

# The Role Five Personality Factors with Narcissism and Psychopathy in Prediction of Dark Triad

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**Abstract:** The aim of present study was to investigate the relationship of main traits with narcissism and psychopathy of dark triad traits. In this manner, 351 male and female college students in the different universities of Tabriz who educated in 2013-14, were selected by multi-stage cluster sampling method. Data was gathered by NEO Five-Factor of Personality Inventory by Costa and McCrae, Defense Styles Questionnaire by Andrews et al., and Dark Triad Traits Scale by Jonason and Webster and analyzed by Pearson's correlation test, stepwise multivariate regression analysis, ANOVA and Chi square by SPSS-18. Results indicated there was a significant relationship between main traits of personality and narcissism and psychopathy ( $p < 0.01$ ).

**Keywords:** Traits of Personality, Narcissism, Psychopathy, Dark Triad.

## Introduction

According to Paulhus and Williams (2002), Machiavellianism, narcissism, and psychopathy bad characters are named after the so-called dark triad. Last decade there are now dozens of studies on the dark triad and, but no research into those three socially-aversive personalities is currently available in Iran. Big five personality is the mainstream personality theory at home and abroad and achieves a high recognition in personality psychology, and there is a lot of exploration on the model from different aspects. "By describing the individual's standing on each of the five factors, we can provide a comprehensive sketch that summarizes his or her emotional, interpersonal, experiential, attitudinal, motivational styles (Costa and McCrae, 1991). It is very meaningful for the comparative analysis between the positive and negative personality traits and helps us comprehensively understand the relationship and differences of different personality traits in two aspects in theory and practice. On the other hand, defense mechanisms are classified into pathological, immature, neurotic and "mature" defenses.

Dark Triad traits are a typical representative. From the perspective of evolution, the reason for various kinds of personality traits to exist is that they can adapt to society and help to get the necessary means and methods for people's survival and development. Prosocial personality traits pursue personal development in the popular form such as agreeableness and conscientiousness, but antisocial personality traits achieve personal purpose through the disgusting form (Jonason and Webster, 2010). Narcissism is defined by a sense of entitlement, dominance and a grandiose self-view (Raskin and Terry, 1988). Psychopathy consists of callousness, a lack of empathy, and antisocial, erratic behavior (Hare, 2003). Men show higher levels of sub-clinical psychopathy than women (Lee and Ashton, 2005). Reise and Wright (1996) propose that psychopathic traits (lack of morality; interpersonal hostility) are beneficial to a short-term strategy and are correlated with unrestricted pattern of sexual behavior.

One popular personality classification characterizing a large number of traits is the big five model. The five dimensions of the model, extraversion, agreeableness, conscientiousness, neuroticism, and openness, represent personality traits essential in determining the behavior of individual in organization. The first of the big five personality dimensions, extraversion, reflects a person's comfort level with relationships. Extraverts are people oriented, sociable, talkative, assertive, dominant, social, active, energetic, enthusiastic, and fun loving. Extraverts are more expected to be involved in jobs based on personal relationships, such as sales and marketing positions. Research suggested that all extraverts tend to be higher overall job performers than introverts (Griffin and Moorhead, 2011). Agreeableness implies a concern for the welfare of other people. Agreeableness causes some people to be kind, supportive, merciful, sympathetic, and friendly in their dealing with others. Agreeable people are better at developing good working relationships with co-workers, subordinates and higher level managers. Conscientiousness is a tendency to show self-control, to be loyal, and to struggle for achievement and competence. People high in conscientiousness work hard and complete their tasks on time, and they tend to have successful jobs (Kalat, 2012). People who are relatively more neurotic tend to be emotional, tense, and insecure. They have high anxiety levels, are depressed, easy upset, suspicious, and low in self-confidence. Finally, openness measures the individual's ability to be open to any kind of experience that helps him or her to do the job effectively. Large reviews of theories of defense mechanisms are available from Paulhus et al. (1997) and Cramer (1991).

