The Mediating Role of Dark Triad Personality Traits in the Relationship Between Childhood Traumas and Obsessive Beliefs

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The Mediating Role of Dark Triad Personality Traits in the Relationship between Childhood Traumas and Obsessive Beliefs

Özlem Çakmak Tolan1*
1Dicle University

Abstract

This study aims to investigate the relationship between childhood traumas, dark triad personality traits, and obsessive beliefs. Personal Information Form, Childhood Trauma Questionnaire, Short Dark Triad Scale, and Obsessive Beliefs Questionnaire were used to collect data in the study. A total of 480 volunteers, of which 306 were female and 174 were male, participated in the study. Pearson Correlation Analysis, independent samples t-test, and Parallel Multiple Mediator Variable analysis were used for the analysis of the obtained data. The correlation analysis results showed that childhood traumas were significantly and positively associated with both dark triad personality traits and obsessive beliefs. Male participants' psychopathic personality traits mean scores were found to be significantly higher than those of females. Mediation analysis results show that the psychopathic personality traits had a mediating effect on the relationship between the physical and emotional neglect and abuse sub-dimensions of childhood traumas and obsessive beliefs. The findings were discussed vis-à-vis the available relevant literature and suggestions were presented.

Keywords: Childhood traumas, Dark triad personality Traits, Obsessive beliefs

Introduction

Some daily life events can have diverse effects on an individual's current state and future prospects. Traumas, which instill extreme fear and helplessness, often result from such extraordinary and unforeseen occurrences in daily life (Aker & Önder, 2003). Trauma is the outcome experienced or witnessed by an individual in the face of death, a threat of death, severe injury, or a violation of bodily integrity. Examples of traumatic events include sexual abuse, physical abuse, domestic violence, community and school violence, medical trauma, traffic accidents, terrorist attacks, warfare, natural and man-made disasters, suicides, and other traumatic losses (Regier et al., 2013). Traumas can impact individuals' physical, mental, and spiritual well-being, as well as their daily lives, in various ways. While some individuals develop trauma following such adverse experiences, others may not be affected to the same degree. Trauma does not necessarily result in negative consequences for all individuals. Numerous factors, such as personality traits, socio-cultural structures, poverty, family relationships, and social support, are believed to influence individuals’ reactions to trauma (Laporte et al., 2011; Linley & Joseph, 2004; Yener, 2017).

Childhood is a critical period for shaping individuals’ biological, cognitive, and socio-emotional characteristics. In addition to physical development, this phase lays the foundation for psychosocial capabilities, personality, and future adolescent and adult life (Lally & Valentine-French, 2019). Therefore, childhood traumas may significantly influence children's developmental trajectory and have long-term effects throughout their lives (Acehan et al., 2013; Ford, 2016). Common causes of childhood traumas include sexual, physical, and emotional abuse, neglect experienced before the age of eighteen, parental loss, adverse life experiences such as separation from parents, parental divorce, witnessing domestic violence, migration, accidents, and natural disasters (Herman, 2015). Child abuse or neglect, which is a prominent factor contributing to childhood trauma, is described by relevant professionals as the inappropriate or harmful treatment of a child by an adult, such as a parent or caregiver, deviating from social norms and impeding the child’s development while causing physical, mental, sexual, or social harm and endangering the child’s health and safety (Oral et al., 2001).

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Dimensions of Neglect and Abuse

The World Report on Violence and Health outlines four types of child maltreatment: physical abuse, sexual abuse, emotional and psychological abuse, and neglect (WHO, 2006). Physical abuse encompasses behaviors such as injuring, choking, or kicking where intentional physical force is directed at a child, resulting in harm, injury, and detriment to the child's well-being, life, development, or dignity. Sexual abuse involves subjecting a child to sexual activities, such as exhibitionism, voyeurism, or witnessing sexual intercourse, that the child does not fully comprehend, cannot provide informed consent to, or is not developmentally prepared for, and that violate societal laws or social taboos (WHO, 2006; Pala et al., 2011). Emotional child abuse refers to a pattern of behavior in which a child is deprived of the attention, love, and care they need, resulting in psychological harm. Abusive behaviors include but are not limited to confining the child to a room, intimidation, isolation, yelling, and adopting an overprotective attitude (Acehan et al., 2013; Güler et al., 2002). Neglect is defined as an ongoing failure to fulfill a child's basic needs, including nutrition, clothing, shelter, education, medical care, social interaction, and love. It involves a lack of necessary attention to the child's living conditions and encompasses physical, emotional, and social neglect. Neglectful behaviors can manifest in not providing proper care, not ensuring a safe environment, and failing to meet the child's emotional and social needs (Grummitt et al., 2021).

