




Original Article

Modeling the dark personality traits according to childhood trauma: the mediating role of guilt sense and anxiety

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Abstract

Background: The dark aspects of personality, including the three traits of narcissism, antisocialism, and Machiavellianism were in the spotlight in the last decade. This study was aimed to modeling the prediction of dark personality traits according to childhood trauma with the mediating role of guilt sense and anxiety

Methods: This research was a correlational study and based on the structural equation modeling method. In the study, all students of the University in the academic year 2020-2021 were included, and 382 people were selected as convenience sampling. Here, the dark personality traits questionnaire, anxiety scale, guilt sense scale and childhood trauma questionnaire were used. Data analysis was performed using AMOS 18 software, correlation coefficient, factor analysis, and fit indices.

Results: The results indicated that the path of childhood trauma to dark personality traits is not significant. After examining the fit indices, guilt sense did not soundly play a mediating role in the correlation between childhood traumas and dark personality traits ($P=0.39$), while childhood traumas through anxiety had a significant indirect relationship with dark personality traits ($P<0.05$).

Conclusion: To reduce the effects of dark personality traits, attention should be paid to childhood traumas. Childhood traumas can increase dark personality traits in a person through the mediation of anxiety.

Keywords: anxiety; childhood trauma; personality traits; guilt.

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Introduction

In the last decade, we have seen a significant increase in those experimental researches that were dedicated to understand the dark side of personality (1). This research developed in a context in which there was no clear consensus about the number and nature of personality aspects that should be considered dark (2). According to the first scientific works in this field (3), Researchers believe that dark aspects of

personality are socially disturbing and are associated with destructive behaviors such as aggression and interpersonal problems; For example, specific dark traits of personality have been associated with perpetration of sexual violence (2, 4).

The three traits of the dark personality as an influential variable in the personal and social spheres have attracted the attention of researchers. The first element of

darkness personality traits is narcissism, which refers to exaggerated feelings of arrogance, pride, self-absorption, and entitlement. Narcissism interferes with different aspects of interpersonal functioning, as others resent the narcissist's exploitative, self-centered, and grandiose tendencies (5). Anti-sociality is also the most dangerous trait in the set of dark personality traits (6), and is characterized by traits such as impulsivity, sensation seeking, callousness, arrogance, and interpersonal aggression (7). The third element of darkness personality traits is Machiavellianism, which is named after the thoughts of Nicola Machiavelli. Machiavellianism reflects a highly selfish orientation in which a person tends to achieve his goals by any means such as deception, fraud, and exploitation (8, 9). What emerges from these traits is that it causes great damage in relationships.

Due to dark personality traits, there is a possibility that they are related to psychological factors such as childhood trauma, guilt sense and anxiety. Childhood trauma is one of the fundamental and effective factors in the incidence of mental disorders. Childhood trauma is divided into different types, the most important of which are physical, emotional, and sexual abuses, and physical neglect (10). Abuse of children is a prevalent international problem and its consecutions are varied (11). Griffin and Amodeo showed that one out of every 43 American children is a victim of physical abuse, especially in the first week of life. In addition, approximately 500 children in each age group have become victims of their parents' abusive behavior (12).

Another variable that has been investigated in this research is Feelings of guilt. Feelings of guilt are among the self-conscious moral emotions that occur after a moral error and have a special function at the individual and communication levels. Because in the guilt sense "self" is involved in evaluation; guilt

sense is a self-conscious emotion and since these emotions play an important role in developing moral behavior, they are included among moral emotions (13). In general, guilt sense is considered one of the types of negative emotions, which is accompanied by self-blame and the desire for punishment (14). In Lafon's opinion, anxiety is generally an annoying expectation and represents something that may happen in a wide and overwhelming and often nameless tension. In a general summary, anxiety can be defined as a painful feeling associated with a current traumatic situation or with the expectation of danger that is related to an uncertain object (15). Misbehavior includes both committing specific behaviors such as emotional misbehavior and refusing to perform certain behaviors such as neglect, which leads to emotions such as anxiety and depression (16). It has been shown that a important association between childhood trauma and emotional disorders (depression, anxiety, hopelessness and loneliness), cognitive, dissociative, interpersonal and the severity of all symptoms of borderline personality disorder (BPD) (17). Jiang et al. (18) and as well, Steele et al. (19) found that dark personality traits were influenced by childhood trauma, guilt sense, and anxiety. Due to the fact that dark personality traits cause much psychological harm in a person, it is very important to investigate the factors related to and affecting them. Also the review of research literature shows that so far no practical model has been presented regarding the mediating role of guilt sense and anxiety in the correlation between childhood trauma and dark personality traits. Therefore, considering the essential role of childhood traumas in the occurrence of psychological and emotional symptoms such as guilt sense and anxiety (As shown in Figure 1); This study with the aim of to model the prediction of dark personality traits based on childhood traumas with the mediation of guilt sense and anxiety.

