Research Paper

# Predicting the Severity of Obsessive-compulsive Symptoms Based on Traumatic Childhood Experiences: The Mediating Role of Self-criticism

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## ABSTRACT

**Objective:** The present study was conducted to predict obsessive-compulsive symptoms (OCS) severity based on childhood traumatic experiences through the mediating role of self-criticism.

**Methods:** This descriptive correlation study was done using structural equation modeling. The statistical population included adults living in Mashhad in 2021, aged from 18 to 50 years with access to the Internet. Of these, 340 individuals were selected as a sample using the available method. Data were collected using the Yale-Brown obsessive scale (Y-BOCS), the childhood trauma questionnaire (CTQ), and the levels of self-criticism questionnaire LOCS. Data analysis was performed using the structural equation modeling method using SPSS software version 26 and AMOS software, version 24.

**Results:** Results showed a significant correlation between childhood traumatic experiences (r=0.51) and self-criticism (r=0.57) with the severity of obsessive-compulsive symptoms (P<0.01). Also, the results of structural equation modeling showed that the model of the present study had an acceptable fitness and the mediating role of self-criticism in the relationship between childhood traumatic experiences and the severity of obsessive-compulsive symptoms ($\chi^2$/df≤3) was significant (0.001).

**Conclusion:** Based on the findings of this study, traumatic childhood experiences are able to predict and affect the severity of obsessive-compulsive symptoms through interaction with self-criticism.

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## Highlights

• Results showed a significant correlation between childhood traumatic experiences and self-criticism with the severity of obsessive-compulsive symptoms.

• Results of structural equation modeling showed that the model of the present study had an acceptable fitness and the mediating role of self-criticism in the relationship between childhood traumatic experiences and the severity of obsessive-compulsive symptoms was significant.

## Plain Language Summary

Obsessive-compulsive disorder (OCD) is defined by thoughts, impulses, and desires that cause unwanted and repetitive disturbances in a person, alongside compulsive behaviors, which occur in response to those thoughts. Several factors are involved in the development of obsessions, such as biological and psychological factors. Results showed that the model of the present study had an acceptable fitness and the mediating role of self-criticism in the relationship between childhood traumatic experiences and the severity of obsessive-compulsive symptoms was significant.

## 1. Introduction

Obsessive-compulsive disorder (OCD) is defined by thoughts, impulses, and desires that cause unwanted and repetitive disturbances in a person, alongside compulsive behaviors, which occur in response to those thoughts. OCD ranks fourth among the most common psychiatric disorders and has a prevalence of 1.3% (Fawcett et al., 2020; Sachs & Erfurth, 2018). The most common comorbid disorders with OCD are social anxiety disorder (14%), major depressive disorder (15%), and generalized anxiety disorder (13%) (Akouchakian et al., 2021; Van Oudheusden et al., 2020).

Several factors are involved in the development of obsessions, such as biological and psychological factors. Biologically, OCD involves the irregular function of the brain's serotonergic and dopaminergic systems, as well as increased brain activity in the cortical-striatal-thalamic-cortical circuit, like the orbitofrontal cortex, caudate, and anterior cingulate cortex (Bruin et al., 2019; Norman et al., 2016).

On the other hand, factors, such as parenting, family dynamics, the formation of early maladaptive schemas, and traumatic childhood experiences have been considered from a psychological point of view (Rukiye & Erbay, 2018; Soltanmohammadlou et al., 2022). Traumatic childhood experiences are any kind of neglect or physical, mental, sexual, or social abuse that causes a risk to a child's safety and health. During childhood, when a person is more vulnerable, these experiences may create neurobiological changes to cope with psychiatric problems (Abramowitz, 2018; Norman et al., 2016). In this regard, Piras and Spallata (2020) showed that childhood trauma creates a kind of vulnerability to stressful factors. Therefore, the interaction of this experience with stressful factors, personality characteristics, and genotype of people will lead to OCD and symptoms, such as obsession with contamination, washing, symmetry, and hoarding (Piras & Spalletta, 2020).

