to higher levels of obsessive–compulsive symptoms. The validity and reliability study of the 41-item Turkish version of the scale was conducted by Beşiroğlu et al.[19] The scale has 5 subscales, which are cleaning, urges, checking, rumination, and precision. The rumination subscale includes items related to the individual's reduced capacity to get rid of unwanted thoughts. The cleaning subscale includes items related to the severe preoccupation of the mind with contamination, dirt, and their consequences and related compulsive behaviors. The checking subscale has items related to the mental occupation of the individual with having performed or not having performed daily activities. The urges subscale includes items related to the individual's urges and worries about harming themselves or others unwillingly, causing harm to their well-being, or performing uncontrolled sexual activities. The precision subscale includes items related to compulsions such as counting and recurrent activities. In this study reliability coefficient of the PI was calculated as 0.93.

Parental Attitude Scale: The scale, which was developed by Kuzgun[20] to assess the parental attitudes in adolescents and revised by Kuzgun and Eldeleklioglu,[11] consists of 40 items and has a 5-point Likert-type scoring system (1 = not suitable at all, 5 = very suitable). The scale is made up of 3 subscales, which are democratic parental attitudes, authoritarian parental attitudes, and protective/demanding parental attitudes. There are 15 items under democratic parental attitudes, 15 items under protective/demanding parental attitudes, and 10 items under authoritarian parental attitudes. The Cronbach's alpha reliability coefficients of the scale were found to be 0.89 for the democratic parental attitudes subscale, 0.78 for the authoritarian parental attitudes subscale, and 0.82 for the protective/demanding parental attitudes subscale. The reliability coefficient of the overall scale in this study was calculated to be 0.86.

Childhood Trauma Questionnaire: Childhood Trauma Questionnaire (CTQ) is a 28-item self-report instrument developed by Bernstein et al[21] that evaluates emotional, physical, and sexual abuse in childhood, as well as physical and emotional neglect in childhood. The possible scores for each form of childhood trauma range from 5 to 25. The sum of the scores derived from each form of trauma provides the total score of the instrument, ranging from 5 to 25. The reliability and validity of the Turkish version of CTQ-28 were examined and found as high as those of the original version.[22] In this study, the Cronbach's alpha coefficient of the scale was found as 0.84.

Statistical Analysis

The data obtained in this study were analyzed by using the Statistical Package for the Social Sciences for Windows version 22.0 (IBM SPSS Corp.; Armonk, NY, USA). In the analyses, frequency, percentage, mean, and standard deviation values were used as descriptive statistical methods. Skewness and kurtosis values related to the normal distribution of the scale scores were examined, and the data were determined to be in the reference range (−1.5 and +1.5).[23] In addition, $P > .05$ was found as a result of the Kolmogorov–Smirnov test and the data were found to be normally distributed. Pearson's correlation coefficient was performed to determine the relationship between OCD-related variables in the participants and their parental attitudes and childhood traumas. Furthermore, to examine the predictive effect of the independent variables of the study (parental attitudes and childhood traumas) on the dependent variable (OCD symptoms), a multivariate linear regression analysis was carried out. The statistical significance level was accepted as $P < .05$.

Ethical Procedure

The study was conducted in line with the principles of the Declaration of Helsinki. Written approval from the Non-interventional Research Ethics Committee of Kastamonu University (decision number: 2020-KAET-143-124, decision date: November 5, 2021) and written permission from the rectorate of the university (decision number and date: 08.10.2021/E-16694033-044-2100066794) where the study would be conducted were obtained. Written informed consent was obtained from the participants who met the inclusion criteria and agreed to participate in the study.

RESULTS

Participant Characteristics

Around 38.97% of the participant students were male, 60.89% were female, 64.61% were 18-21 years old, 31.15% were 22-25 years old, 4.10% were 26 years old or older. Also, 24.74% were first-year students, 24.35% were second-year students, 19.10% were third-year students, and 31.66% were fourth-year students (Table 1).