Vaillant (1977) has further limited these classifications into four categories like pathological, immature, neurotic and mature etc. Pathological defense mechanisms are psychotic (psychotics are the people passing through the abnormal state of mind, where they are experiencing complete loss of contact with reality) in nature and found in dreams and throughout childhood. The mechanisms included under this category are delusional projection, Conversion, denial, distortion, splitting, and extreme projection. Immature type of mechanisms is found in adults and these mechanisms help to reduce distress and anxiety initiated by the uncomfortable reality. These types of defenses are dominant in the state of major depression and personality disorders. Excessive use of such defenses is seen as socially undesirable, so why known as 'immature'. Excessive use of immature defense mechanism always leads to serious problems in a person's ability to adjust with self and environment. Immature mechanisms include acting out, fantasy, idealization, passive aggression, projection, projective identification and summarization. Neurotic ego defense mechanisms are again fairly common in practice among adults; neurotics are the people with extreme mood swings. These types of defenses have short-term advantages in coping, but can cause long-term problems in relationships, work and adjustment in life, when used as one's primary style of adjustment with the world. These mechanisms include displacement, dissociation, hypochondriasis, intellectualization, isolation, rationalization (making excuses), reaction formation, regression, repression, undoing and withdrawal. Mature defense mechanisms are mostly used by emotionally healthy adults and therefore considered as mature. Mature defense mechanisms are learnt during the immature stage of development and such defenses have been adapted through the years to optimize success in life and relationships. The use of these defenses enhances pleasure and feelings of control. These defenses help to integrate conflicting emotions and thoughts, whilst still remaining effective. Those who use these mechanisms are usually considered virtuous. These mechanisms include altruism, anticipation, humor, identification, introjections, sublimation and thought suppression. All of the above mentioned type and subtype of defense mechanisms can prevent individuals from experiencing the excessive level of the anxiety, negative effects and socially unacceptable drives such as: Anxiety: anguish, genuine fears and loss of self-esteem, Negative effects: jealousy; bereavement and hostility.

### **Materials and Methods**

The present study is a correlational descriptive research. The participants of the research included all the college students of Tabriz University from which the sample was selected. According to the population and based on the Morgan table, 351 (170 female and 181 male) students were selected as a sample using the multi-stage cluster sampling method. For data collection in this study, three types of questionnaires:

#### ***The Dutch version of the Dirty Dozen***

This scale is to measure the traits of the Dark Triad personality (Jonason and Webster, 2010). The traits are self-reported by adolescents and young people, measuring narcissism, Machiavellianism and psychopathy with 4 items each, rated on a 9-point scale ranging from 1 ('strongly disagree') to 9 ('strongly agree'). To compute the Dark Triad scores, the sum of the answers was divided by the amount of questions (12 in total), so the average was taken. The separate construct scores were computed the same, dividing the sum of the scores of one construct by four. Missing values were excluded from the study when two or more questions of a construct were missing. The internal consistency for the Dirty Dozen questionnaire was measured using a reliability analysis in order to determine the Cronbach's alphas ( $\alpha$ ). The alpha ( $\alpha$ ) was measured for all questions together, all

constructs separated, and between the means of the constructs. It was found that all the alphas ( $\alpha$ ) s were above .70 (see Table 10). Generally, scores above .70 can be seen as reliable. No items in the questionnaire needed to be deleted to increase alpha ( $\alpha$ )

Table 1. Cronbach's Alphas ( $\alpha$ ) of the Dirty Dozen.

	All questions	Machiavellianism (M)	Psychopathy (P)	Narcissism (N)	Between MN-P
$\alpha$	.869	.74	.735	.840	.764

**The NEO Personality Inventory Revised (NEO-PI-R)**

Costa and McCrae (1992) developed this scale to measure the personality of individuals, based on the five-factor model of personality, which includes the dimensions of Extraversion, Neuroticism, Agreeableness, Openness to experience and Conscientiousness. The five personality dimensions are each divided into six facets. The NEO-PI-R has 240 items (Costa and McCrae, 1992). The Cronbach's alpha coefficients of the personality dimensions vary from 0,86 (Openness) to 0,92 (Neuroticism), and those of the personality facets from 0,56 (Tender-minded) to 0,81 (Depression). Costa and McCrae (1992) report test-retest reliability coefficients (over six years) for Extraversion, Neuroticism and Openness varying from 0.68 to 0.83 and for Agreeableness and Conscientiousness (over three years) of 0.63 and 0.79 respectively. Costa and McCrae (1992) showed construct validity for the NEO-PI-R for different gender, race and age groups.