On the other hand, today, the role of emotions and beliefs related to them has been shown in the formation and continuation of many psychiatric disorders. One of the most important beliefs is self-criticism (Ammerman & Brown, 2018; Dorri Mashhadi et al., 2022). Self-criticism refers to a set of behaviors, in which a person considers his/her flaws and shortcomings very prominent and constantly blames him/herself. Self-criticism targets various types of human characteristics, including physical characteristics and appearance, behavioral characteristics, inner thoughts and feelings, personality, and thinking. If a person is not able to achieve the necessary success in situations, for which he/she spends a lot of mental energy, whether in a relationship, in school, or work and daily life, he/she starts blaming and hurting him/herself (Halamová et al., 2021; Kim et al., 2021). This process is very painful and causes deep damage to the psyche. These experiences target and destroy the core of self-examination and motivation to progress in a person (Greenberg & Goldman, 2019). Many studies have investigated the relationship between self-criticism and psychiatric disorders. In this regard, Cheli et al. (2020) showed that perfectionism and self-criticism are two prominent features in the formation and persistence of obsessive-compulsive symptoms, which causes a per-

son to set strict standards for him/herself and considering that he/she can never reach them, begins to blame him/herself (Cheli et al., 2020). Loew et al. (2020) showed that self-criticism causes various types of mental problems, including anxiety disorders and OCD (Loew et al., 2020). Based on cognitive models related to OCD, self-criticism plays an important role as an underlying belief. Therefore, identifying the factors influencing the formation of these beliefs can be very controversial (Pace et al., 2011).

Elliott and Greenberg (2021) showed that the underlying emotion in thoughts with self-critical content (such as blame, remorse, guilt, etc.), is the painful emotion of shame (Elliott & Greenberg, 2021). Lack of approval from parents in childhood causes feelings of shame. Over time, this emotion leads to the formation of negative judgments and valuations towards oneself, which will appear in the form of self-criticism and self-blame (Chou et al., 2018). This shame in OCD is increased to such an extent that the person gets distressed and considers him/herself responsible for bad events. For example, the person says to himself "I am not capable enough; thus, I have to work hard and be careful to do things right and avoid harming others" (Petrocchi & Cheli, 2019; Zhang et al., 2021).

As mentioned, based on the literature of the current research, childhood traumatic experiences have a significant role in the formation of self-criticism components and obsessive-compulsive symptoms. Also, the component of self-criticism can play a decisive role in the formation and continuation of OCD symptoms. Considering the importance of obsessive-compulsive symptoms and the precise identification of the factors affecting their formation and continuation, as well as the examination of the contribution and extent of the effect of each variable and the obvious and hidden relationships between them, in this study, childhood traumatic experiences and Self-criticism were assessed simultaneously. For this reason, structural equation modeling was used to examine the mediating role of self-criticism in the relationship between obsessive-compulsive symptom severity and traumatic childhood experiences. The results of this study may be used to further understand the factors affecting the development and persistence of obsessive-compulsive symptoms and their prevention through education to parents and families.

This study aimed to investigate the relationship between traumatic childhood experiences and obsessive-compulsive symptoms with a mediating role of self-criticism.

## 2. Materials and Methods

### Subjects and methods sample

This descriptive correlation study was done using structural equation modeling. The statistical population included all adults aged 18 to 50 years living in Mashhad in 2021 who had access to the Internet and virtual space at the time of sampling. Due to the type of statistical method used in the study and considering an attrition rate of 25%, an effect size of 0.15, and a 0.95 test power, the G-power software determined a sample size of at least 300 subjects; however, 340 subjects were selected as the sample to increase the similarity of the current sample to the target population, the validity of the test, and the generalizability of our findings.