Mean Childhood Trauma Questionnaire28, Parental Attitude Scale, and Padua Inventory Scores

It was determined that, in Parental Attitude Scale (PAS), the mean "democratic parental attitudes" subscale score of the participants was 53.44 ± 14.19, their mean "protective/demanding parental attitudes" score was 36.91 ± 10.60, and their mean "authoritarian parental attitudes" score was 22.06 ± 7.91. Moreover, in CTQ-28, the mean "physical neglect" subscale score of the participants was 11.16 ± 2.84, their mean "emotional neglect" score was 18.13 ± 2.91, their mean "physical abuse" score was 9.71 ± 3.23, their mean "emotional abuse" score was 10.00 ± 3.07, their mean "sexual abuse" score was 14.38 ± 3.04, and their mean total "CTQ-28" score was 63.40 ± 6.96. The mean total PI score of the participants was determined to be 59.08 ± 28.87 (Table 2).

Table 1. Distributions of the Descriptive Characteristics of the Participants

Groups	n	%
Gender		
Male	304	38.97
Female	475	60.89
Age		
18-21	504	64.61
22-25	243	31.15
26 and older	32	4.10
Class year		
1	193	24.74
2	190	24.35
3	149	19.10
4	247	31.66

In the examination of the types of OCD symptoms in the participants, the mean "rumination" score of the participants was found as 15.125 ± 8.864, their mean "cleaning" score was 17.861 ± 8.471, their mean "urges" score was 7.662 ± 6.228, their mean "checking" score was 12.259 ± 7.439, and their mean "precision" score was 6.176 ± 5.457 (Table 2).

Correlations Between Childhood Trauma Questionnaire-28, Parental Attitude Scale, and Padua Inventory Scores

A positive and significant relationship was found between the mean total PI scores of the participants, which indicated the severity of their obsessive-compulsive symptoms, and their mean protective/demanding parental attitudes ($r = 0.437$; $P < .001$) and authoritarian parental attitudes ($r = 0.367$; $P < .001$) scores. A positive and significant relationship was also determined between the mean total PI total scores of the participants and their mean total CTQ-28 scores ($r = 0.419$; $P < .001$). With regard to the subscale score comparisons, a positive and weak correlation was found between the mean total PI scores of the participants and their mean scores in the emotional neglect ($r = -0.374$; $P < .001$), physical abuse ($r = 0.425$; $P < .001$), emotional abuse ($r = 0.442$; $P < .001$), and sexual abuse ($r = 0.22$; $P < .001$) subscales of CTQ-28 (Table 3).

A positive and statistically significant relationship was identified between precision, an OCD symptom category, and physical neglect ($r = 0.361$; $P = 0.000$), emotional neglect ($r = 0.374$; $P < .001$), physical abuse ($r = 0.529$; $P < .001$), emotional abuse ($r = 0.485$; $P < .001$), and sexual abuse ($r = 0.164$; $P < .001$) subscales of CTQ-28.

Table 2. Mean Total Scale and Subscale Scores of the Participants

Scale and subscales	n	Mean ± SD
Democratic parental attitudes	779	53.445 ± 14.192
Protective parental attitudes	779	36.918 ± 10.606
Authoritarian parental attitudes	779	22.067 ± 7.918
Physical neglect	779	11.164 ± 2.842
Emotional neglect	779	18.137 ± 2.913
Physical abuse	779	9.716 ± 3.230
Emotional abuse	779	10.000 ± 3.074
Sexual abuse	779	14.385 ± 3.046
CTQ-28 total	779	63.403 ± 6.962
Rumination (obsessive thoughts)	779	15.125 ± 8.864
Cleaning	779	17.861 ± 8.471
Urges	779	7.662 ± 6.228
Checking	779	12.259 ± 7.439
Precision (counting and repetitive behaviors)	779	6.176 ± 5.457
PI total	779	59.083 ± 28.870

PI, Padua Inventory; CTQ-28, Childhood Trauma Scale.