Child neglect and abuse are pervasive issues that have detrimental effects on a child's development, leaving lasting psychological scars and leading to tragic outcomes (Briere & Elliott, 2003; De Bellis & Zisk, 2014). Childhood traumas not only disrupt the normal development process but also serve as a catalyst for challenges experienced in adulthood (Kendall-Tackett et al., 1993; Springer et al., 2007). Research conducted by Norman et al. (2012) indicates that childhood traumas can contribute to developmental disorders that persist well into adulthood. These disorders can manifest as psychological and behavioral problems, including disruptions in social interactions, self-harm (Dube et al., 2001), post-traumatic stress disorder (Widom, 1999), depression, and substance abuse (Bostancı et al., 2006; Molnar et al., 2001). Additionally, physical ailments such as obesity (Der Kolk, 2003: 1-30), heart diseases, and high blood pressure (Danese et al., 2009) have been associated with childhood traumas. Furthermore, the literature suggests that individuals with a history of childhood trauma may be more susceptible to experiencing physical, cognitive, behavioral, and psychological problems in later life (Anda et al., 2008; Felitti et al., 1998; Kalmakis & Chandler, 2015; Whitfield et al., 2003). Long-term follow-up studies have revealed that childhood traumas contribute to significant and progressively worsening physical, emotional, social, and behavioral problems and that individuals with childhood traumas are more likely to exhibit various psychopathological behaviors (Corso et al., 2008; Chapman et al., 2004; Gündüz & Gündoğmuş, 2019; Örsel et al., 2011).

Dark Triad Personality Traits

It is claimed that traumas that are exposed can affect individuals emotionally, cognitively, and socially, and that these traumas may also have negative effects on personality development (Allen & Lauterbach, 2007; Z-Page, 2004). In the relevant literature, it has been stated that childhood traumas have disruptive effects on identity and personality development and that negative experiences in childhood may be effective in completing the individual's identity development and causing identity confusion (Güler, 2014). It has also been reported that childhood traumas are associated with personality disorders (antisocial, paranoid, etc.) (Carr & Francis, 2009; Sansone et al., 2004). Childhood traumas (such as physical and emotional abuse) can lead to the individual having maladaptive personality traits (De Carvalho et al., 2015; Spinhoven et al., 2016). A study conducted in Turkey revealed that as childhood traumas increase, creative personality traits decrease (Büyükcebeci, 2019). It has also been found that childhood traumas serve as a risk factor for the development of personality disorders (Ball & Links, 2009; Horesh et al., 2003; Sansone et al., 2004; Yen et al., 2005). All of these findings highlight the significance of the relationship between childhood traumas and personality traits. It has been argued that the personality traits that encompass an individual’s feelings, thoughts, and behaviors may also be affected by childhood traumas (Roberts et al., 2006). Therefore, it seems reasonable to explore the relationship between dark triad personality traits and childhood traumas in this study.

The dark triad personality traits, which are variables of interest in this study, encompass non-pathological personality traits consisting of narcissism, machiavellianism, and psychopathy. These traits are characterized as socially unwelcome, unwanted, and offensive (Jonason et al., 2015; Paulhus & Williams, 2002). They are associated with socially undesirable behaviors, self-centeredness, and a lack of pro-social orientations (Rauthmann & Kolar, 2012). These personality traits have been linked to negative behaviors such as aggression,
erratic behavior, socio-emotional deficits, difficulties in interpersonal relationships, and antisocial behavior (Cairncross et al., 2013; Muris et al., 2017; Van Geel et al., 2017).

The Machiavellianism personality trait is characterized by a focus on one's own ambition and interests and adopting a utilitarian perspective in interactions with others. Individuals with this trait are prone to lying for personal gain and engaging in manipulative tactics to achieve success. They tend to disregard ethical values and prefer to cultivate relationships with influential individuals (Fehr et al., 1992). Narcissism, on the other hand, involves an excessively high sense of self-importance. Individuals with this trait exhibit behaviors such as grandiosity, entitlement, arrogance, a lack of empathy, indifference, and egocentrism (Campbell & Foster, 2016; Pailing et al., 2014). Psychopathy constitutes the ultimate component of the dark triad. It encompasses a range of behaviors, including antisocial tendencies, thrill-seeking, a lack of empathy, aggression and impulsivity (Hopley & Brunelle, 2012). Moreover, individuals with psychopathy often exhibit aggressive behaviors and have a propensity for criminal activities (Jakobwitz & Egan, 2006; Muris et al., 2017).

Recently, there has been a significant focus on the concept of the 'Dark Triad', which comprises the personality traits of Machiavellianism, narcissism, and psychopathy. The Dark Triad is believed to capture the darker aspects of human personality and has been extensively investigated in various studies. Existing literature has examined the constituent traits of the Dark Triad in relation to several variables, including impulsivity (Szabó & Jones, 2019), empathy, forgiveness (Giammarco & Vernon, 2014), self-control (Jonason & Tost, 2010), and violence (Pailing et al., 2014). On the other hand, the relevant studies carried out in Türkiye explored various variables such as sensation-seeking behaviors (Satıcı et al., 2019), relational aggression (Karaaslan & Ardiç, 2017; Uysal, 2016). Studies in the literature have indicated that dark triad personality traits play a mediating role between childhood traumas, emotional abuse, and cyberbullying (Kircaburun et al., 2019). Furthermore, these personality traits have been found to be positively and significantly associated with bullying behaviors (Davis et al., 2022) and violence towards intimate partners (Kiire, 2017).