### Data collection tools

**Demographic information form:** This form collects personal information, such as gender, age, educational background, marital status, and where to send survey results.

**Yale-Brown obsession questionnaire (Y-BOCS):** This questionnaire was first developed by Goodman et al. in 1989. The scale measures the obsessive-compulsive symptom severity and is administered to patients who have answered the initial clinical interview questions regarding obsessions. The Y-BOCS is a 10-item questionnaire, in which each item is graded from zero to four regarding the severity, frequency, duration of symptoms, and the patient's resistance to performing procedures. Items 1-5 examine obsessive thoughts and items 6-10 examine obsessive behavior. The total score of obsessions in this questionnaire is obtained by summing the items and is categorized into four groups. A score of 0-9 indicates a very mild obsession, a score of 10-15 is a relatively mild obsession, a score of 16-25 is a moderate obsession, and a score of more than 25 is a very severe obsession. The reliability coefficient between different evaluators in 40 patients was 0.98 and the internal consistency coefficient was reported as 0.89 through Cronbach's α coefficient (Goodman et al., 1989). Deacon and Abramowitz also found correlations between the Yale-Brown and the revised OCD questionnaires, Brown beliefs scale, BDI, Zong anxiety scale, and Sheehan disability scale to be 0.45, 0.34, 0.46, 0.38, and 0.55, respectively. These coefficients indicate the high validity of this scale (Deacon & Abramowitz, 2005). In Iran, Rajzi Esfahani et al. examined the validity and reliability of the Persian version in 2013 and found that Cronbach's α was 0.95, the correlation coefficient for the two halves of the test was 0.89, and the retest reliability was 0.99 (Esfahani et al., 2012).

**Childhood traumatic experiences questionnaire (CTQ):** This scale was designed and developed in 2003 by Bernstein et al. (2003) to measure childhood injury and trauma. This questionnaire is a screening instrument to identify individuals with experiences of childhood abuse and neglect and measures five types of childhood maltreatment (sexual abuse, physical abuse, emotional abuse, and emotional and physical neglect). CTQ includes 28 questions, 25 of which are used to measure the major components of the questionnaire, and three questions are used to identify individuals who are in denial about their childhood problems (Bernstein et al., 2003). The questionnaire is scored on a five-point Likert scale ranging from one to five. Therefore, the range of scores each person receives on the entire questionnaire is from 25 to 125, with a high score on the questionnaire indicating greater trauma or injury and a low score indicating less injury or trauma in childhood. In Bernstein, et al.'s study, the questionnaire's Cronbach's α coefficient for a group of adolescents was 0.87, 0.86, 0.95, and 0.89 for the dimensions of emotional abuse, physical abuse, sexual abuse, emotional neglect, and physical neglect, respectively. Concurrent validity based on the number of traumas in childhood assessed by therapists was also reported to be between 0.59 and 0.78 (Bernstein et al., 2003). Ebrahimi et al. (2014) in Iran found the Cronbach's α for this scale for the five components to be from 0.81 to 0.98, and the retest validity was 0.94 (Ebrahimi et al., 2014).

**Levels of self-criticism questionnaire (LOCS):** A self-criticism questionnaire was developed and validated in 2004 by Thompson and Zuroff (2004) to measure people's level of self-criticism. This questionnaire measures two levels of internalized self-criticism and comparative self-criticism in people. The scale includes 22 items and is scored on a seven-point Likert ranging from one to seven. Thus, the range of scores achieved by each person on this questionnaire is between 22 and 154. Higher scores on this scale indicate higher levels of self-criticism in an individual (Thompson & Zuroff, 2004). Thompson and Zuroff measured the validity and reliability of this questionnaire on a sample of 144 individuals. The Cronbach's α for the two subscales of comparative self-criticism and internalized self-criticism was reported to be 0.78 and 0.84, respectively (Thompson & Zuroff, 2004). Yamaguchi et al. (2014) showed that the reliability coefficient for the comparative self-criticism and internalized self-criticism components, and the entire test based on Cronbach's α, were 0.70, 0.82, and 0.90, respectively (Yamaguchi et al., 2014). In Iran, the reliability of the LOCS was found by Mousavi and Ghorbani (2007) to be 0.87 for the internalized self-criticism subscales, 0.55 for the comparative self-criticism, and 0.83 for the total test, using Cronbach's α method. The relationship between the components of the LOCS and the subscales of the interpersonal problems questionnaire was also positive and significant (Mousavi & Ghorbani, 2007).