The Role of Parental Attitudes and Childhood Traumas in Predicting Obsessive-Compulsive Symptoms

The regression analysis performed to determine the causal relationship between the independent variable of parental attitudes and the dependent variable of obsessive symptoms yielded significant results ($P < 0.001$). Accordingly, parental attitudes explained 19.3% of the total variance in PI scores ($R^2 = 0.193$). According to the results of the regression analysis, protective/demanding parental attitudes (ß = 0.959; $P < .001$) and authoritarian parental attitudes (ß = 0.439 $P = .037$) were positive and significant predictors of obsessive-compulsive symptoms (Table 4).

The regression analysis performed to determine the causal relationship between the independent variable of childhood traumas and the dependent variable of obsessive-compulsive symptoms yielded significant results ($P < .001$). Accordingly, childhood traumas explained 17.5% of the total variance in PI scores ($R^2 = 0.175$). According to the results of the regression analysis, childhood traumas (emotional neglect ß = 0.905, $P = 0.049$; physical abuse ß = 1.464, $P = 0.002$; emotional abuse ß = 2.152, $P < 0.001$; sexual abuse ß = 0.812, $P = .030$) constituted a positive and significant predictor of obsessive–compulsive symptoms (Table 4).

Additionally, the regression analysis performed to identify the causal relationship between the scores of the subscales of physical neglect, emotional neglect, physical abuse, emotional abuse, sexual abuse, and obsessive-compulsive symptoms revealed significant relationships ($P < .001$). It was seen that 22.70% of the total variance in PI scores was explained by physical neglect, emotional neglect, physical abuse, emotional abuse, and sexual abuse ($R^2 = 0.227$). Accordingly, it was determined that physical abuse (ß = 1.464, $P = .002$), emotional abuse (ß = 2.152, $P < .001$), sexual abuse (ß = 0.812, $P = .030$), and emotional neglect (ß = 0.905, $P = .049$) positively predicted obsessive-compulsive symptoms.

DISCUSSION

It is important to investigate the cognitive, developmental, and environmental factors in the development and permanence of OCD. The main aim of this study was to examine the roles of the perceived parental attitudes and childhood traumas of university students in predicting their OCD symptoms in a nonclinical sample. Previous research has demonstrated that childhood traumas and parental attitudes are associated with OCD.[9,10,24,25] The findings of this study contribute to the findings of previous studies which showed the relationships between childhood traumas and parental attitudes with OCD symptoms.

One of the purposes of this study was to analyze the relationship between obsessive-compulsive symptoms in university students and their perceived parental attitudes. The role of parental attitudes in the development of OCD and the relationship between the parenting styles of parents related to raising children and OCD are controversial issues, but previous research has shown that parental attitudes may be associated with an increase in OCD symptoms. It is commonly recognized that parental attitudes such as over-protectionism and perfectionism contribute to the pathogenesis of OCD. Our finding which showed a relationship between parental attitudes and increased levels of OCD symptoms supported the findings of previous studies.[10,12,24,26] Similar to the results of the study conducted by Alonso et al.[26] it was determined in

Table 3. Correlations Between CTQ-28, PAS, and PI scores

		Democratic Parental Attitudes	Protective/Demanding Parental Attitudes	Authoritarian Parental Attitudes	Physical Neglect	Emotional Neglect	Physical Abuse	Emotional Abuse	Sexual Abuse	CTQ-28 Total
Rumination	*r*	−0.056	0.408	0.342	0.107*	0.264	0.278	0.335	0.149	0.275
	P	.122	<.001	<.001	.003	<.001	<.001	<.001	<.001	<.001
Cleaning	*r*	0.163	0.228	0.102*	0.024	0.248	0.175	0.190	0.258	0.184
	P	<.001	<.001	.004	.498	<.001	<.001	<.001	<.001	<.001
Urges	r	−0.248	0.433	0.473	0.368	0.363	0.537	0.535	0.085*	0.521
	P	<.001	<.001	<.001	<.001	<.001	<.001	<.001	.018	<.001
Checking	*r*	0.015	0.307	0.226	0.097*	0.275	0.280	0.297	0.192	0.270
	P	.667	<.001	<.001	.007	<.001	<.001	<.001	<.001	<.001
Precision	r	−0.136	0.383	0.380	0.361	0.374	0.529	0.485	0.164	0.522
	P	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001
PI total	*r*	−0.044	0.437	0.367	0.213	0.374	0.425	0.442	0.220	0.419
	P	.216	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001

