



Prediction of Dark Personality Traits and Self-Destruction Based on Emotion Regulation among Adolescent Females

Azadeh Moradi¹ , Masoud Mohammadi^{2*}

¹ MSc Department of Psychology, Shiraz Branch, Islamic Azad University, Shiraz, Iran

² PhD Department of Psychology, Shiraz Branch, Islamic Azad University, Shiraz, Iran

***Corresponding author:**

Masoud Mohammadi, Department of Psychology, Shiraz Branch, Islamic Azad University, Shiraz, Iran
Tel: 0934861810
Email: mmohamadi@yahoo.com

Received: 05 Dec. 2019
Accepted: 06 Mar. 2020
ePublished: 01 May. 2020

Abstract

Background and Objective: Temperament is determined as a relatively constant, basic, and innate position that underlies and modifies the expression of activity, emotionality, and sociability among people. The current study aimed to investigate the prediction of dark personality traits and self-destruction based on emotion regulation among adolescent females.

Materials and Methods: This correlational study included 250 adolescent females using a cluster sampling method in the academic year of 2018-19 in Shiraz, Iran. The participants were asked to complete Difficulties in Emotion Regulation Scale, Dark Triad Scale, and Chronic Self-Destructiveness Scale.

Results: The results of the regression analysis showed that emotion regulation with beta coefficients was able to predict significant and positive dark personality traits (0.25), narcissism (0.49), Machiavellianism (0.39), psychopathy (0.32), sadism (0.35), and self-destructiveness (0.49) ($P < 0.05$).

Conclusion: Directly targeted interventions to regulate emotion may be useful in addressing risky behaviors of adolescents with self-destructive and dark personality traits.

Keywords: Adolescent, Dark personality, Emotion regulation, Female, Self-destruction, Traits



Background

The term Dark Triad refers to the constellation of narcissism, Machiavellianism, and psychoanalysis. Over the past few years, this concept has gained momentum, and many scholars have thought that the dark trilogy is a prominent forerunner of norm transgression and violation [1]. The Big Five traits (e.g., openness, conscientiousness, extraversion, agreeableness, and neuroticism) have been suggested to create a meaningful classification for the studying of the Dark Triad which included Machiavellianism, narcissism, and psychotherapy [2]. The dark personality trio is characterized by offensive but not sociologically pathological traits; however, psychopathy is known to be the most destructive of the three showing feelings of hatred, apathy, excitement, and insensitive behaviors [3]. In adolescence, Machiavellian youths are also known as "strategic" since they tend to use different prosocial and antisocial strategies to get what they want depending on the social context [3].

Psychopathy typically involves unfeeling and passionless traits, low empathy, high levels of irritability, and a desire for sensation. In the end,

narcissism can be described as a tendency to self-esteem and admiration, arrogant behavior, and limitless self-esteem while simultaneously evaluating the value of others [4].

In addition, Machiavellianism and psychopathy appear as significant and unique correlations of aggression and delinquency symptoms, which further emphasize the importance of these Dark Triad traits in the pathogenesis of behavioral disorders in adolescence [5]. These destructive personality traits were associated with antisocial, delinquent, and self-destructive behaviors [6]. Many studies have shown that these personality traits can be responsible for immoral and anti-social behaviors [7]. Rasaei et al. in a study entitled: "The Dark Triple Role of Personality in Behavioral Risk and Ethical Indifference in Male Students" showed that the Dark Triple of Personality had an important role in predicting behavioral risk, bias, and the moral difference among male students [8].

Archer et al. have shown that self-destructive behaviors are expressions of our shadows resulting from low self-esteem, low self-worth, and even self-

hatred. Others regard self-destructive behaviors as ways to maintain comfort zones due to a lack of self-confidence or carelessness [9]. The person who fulfills his/her characteristics shows high acceptance, autonomy, energy, and internal control (i.e., agency) followed by purpose in life, positive relationships with others, and helpful behavior (i.e., communion). Moreover, these individuals with self-destructive behaviors experience all of the degraded traits at a low level [10]. Additionally, individuals with high levels of the dark trilogy are considered to be adopting a rapid life strategy [11] and are more likely to attempt to start new ventures [12].