### Research procedure

Because this research was conducted during the COVID-19 pandemic and in-person access was not available, the sample was chosen using an online questionnaire. The data were collected from all adults who were interested and volunteered to participate in the study and fill in an online questionnaire (Google form between March and May 2021) that was shared on Instagram, Telegram, and WhatsApp. The inclusion criteria included at least a middle school diploma, no acute medical or psychiatric problems, and willingness to participate in the study; questionnaires that weren't completed in full, and patients with medical or psychiatric problems in the past were excluded. Therefore, the research link was made publicly available and then available to anyone who expressed a desire to participate in the research and who also met the necessary criteria to answer the questionnaire whenever they had the opportunity to do so. In order to maintain the principle of confidentiality, the data gathered from the questionnaires were collected without any personal details, like names or addresses of the subjects. Therefore, the identities of the subjects were known only to those involved in this research. The subjects' confidence in participating in the research and freedom in answering the questionnaires were also among the other considerations that were taken into account in this study.

### Data analysis

Structural equation modeling was used to analyze the research data. The data were analyzed using SPSS version, 26 and AMOS software, version 24.

## 3. Results

First, the demographic characteristics of the sample studied were collected. Of the 340 samples studied, 98 samples (28.8%) were men and 242 samples (71.2%) were women. The age of the participants ranged from 18 to 50 years, and the Mean±SD were 29.32 and 9.38, respectively. Of the participants, 50 individuals (14.7%) had a diploma, ten individuals (2.9%) had an associate degree, 141 individuals (41.5%) had a bachelor's degree, and 139 individuals (40.9%) had a master's degree or higher. Among the participants, 217 cases (63.8%) were single and 123 cases (36.2%) were married.

**Table 1.** Pearson's correlation coefficient results to check the relationship between research variables

| Variables | Mean±SD | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|---|
| Traumatic childhood experiences | | | | | | | | | | |
| Physical abuse | 10.28±4.85 | 1 | | | | | | | | |
| Sexual abuse | 8.49±4.40 | 0.74 | 1 | | | | | | | |
| Emotional abuse | 9.98±4.61 | 0.62 | 0.43 | 1 | | | | | | |
| Physical neglect | 9.01±4.13 | 0.73 | 0.60 | 0.53 | 1 | | | | | |
| Emotional neglect | 13.67±5.14 | 0.61 | 0.37 | 0.58 | 0.48 | 1 | | | | |
| The total score of self-criticism | 82.56±21.42 | 0.45 | 0.35 | 0.37 | 0.49 | 0.40 | 1 | | | |
| Internalized self-criticism | 43.70±13.43 | 0.35 | 0.24 | 0.33 | 0.34 | 0.33 | 0.93 | 1 | | |
| Comparative self-criticism | 36.86±10.21 | 0.49 | 0.41 | 0.34 | 0.58 | 0.40 | 0.87 | 0.63 | 1 | |
| Severity of obsessive-compulsive symptoms | 9.76±5.81 | 0.51 | 0.43 | 0.49 | 0.48 | 0.46 | 0.57 | 0.52 | 0.51 | 1 |

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The results presented in Table 1 show that the severity of obsessive-compulsive symptoms had a significant relationship with all components of traumatic childhood experiences and shame (P<0.01). To examine the proposed model, structural equation modeling was used, before which the assumptions of normality, multiple collinearities, and independence of errors were verified, each of which is stated.