*$P < .05$; $P < .001$: Pearson's correlation coefficient.
CTQ-28, Childhood Trauma Scale; PAS, Parental Attitude Scale; PI, Padua Inventory.

this study that authoritarian and protective/demanding parental attitudes were associated with OCD symptoms, and OCD symptoms were observed more in the children of families that exhibited such attitudes. In another recent study in which parental attitudes were examined as a predictor in adolescents with OCD, similar results to the findings of this study were obtained.[24] Haciomeroglu and Kanci[12] also found that parental attitudes perceived as overprotective significantly predicted OCD symptoms. This finding and similar findings in the literature suggest that social variables such as the styles of parents in raising their children may contribute to the development of OCD symptoms. These results support the importance of involving family members in the treatment of individuals with OCD.[24] In a study conducted on this issue, it was reported that a psychoeducation program provided to parents showed a diminishing effect on both the negative attitudes of mothers and the OCD symptoms observed in children.[27]

Obsessive–compulsive disorder is a disorder that negatively affects not only the individual but also the family environment. It is commonly seen that families are also involved in the symptoms in OCD observed in children and adolescents, and this situation affects families negatively. Due to their involvement in the patient's compulsions and avoidance behaviors and because of changes in the family and free time routines to adapt to the patient's condition, OCD creates considerable stress on the family members of children with OCD. When confronting the obsessive–compulsive behaviors of their children, the parents of OCD patients usually feel confused and worried, and their reactions to OCD symptoms are frequently inconsistent and variable. The involvement of family members in these symptoms in some way may cause these behaviors of children to be reinforced and maintained. Due to this maintenance factor, the treatment process is also negatively affected. Likewise, strict, demanding, and highly critical families create a feeling of guilt in the child, and it increases anxiety in the affected child and may discourage them from participating in active treatment.[26] Considering these factors, families should also be involved in the psychotherapy process, the cooperation of families should be ensured, and they should be provided with education on the nature of OCD.

Another finding of this study was that the OCD symptom levels of the participant students who perceived their parents' attitudes as democratic were lower, but this difference was statistically insignificant. As the democratic attitudes of parents increase, the OCD symptoms of their children decrease. It was suggested that the family's democratic attitude is the ideal attitude in raising children.[10] The findings obtained in this study supported the opinion that a democratic parental attitude plays a protective role against the severity of OCD symptoms. Moreover, it is also believed that democratic parental

Table 4. Predictive Effect of Parental Attitudes and Childhood Trauma on Obsessive-Compulsive Symptoms

Dependent Variable	Independent Variable	ß	*P*	Model (*P*)	R^2
PI scores	Constant	8.168	.158	<.001	0.193
	Democratic parental attitudes	0.109	.154		
	Protective-demanding parental attitudes	0.959	<.001		
	Authoritarian parental attitudes	0.439	.037*		
PI scores	Constant	−51.108	<.001	<.001	0.175
	(CTQ-28) total	1.738	<.001		
PI scores	Constant	23.535	.104	<.001	0.227
	Physical neglect	0.406	.310		
	Emotional neglect	0.905	.049*		
	Physical abuse	1.464	.002*		
	Emotional abuse	2.152	<.001		
	Sexual abuse	0.812	.030*		

Linear regression analysis; R^2, variance explanation ratio; ß, effect coefficient.
CTQ-28: Childhood Trauma Scale; PI, Padua Inventory.
P < .001; **P* < .05.

attitudes contribute to the development of problem-solving skills, general academic success, motivation, and self-respect in children.