Studies showed that the dark personality narcissistic in adolescence had severe self-destructive behaviors, including suicide attempts, and difficulties in emotional regulation [13]. The inability or difficulty of experiencing and differentiating emotions may be just as incompatible with the ability to modulate strong negative emotions. In other words, adaptive regulation requires adjusting the experience of emotions rather than eliminating specific emotions. This arousal modulation is thought to reduce the intensity of emotion so that the individual can control their behaviors [14]. According to a study, changes in emotion regulation play a mediating role in non-suicidal self-injury treatment and self-destructive behaviors during treatment [15]. Emotion regulation is an important factor in determining health and having a successful performance in social interactions. Therefore, failure in emotion regulation is called a disorder.

The emotional disorder is defined as maladaptive ways of responding to emotions that include unacceptable responses, difficulty controlling behaviors in the context of emotional distress, and deficiencies in the functional use of emotions as information [16].

Silva et al. concluded that failure in romantic relationships can lead to self-destructive behaviors. However, emotion regulation can play a negative mediating role in the relationship between relationship failure and suicidal tendencies that may reduce self-destructive behaviors [17]. Several studies have shown that difficulty in emotion regulation is associated with a wide range of disorders, including substance abuse, generalized anxiety disorder, and post-traumatic stress disorder [18].

Concerning emotion regulation, a theory has suggested that people who are more emotionally impaired are more likely to be exposed to risky behaviors in an attempt to reduce the experience of negative emotions, specifically for adolescents [19].

In recent years, there has been an increasing prevalence of some social and individual abuses in the realm of self-destructive behaviors [20].

According to a study conducted by McManus et al., individuals aged 16-25 years were found to have significantly more self-destructive behaviors, compared to other age groups. Moreover, the perceptions of self-destructive behaviors are of particular importance in this age range [21]. Such behaviors are extremely destructive to one's self and those around them, and they damage the health of the family and the community. Accordingly, they are regarded as among the most important issues in the field of psychological trauma. Despite the importance of this issue, a limited number of studies have been conducted in this regard.

Objectives

This study aimed to investigate the prediction of dark personality traits and self-destruction based on emotion regulation among adolescent females.

Materials and Methods

This correlational study investigated the prediction of dark personality traits and self-destruction based on emotional regulation. The study population consisted of all high school students, and 250 high school senior students were selected from a high school in Shiraz, Iran, using cluster sampling according to the inclusion criteria. Out of four districts in Shiraz, districts 1 and 2 were selected randomly, and 10 schools (five schools from each district) were randomly chosen followed by the selection of one class from each school.

The researcher obtained the required permission from the school administrators to conduct the study during school hours. The students were asked to complete the Difficulty in emotion regulation scale, Dark personality trait scale, and Chronic self-destructive scale under the supervision of a trained psychologist. Regarding the ethical considerations, the participants were assured of the confidentiality and anonymity of the data.

Difficulties in Emotion Regulation Scale

This self-report questionnaire was developed by Gratz [22] to assess the complexity of emotional regulation more comprehensively, compared to other available tools. This 36-item scale consists of six subscales, namely a) rejection of emotional responses, b) difficulties engaging in goal-directed behaviors, c) difficulties controlling impulsive behaviors, d) lack of emotional awareness, e) limited access to emotion regulation strategies, and f) lack of emotional transparency.

Deficiency levels of the emotion regulation in individuals range from 0 (rarely) to 5 (almost always). From the total score of six subscales of the test, the individual's total score is calculated for

emotion regulation. The items are scored based on a five-point Likert scale, and higher scores on this scale indicate greater difficulty in dealing with emotions. Gratz validated this questionnaire two times using Cronbach's alpha method with coefficients of 0.86 and 0.80, respectively. Moreover, Mazaheri obtained the reliability of the Persian version of the questionnaire at 0.90 through Cronbach's alpha [14].

