

## Mediating Role of Mentalization in the Relationship between Childhood Adversity and Dark Triad Personality

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This study investigates the mediating role of mentalization in the relationship between traumatic adversity and dark triad personality by developing a structural equation model (SEM). The statistical population consisted of 24-45 years old male and female students of the Islamic Azad University, South Tehran Branch of which 250 students (146 females and 104 males) were selected by using the convenience sampling method in 2021. The Dark Triad Dozen Dirty Scale (DTDD), the Reflective Functioning Questionnaire (RFQ) and the Childhood Trauma Questionnaire (CTQ) were used. Correlation coefficients were -.15, .34, and -.29 respectively between childhood adversity and mentalization, childhood adversity and dark triad personality and mentalization and dark triad personality. Mentalization significantly mediated the relationship between childhood adversity and dark triad personality. These findings can lead to a possible conclusion which states children who are exposed to traumatic experiences during their childhood period may encounter decreased mentalization which in turn may increase the occurrence rate of dark triad personality among them.

*Keywords:* Mentalization, Childhood Adversity, Dark Triad Personality

After years of studying mostly positive or neutral personality traits, such as the Big Five personality factors, researchers have shifted their attention to the dark side of personality. The last decades of psychology have seen a huge wave of empirical research to understand the dark side of personality (Zeigler-Hill & Marcus, 2016). Paulhus and Williams (2002) clearly define the characteristics of some personality traits that are annoying but are still within the normal functional range. Among these, three variables stand out the most, which make up the dark triad personality: Machiavellianism, Narcissism and Psychopathy.

The dark triad personality traits do not represent a kind of dark personality, but indicates the dark side of the human personality. In this regard, these variables are measured and examined at the subclinical level. In this study, following Furnham, Richards and Paulhus (2013), we used both clinical and subclinical populations as follows: The clinical population included individuals who were currently under clinical or forensic supervision, and the subclinical population referred to a wider groups of people in the Persian-speaking society who did not meet the two above conditions, meaning that dark triad personality traits in them were not severe enough to require clinical or forensic attention, and therefore, they could adapt to the everyday job and education system in a wide range of relationships. However, normal individuals with dark triad personality traits exhibited higher levels of antisocial and immoral behavior compared to the normal population (Sijtsema, Garofalo & Jansen, 2019). Like other personality phenomena, the role

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of childhood and parents is prominent when we go back to the roots of this dark triad personality.

Poor parenting is likely to increase the manifestations of anxious attachment in children. Furthermore, the experience of childhood trauma increases anxious attachment and decreases self-control in victims, and these two adverse childhood events affect the manifestations of dark triad personality (Stead, 2012). Some researchers have pointed to the mediating role of mentalization in how these traumatic events lead to the formation of dark traits (Taubner & Curth, 2013).

Mentalization refers to the individuals' capacity to understand themselves and others in terms of mental states and overlaps with the concept of empathy (Steinmair, Ritscher & Liffler-Stastka, 2020). Individuals with antisocial personality traits have difficulty mentalizing about themselves and others, especially in empathetic understanding of others (Bateman, Bolton & Fonagy, 2013).

Antisocial personality has been introduced at the clinical level by the 5<sup>th</sup> edition of the diagnostic and statistical manual of mental disorders (American psychological association, 2013), which defines the main characteristics of an antisocial personality as the lack of empathy, exploitation and violation of the rights of others. In contrast, at a subclinical level, a concept has recently come to the fore which is called "dark triad personality" and includes the three personality traits of Machiavellianism, narcissism, and psychopathy (Paulhus & Williams, 2002).

Machiavellianism is a personality construct characterized by behaviors of deception and abuse of others, the lack of empathy and a pessimistic view of the human nature. In fact, these people abuse others in various ways to achieve their desires, believing that the goal justifies the means (Chiesa & Fonagy, 2014).

Narcissism, also, is a construct that can be defined at both clinical and subclinical levels. According to the recent studies at the clinical or pathological level, two types of narcissism have been proposed including: grandiose narcissism and vulnerable narcissism (Wright & Edershile, 2018; Miler, Lynam, Hyatt & Campbell, 2017; Pincus, Cain & Wright, 2014).