One of the most important assumptions of structural equation modeling is the normality of the distribution of the variables, which was checked by the skewness and stretch coefficients. The skewness coefficient for the variables was obtained as follows: Physical abuse: 0.77, sexual abuse: 1.15, emotional abuse: 0.77, physical neglect: 1.01, emotional neglect: 0.21, internalized self-criticism: 0.57, comparative self-criticism: 0.63, and the severity of obsessive-compulsive symptoms: 0.63. The stretch coefficient for the variables was as follows: Sexual abuse: -0.13, emotional abuse: -0.26, physical neglect: -0.02, emotional neglect: -0.37, and internalized self-criticism: -0.26, comparative self-criticism: -0.37, and obsessive-compulsive symptoms intensity: 0.24. Considering that the skewness and elongation indices were in the range of +1 and -1, the distribution of the variables in the study was normal. The tolerance statistic and the variance inflation index were used to check for multiple collinearities. The tolerance index was 0.23 for physical abuse, 0.41 for sexual abuse, 0.51 for emotional abuse, 0.53 for physical neglect, 0.43 for emotional neglect, 0.47 for internalized self-criticism, and 0.50 for comparative self-criticism. The values obtained for the independent variables were all greater than 0.40, indicating that there was no significant collinearity among the independent variables. The variance inflation index was also 4.28 for physical abuse, 2.40 for sexual abuse, 1.95 for emotional abuse, 1.87 for physical neglect, 2.28 for emotional neglect, 5.76 for internalized self-criticism,

**Table 2.** Measurement parameters of the direct relationships

| Paths | Unstandardized Estimate | Standard Estimate | Standard Error | Critical Ratio | Sig. |
|---|---|---|---|---|---|
| Traumatic childhood experiences to self-criticism | 1.29 | 0.61 | 0.14 | 9.08 | 0.001 |
| Traumatic childhood experiences with severe obsessive-compulsive symptoms | 0.50 | 0.34 | 0.10 | 5.02 | 0.001 |
| Self-criticism in the severity of obsessive-compulsive symptoms | 0.30 | 0.43 | 0.10 | 5.02 | 0.001 |

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**Table 3.** Bootstrap test results for testing indirect relationships

| Paths | Standard value | Standard Error | Lower limit | Upper limit | Sig. |
|---|---|---|---|---|---|
| Traumatic childhood experiences to the severity of obsessive-compulsive symptoms with the mediation of self-criticism | 0.26 | 0.04 | 0.18 | 0.36 | 0.001 |

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and 5 for comparative self-criticism. On the other hand, the score of 2.33 obtained for the Durbin-Watson test was within the acceptable range (1.5 to 2.5), indicating the independence and noncorrelation of the error scores.

As can be seen in Table 2, the effects of the overall pathways from traumatic childhood experiences to self-criticism (0.61), from traumatic childhood experiences to obsessive-compulsive symptom severity (0.34), and from self-criticism to obsessive-compulsive symptom severity (0.43) were significant. To estimate the significance of the indirect path, the Bootstrap test was used in Amos software (Table 3).

As shown in Table 3, the path from traumatic childhood experiences to obsessive-compulsive symptom severity with the mediation of self-criticism ($\beta$=0.26; P<0.05), had a lower limit of confidence interval of 0.18 and an upper limit of 0.36. Considering that zero is outside these confidence intervals, this mediating relationship was significant.

As shown in Table 4, the model fit indices included the chi-square index ($\chi^2$=38.62), the relative chi-square index ($\chi^2$/df=2.31), the goodness-of-fit index (GFI=0.97), the goodness-of-adaptive-fit (AGFI=0.92), the comparative fit index (CFI=0.98), the incremental fit index (IFI=0.98), the Tucker-Lewis fit index (TLI=0.95), and the root mean square error of approximation (RMSEA=0.08) and indicated the fit of the model. Therefore, the final model had a good fit (Figure 1).