It is known that one of the factors that play a role in the development and permanence of obsessive-compulsive symptoms is childhood traumas such as neglect and abuse experienced in childhood.[13] Negative experiences in early childhood may lead to intrusive and undesirable thoughts that result in clinical obsessions and compulsions, as well as increasing the frequency and impact of early traumatic events and intrusive.[25]

Another purpose of this study was to examine the role of childhood traumas in predicting OCD symptoms. The results of our study demonstrated that the participants who reported more childhood traumas had more obsessive-compulsive symptoms, and their childhood traumas positively predicted their OCD symptoms. This finding supported the results of other research that has provided evidence regarding the significant relationship between being exposed to childhood traumas and OCD symptoms.[9,16,25] In the study in which they investigated the relationship between childhood traumas, personality characteristics, and obsessive-compulsive symptoms in 938 university students, Carol et al[4] found that 13% to 30% of the students met the criterion of childhood trauma, and there was a significant relationship between obsessive-compulsive symptoms and childhood traumas, especially emotional abuse and physical abuse. In the study conducted by Demirci[5] on 201 university students, it was determined that individuals with high levels of childhood traumas exhibited more obsessive-compulsive symptoms. In yet another study, the childhood trauma scores of OCD patients were found to be higher compared to the healthy control group of individuals.[28] In 2 studies including large samples of university students and a general population,[4,29] it was reported that higher levels of childhood trauma were associated with increased OCD symptom severity. In a study including 120 patients diagnosed with OCD, childhood traumas were associated with higher OCD symptom severity. This was especially true for sexual, physical, and emotional abuse, and emotional neglect.[16] In a recent study which investigated the relationship between childhood traumas and the duration and severity of OCD symptoms, the severity of childhood traumas was found to be strongly related to emotional abuse, along with higher OCD symptom severity.[30] In parallel with the gradually increasing number of studies, the findings of our study showed that childhood traumas (sexual abuse, physical abuse, emotional abuse, emotional neglect) are closely associated with the severity of OCD symptoms. Regarding childhood traumas, the most significant relationship was found between emotional abuse and OCD symptom severity. In this study, in which the relationship between childhood traumas and OCD symptom severity was examined in a large sample of university students, we found that the results supported previous findings, especially regarding emotional abuse.[4] Despite methodological differences, this finding was consistent with previous research that has demonstrated the relationship between childhood traumas and OCD in general populations and clinical samples.[4,16] This suggests that although an emotional trauma does not meet DSM-5 criteria for a traumatic event, it may nevertheless play an important role in the development and permanence of OCD. Our findings emphasized the significance of the role of childhood traumas in the symptomatology of OCD.

Although many studies have argued that there is a relationship between childhood traumas and OCD, the current opinion related to the relationship between certain types of childhood trauma and OCD remains uncertain.[9] For instance, Caspi et al.[31] determined a higher frequency

of childhood sexual abuse in OCD in comparison to the control group, which suggested that certain traumatic life events can shape the expression of OCD. On the other hand, studies tend to focus on only one aspect of childhood traumas, e.g., physical abuse in childhood.[4] A study conducted on a large population showed that being exposed to multiple traumatic events in childhood increased the risk of developing OCD in adulthood in comparison to individuals who experienced only one traumatic event in their childhood.[32] More specifically, in other studies, it has been found that emotional abuse, physical abuse/neglect, sexual abuse, and emotional neglect/abuse were all positively related to a higher severity of obsession.[33] The findings of our study contributed to the literature as the effects of different childhood traumas on OCD symptom severity were discussed. Additionally, our findings emphasized the importance of focusing on the number of traumatic events and on nonclinical populations. Continuous exposure to traumatic events in childhood in these nonclinical populations may be a significant clinical indicator in identifying individuals who have a risk of developing OCD.[34]