Central personality elements for subclinical concept of psychopathy also include high impulsiveness and sensation-seeking along with low

anxiety and empathy (Heer, 1985, cited in Paulhus & Williams, 2002). The differences between clinical and subclinical psychopathy is not in the type of behavior, emotions and interpersonal relationships, but in the degree, extent and frequency of those behaviors and cognitions. They maintain their mediocre performance, and their behavioral abnormalities do not usually lead to criminal offenses (Lebreton, Binning & Adorno, 2006). Despite the fundamental differences among the three dark triad personality traits, individuals with all three express a kind of psychopathic personality together with behavioral tendencies toward self-promotion, emotional coldness, hypocrisy and dominance-seeking (Paulhus & Williams, 2002).

Although the exact causes of anti-social and psychopathic personality traits are still debated by experts, the role of childhood experiences in the background of anti-social and psychopathic personality is undeniable. Childhood experiences, especially experiences of abuse, play an important role in the development of personality disorder symptoms (Karakus, 2012). Decades of research have clearly shown that childhood trauma can have subsequent destructive effects such as antisocial behavior in late adolescence and adulthood (Yazgan et al., 2020). More severe childhood traumas are associated with the diagnosis of antisocial personality disorder. Physical abuse is associated with symptoms of antisocial personality and sexual abuse is associated with lifetime diagnosis of this disorder (Delisi, Drury & Elbert, 2019). In a research by Jia, Wang and Lin (2020), findings suggested that childhood neglect is associated with dark personality traits that in turn lead to a kind of malevolent creativity in behaviors damaging others. Moreover, the studies conducted by Badbereh and Zeinali (2016) demonstrated that there is a significant positive relationship between emotional abuse in childhood and dark personality traits of university students. The quality of parent-child care is one of the factors that affect the formation of the dark triad personality. Machiavellianism is the most susceptible to being influenced by parental care and poor-quality or disorganized attachment patterns. The low quality of parental care for narcissism and psychopathy has limited effects on the elements of each of these characteristics. Path modeling suggests that the quality of parental care leads to attachment patterns that can result in different

aspects of the dark triad personality (Jonason, Lyons & Bethell, 2014).

Despite the diverse and arbitrary measurement approaches, different approaches have yielded the same result: more stressful experiences will lead to worse outcomes in terms of antisocial behavior. However, the evolutionary paths that link these experiences to antisocial behaviors are unclear (Yazgan et al., 2020). In this respect, many studies have pointed to the mediating and effective role of mentalization capacity in the relationship between traumatic childhood experiences and antisocial traits (Taubner, Zimmermann, Zemberg & Schroder, 2016; Taubner & Curth, 2013). Luyten, Campbell, Allison and Fonagy (2020) believe that mentalization is a meta-diagnostic and transtheoretical concept useful for explaining and treating psychopathology. Mentalization is defined as the implicit (involuntary) or intentional (voluntary) perception or interpretation of the individual's or others' actions in the form of intentional behavior through psychological states or processes (Fonagy, Gergely, Jurist & Target, 2002). People with a long history of intense arousal, such as what may occur in traumatic experiences in early childhood, are more likely to become sensitive meaning that their threshold for mentalization capacity decreases (Mayes, 2000). In other words, there are more probability for arousal and less possibility for mentalization in these situations. Another study indicated that excessive mentalization mediates the relationship between trauma and violence (Abate, Marshal, Sharp & Venta, 2017). According to Fonagy and Chiesa (2014) childhood traumas predict low levels of mentalization which in turn is associated with the subsequent onset of personality disorders.

This study seeks to investigate whether mentalization plays a mediating role in the relationship between childhood adversity and the emergence of dark personality traits.

## Method

### Participants

The statistical population consisted of male and female students of the Azad University, South Tehran Branch in 2021. With a correlational design,  $\alpha = .05$  (two-tailed),  $df = 129$ , and two predictor variables, 132 participants were needed to detect a

small effect ( $f^2 \geq 0.1$ ) in 95% of the cases (Faul, Erdfelder, Lang, & Buchner, 2007). However, the authors included 250 participants in this study who were selected by using convenience sampling method.

### Measurement Instruments

*The Dark Triad Dirty Dozen Scale (DTDD)*. The 12-item DTDD scale was developed by Jonason and Webster (2010) as a short scale for dark triad personality traits. Items are rated on a 5-point Likert scale (Very Low= 1 to Very High= 5). Narcissism is measured by items 1 through 4, Machiavellianism by items 5 through 8, and psychopathy by items 9 through 12. The internal consistencies according to Jonason and Webster's (2010) two separate samples were found to be 0.85 and 0.87 narcissistic traits, 0.67 and 0.72 for Machiavellianism, and finally 0.62 and 0.66 for psychopathy. Concurrent and convergent validities ranged from 0.34 to 0.76 (Jonason, Lee & Sizarna, 2013; Ratman & Kular, 2013). Yousefi and Piri (2016) studied the psychometric properties of the Persian version of the DTDD scale and found that the test-retest reliabilities for the whole scale as well as the subscales ranged from 0.66 to 0.88. In addition, the internal consistencies of the subscales (by using Cronbach's alpha) were between 0.68 and 0.77. In the present study, Cronbach's alpha values ranged between 0.71 for psychopathy to 0.84 for Machiavellianism subscales.