## 4. Discussion

This research was conducted to define the mediating role of self-criticism in the relationship between childhood traumatic experiences and the severity of obsessive-compulsive symptoms. The findings of this study showed that the relationship between childhood traumatic experiences and the severity of obsessive-compulsive symptoms was significant. This result is in line with the findings of Piras and Spalletta (2020), Hosseini and Soleimani (2019), Kroska et al. (2018), and Rukiye and Erbay (2018). Traumatic childhood experiences impair and damage a person's memory, emotions, cognition, and physical senses depending on the severity and frequency of the events. In people who have had traumatic experiences in childhood, a kind of lack of self-confidence and inner self-esteem is formed; therefore, they do not trust what they have done in various events and doubt the correctness of their actions. They constantly check whether they are right or wrong so as not to make a mistake because the occurrence of this mistake is equivalent to the occurrence of an event. They know that it is very disastrous. The obvious characteristic of these people is that they perceive the emotional burden of a mistake and the occurrence of a catastrophic event as similar to the same traumatic event in their childhood; thus, they constantly try to cope with it through "compulsive behavior". They "avoid" this deep emotional pain, but are not aware of the fact that this avoidance becomes a "vicious circle" and increases the pain and thus the severity of their obsessive-compulsive symptoms (Kroska et al., 2018). In this context, the traumatic experiences in childhood affect a person who cannot be open to new experiences in his/her life, which leads to the reinforcement of thoughts in his/her mind in a vicious circle and leads to the formation of obsessions. On the other hand, it can be said that the occurrence of traumatic experiences in childhood causes the formation of a kind of "hypervigilance" in a person, which is very favorable for him/her in the short term because it prevents the reoccurrence of

**Table 4.** Fit indices of the final research model

| Fit Index | $\chi^2$ | df | $\chi^2$/df | RMSEA | GFI | AGFI | IFI | TLI | CFI | NFI |
|---|---|---|---|---|---|---|---|---|---|---|
| Optimal limit | | | ≥3 | ≥0.08 | ≤0.9 | ≤0.9 | ≤0.9 | ≤0.9 | ≤0.9 | ≤0.9 |
| The final model | 38.62 | 12 | 3.21 | 0.08 | 0.97 | 0.92 | 0.98 | 0.95 | 0.98 | 0.97 |

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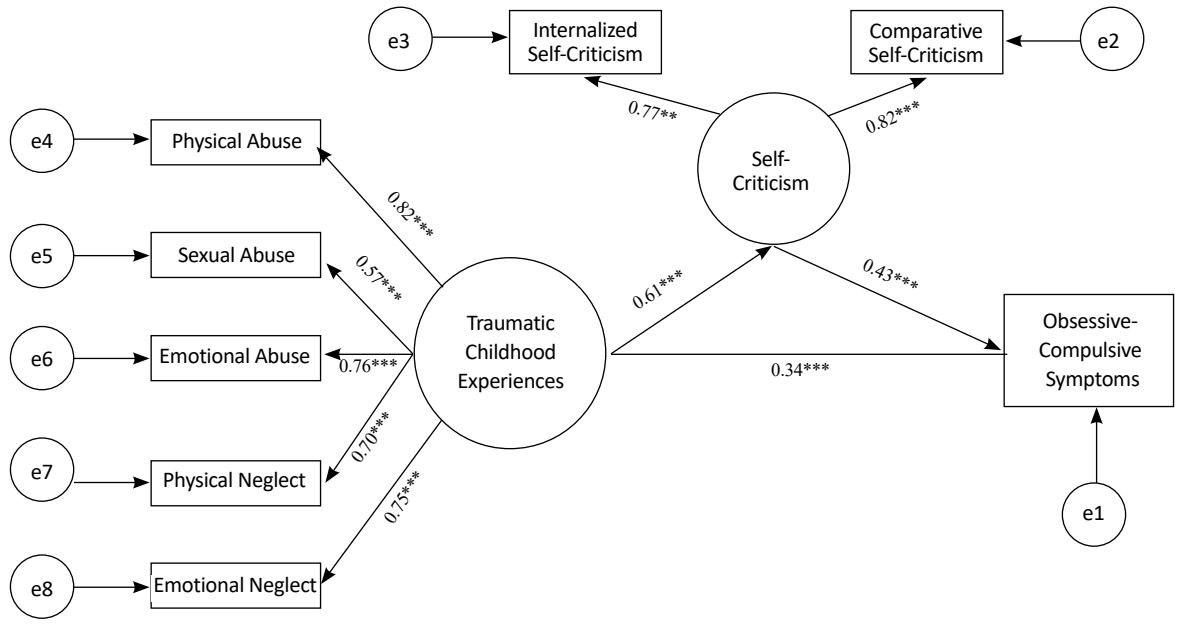