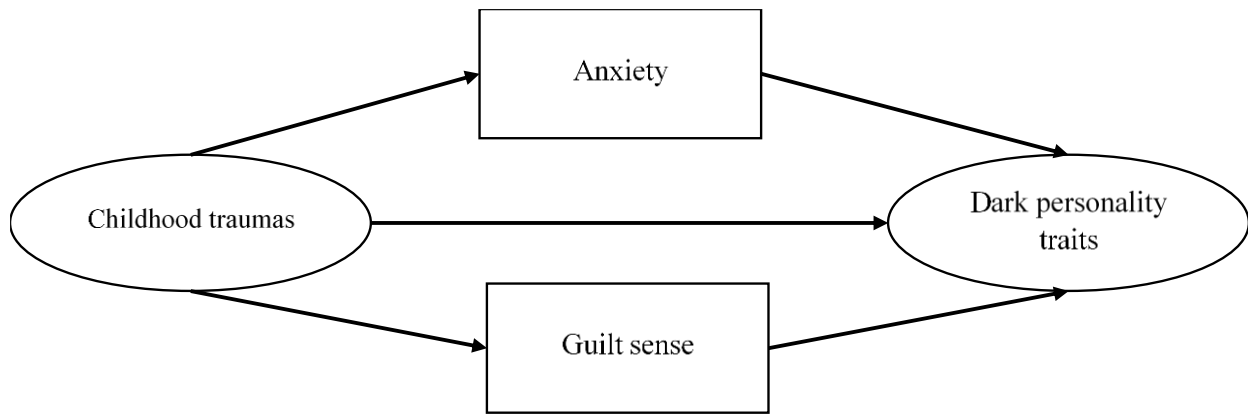


Figure 1. The research hypothesis and the relationships between variables

Methods

The present research was of the correlation type and structural equation modeling (SEM) was used according to the objectives. The statistical population of this study included 6550 students of the Islamic Azad University, Science and Research Branch of Tehran in 2020-2021. According to Cochran's formula, 382 people were selected using the convenience sampling and were included in the study. The criteria for entering this research were being at least eighteen years old and not having a history of taking psychiatric drugs. The exclusion criteria were included incomplete answers to the questionnaires and refusal to answer.

In order to collect information from the research samples, first the necessary permission was obtained from the university and the necessary coordination with the university officials was done by the researcher. Then, in order to pay attention to ethical considerations, the necessary training was given to the participants and People were assured that the information would remain confidential. Informed written consent was gotten from the participants. Then the questionnaires were given to people and they were requested to complete the questionnaires. Also, demographic information including gender and education was collected.

Dark personality traits questionnaire: This instrument was produced by Jennison and

Webster in 2010 to measure dark personality traits (20). Dark personality traits have 12 items in a seven-point Likert scale from strongly disagree = 1 to strongly agree = 7. In this questionnaire, each of the three dark personality traits is measured by four items. Jonason and Webster obtained the test-retest reliability coefficient for the whole scale as well as the subscales in the range of 0.76 to 0.87 and showed that this instrument has acceptable validity and reliability (20). In Iran, Yousefi and Piri examined the psychometric properties of it and the retest coefficient of the questionnaire was 0.75 for the entire scale and 0.79 for the components of narcissism, Machiavellianism 0.80, and antisociality 0.66 (21). In the present study, Cronbach's alpha of the scale was calculated as 0.87.

Guilt sense scale: Guilt sense scale was designed by Mosher (2008), includes 50 questions and is graded on a six-point Likert scale (completely agree to completely disagree). The validity of the scale was confirmed in Mosher's research and the reliability of 0.84 was reported by Cronbach's alpha method (22). Teimourpour et al. (23) obtained the Cronbach's alpha coefficient of this questionnaire as 0.87. Here, Cronbach's alpha of the questionnaire was also calculated as 0.89.

Anxiety scale: To measure anxiety, Lovibond and Lovibond (1995) anxiety and stress scale was used. Its original form has

42 statements that evaluate each of the psychological symptoms (depression, anxiety and stress) with 14 different statements. Lovibond and Lovibond also showed that the retest validity for the anxiety scale is 0.79, respectively (24). For the validity of this scale, the correlation coefficients with Beck's anxiety and depression questionnaires were obtained as 0.81 and 0.74, respectively. The anxiety subscale consists of 14 questions, the final score of each of which is obtained from the sum of the scores of the corresponding questions. Each item is scored from 0 never to 3 always. Moghadam et al., offered the Cronbach's alpha of the questionnaire as 0.71 (25). Cronbach's alpha of this scale in the current study was obtained as 0.91.