*Reflective Functioning Questionnaire (RFQ)*. Fonagy et al. (2016) have designed RFQ in three different versions including: 26-item, 46-item and 8-item forms to assess the concept of mentalization. The 8-item form was used in this study in which the responses were rated on a 7-point Likert scale ranging from strongly disagree (1) to strongly agree (7).

Internal consistencies were found to be 0.77 and 0.65 respectively for uncertainty about internal states and certainty about internal states subscales in the clinical sample and 0.63 and 0.67 in the non-clinical sample. The test-retest reliability with three-week interval was found to be 0.84 for uncertainty subscale and 0.75 for certainty subscale. Validation and reliability examination of RFQ on a Persian speaking, Iranian sample by Doroudgar, Fathi-Ashtiani and Ashrafi (2020) found a Cronbach's alpha of 0.88 for certainty and 0.66 for uncertainty

subscales. In the present study test-retest reliabilities for the 8-item form was found to be 0.78 for uncertainty and 0.81 for certainty subscales. The validity was also confirmed in Iran by measuring the relationship between the 8-item RFQ and other related tools (see Mousavi, Vahidi, Qanbari, Khoshrou & Sakaki, 2021). Cronbach's alpha for the total scale of mentalization was 0.79 in this study.

*Childhood Trauma Questionnaire (CTQ)*. The CTQ was first developed by Bernstein et al. (2003) to evaluate the childhood trauma. The CTQ is a screening tool for those with experiences of childhood abuse and neglect and can be used for both adults and adolescents. The questionnaire contains 28 items, of which 25 items are used to assess main components of childhood trauma and the other 3 items are used to identify those respondents who deny their childhood adversities. Items are rated on a 5-point Likert scale ranging from never= 0 through always= 4. CTQ has 5 separate subscales including emotional abuse, physical abuse, sexual abuse, emotional neglect and physical neglect. The total score for each subscale can range from 5 to 25 and the total score for entire questionnaire can range from 25 to 125. Items 10, 16, and 22 are intended to assess the validity of the responses or the denial of one's childhood adversities. Therefore, if the total score for these three items is higher than 12, the individual's answers are regarded as invalid. Items 2, 5, 7, 13, 19, 26, and 28 are reverse scored.

Bernstein et al. (2003) reported Cronbach's alphas on a sample of adolescents to be 0.87, 0.86, 0.95, 0.89 and 0.78 respectively for emotional abuse, physical abuse, sexual abuse, emotional neglect and physical neglect. Additionally, the concurrent validity with therapists' ratings of childhood adversity, ranged from 0.59 to 0.78. The item-total correlations ranged from 0.813 to 0.977 in a psychometric study by Ebrahimi, Dezhkam and Yousefi (2013) in Iran. Cronbach's alphas ranged from 0.71 to 0.90 in the current study.

## Procedures

The current research was a descriptive and correlational study. Online questionnaires were electronically placed on Porsline website, and a link to the questionnaires was sent to the participants via

WhatsApp or Instagram. Before responding, participants were provided with explanations regarding study objectives, voluntary participation in the study, and the confidentiality of their personal data so that entering the response page required the confirmation of the above informed consent by the participants. Respondents participated in the study anonymously, and it was possible to go to the next question only after answering the previous question, so that no item was left unanswered.

## Data Analysis

Data were analyzed by using IBM SPSS 26 and LISREL software. The associations between variables were examined by the Pearson product moment correlation and the proposed model was tested using structural equation modeling (SEM).

## Results

Table 1 shows means and standard deviations for the subscales as well as the total scales of childhood trauma, dark triad personality, and the mentalization variables in this study.