Dark Personality Traits Scale

Jenson and Webster [23] developed a short version of this questionnaire to measure dark personality traits [23]. This 12-item scale measures the three components of narcissism, Machiavellianism, and anti-socialism. Respondents are asked to rate the items on a seven-point scale from strongly disagree=1 to strongly agree=7. On this scale, each of the three personality traits is measured using four items. Confirmatory factor analysis was used to validate the scale, and the results showed factor loadings for Machiavellism (from 0.72 to 0.89), anti-social community (from 0.29 to 0.69), narcissism (from 0.62 to 0.85), and other sadism components (from 0.56 to 0.88). The reliability of the dark personality quadruple trait scale using Cronbach's alpha internal consistency was estimated at 0.85 for the whole scale.

In Iran, the test-retest correlation coefficients for the total scale and its subscales ranged from 0.66 to 0.80. Furthermore, the internal consistency of the subscales was determined within the range between 0.68 and 0.77. Moreover, the correlation coefficients among the total score of the Dark Triad Scale and narcissistic personality, psychopathy, and Machiavellianism were 0.57, 0.42, and 0.55, respectively. There was a significant difference between males and females regarding the scores on the Dark Triad components [24].

Chronic Self-Destruction Scale

This scale was developed by Kelly et al. [25] to measure one's willingness to behave in a self-destructive manner. The items cover the content

in four areas of neglect, poor health care, evidence of abuse, and lack of planning. The internal consistency of this questionnaire was obtained at 0.73-0.97 using Cronbach's alpha coefficient. In the Persian version for males with 23 items, there are four factors, including negligence, neglect, intimidation, and risk aversion. Moreover, the female version included three factors of negligence and risk, irregularity, as well as lack of care and planning. The reliability values of this scale were estimated at 0.849 and 0.845 for the two groups using Cronbach's alpha coefficient, respectively [26]. In the original version, Cronbach's alpha coefficients for male and female items were determined at 0.73-0.97 and 0.85-0.97, respectively [25].

Results

In total, 250 female adolescent students within the age range from 17 (46.4%) to 18 (53.6%) years participated in this study (Table 1).

As can be seen in Table 2, emotion regulation ($r=0.50$; $P<0.001$) showed a significant positive relationship with dark personality traits, including rejection of emotional responses ($r=0.36$; $P<0.001$), difficulties engaging in goal-directed behaviors ($r=0.36$; $P<0.002$), difficulties controlling impulsive behaviors ($r=0.50$; $P<0.001$), lack of emotional awareness ($r=0.42$; $P<0.001$), limited access to effective emotion regulation strategies ($r=0.58$; $P<0.001$), and lack of emotional clarity ($r=0.33$; $P<0.003$).

Moreover, there is a significant positive correlation between emotion regulation and self-destructiveness traits ($r=0.44$; $P<0.00$), such as dimensions of rejection of emotional response ($r=0.28$; $P<0.001$) difficulties engaging in goal-directed behaviors (002 Pulse control difficulties ($r=0.31$; $P<0.001$), lack of emotional awareness ($r=0.42$; $P<0.001$), limited access to effective emotion regulation strategies ($r=0.32$; $P<0.001$), and lack of emotional clarity ($r=0.41$; $P<0.003$).