Childhood trauma questionnaire (CTQ): This questionnaire was developed by Bernstein et al. (1994) and its final version of 28 items was presented in 1998. The items are replied on a five points Likert scale from never to always, and measure five subscales physical abuse, emotional abuse, emotional neglect, physical neglect, and sexual abuse. The reliability of CTQ was obtained by Cronbach's alpha test and retest in the range of 0.94-0.79 (26). The reliability and validity of the Persian language of this questionnaire was investigated by Ebrahimi et al. and were reported Cronbach's alpha from 0.81 to 0.98 (27). In this study, Cronbach's alpha of CTQ was calculated as 0.88.

The analysis of collected data was done with the help of inferential statistics of correlation, regression and SEM using SPSS version 21 and AMOS software version 18.

Results

In this research, 218 (56.91%) subjects were women and 165 (43.09%) were men. 65 (16.97%) undergraduates, 239 (62.40%) master's degrees, and 79 (20.62%) PhDs were the research samples. According to table 1, the maximum and minimum averages were related to guilt sense and sexual abuse, respectively. Also, the skewness and elongation of the research variables and subscales were in the normal range. First, the relationships between the subscales, and then the measurement models of the latent variables and their fit were examined. Lastly, the final model was fitted and the paths between the constructs were provided.

Table 2 shows the correlation between childhood trauma subscales and dark personality traits. According to the results, there is the highest relationship between emotional abuse subscale and anti-social personality trait.

Figure 2 shows the final fitted model of the main and mediating hypotheses. In the following, its coefficients and fit indices are revealed. Table 4 presents the coefficients and indices of the paths between the variables according to the assumed model.

Table 1. Descriptive statistics of research variables

Variable		Mean	Standard Deviation	Skewness	Elongation
Childhood trauma	Physical abuse	2.14	2.54	0.43	0.65
	Emotional abuse	1.32	1.32	0.76	1.04
	Emotional neglect	2.76	2.67	-1.11	0.49
	Physical neglect	2.75	4.41	0.32	0.07
	Sexual abuse	1.05	1.42	0.87	0.04
Dark personality traits	Narcissism	5.60	1.11	-0.01	-0.33
	Machiavellianism	4.96	1.7	0.23	0.88
	Anti-social	3.27	0.39	0.64	0.09
Anxiety		23.22	3.67	0.65	0.78
Guilt sense		125.43	8.75	1.12	-0.77

Table 3. Investigation of direct and indirect effects of research variables

Path	Coefficient	S.E.	C.R.	P-value
Childhood trauma → Anxiety	0.38	0.09	4.22	0.018
Childhood trauma → Guilt sense	0.49	0.035	12.56	0.0001
Anxiety → Dark personality traits	0.49	0.11	4.45	0.013
Childhood trauma → Dark personality traits	0.107	0.142	0.751	0.453