**Table 1**  
*Descriptive Statistics*

Variables	Mean	SD
Emotional abuse	8.47	3.65
Physical abuse	5.24	2.51
Sexual abuse	6.24	3.14
Emotional neglect	11.37	4.69
Physical neglect	5.25	2.39
Childhood trauma (total)	36.57	12.28
Narcissism	6.80	2.12
Machiavellianism	6.70	3.29
Psychopathy	6.49	2.53
Dark triad personality (total)	20.99	5.93
Mentalization	23.51	7.83

Pearson correlation tests (see Table 2 below) revealed that there are several significant correlations among different dimensions of dark triad personality, childhood trauma, and mentalization. Interestingly, the directions of the relations were positive between dark triad personality and childhood trauma, and negative between dark triad personality and mentalization.

**Table 2**  
*Correlation Matrix for Main Variables in the Study*

Variables	1	2	3	4	5	6	7	8	9	10	11
1.Emotional Abuse	<u>1</u>										
2.Physical Abuse	0.58**	<u>1</u>									
3.Sexual Abuse	0.34**	0.26**	<u>1</u>								
4.Emotional Neglect	0.62**	0.40**	0.16**	<u>1</u>							
5.Physical Neglect	0.59**	0.40**	0.31**	0.69**	<u>1</u>						
6.Childhood Trauma	0.86**	0.67**	0.53**	0.83**	0.80**	<u>1</u>					
7.Mentalization	-0.18**	-0.04	-0.14*	-0.09	-0.09	-0.15*	<u>1</u>				
8.Narcissism	0.19**	0.12	0.16**	0.19**	0.11	0.22**	-0.25**	<u>1</u>			
9.Machiavellianism	0.20**	0.13*	0.13*	0.18**	0.28**	0.24**	-0.23**	0.32**	<u>1</u>		
10.Psychopathy	0.26**	0.17**	0.14*	0.23**	0.27**	0.29**	-0.18**	0.18**	0.42**	<u>1</u>	
11.Dark Triad Personality	0.29**	0.19**	0.19**	0.27**	0.31**	0.34**	-0.29**	0.61**	0.85**	0.72**	<u>1</u>

Note: \* = P ≤ 0.05    \*\* = P ≤ 0.01

**Table 3**  
*Results of Confirmatory Factor Analysis of Childhood Trauma Components*

Components	Item No.	Loadings	AVE	Composite Reliability	Cronbach's Alpha
Emotional Abuse	3	0.49	0.39	0.76	0.75
	8	0.61			
	14	0.66			
	18	0.81			
	25	0.52			
Physical Abuse	9	0.75	0.58	0.84	0.83
	11	0.69			
	12	0.83			
	17	0.76			
Sexual Abuse	20	0.73	0.68	0.89	0.90
	23	0.66			
	24	0.96			
	27	0.92			
Emotional Neglect	5	0.55	0.52	0.84	0.84
	7	0.61			
	13	0.85			
	19	0.81			
	28	0.74			
Physical Neglect	2	0.58	0.38	0.73	0.71
	4	0.71			
	26	0.56			

Note: AVE = Average Variance Explained; All the factor loadings were significant at 95% confidence level (all *p*'s < 0.05) and (all *T* values > 1.96)

**Table 4**  
*Results of Structural Equation Modeling*

Paths	Standardized Coefficients	T-Values	P-Values	Result
<i>Direct Paths</i>				
Childhood Trauma -> Mentalization	-0.16	2.61	<0.05	Confirmed
Childhood Trauma -> Dark Triad Personality	0.35	5.12	<0.001	Confirmed
Mentalization -> Dark Triad Personality	-0.39	6.09	<0.001	Confirmed
<i>Indirect Path</i>				
Childhood Trauma -> Mentalization -> Dark Triad Personality	0.062	--	<0.05	Confirmed

Table 3 shows the results of confirmatory factor analysis. Results indicate that a five-factor measurement model for childhood trauma is a good fit with factor loadings ranged from .49 to .96 all of which were statistically significant at .05 level. Table 3 also shows the composite reliabilities and the Cronbach's alphas for all the five dimensions of childhood trauma.

SEM results (see Table 4) demonstrated that childhood trauma can significantly and negatively predict mentalization ( $P < 0.05$ ;  $\hat{\beta} = -.16$ ). Childhood trauma significantly and positively predicted the dark triad personality traits ( $p < 0.05$ ;  $\hat{\beta} = .35$ ). And finally, childhood trauma could indirectly predict dark triad personality traits through decreased mentalization as a mediator ( $p < 0.05$ ;  $\hat{\beta} = .062$ ). Therefore, the results indicated that mentalization can significantly mediate the relationship between childhood trauma and dark triad personality traits ( $p < 0.05$ ).