It is stated that childhood traumas may have negative effects on the development of personality traits that comprise an individual's emotions, thoughts, and behaviors (Roberts et al., 2006). In this context, it is anticipated that significant relationships may exist between childhood traumas and dark triad personality traits. A study also found a higher prevalence of childhood traumas among individuals with dark triad traits (Jia et al., 2020). Therefore, investigating the relationship between maladaptive and socially undesirable dark triad personality traits and childhood traumas is believed to help identify risk factors associated with childhood traumas. It is known that individuals with dark triad traits are prone to manipulative, selfish, lacking empathy, and aggressive behaviors (Paulhus & Williams, 2002). Similarly, childhood traumas have been observed to play a significant role in the development of risky behaviors (Dubé et al., 2001). Understanding the relations between these two variables may contribute to the prevention of risky behaviors, reducing the effects of childhood traumas, and developing effective healing methods to manage the personality traits resulting from these traumas.

**Obsessive Beliefs**

Obsessive beliefs, a key variable in this study, are defined as dysfunctional cognitive biases that lead to intrusive thoughts, impulses, and misinterpretations (Briggs & Price, 2009). These beliefs encompass six distinct domains: 'inflated responsibility'; 'over-importance of thoughts'; 'excessive concern about the importance of controlling one's thoughts'; 'overestimation of threat and intolerance of uncertainty'; and 'perfectionism' (Frost et al., 1997; Konkan et al., 2012). In the existing literature, obsessive beliefs are examined in conjunction with their role in the development and persistence of obsessive and compulsive symptoms (Abramowitz et al., 2006; Barahmand et al., 2014; Briggs & Price, 2009; Tümkaya et al., 2015). Studies investigating the symptoms of Obsessive-Compulsive Disorder and obsessive beliefs have found a strong association between them, suggesting that dysfunctional beliefs play a significant role in the persistence of obsessive and compulsive symptoms (Konkan et al., 2012; Tümkaya et al., 2015). Moreover, research exploring the exclusive link between obsessive beliefs and Obsessive-Compulsive Disorder has revealed that certain obsessive beliefs, such as inflated personal responsibility and the overestimation of threat, are specifically associated with the disorder. However, other domains of obsessive beliefs, such as perfectionism and certainty, may also be relevant to other psychopathologies such as anxiety and depression (Purdon & Clark, 1993; Steketee et al., 2003; Shams & Milosevic, 2015; Tolin et al., 2003; Tolin et al., 2006).

It is known that childhood traumas have been linked not only with obsessive beliefs but also to self-blame, denial, and intrusive, recurrent thoughts (Janoff-Bulman, 1989). Therefore, it has been indicated that childhood traumas may play a role in negative cognitive processes related to obsessive beliefs (Briggs & Price, 2009;
It is stated that childhood traumas can lead to the development of obsessive beliefs. For instance, traumatic experiences during childhood may lay the foundation for obsessive beliefs such as feelings of insecurity, loss of control, and a search for order. Childhood traumas may also influence individuals' thoughts, behaviors, and emotional states, contributing to the emergence of obsessive beliefs (Selvi et al., 2012). Additionally, it is suggested that traumatic experiences in childhood may increase the risk of exhibiting obsessive thoughts and compulsive behaviors in adulthood and may be associated with dysfunctional obsessive beliefs and other psychopathologies such as anxiety and depression (Caspi et al., 2008; Çelikel & Beşiroğlu, 2008; Purdon & Clark, 1993; Semiz et al., 2014). Therefore, investigating the relationship between childhood traumas and obsessive beliefs is expected to contribute to a better understanding of individuals and the development of effective intervention methods. The information obtained regarding this relationship may be used in planning therapy processes and developing coping strategies for dealing with obsessive beliefs.

Based on the comprehensive information provided, it is evident that childhood traumas can have detrimental effects on various aspects of a child's development, including behavioral, social, cognitive, and emotional domains, which can extend into adulthood (Kendall-Tackett, 2002; Springer et al., 2007; Zhang et al., 2020). Therefore, it is crucial to examine and describe the relationship between the socially undesirable dark triad personality traits and childhood traumas, as this understanding can help mitigate negative outcomes that may arise in the future as a result of the interaction between these two variables. The findings in this area will also provide valuable guidance for psychological counseling services.

This study aims to investigate the relationship between childhood traumas, dark triad personality traits (Machiavellianism, narcissism, and psychopathy), and obsessive beliefs, as well as the potential mediating effect of these traits in the relationship between childhood traumas and obsessive beliefs among university students. With consideration of all the variables involved, the study seeks to address the following research questions:

**Research Questions:**

1. Is there a significant relationship between childhood traumas, dark triad personality traits, and obsessive beliefs?
2. Do childhood traumas, dark triad personality traits, and obsessive beliefs differ significantly by gender?
3. Do dark triad personality traits have a mediating effect on the relationship between childhood traumas and obsessive beliefs?

**Method**

The study employed the correlational survey model, which aims to determine the existence and degree of change between two or more variables (Karasar, 2016).

**Participants**

The convenience sampling method was used in the study (Büyüköztürk et al., 2013). Participation in the study was made on a voluntary basis, and consent forms were obtained from all participants before the procedure. Initially, 508 volunteers filled out the forms, and 28 volunteers were excluded from the analysis after single and multiple extreme value analyses. Consequently, the finalized sample of the study consisted of 480 volunteer
university students, of whom 306 were female (63.8%) and 174 were male (36.3%). Of the participants, 92.5% were between the ages of 18 and 24, and 7.5% were over 25 years old.