Emotion regulation by simple linear regression can predict the dark personality traits ($F=17.64$;

Table 1. Demographic characteristics

Variable		Mean±SD
Difficulties in emotion regulation	Rejection of emotional responses	2.29±0.51
	Difficulties engaging in goal-directed behaviors	3.2±0.68
	Difficulties controlling impulsive behaviors	2.79±0.68
	Lack of emotional clarity	3.11±0.65
	Limited access to effective emotion regulation strategies	3.20±0.50
	Lack of emotional awareness	2.66±0.48
Dark personality traits	Narcissism	2.43±0.71
	Machiavellianism	2.94±0.63
	Psychopathy	3.62±0.57
	Sadism	2.64±0.90
Chronic self-destructiveness	Self-destructiveness	2.64±0.43

Table 2. Pearson correlation coefficient of emotion regulation with dark personality traits and chronic self-destructiveness

	1	2	3	4	5	6	7
Emotional regulation (total score)	1						
Rejection of emotional responses	0.70**	1					
Difficulties engaging in goal-directed behaviors	0.82**	**0.57	1				
Difficulties controlling impulsive behaviors	0.75**	0.37**	0.54**	1			
Lack of emotional clarity	0.83	0.62**	0.52**	**0.51	1		
Limited access to effective emotion regulation strategies	0.27**	0.37**	0.22**	0.06	0.20*	1	
Lack of emotional awareness	0.50**	0.51**	0.36**	0.50**	0.046**	0.036**	1
Dark personality traits	0.50**	0.51**	0.36**	0.50**	0.042**	**0.58	0.33**
Chronic self-destructiveness	0.44**	0.28**	0.23**	0.31**	0.042**	**0.32	0.41**

The correlation coefficients are statistically significant ** (P<0.01), * (P<0.05).

Table 3. Simple linear regression results for predicting variable

Predictor variables	Criterion variable	F	p <	R	R2	Beta	T	p <
Emotion regulation	Dark personality traits	17.64	0.001	0.50	0.25	.50	6.64	0.01
	Narcissism	18.64	0.001	0.49	0.24	0.49	3.96	0.002
	Machiavellianism	24.84	0.001	0.39	0.15	0.39	3.11	0.001
	Psychopathy	15.89	0.001	0.32	0.10	0.32	2.94	0.004
	Sadism	31.96	0.001	0.35	0.12	0.35	4.11	0.003
	Self-destructiveness	18.09	0.001	0.49	0.24	0.49	4.32	0.001

P<0.001), narcissism (F=18.64; P<0.001), Machiavellianism (F=24.84; P<0.001), psychopathy (F=15.89; P<0.001), sadism (F=31.96; P<0.001), and self-destructiveness (P<0.001; F=18.9) (Table 3).

The regression results showed that emotion regulation with beta coefficients was able to predict significantly positive dark personality traits (0.25), narcissism (0.49), Machiavellianism (0.39), psychopathy (0.32), sadism (0.35), and self-destructiveness (0.49).

Discussion

The overall results showed the significance of emotion regulation to predict the dark personality traits and self-destructive among adolescent females. Moreover, emotion regulation by simple linear regression can predict dark personality traits, such as narcissism, Machiavellianism, psychopathy, sadism, and self-destructiveness. These results are in line with the findings of studies conducted by Rassai et al. [8], Silva et al. [17], Wu et al. [27], Jonason et al. [28], Smith et al. [29], and Zalpour et al. [30].

In a study performed by Zalpour et al. [30], there was a significant difference between self-fascinated and normal individuals in terms of cognitive empathy and emotional reactivity. Several studies revealed that underdeveloped emotional skills and the use of strategies that prolong and increase negative emotions were significant risks for the development and durability of mental illness.

Similarly, overuse of emotion suppression, self-blame, rumination, catastrophizing, and less use of cognitive appraisal and reorientation have been associated with high levels of depression and anxiety, as well as widespread problems [31-35]. Lee et al. [36] in a study entitled: "Is Cognitive Emotion

Regulation Associated with Patient Personality Traits?" found that the quality of ability in cognitive emotion regulation was associated with pathological personality traits, such as narcissism and sadism.

According to a study carried out by Pollack et al. [37], a correlation was found between pathological personality traits and specific aspects of emotion regulation disorder (e.g., antagonism was associated with impulse control difficulties and limited access to emotion regulation strategies). Furthermore, the results of these studies indicate important relationships between pathological personality traits and emotion regulation difficulties that might affect interpersonal problems associated with personality pathology.