Nevertheless, research on potential relationships between different childhood traumas and types of OCD symptoms is still far from being sufficient. For this reason, more research on the relationship between certain childhood traumas and certain types of OCD symptoms is needed. Four studies reported a relationship between subtypes for both childhood traumas and OCD symptom severity.[33,35] Two of these studies reported that a series of subtypes of childhood traumas were significantly associated with the severity of obsessions and compulsions, and emotional abuse, physical abuse/neglect, sexual abuse, and emotional neglect/abuse were all positively correlated with higher obsession severity. For example, physical abuse/neglect and sexual abuse were found to be more significantly associated with obsessions.[33] A relationship was found between physical abuse/neglect and increased cleaning and counting obsessions, while emotional abuse/neglect was associated with increased checking and hoarding compulsions.[33] The finding of this study examining the relationship between various childhood traumas and OCD symptom types provided support for the already limited number of studies on this topic by revealing positive relationships on different levels between these factors.[33,36,37] Based on these findings, it may be stated that being exposed to a certain type of childhood trauma can predict the presence and severity of different types of OCD symptoms.

The findings obtained in this study supported previous evidence that showed the relationship of authoritarian and protective/demanding parental attitudes and childhood traumas with increased OCD symptom severity. The results of our study demonstrated that the participants who reported more childhood traumas had more obsessive-compulsive symptoms, and their childhood traumas positively predicted their OCD symptoms. The impact of childhood traumas on OCD symptoms is important. Therefore, in the evaluation and management of OCD, it is necessary to investigate and pay attention to childhood traumas. It is recommended to conduct studies that examine the relationship between especially different childhood trauma types and various OCD symptoms. Moreover, future studies that will examine variables which can mediate the effect of childhood traumas on OCD development and symptoms may be planned. More studies which will longitudinally investigate the experiences of individuals starting from childhood are needed for the improvement of our understanding of causal relationships between childhood traumas and OCD symptoms and severity. At the same time, in this study that authoritarian and protective/demanding parental attitudes were associated with OCD symptoms, and OCD symptoms were observed more in the children of families that exhibited such attitudes. These results support the importance of involving family members in the treatment of individuals with OCD.

From a clinical point of view, evaluations of specific childhood traumas may help predict the outcomes of OCD, and interventions aimed at childhood traumas can help alleviate OCD symptoms. Potential interventions that will be included in treatment approaches for victims of childhood traumas who have OCD symptoms may range from psychoeducation that will target the relationship between childhood abuse and OCD symptoms to trauma-focused psychotherapy interventions that aim to process traumatic experiences. Considering the impact of parental attitudes on OCD, involving families in treatment in the psychotherapy process and cooperating with families can positively affect the treatment process. Nurses with the roles of direct care, support, education, and counseling have important standing in running psychoeducation groups. In particular, academic psychiatric nurses can identify risky students and provide counseling and psychoeducation to university students.

The study had certain limitations in terms of generalizability as it included only a certain number of students studying at a state university in Turkey. In order to conduct a study with a more representative sample, future studies that include students at other universities and young individuals who are not enrolled in a university are needed. Another limitation of the study was that it was conducted on young individuals who had not been clinically diagnosed with OCD according to the DSM-5 criteria. The results from this study should be confirmed in additional samples, using formal clinical assessments for OCD and using other techniques to document the presence and significance of exposure to childhood trauma. The distribution and severity of obsessive–compulsive symptoms of the participants of this study were determined according to their PI scores. It is recommended for future studies to focus on clinical samples that have been diagnosed with OCD according to

the DSM-5 criteria. Another limitation of this study was related to the characteristics of the sample. The students of 1 university were included in the study as the sample. Therefore, the ranges of the ages and academic success levels of the participants were very limited. For this reason, the study may be replicated on an adult sample that represents different ages. Additionally, an important limitation of this study was that the correlational and cross-sectional nature of the data did not allow the causal nature of the identified relationships to be determined. Another important limitation of the study is that the trauma history has not been corroborated by other sources. Besides, all tests are self-report tests that could not be verified and solely depend on participant views.

Ethics Committee Approval: Ethical committee approval was received from the Ethics Committee of Kastamonu University (decision number: 2020-KAET-143-124, decision date: November 5, 2021) and written permission from the rectorate of the university (decision number and date: 08.10.2021/E-16694033-044-2100066794) where the study would be conducted were obtained.

Informed Consent: Informed consent was obtained from all participants who participated in this study.

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