**Data Collection Tools**

*Childhood Trauma Questionnaire (CTQ)*

The Childhood Trauma Questionnaire developed by Bernstein et al. (1994) was used by the researchers to measure the participants’ childhood traumas. The scale offers separate scores for its three sub-dimensions, namely physical neglect and abuse, emotional neglect and abuse, and sexual abuse, in addition to a total score. In the original study, Cronbach's alpha internal consistency coefficients ranged from .79 to .94 (Bernstein et al., 1994). The adaptation of the study to Turkish was carried out by Aslan and Alparslan (1999), and in the study, Cronbach's alpha internal consistency coefficients were reported as .94 for physical neglect and abuse, .95 for emotional neglect and abuse, .94 for sexual abuse, and .96 for the overall scale (Aslan & Alparslan, 1999). In this study, the skewness and kurtosis values indicated that the scale was normally distributed (1.40, 1.52, respectively), and Cronbach's alpha internal consistency coefficient for all scale items was found to be .94. The Cronbach's alpha internal consistency values of the sub-dimensions of the scale were determined as .89 for physical abuse, .90 for emotional abuse, and .84 for sexual abuse.

*Short Dark Triad (SD3)*

The Short Dark Triad developed by Jones and Paulhus (2014) was used to measure the Dark Triad personality traits of the participants. The Short Dark Triad has three sub-dimensions, namely Machiavellianism, narcissism, and psychopathy. The Cronbach's alpha internal consistency coefficients of the original Brief Short Triad were found to be .77 for the Machiavellianism sub-dimension, .71 for the Narcissism sub-dimension, and .80 for the Psychopathy sub-dimension (Jones & Paulhus, 2014). The measurement tool was adapted to Turkish by Ermiş et al. (2018). The Cronbach's alpha internal consistency coefficients calculated in the Turkish adaptation study were .93 for the Machiavellianism dimension, .93 for the Narcissism dimension, and .91 for the Psychopathy dimension. In this study, the skewness and kurtosis values indicated that the Short Dark Triad was normally distributed (.02, .03, respectively) and was in the normal distribution range, and Cronbach's alpha internal consistency coefficient was .74. The reliability coefficients of the sub-dimensions of the scale (.72 for Machiavellianism and Narcissism, .78 for psychopathy) were found to be acceptable.

*Obsessional Beliefs Questionnaire (OBQ-44)*

Developed by the Obsessive-Compulsive Cognitions Working Group, this questionnaire was designed to measure dysfunctional beliefs considered important in the development and maintenance of obsessive-compulsive disorder (OCD). The sub-dimensions of the questionnaire have been determined as (1) responsibility/perception of danger; (2) perfectionism/certainty; and (3) caring/control of thoughts. The Cronbach's alpha internal consistency coefficient of the Obsessional Beliefs Questionnaire was found to be around .87 for the total and sub-dimensions (Steketee et al., 2001). The Turkish validity and reliability study of the scale was carried out by Boysan et al. (2010). The Cronbach's alpha internal consistency coefficient of the scale was reported as .95; the internal consistency coefficients of the sub-dimensions were reported as .88 for inflated responsibility/perception of danger, .88 for perfectionism/certainty, and .86 for caring/control of thoughts (Boysan et al., 2010). In this study, the skewness and kurtosis values indicated that the Obsessional Beliefs Scale was normally distributed (−.02, .20, respectively). The total internal consistency coefficient of the scale was found to be .92; the internal consistency coefficients of the sub-dimensions were reported as .85 for inflated responsibility/perception of danger and perfectionism/certainty and .86 for caring/control of thoughts.

**Ethics Committee Approval**

The experiment started with the permission of the Dicle University Ethics Committee, dated October 21, 2022, and numbered 376660.

**Data Analysis**

IBM SPSS-24 (Statistical Package for Social Sciences) package program and PROCESS Macro were used in the analysis of the collected data. In inter-group comparisons, an independent sample t-test was used to make comparisons between two parametric groups. The Pearson correlation coefficient was calculated to determine the relationships between the variables in the study. The mediator variable analyses were carried out using the
Bootstrap method proposed by Hayes (2013), which is also called "ordinary least squares regression". The bootstrap method is a widely used method as it allows one to identify the factors affecting the relationships between variables (Preacher & Hayes, 2008). Indeed, Hayes (2009) suggests that bootstrapping is a reliable, state-of-the-art method that can be used to estimate the direct and indirect effects of the mediation model. The bootstrap method is based on creating sub-samples from the data of the existing sample and comparing the resulting parameters with the results of the main sample. Accordingly, calculations regarding the mediating roles of dark triad personality traits in the relationship between childhood traumas and obsessional beliefs were performed using IBM SPSS 24.0 (Hayes, 2013) via PROCESS Macro. Data were analyzed at a 95% confidence interval, and p < .05 was used for statistical significance.

Findings

The data were analyzed using the SPSS-24 program. Since the skewness and kurtosis values of the scales used in the study for the collection of data were found to be ±1.5, thus showing a normal distribution, it was deemed appropriate to perform the analyzes with parametric tests (Fidell & Tabachnick, 2013).