In a study, the results showed a significant relationship of the components of dark personality characters with empathy, emotional disorder, and attachment styles. In addition, path analysis modeling reveals the mediating role of emotional dysregulation and empathy in the relationship between attachment styles and dark traits [32].

Hierarchical regression analysis indicated that emotion regulation difficulties were negatively associated with dominant psychological and psychological traits; however, they positively correlated with self-centered impulsivity and psychological traits. In addition, emotion regulation difficulties explained an increase in the variance of the psychological traits over and above negative effects. These findings may have clinical implications for the etiology and treatment of psychiatric personality disorder [34]. Therefore, dysfunctions in emotional regulation can serve as a basis for mental and personality disorders. Accordingly, some personality traits, such as narcissism, Machiavellianism, or anti-socialism, can

be attributed to an individual's inability to regulate emotions. In other words, a person with these personality disorders has some form of difficulties in emotion regulation [35].

Based on the results of the empirical studies and those of the present study, the self-destruction and dysregulation of emotion or emotion regulation difficulties are related to psychological problems, such as non-suicidal self-injury [37, 38]. Aghamohamadian Sharbaf [39] demonstrated a significant negative relationship between emotional intelligence and self-destructive behaviors. Moreover, it was found that emotional intelligence predicted the extent of self-destructive behaviors.

Noshpitz emphasizes the need for investigating the effect of what he defines as the "negative ideal" on self-destructive behavior in adolescents. He claims that ideal negative self and trauma work together to reinforce their destructive behavior. Furthermore, he identifies countless similarities between torture thoughts that arise after exposure to a traumatic event and those thoughts caused by negative ideals. Therefore, the traumatic encounter when interpreted by the ideal negative self-experiences a new interpretation in the ideal ego. Noshpitz's emphasis on the ideal negative ideal ego can affect many manifestations of self-destructive behaviors that can play a role in working with adolescents and young adults who have experienced some form of psychological trauma [20]. Changes in emotion regulation difficulties also improve self-destructive behaviors during treatment. These findings provide further support for the critical role of emotion regulation difficulties in maintaining self-destructive behaviors [15].

Many adults with self-destructive behaviors are found to have a history of childhood trauma, as well as sexual and physical abuse, which are regarded as a major contributor to suicide and suicide attempts. The nature of trauma and age at trauma affects the personality and severity of self-destructive behavior. Childhood traumas begin to disrupt behavior; however, a lack of secure attachments helps to maintain it [32]. Experiences related to interpersonal safety, anger, and emotional needs may trigger conflicting events and self-destructive behaviors [40]. Overall, it seems that some form of dysregulation or difficulty in emotion regulation drives one to behave in a self-destructive manner.

Considering the components, such as lack of emotional awareness and clarity, refusal of emotional responses, difficulty in targeted behavior, impulse control difficulties, and limited access to emotional regulation strategies, it can be concluded that the root of self-destruction seems to be the result of some kind of emotional awareness and

difficulty in identifying emotions. In general, one has some confusion in identifying and managing emotions correctly.

The notable limitation of this study included the correlational nature of the research procedure. Accordingly, it was not possible to infer causation the same as the empirical method. Moreover, due to the small sample size of the study, cautions should be considered in generalizing the results. In addition, questionnaires were the only instruments used in the present study. Regarding the cross-sectional nature of this study, further research is recommended to use empirical methods to investigate the influential variables.

Moreover, it is suggested that further studies investigate the effect of emotion regulation training on reducing dark personality traits and variables of this study at a wider level in other provinces or throughout the country. Structures, such as self-destruction or dark traits of personality are very complex and multifaceted. Therefore, the development of structural models in future research will probably provide a better explanation of these structures. In further studies, it may be possible to examine personality traits as an independent variable that plays a role in the relationship between emotional adjustment and dark personality traits.