**Figure 1.** The final model

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***All relationships are significant at P<0.00).

damage and has a protective function, but this protective function, over time, due to its "avoidance" character, prevents the experience of the surrounding world and, as a result, transforms into obsessive and psychopathological features (Shirkhani et al., 2022).

Furthermore, the results of this research indicated a notable relationship between self-criticism and obsessive-compulsive symptoms severity. These results comply with previous findings by Cheli et al. (2020), Loew et al. (2020), Chou et al. (2018), and Pace et al. (2011). Self-criticism makes a person very aware of his/her faults and shortcomings and constantly points the finger of blame at him/herself. When a person cannot achieve the necessary success in various situations, he/she begins to hurt him/herself and damage his/her psychological organization. A self-critical person constantly thinks negatively about his/her abilities and feels that he/she will screw up again. When faced with obstacles, these people cannot compromise and feel defeated. This sense of failure causes them to rebel against themselves and fall into disharmony, and by reducing their inner coherence, they become prone to psychiatric disorders, such as OCD. By imposing strict rules on themselves, these people constantly doubt their work and worry that they might make a mistake. When such a situation happens to them, they feel a very high level of anxiety that disrupts their normal functioning. To reduce this anxiety, they turn to obsessions so that they can reduce the level of this painful anxiety and live a normal life (Cheli et al., 2020). One of the most important reasons for the development and persistence of obsessive-compulsive syndromes is perfectionism and "all-or-nothing" thinking. Perfectionism causes a person to set very high and unrealistic standards for themselves and try to meet them completely and without flexibility. However, as these standards are extremely difficult and they cannot achieve them, they begin to evaluate and blame themselves and become anxious. But these people consider themselves obliged to fully control these anxieties and turn to compulsive behaviors, which, not only do not reduce anxiety but alos increase it (Fearn et al., 2021).

The findings of this study also showed that childhood traumatic experiences are significantly related to self-criticism. These findings are consistent with previous findings, such as those by Daly and Willoughby (2019), Naismith et al. (2019), Lassri et al. (2018), and Swannell et al. (2012). To explain this research finding, it can be said that traumatic experiences at developmental stages and when a person is vulnerable to psychological disintegration, especially by the person's parents and caregivers, lead to self-injury and violation of the person's basic moral values or beliefs, which impedes normal development. These experiences overshadow the survival, well-being, and dignity of the individual and lead to problems in understanding one's identity. Specifically, this problem leads to feelings of guilt, blame, self-reproach, and self-criticism based on the misbehavior of others toward him/her, and ultimately to a comprehensive understand-

ing of oneself as worthless, helpless, and a victim. This self-criticism is devastating to a person both psychologically and physically.