Table 1. Descriptive Statistics and Correlation Analysis Findings

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<th>1</th>
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<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
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<tbody>
<tr>
<td>1. Machiavellianism</td>
<td>3.34</td>
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<td>1</td>
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<tr>
<td>2. Narcissism</td>
<td>3.00</td>
<td>.63</td>
<td>.14*</td>
<td></td>
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<td></td>
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<td></td>
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<td></td>
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<tr>
<td>3. Psychopathy</td>
<td>2.35</td>
<td>.67</td>
<td>.34*</td>
<td>.26*</td>
<td></td>
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<tr>
<td>4. Short Dark Triad</td>
<td>2.90</td>
<td>.46</td>
<td>.69**</td>
<td>.65**</td>
<td>.77**</td>
<td>1</td>
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<tr>
<td>5. Responsibility/Perception of Danger</td>
<td>4.33</td>
<td>1.00</td>
<td>.34**</td>
<td>.09*</td>
<td>.25**</td>
<td>.32**</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>6. Perfectionism/Certainty</td>
<td>4.57</td>
<td>.97</td>
<td>.30**</td>
<td>.05</td>
<td>.20**</td>
<td>.26**</td>
<td>.73**</td>
<td></td>
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<td>7. Caring/Control of thoughts</td>
<td>3.46</td>
<td>1.03</td>
<td>.25**</td>
<td>.03</td>
<td>.30**</td>
<td>.28**</td>
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<td>.55**</td>
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<tr>
<td>8. Total of Obsessive Beliefs</td>
<td>4.12</td>
<td>.88</td>
<td>.34**</td>
<td>.07</td>
<td>.29**</td>
<td>.33**</td>
<td>.91**</td>
<td>.86**</td>
<td>.85**</td>
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<tr>
<td>9. Emotional Neglect and Abuse</td>
<td>1.86</td>
<td>.57</td>
<td>.08</td>
<td>-.01</td>
<td>.25**</td>
<td>.16**</td>
<td>.10**</td>
<td>.04</td>
<td>.15**</td>
<td>.12**</td>
<td></td>
<td></td>
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<tr>
<td>10. Physical Neglect and Abuse</td>
<td>2.01</td>
<td>.65</td>
<td>.08</td>
<td>-.01</td>
<td>.24**</td>
<td>.16**</td>
<td>.14**</td>
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<td>.17**</td>
<td>.14**</td>
<td>.78**</td>
<td></td>
<td></td>
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<tr>
<td>11. Sexual Abuse</td>
<td>1.27</td>
<td>.60</td>
<td>.04</td>
<td>.04</td>
<td>.21**</td>
<td>.14**</td>
<td>.05</td>
<td>-.03</td>
<td>.10**</td>
<td>.05</td>
<td>.47**</td>
<td>.56**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. All Childhood Traumas</td>
<td>1.71</td>
<td>.52</td>
<td>.08</td>
<td>.01</td>
<td>.27**</td>
<td>.18**</td>
<td>.11**</td>
<td>.03</td>
<td>.17**</td>
<td>.12**</td>
<td>.88**</td>
<td>.90**</td>
<td>.78**</td>
<td></td>
</tr>
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</table>

*p < .05; **p < .01

According to the findings of the correlation analysis, it has been determined that childhood traumas are significantly and positively associated with both dark triad personality traits (r = .18**) and obsessive beliefs (r = .12**). When evaluated in the context of subscales, it has been found that childhood traumas are significantly and positively associated with psychopathy personality traits (r = .27**), as well as with the responsibility/perception of danger subscale (r = .11*) and the caring/control of thoughts subscale (r = .17**) of obsessive beliefs.

Table 2. Comparison of Dark Triad Personality Traits, Obsessional Beliefs, and Childhood Traumas by Gender

<table>
<thead>
<tr>
<th></th>
<th>Gender</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>SE</th>
<th>t</th>
<th>p</th>
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<tbody>
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<td>Machiavellianism</td>
<td>Female</td>
<td>306</td>
<td>3.30</td>
<td>.62</td>
<td>.035</td>
<td>1.847</td>
<td>.066</td>
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<tr>
<td></td>
<td>Male</td>
<td>174</td>
<td>3.41</td>
<td>.65</td>
<td>.049</td>
<td>1.873</td>
<td>.062</td>
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<tr>
<td>Narcissism</td>
<td>Female</td>
<td>306</td>
<td>3.01</td>
<td>.65</td>
<td>.037</td>
<td>-.691</td>
<td>.490</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>174</td>
<td>2.97</td>
<td>.59</td>
<td>.045</td>
<td>-.674</td>
<td>.500</td>
</tr>
<tr>
<td>Psychopathy</td>
<td>Female</td>
<td>306</td>
<td>2.25</td>
<td>.67</td>
<td>.038</td>
<td>4.128</td>
<td>.000*</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>174</td>
<td>2.51</td>
<td>.66</td>
<td>.049</td>
<td>4.105</td>
<td>.000*</td>
</tr>
<tr>
<td>Responsibility/ Perception of Danger</td>
<td>Female</td>
<td>306</td>
<td>68.3</td>
<td>15.9</td>
<td>.912</td>
<td>1.690</td>
<td>.092</td>
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<tr>
<td></td>
<td>Male</td>
<td>174</td>
<td>70.9</td>
<td>16.3</td>
<td>1.238</td>
<td>1.701</td>
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</tbody>
</table>
To seek answers to the third research question, an independent samples t-test analysis was performed to determine whether there were differences between genders in terms of the variables of dark triad personality traits, having obsessional beliefs, and being exposed to childhood traumas, and only the findings with a significant difference were reported (Table 2). Accordingly, in the psychopathy dimension of dark triad personality traits, male participants were found to have obtained significantly higher mean scores ($M = 2.51, SD = .66$) than female participants ($M = 2.25, SD = .67$).