Conclusions

The results showed that emotion regulation problems were effective in predicting dark personality traits and self-destructive traits. Therefore, it seems that holding training workshops on enhancing emotional regulation skills can play an effective role in reducing these traits.

Acknowledgments

The authors are thankful to all students and managers of the schools for their contribution to conducting this study in Shiraz, Iran.

Authors' contributions

A.M. changed, conceived, designed, and performed the study. Moreover, she analyzed the data, prepared figures and/or tables, and wrote the manuscript.

M.M. conceived and designed the experiments, reviewed drafts of the paper, monitored the whole process of the study, contributed to reagents, materials, and analysis tools.

Conflicts of Interest

The authors declare that they have no conflict of interest regarding the publication of the study.

References

1. Muris P, Merckelbach H, Otgaar H, Meijer E. The malevolent side of human nature. *Perspectives on Psychological Science*. 2017; 12(2):183-204. [DOI:10.1177/1745691616666070] [PMID]
2. García D, González Moraga FR. The dark cube: dark character profiles and OCEAN. *PeerJ*. 2017; 5:e3845. [DOI:10.7717/peerj.3845] [PMID] [PMCID]

3. Lopes B, Yu H. Who do you troll and why: an investigation into the relationship between the Dark Triad personalities and online trolling behaviours towards popular and less popular Facebook profiles. *Computers in Human Behavior*. 2017; 77:69-76. [DOI:10.1016/j.chb.2017.08.036]
4. Sijtsema JJ, Garofalo C, Jansen K, Klimstra TA. Disengaging from evil: longitudinal associations between the dark triad, moral disengagement, and antisocial behavior in adolescence. *Journal of Abnormal Child Psychology*. 2019; 47(8):1351-65. [DOI:10.1007/s10802-019-00519-4] [PMID] [PMCID]
5. Muris P, Meesters C, Timmermans A. Some youths have a gloomy side: correlates of the dark triad personality traits in non-clinical adolescents. *Child Psychiatry and Human Development*. 2013; 44(5):658-65. [DOI:10.1007/s10578-013-0359-9] [PMID]
6. Muris P, Merckelbach H, Otgaar H, Meijer E. The malevolent side of human nature: a meta-analysis and critical review of the literature on the dark triad (narcissism, Machiavellianism, and psychopathy). *Perspectives on Psychological Science*. 2017; 12(2):183-204. [DOI:10.1177/1745691616666070]
7. Baka L. When do "the dark personalities" becomes less counterproductive? The moderating role of job control and social support. *International Journal of Occupational Safety and Ergonomics*. 2018; 24(4):557-69. [DOI:10.1080/10503548.2018.1463670] [PMID]
8. Rasaei Z, Ahi G, Mansouri A. The role of dark triad of personality in the prediction behavioral risk-taking and moral disengagement. *Scientific Journal of Clinical Psychology & Personality*. 2018; 16(1):83-91.
9. Adrianson L, Ancok A, Ramdhani N, Archer T. Cultural influences upon health, affect, self-esteem and impulsiveness: an Indonesian-Swedish comparison. *International Journal of Research Studies in Psychology*. 2013; 2(3):25-44. [DOI:10.5861/ijrsp.2013.228]
10. Garcia D, Adrianson L, Archer T, Rosenberg P. The dark side of the affective profiles: differences and similarities in psychopathy, Machiavellianism, and Narcissism. *Sage Open*. 2015; 5(4):2158244015615167. [DOI:10.1177/2158244015615167]
11. Jonason PK, Baughman HM, Carter GL, Parker P. Dorian Gray without his portrait: psychological, social, and physical health costs associated with the Dark Triad. *Personality and Individual Differences*. 2015; 78:5-13. [DOI:10.1016/j.paid.2015.01.008]
12. Hmieleski KM, Lerner DA. The dark triad and nascent entrepreneurship: an examination of unproductive versus productive entrepreneurial motives. *Journal of Small Business Management*. 2015; 54(Suppl 1):7-32. [DOI:10.1111/jsbm.12296]
13. Hosseinabadi M, Ghanbary Hashemabady BA, Kareshki H, Modares Gharavi M. Narcissistic disturbances as the bedrock of difficulties in emotional regulation and self-destructive behavior in melancholic patients: a psychoanalytic re-evaluation of narcissus Myth. *Practice in Clinical Psychology*. 2018; 6(1):47-56. [DOI:10.29252/nirp.jpccp.6.1.47]
14. Mazaheri M. Psychometric properties of the Persian version of the difficulties in emotion regulation scale (DERS-6 & DERS-5- revised) in an Iranian Clinical Sample. *Iranian Journal of Psychiatry*. 2015; 10(2):115-22. [PMID] [PMCID]