## Discussion

The aim of this study was to investigate the mediating role of mentalization in the relationship between childhood trauma and dark triad personality. Results indicated that there is a significant positive relationship all different components of childhood trauma and dark triad personality. This is consistent with several studies (e.g., Voestermans et al., 2020; Lobbestael, Arntz and Bernstein, 2010; Berthelot, Talmon and Gross, 2020; Breshnikov et al., 2017; and Badbereh and Zeinali, 2015) which suggest children who had been exposed to traumatic experiences at an early age in their life show serious dysfunctions in attachment to significant others which in turn is associated with problems in empathy, emotion regulation, trust and communication with others. This psychological and emotional distance from others can lead to antisocial behaviors, striving for superiority, aggression, abuse and manipulation of others to achieve one's goals which constitutes major components of dark triad personality (Voestermans et al., 2020). It should be noted that the strongest relationship was observed between physical neglect and dark triad personality. This finding was incongruent with those of Lobbestael, Arntz and Bernstein (2010) who did not find any relationship between physical neglect and

personality disorders, but still it was consistent with the findings Lang, Kleinberg and Am (2002), as well as Evans and Burton (2013). Interestingly, physical neglect was more predictive of criminal and delinquent behaviors than physical abuse in the present study. As a possible explanation, it can be argued that victims of targeted physical abuse avoid committing violent crimes to prevent others from experiencing the same pain they experienced as children (Evans & Burton, 2013). The betrayal trauma theory (Freyd, Clast & DePrince, 2010) may also explain why physical abuse is less likely to lead to violent crimes. This theory suggests that psychogenic amnesia is an adaptive response to the childhood abuse. When traumatic or betrayal experiences are more prominent, the victim is more likely to push them out of the realm of consciousness. Physical abuse is more violent than neglect, so victims of physical abuse compared to victims of neglect, are more likely to get away this damage from their consciousness and therefore not to have aggressive reactions caused by its anger (Evans & Burton, 2013). Childhood neglect can also affect malevolent creativity in emotional and cognitive dimensions. The results obtained by Jia, Wang, and Lin (2020), using structural equation modeling, showed that childhood neglect has a positive relationship with malevolent creativity, and the dark triad personality plays a mediating role in this relationship.

Findings of the present study also showed that there is a significant negative relationship between mentalization and childhood trauma which is in line with Taubner and Curth's (2013), Fowler's (2016), Berthelot, Talmon and Gross's (2020) suggesting that the development of mentalization is nurtured by secure attachment. The child first learns to represent his own emotions through the caregiver who returns the manifestations of the child's psycho-emotional experiences to him or her. Therefore, it is believed that in the context of a secure attachment relationship, the process of naming and mirroring facilitates the development of effective strategies for regulating distress and representing and communicating with emotions (Fonagy, Gergely, Jurist & Target, 2002). Thus, children with insecure attachment, such as those with a history of childhood abuse or neglect, have difficulty mentalizing. Experts believe that this defect is the result of the abusive parents' reduced

ability to understand and relate to the child's intra-emotional experiences. Finally, abused children may avoid contemplating their parents' targeted mental states to reduce anxiety and maintain their attachment relationships (Insink, Normandine, Target, Fonagy, Seborin & Berthelot, 2015). In fact, when the minds of the caregivers contain frightening or evil intentions, it may be an adaptive choice for the child to suppress his innate curiosity to understand the minds of others (Fonagy, 1999).

Research has shown that insecure attachment, through its negative effects on mentalization, causes subsequent distress in interpersonal relationships (Hayden, Müllauer, Gaugeler, Senft & Andreas, 2019). Based on the foregoing and since the experiences of emotional abuse in early childhood are perpetrated directly by the main characters of attachment, they may be much more destructive than other types and provide more potential to activate a negative pattern of self and the other in the victim (Heim et al., 2000). In this study, the greatest negative relationship was found between mentalization and the emotional abuse dimension, which is consistent with the findings of Squarzer, Notle, Finagy and Ginglemer (2021).

Results showed a negative relationship between mentalization and dark triad personality, meaning that lower levels of mentalization were associated with higher levels of dark triad personality. This finding is consistent with those of Bateman, Bolton and Fonagy (2013), Luyten, Campbell, Allison and Fonagy (2020), Mcgauley, Yakeley, Williams and Bateman (2011), Taubner, White, Zimmermann, Fonagy and Notle (2013) in that what is clearly visible in the dark triad personality is the objectifying view of people and lack of empathy. This is one of the most important consequences of a defect in healthy and appropriate mentalization, since the inability to understand the mental states of others causes the person to consider others as mindless beings and to treat them as an object (Bateman, Bolton & Fonagy, 2013). This allows them to exploit and abuse others for their own interests and benefits.