Table 3: The Indirect Effects of Physical Neglect and Abuse on Obsessive Beliefs

<table>
<thead>
<tr>
<th>Indirect Effects</th>
<th>$\beta$</th>
<th>SE</th>
<th>%95 Confidence Interval</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Neglect and Abuse $\rightarrow$ Machiavellianism $\rightarrow$ Obsessive Beliefs</td>
<td>.09</td>
<td>.05</td>
<td>-.0036/ .0828</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Neglect and Abuse $\rightarrow$ Narcissism $\rightarrow$ Obsessive Beliefs</td>
<td>.01</td>
<td>.05</td>
<td>-.0092/ .0066</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Neglect and Abuse $\rightarrow$ Psychopathy $\rightarrow$ Obsessive Beliefs</td>
<td>.25</td>
<td>.05</td>
<td>.0284/ .1146</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to the findings obtained from the analysis conducted using the Process Macro program, it was found that the direct effect of physical neglect and abuse on obsessional beliefs was significant ($\beta = .22, SE = .06, t = 3.30, p < .01$). On the other hand, when Machiavellianism ($\beta = .09, SE = .05, %95 CI = -.00/.08$), narcissism ($\beta = .01, SE = .05, %95 CI = -.00/.00$) and psychopathy ($\beta = .25, SH = .05, %95 CI = .02/.11$) were included as mediating variables in the analysis, it was observed that only the indirect effect of psychopathy on obsessional beliefs was significant. Therefore, it was determined that psychopathy acts as a mediator in the relationship between physical neglect and abuse and obsessional beliefs.
Figure 2: The Mediating Role of Psychopathy in the Relationship between Physical Neglect and Abuse and Obsessive Beliefs

Note: *p<0.05, **p<0.01. 

- a: The direct effect of physical neglect and abuse (predictive variable) on psychopathy (mediator variable);
- b: The direct effect of psychopathy on obsessive beliefs (outcome variable);
- c': The direct effect of physical neglect and abuse on obsessive beliefs when controlling for psychopathy;
- ab: The indirect effect of physical neglect and abuse on obsessive beliefs when the mediator variable is added to the model.

Unstandardized B values are presented.

<table>
<thead>
<tr>
<th>Indirect Effects</th>
<th>β</th>
<th>SE</th>
<th>%95 CI Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional neglect and abuse → Machiavellianism → ⏤ Obsessive Beliefs</td>
<td>.09</td>
<td>.04</td>
<td>-.0001 / .0743</td>
</tr>
<tr>
<td>Emotional neglect and abuse → Narcissism → ⏤ Obsessive Beliefs</td>
<td>-.02</td>
<td>.04</td>
<td>-.0062 / .0074</td>
</tr>
<tr>
<td>Emotional neglect and abuse → Psychopathy → ⏤ Obsessive Beliefs</td>
<td>.26</td>
<td>.04</td>
<td>.0305 / .1112</td>
</tr>
</tbody>
</table>

According to the findings obtained from the analysis conducted using the Process Macro program, it was found that the direct effect of emotional neglect and abuse on obsessive beliefs was significant ($β = .16, SE = .06, t = 2.63, p < .05$). On the other hand, when Machiavellianism ($β = .09, SE = .04, %95 CI = -.00/0.07$), narcissism, ($β = -.02, SE = .04, %95 CI = -.00/0.00$) and psychopathy ($β = .26, SE = .04, %95 CI = .03/.11$) variables were included as mediating variables in the analysis, it was observed that only the indirect effect of psychopathy on obsessive beliefs was significant. Therefore, it was determined that psychopathy acts as a mediator in the relationship between emotional neglect and abuse and obsessive beliefs.
**Table 5: The Indirect Effects of Sexual Abuse on Obsessive Beliefs**

<table>
<thead>
<tr>
<th>Indirect Effects</th>
<th>β</th>
<th>SE</th>
<th>%95 Confidence Interval</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sexual Abuse → Machiavellianism → Obsessive Beliefs</td>
<td>.05</td>
<td>.04</td>
<td>-.0126</td>
<td>.0553</td>
<td></td>
</tr>
<tr>
<td>Sexual Abuse → Narcissism → Obsessive Beliefs</td>
<td>.05</td>
<td>.04</td>
<td>-.0120</td>
<td>.0059</td>
<td></td>
</tr>
<tr>
<td>Sexual Abuse → Psychopathy → Obsessive Beliefs</td>
<td>.21</td>
<td>.05</td>
<td>.0273</td>
<td>.1081</td>
<td></td>
</tr>
</tbody>
</table>