15. Bjureberg J, Sahlin H, Hedman-Lagerlöf E, Gratz KL, Tull MT, Jokinen J, et al. Extending research on emotion regulation individual therapy for adolescents (ERITA) with nonsuicidal self-injury disorder: open pilot trial and mediation analysis of a novel online version. *BMC Psychiatry*. 2018; 18(1):326. [DOI: 10.1186/s12888-018-1885-6] [PMID] [PMCID]
16. Gratz KL. Targeting emotion dysregulation in the treatment of self-injury. *Journal of Clinical Psychology*. 2007; 63(11):1091-103. [DOI:10.1002/jclp.20417] [PMID]
17. Silva E, Machado B, Moreira C, Ramalho S, Gonçalves S. Romantic relationships and nonsuicidal self-injury among college students: the mediating role of emotion regulation. *Journal of Applied Developmental Psychology*. 2017; 50:36-44. [DOI:10.1016/j.appdev.2017.04.001]
18. Extremera N, Quintana-Orts C, Sánchez-Álvarez N, Rey L. The role of cognitive emotion regulation strategies on problematic smartphone use: comparison between problematic and non-problematic adolescent users. *International Journal of Environmental Research and Public Health*. 2019; 16(17):3142. [DOI:10.3390/ijerph16173142] [PMID] [PMCID]
19. Jonason PK, Webster GD, Schmitt DP, Li NP, Crysel L. the antihero in popular culture: a life history theory of the dark triad. *Review of General Psychology*. 2012; 16(2):192-9. [DOI:10.1037/a0027914]
20. Gvion Y, Fachler A. Traumatic experiences and their relationship to self-destructive behavior in adolescence. *Journal of Infant Child and Adolescent Psychotherapy*. 2015; 14(4):406-22. [DOI:10.1080/15289168.2015.1090863]
21. McManus S, Hassiotis A, Jenkins R, Dennis M, Aznar C, Appleby L, et al. Suicidal thoughts, suicide attempts and self-harm. Mental health and wellbeing in England: adult psychiatric morbidity survey. Swansea, Wales: Swansea University; 2014.
22. Gratz KL, Roemer L. Multidimensional assessment of emotion regulation and dysregulation: development, factor structure, and initial validation of the difficulties in emotion regulation scale. *Journal of Psychopathology and Behavioral Assessment*. 2004; 26(1):55-41.
23. Jonason PK, Webster GD. The dirty dozen: a concise measure of the Dark Triad. *Psychological Assessment*. 2010; 22(2):420-32. [DOI:10.1037/a0019265] [PMID]
24. Yousefi R, Piri F. Psychometric properties of Persian version of Dirty Dozen Scale. *Iranian Journal of Psychiatry and Clinical Psychology*. 2016; 22(1):67-76.
25. Kelley K, Byrne D, Przybyla DP, Eberly C, Eberly B, Greendlinger V, et al. Chronic self-destructiveness: conceptualization, measurement, and initial validation of the construct. *Motivation and Emotion*. 1985; 9(2):135-51. [DOI:10.1007/BF00991572]
26. Mousavi AS, Azadfalsh P, Farahani H, Dehghani M. The validity, reliability and factorial structure of the Chronic Self-Destructiveness Scale (CSDS). *Iranian Journal of Psychiatry and Clinical Psychology*. 2015; 21(2):132-43.
27. Wu W, Wang H, Zheng C, Wu YJ. Effect of narcissism, psychopathy, and Machiavellianism on entrepreneurial intention-the mediating of entrepreneurial self-efficacy. *Frontiers in Psychology*. 2019; 10:360. [DOI:10.3389/fpsyg.2019.00360] [PMID] [PMCID]
28. Jonason PK, Li NP, Teicher EA. Who is James Bond? The Dark Triad as an Agentic social style. *Individual Differences Research*. 2010; 8(2):111-20.
29. Smith MB, Hill AD, Wallace JC, Recendes T, Judge TA. Upsides to dark and downsides to bright personality: a multidomain review and future research agenda. *Journal of Management*. 2018; 44(1):191-217. [DOI:10.1177/0149206317733511]
30. Zalpour K, Shahidi S, Zarrani F, Mazaheri MA, Heidari M. Empathy and cognitive emotion regulation in phenotypes of narcissism. *Payesh*. 2015; 14(2):239-47.
31. Amiri S, Ghasemi NA. Emotion and emotion regulation beliefs as a moderator between morningness-eveningness and dark traits: a study on normal population. *Psychological Achievement*. 2018; 25(1):113-28.
32. Amiri S, Jamali Y. The mediating role of empathy and emotion regulation in attachment styles and dark personality traits in adolescents. *Iranian Journal of Psychiatry and Clinical Psychology*. 2019; 25(3):292-307. [DOI:10.32598/ijpcp.25.3.292]
33. Mannarini S, Balottin L, Palmieri A, Carotenuto F. Emotion regulation and parental bonding in families of adolescents with internalizing and externalizing symptoms. *Frontiers*