Another dimension of decreased mentalization is a defect in understanding one's own mental states. Mentalization gives people the ability to reflect on their own actions, take different approaches, and respond to the requirements of the interpersonal environment without emotion

regulation problems, thus coping better with engaging emotional states or negative thoughts. Reduced mentalization can result in a range of different reactions. For example, a person may experience his own thoughts, mental images or emotions in a very real way as if they are no longer a mental state but an external issue (Rothschild-Yakar et al., 2019). This confusion of mentalities and internalities with reality, along with the inability for empathy, makes individuals to take a variety of behavioral measures to manage their emotions, including aggression and manipulation/abuse of others. In fact, since the person lacks the capacity for contemplation and internal emotion regulation, he tries to manage it by acting it out without considering the damage to others.

Results also showed that childhood trauma is associated with dark triad personality indirectly through decreased mentalization. This is consistent with the findings of Abate, Marshall, Sharp and Venta (2017), Taubner, Zimmermann, Ramberg and Schroder (2016) and Taubner and Curth (2013) all of which emphasize that it is necessary to address the evolutionary paths of dark triad personality in the context of mentalization. As mentioned earlier the normal development of mentalization depends on an inter-subjective process including psychological awareness between a securely attached child and his or her primary caregivers. Children become aware of their own mind by increasing awareness of their mothers' mind, mothers who show the capacity of considering their children as independent individuals with separate intentions, beliefs and desires. If the thoughts of the mother or the primary caregiver are repeatedly hurtful or do not recognize the child as a separate being, the child will be less likely to develop the capacity of feeling secure about what others think of him or her. This in turn leads to a total failure to see others as thoughtful and independent beings. A person with limited capacity for mentalization is unable to manage negative emotions such as normal anger, hatred and injury motives, and loses the ability to reflect, leading to active violent behaviors (Mcgauley, Yakeley, Williams & Bateman, 2011).

Duval et al. (2018) suggest that decreased reflective capacity in narcissism is related to emotional abuse in early childhood. Such traumatic

experiences reduce the evolution of appropriate agency and the initial and necessary self-confidence and mentalization through inter-subjective experiences that regularly attack one's psychological experience and mentalization rather than mirroring and supporting them. On the other hand, research has shown that shifting the role of parent and child is also involved in the emergence of grandiose narcissism. In such a relationship, the illusion of knowing and having great confidence in mentalization is encouraged by parents who need their children to take responsibility and control. In this case, the child loses the opportunity to learn about his or her own limitations in mentalization in the interpersonal relationship. When children are forced to take on many parental responsibilities, the illusion to know about what others think and feel may facilitate feelings of superiority and control. As a result of these traumatic experiences, the individual with narcissistic personality loses contact with the mental and inner world of others. In contrast, individuals with Machiavellian personality are able to read the minds of others cognitively, but they show deficiencies in understanding their own as well as others' emotions, and therefore lack of empathy and feelings of guilt and shame.

Numerous studies have indicated that individuals with Machiavellian traits show deficiencies in understanding emotions (Ali & Chamorro-Premuzic, 2010) which in turn leads to a lack of empathy and feelings of guilt and shame (those emotions that prevent people from manipulating others) and as a result enables individuals with Machiavellian traits to successfully exploit others. People with high levels of Machiavellianism also have defects in understanding their own emotional and psychological states, which cause their emotions to be hidden from others and also prevent the recognition of emotions in others. As a result, despite a cognitive understanding of others' mental states, they act weakly in the mentalization of emotions (Asperger & Brzezowski, 2011).

### **Strengths and Limitations**

This study successfully demonstrated the mediator role of mentalization in the relationship between childhood trauma and dark triad personality. However, like any other research,

current study also involved an important limitation of collecting the data online due to Coronavirus constraints which made the researchers unable to observe the participants and unable to resolve their ambiguities while answering the questionnaires.

### **Author Note:**

All the authors actively participated in conceptualization, methodology, editing and review.

### **Statements:**

There is no conflict of interest. No funds. This study was approved by the scientific and ethical committee of Islamic Azad University, South Tehran Branch. All the participants read and approved the informed consent forms before answering the questionnaires.

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