Here, the person tends to set unrealistic standards and adopt a punitive attitude against him/herself because the standards that he sets for him/herself are so far that they can never be met, and all that remains of these standards is a person's deep anger at him/herself, which is caused by not meeting them. Self-criticism causes a person to be constantly preoccupied with negative evaluations of him/ herself and also to fear the disapproval of others and the loss of their approval (Daly & Willoughby, 2019; Elliott & Greenberg, 2021). Traumatic experiences that occurred in childhood never go away for survivors; rather, survivors make hostile interjections of these injuries. The person displays this introjection as self-blame and criticism. Self-criticism is the opposite of self-compassion and is rooted in insecure attachment in childhood and childhood trauma. People who have had traumatic experiences in childhood refuse to have empathy and compassion for themselves; this is because childhood injuries lead to the formation of a negative image of oneself, and instead of compassion, the person expresses criticism and blames oneself. This person becomes very vulnerable to threats and negative emotions and blames him/herself for every problem (Kolubinski et al., 2021).

Nevertheless, the main result found in this study is the mediating role of self-criticism in the relationship between childhood traumatic experiences and the extent of obsessive-compulsive symptoms severity. This is consistent with studies by Piras and Spalletta (2020) and Kroska et al. (2018). One of the greatest harms inflicted on people by traumatic childhood experiences is that the society surrounding the injured person (family, culture, and friends) views the injured person as the cause of that experience. In other words, they treat the injured person as if he/she had engaged in wrong behavior so that the aggressor allowed him/herself to cause this injury. In this situation, because the organization of the personality is not yet formed properly and is strongly influenced by the thoughts and behavior of others, it creates the belief that the cause of this incident must be the person. This condition not only persists in this situation but also becomes generalized, and the aggrieved person feels that the problem is his/herself in every other event similar to this one. Therefore, he/she begins to criticize him/herself and wounds him/herself from within. As the person grows, he/she assumes that he/she will make mistakes again and equates mistakes with recurring painful experiences because similar emotions are evoked; thus, he/she begins to impose standards and rules on him/herself. The mere imposition of these rules is not problematic in any way; rather, the problem is that the person sets these standards for him/herself so distant and high that he/she can never achieve them. However, he/she cannot accept that he/she will not achieve these goals and tries again and with even greater effort to achieve them. This goes so far that these efforts become an obsession in him/her that he/she feels powerless and weak if he/she does not do them, and begins to hurt him/herself again with self-criticism (Elliott & Greenberg, 2021; Greenberg & Goldman, 2019). The occurrence of traumatic childhood experiences creates a kind of vulnerability in a person's psychological organization that a person is a failure and a victim and there is nothing he/she can do. This inability leads a person to view him/herself as a weak person who has no control over the situation and therefore deserves to be blamed. In the future, to escape this blame, the person tries to escape this failure with compulsive thoughts and behaviors; however, the solution is to face this painful childhood experience and relive it in the treatment room, and these compulsive behaviors have no effect on improving his/her condition (Fearn et al., 2021).

## 5. Conclusions

By demonstrating the mediating role of self-criticism in the impact of traumatic experiences in childhood, the present study predicted obsessive-compulsive symptoms. Thus, interventions based on the introduction of preventive measures related to parenting style and the importance of children's childhood to reduce traumatic experiences in people's childhood have positive results and should be considered in preventive and treatment agendas to help reduce and improve people's obsessive-compulsive symptoms.

The current research has limitations that should be considered when interpreting the results. For example, one of the limitations of this research is that the sample was drawn in the form of an Internet questionnaire due to the spread of coronavirus and the use of social distancing; thus, individuals who did not have access to virtual space and the Internet could not be included in this research. Another limitation is that the medical or psychiatric history of the subjects was not evaluated. For this reason, it is suggested that these limitations be overcome in future studies.

## Ethical Considerations

### Compliance with ethical guidelines

This research was approved by the Ethics Committee of the Ferdowsi University of Mashhad (Code: IR.UM.REC.1400.153).

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## Authors' contributions

All authors equally contributed to preparing this article.

## Conflict of interest

The authors declared no conflicts of interest.

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