- in Psychology. 2018; 9:1493. [DOI:10.3389/fpsyg.2018.01493] [PMID] [PMCID]
34. Donahue JJ, McClure KS, Moon SM. The relationship between emotion regulation difficulties and psychopathic personality characteristics. *Personality Disorders: Theory, Research, and Treatment*. 2014; 5(2):186-94. [DOI:10.1037/per0000025] [PMID]
 35. Carpenter RW, Trull TJ. Components of emotion dysregulation in borderline personality disorder: a review. *Current Psychiatry Reports*. 2013; 15(1):335. [DOI:10.1007/s11920-012-0335-2] [PMID] [PMCID]
 36. Lee SJ, Kim SR, Han SY, Lee YJ, Chae H. Is the cognitive emotion regulation strategy related to Yin-Yang personality traits? *European Journal of Integrative Medicine*. 2019; 26:24-30. [DOI:10.1016/j.eujim.2019.01.004]
 37. Wolff JC, Thompson E, Thomas SA, Nesi J, Bettis AH, Ransford B, et al. Emotion dysregulation and non-suicidal self-injury: a systematic review and meta-analysis. *European Psychiatry*. 2019; 59:25-36. [DOI:10.1016/j.eurpsy.2019.03.004] [PMID] [PMCID]
 38. Peterson AL, Chen JJ, Karver MS, Labouliere CD. Frustration with feeling: latent classes of non-suicidal self-injury and emotion regulation difficulties. *Psychiatry Research*. 2019; 275:61-70. [DOI:10.1016/j.psychres.2019.03.014] [PMID] [PMCID]
 39. Aghamohamadian Sharbaf HA, Moradian Z, Baensaf N. Self-destructive behaviors and psychosocial correlates among students of the Ferdowsi University of Mashhad. *Research in Clinical Psychology and Counseling*. 2013; 2(2):5-24.
 40. Van der Kolk BA, Perry JC, Herman JL. Childhood origins of self-destructive behavior. *American Journal of Psychiatry*. 1991; 148(12):1665-71. [DOI:10.1176/ajp.148.12.1665] [PMID]