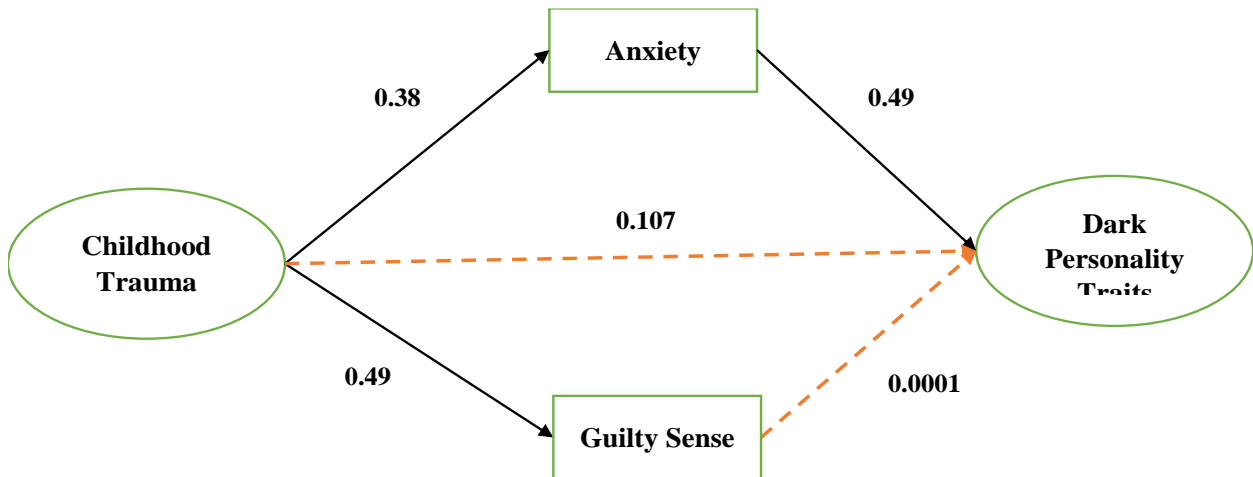


Figure 3. The fitted SEM along with standardized path coefficients

Discussion

The purpose of this research was to model dark personality traits according to childhood traumas with the mediating role of guilt sense and anxiety, and research hypothesis 1 was that guilt sense mediates correlation between childhood trauma and dark personality traits. The findings of the study indicated that guilt sense did not play a mediating role in the correlation between childhood trauma and dark personality traits, which was consistent with the results of Jiang et al. (18). They investigated direct and indirect connections between childhood trauma and self-dehumanization through dark personality traits in adolescents. Machiavellianism and antisocial traits partially arbitrated the correlation between childhood trauma and dehumanization with others, while the foretelling effect of narcissism was not significant for dehumanization, In explaining this finding, it can be said that

guilt sense alone is not effective in the dynamics of turning childhood trauma into dark traits (28), and there are probably other dynamics in relationships that have not been seen in the present study. Another result of the current research is that guilt sense directly affects dark personality traits, This finding was consistent with Peng et al.'s results (16). They investigated the role of mediator of insecure attachment and emotion dysregulation between childhood trauma and abnormal personality symptoms. The results showed the mediating path of damage to insecure style and abnormal personality symptoms to be significant. Guilt sense is one of the self-conscious moral emotions that occur after a moral error. Guilt sense is a self-conscious emotion and since these emotions play an important role in developing moral behavior, they are included among moral emotions.

Table 4. Model fit indices

Model	CMIN	DF	CMIN/DF	P	CFI	RMSEA	GFI	NFI	IFI
Amount	123.195	60	2.05	0.001	0.92	0.024	0.912	0.922	0.954

It seems that according to the findings, people who lack such moral feeling in interpersonal relationships, others have no value for them, and they are the center of their own relationships, and it provides the causes of self-infatuation, which are considered dark personality traits (27).

Also, the results of the present study revealed that anxiety directly affects dark personality traits. Furthermore, anxiety mediated the correlation between childhood trauma and dark personality traits. This finding confirmed the results of Jafari et al. (29). Also, this research was consistent with the study of Farrokhzadian et al., (30) that found childhood injuries have a significant relationship with the emotional symptoms of depression and anxiety. In explaining this finding, it can be said that in the form of psychoanalytical theories, anxiety plays a key role in the occurrence of mental disorders. Childhood trauma can also cause lasting stress and anxiety in a person (31). Therefore, it can be said that anxiety, in turn, plays a role in the formation of dark personality traits. According to psychoanalytical theories, anxiety has been introduced as a warning to the ego that informs the pressure of an unacceptable driver for conscious pretense and imitation. Anxiety, as a warning, stimulates the ego to take defensive actions against internal pressures (15). If this warning is not taken seriously, it will eventually lead to the ineffectiveness of psychological defenses and weakening of the ego structure, and finally, it will create interpersonal flaws in relationships in the form of dark personality traits. Freud believed that anxiety is the starting point, and guilt sense is the second feeling that is experienced, and finally, shame is the end point of the path (32). It seems that the sequence of this process provides the basis for the formation of dark traits.

This study had limitations such as: the impossibility of participation of all students in the research and also the limited samples of present research, which may limit the

generalizability of the results. Since this research was unique to Islamic Azad University, Science and Research Branch of Tehran, it is suggested that this research be done in other similar societies as well. In addition, it is recommended to improve the reduction of the effects of dark personality traits, the necessary trainings regarding childhood trauma and anxiety control should be provided.

Conclusion

According to the results, childhood traumas can affect dark personality traits by increasing the level of anxiety, so in order to reduce the destructive effects of dark personality traits, attention should be paid to the anxiety resulting from childhood traumas. Also, childhood traumas cause it increases the feeling of guilt in a person, in order to reduce the destructive effects of guilt, attention should be paid to childhood injuries.

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Author's contribution

Study conception and design: Jahangiri Kalestan Z and Salahian A; data collection: Jahangiri Kalestan Z; analysis and interpretation of results: Nasrollahi B; draft manuscript preparation: Jahangiri Kalestan Z and Salahian A. All authors approved the final version of the manuscript.

Ethical considerations

This article is taken from the doctoral thesis with the code 4007 approved by the Islamic Azad University, Science and Research Branch, with the ethics committee code SRIAU.149.23.

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Conflicts of interest

The authors of this article stated that there is no conflict of interests.

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