*p<05, **p<0.01

According to the findings obtained from the analysis conducted using the Process Macro program, it was found that the direct effect of emotional neglect and abuse on obsessive beliefs was significant (β = .07, SE = .06, t = 1.12, p<.01). On the other hand, when Machiavellianism (β = .05, SE = .04, %95 CI = -.01/.05), narcissism (β = .05, SE = .04, %95 CI = -.01/00), and psychopathy (β = .21, SE = .05, %95 CI = .02/.10) variables were included as mediating variables in the analysis, it was observed that only the indirect effect of psychopathy on obsessive beliefs was significant. Therefore, it was determined that psychopathy acts as a mediator in the relationship between sexual abuse and obsessive beliefs.
Discussion

This study investigated the relationships between childhood traumas, dark triad personality traits (Machiavellianism, narcissism, and psychopathy), and obsessional beliefs among university students. The findings revealed that childhood traumas are significantly and positively associated with both dark triad personality traits and obsessional beliefs. When examined in terms of sub-dimensions, it was found that childhood traumas were significantly and positively associated with psychopathic personality traits and the 'responsibility/perception of danger and 'caring/control of thoughts sub-dimensions of the obsessional beliefs questionnaire. Furthermore, the results of the mediation analysis demonstrated that psychopathic personality traits had a mediating effect on the relationship between the sub-dimensions of childhood traumas and obsessional beliefs.

The analysis examined whether there were significant variations in childhood traumas, dark triad personality traits, and obsessional beliefs based on gender. The results revealed that there was a significant difference between genders in terms of the psychopathy sub-dimension of the dark triad personality traits. Specifically, male participants obtained significantly higher scores in the psychopathy sub-dimension compared to female participants. These findings are concurrent with previous studies addressing gender differences in terms of the dark triad psychopathy sub-dimension and consistently demonstrating that the rate of psychopathy is higher in males than in females (Strand & Belfrage, 2005; Power & Oltmanns, 2012). Psychopathy is characterized by continuous antisocial behavior, aggression, and impulsivity. A relevant study found that psychopathy is a primary predictor of a lack of empathy within the dark triad personality sub-dimensions (Wai & Tiliopoulos, 2012). Additionally, some aggressive behaviors and a tendency to commit crimes are observed in individuals who display psychopathic personality traits (Muris et al., 2017). Existing literature has shown that aggression is higher in males (Camadan & Yazıcı, 2017; Grijalva et al., 2015; Strand & Belfrage, 2005). Societal expectations and norms contribute to the differential upbringing of males and females, with males being encouraged to exhibit leadership, competitiveness, and aggression. Women, on the other hand, are raised to be gentle and compassionate, making the display of aggressive behaviors by women appear atypical (Camadan & Yazıcı, 2017). Therefore, it can be argued that society perceives men expressing anger and engaging in aggressive behavior as more socially acceptable. The relevant literature shows that males get higher scores than females in all sub-dimensions of the dark triad (Jonason et al., 2010; Jonason & Davis, 2018; Strand & Belfrage, 2005). A meta-analysis conducted by Muris et al. (2017) further supports these findings, reporting that males scored
higher in all dark triad sub-dimensions than females. In light of this information, it is believed that these significant gender differences may be due to the gender roles that society imposes on both women and men.

The findings of the study revealed a positive and significant relationship between childhood traumas (physical abuse or neglect, emotional abuse or neglect, and sexual abuse) and dark triad personality traits. Accordingly, it can be suggested that individuals who have experienced childhood trauma have a higher tendency to exhibit dark triad personality traits. Kircaburun et al. (2019) conducted a study that revealed a link between emotional abuse as a form of childhood trauma and the emergence of dark triad personality traits, which, in turn, was associated with an increase in cyberbullying. Consistent with these findings, another recent study found that childhood traumas positively predicted bullying (Zhang et al., 2022). Bullying, characterized by interpersonal aggression and perpetrated by individuals on other individuals, can be considered a manifestation of the dark triad of personality traits. In a study, it was shown that dark triad personality traits are associated with aggression (Muris et al., 2017). In this sense, these findings, which reveal the relationship between childhood traumas and aggression, suggest that personality organization may also play a role in this association.

Another finding of the study was the significant positive relationships between childhood traumas and sub-dimensions of obsessive beliefs: responsibility, perception of danger, and caring or control of thoughts. According to this finding, abuse and neglect experienced by individuals in the past seem to increase the possibility of developing dysfunctional obsessive beliefs. This finding is consistent with previous research in the related literature (Briggs & Price, 2009; Ertacı, 2021; Salkovskis & Forrester, 2002). The way children are exposed to abuse and neglect may shape their experiences in life as well as their reactions, which may give rise to maladaptive patterns of thinking. Traumatic events may instill in individuals the belief that they have no control over their lives (Dube et al., 2005). Therefore, abused and/or neglected people may prioritize regaining the control they have lost as their primary concern. It can also be argued that these individuals' fear of losing control over their behaviors and thoughts triggers obsessive beliefs, causing stress and anxiety. Indeed, according to cognitive science, stressful life events trigger obsessions (Rachman & Stanley, 1998). Considering childhood traumas are an important source of stress, it can be argued that these traumas pave the way to obsessional beliefs. Parallel to this assumption, there is existing literature indicating that childhood traumas may have a crucial role in the emergence of obsessive-compulsive disorder and the transformation of thoughts into obsessions (Briggs & Price, 2009; Taylor, 2000). Childhood traumas affect the way individuals perceive the world and may lead to the adoption of unhealthy coping mechanisms (Gipple et al., 2006). They are known to have a significant role in the increase of individuals' perception of imminent threat, the emergence of feelings of guilt and shame, and the occurrence of recurrent thoughts (Webb et al., 2007). Therefore, it is thought that individuals may be more prone to developing dysfunctional thoughts as a means of coping with traumatic experiences. Obsessional beliefs also play a role in the development and maintenance of obsessive-compulsive disorder symptoms (e.g., Abramowitz et al., 2006; Barahmand et al., 2014). There are studies in the literature suggesting that childhood traumas positively predict obsessive-compulsive disorder. In these studies, participants who suffered from obsessive-compulsive disorder reported more childhood traumas than those who did not (Carpenter et al., 2011; Çelikel & Beşiroğlu, 2008; Lochner et al., 2002). Therefore, since childhood traumas exacerbate obsessive beliefs, it is thought that they may constitute a risk factor for the development of obsessive-compulsive disorder as well.

Based on the findings of this study, significant positive relationships were found between all sub-dimensions of the Childhood Trauma Questionnaire—emotional, physical, and sexual abuse—and psychopathy, which is one of the sub-dimensions of the dark triad. The results of the mediation analysis performed to better understand the nature of this relationship showed that the relationship between childhood traumas and obsessive beliefs was mediated by psychopathy, one of the sub-dimensions of the dark triad. This finding is consistent with those of the few similar studies available in the literature. For instance, a study carried out with the participation of juvenile delinquents concluded that emotional and physical abuse exacerbates psychopathic personality traits, and childhood traumas pose a risk for the emergence of these traits (Farina et al., 2018). In another recent study, a significant relationship was found between childhood traumas and dark triad personality traits (Merluşcă & Chiracu, 2018). A Turkish study concluded that there is a positive and significant relationship between childhood traumas and dark triad personality traits in university students (Erccion, 2020). The existing literature suggests that childhood traumas play a causal role in the emergence of psychopathic personality traits, which are manifested by behaviors such as aggression and anti-sociality (Graham et al., 2012; Schimmenti et al., 2015). Thus, the findings from this study align with the existing literature. It is thought that feelings such as guilt, shame, anger, and insecurity, which arise as a result of traumatic events experienced in childhood, negatively affect mental integrity as well as self-development and may play a role in the emergence of dark triad personality traits. Therefore, it can be argued that childhood traumas hinder personal development because of
the above-mentioned negative emotions, as well as push individuals towards developing dark triad personality traits.

Conclusion and Recommendations

Overall, this study has found a significant relationship between childhood traumas and dark triad personality traits, as well as obsessional beliefs. Furthermore, it has been revealed that psychopathy has a mediating effect on the relationship between childhood traumas and obsessional beliefs. Childhood traumas significantly impact an individual's life. Such traumas may yield adverse consequences in the long term in terms of cognitive, psychological, emotional, and personality development (Herrenkohl et al., 2013; Kendall-Tackett, 2002; Bellis et al., 2014; Xie et al., 2018). Considering the possible impacts of childhood traumas, which may lead to chronic issues in an individual's life, understanding the mechanisms with which childhood traumas may be associated may contribute to the development of preventive and protective interventions. Addressing the traumas children experience may enable the early treatment of potential psychological consequences and help prevent the emergence of such problems in adulthood. The findings of this study may serve as a guide for the individual and group counseling practices to be offered in the psychological counseling centers of the universities. It is recommended to provide preventive and protective interventions for individuals who are likely to have had childhood traumas (such as those who lost a parent, experienced poverty, etc.). Additionally, services should be provided for children who have been subjected to maltreatment and their families. Furthermore, it will be beneficial to carry out informative training programs on abuse and neglect within the scope of school psychological counseling services for parents whose children are at the primary, secondary, and high school levels. In addition, it is recommended that the subjects such as anger control and gender should be addressed by school counselors starting from primary school and secondary school levels by doing group work.

As is the case in this study as well, there are certain limitations. Further studies on the variables presented in this study conducted with a larger sample would provide more comprehensive information on the subject. The predominance of self-reported data collection tools pertaining to childhood traumas and other variables is based on the assumption that individuals respond objectively, free from self-bias and social desirability. However, it should be acknowledged that establishing universally applicable causal links is challenging due to the individual nature of childhood traumas. Cross-sectional studies may partially address this limitation, although their ability to establish causal relationships is limited. It is anticipated that investigating the long-term effects of childhood traumas in future studies and carrying out qualitative studies to examine in depth their relationships with different variables would make noteworthy contributions to the existing literature.

Conflicts of Interest

There is no conflict of interest in this study.

Ethics Committee Approval

This study was conducted based on the permission obtained from the Dicle University Ethics Committee dated 21.10.2022 and numbered 376660

References