**Defense Style Questionnaire-40 (DSQ-40)**

Defense styles and mechanisms were assessed using the (DSQ-40; Andrews, Singh, and Bond, 1993). The DSQ-40 is a self-report measure of characteristic defense styles (i.e., clusters of developmentally similar defense mechanisms). This measure consists of 40-items to which participants provide ratings of agreement on scales ranging from 1 (strongly disagree) to 9 (strongly agree). The instrument measures the conscious behavioral derivatives of 20 defense mechanisms with two items for each defense. These specific defense mechanisms are organized into three broad defense styles: mature, neurotic, and immature. The mature defense style is comprised of the following defense mechanisms: humor, suppression, sublimation, and anticipation. Reaction formation, idealization, pseudo-altruism, and undoing constitute the neurotic defense style. The immature defense style consists of rationalization, autistic fantasy, displacement, isolation, dissociation, devaluation, splitting, denial, passive aggression, somatization, acting out, and projection. The internal consistency coefficient for the immature defense style was adequate ( $\alpha = .80$ ); whereas, the coefficients for the mature and neurotic defense styles were less robust (.59 and .54, respectively). The relatively low internal consistency coefficients for the intermediate and mature defense styles is most likely influenced by the fact that they contain fewer items (i.e., 8 items each) than the immature defense style which contains 24 items. Because each defense mechanism is measured using only two items, the internal consistencies of these subscales were highly variable, from  $\alpha = .19$  for denial to  $\alpha = .72$  for autistic fantasy. The average internal consistency for the defense mechanisms was  $\alpha = .37$ . Despite the low internal consistencies of these defense mechanism scores, these measures were included in the present study for exploratory purposes. Information concerning the reliability and validity of the DSQ-40 has been previously reported (Andrews et al., 1993; Bond, 1995).

**Results**

Table 1. The correlation coefficients of the dark triad component of narcissism with big five factors, defense mechanisms

	Narcis	Neuro	Extro	Open	Agree	Conscie	Mature	Neurotic	Immature	
Pearson Correlation	Narcis	1.000								
	Neuro	.739	1.000							
	Extro	.697	.898	1.000						
	Open	-.383	-.500	-.450	1.000					
	Agree	-.396	-.534	-.480	.872	1.000				
	Conscie	-.438	-.573	-.548	.826	.844	1.000			
	Mature	-.475	-.604	-.555	.790	.797	.849	1.000		
	Neurotic	.495	.620	.596	-.597	-.629	-.644	-.669	1.000	
	Immature	.470	.545	.525	-.568	-.587	-.612	-.641	.765	1.000

According to Table 1, the correlation was statistically positive and significant between the dark triad component of narcissism with extraversion (0.697), neuroticism (0.739), neurotic defenses (0.495) and immature defenses (0.470) at the significance level of 0.01. Furthermore, the correlation was statistically negative and significant between the dark triad component of narcissism with openness (-0.0383), agreeableness (-0.396), consciousness (-0.438) and mature defenses (-0.475) at the significance level of 0.01.

Table 2. Analysis of Variance (ANOVA) for Simple Linear Regression.

Model		SS	Df	MS	F	Sig.
1	Regression	3950.548	8	493.818	54.176	.000 <sup>a</sup>
	Residual	3117.350	342	9.115		
	Total	7067.897	350			

a. Predictors: (Constant), Immature, Extro, Open, Neurotic, Mature, Conscie, Agree, Neuro

b. Dependent Variable: Narcis

Table 2 showed that F became 54.176 within the significance level of 0.000 that was less than 0.05. It was concluded that this model was significant. In other words, the variables of extraversion, neuroticism, neurotic defenses, immature defenses with openness, agreeableness, consciousness and mature defenses could properly explained the dark triad component of narcissism.

Table 3. Linear regression coefficients of the dark triad component of narcissism in terms of big five factors and defense mechanisms.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	$\beta$			Tolerance	VIF
		1	(Constant)	.047			1.304	
	Neuro	.211	.033	.559	6.486	.000	.174	5.755
	Extro	.065	.034	.157	1.884	.060	.187	5.360
	Open	-.008	.024	-.025	-.321	.749	.204	4.899
	Agree	.022	.026	.069	.830	.407	.184	5.425
	Conscie	.010	.026	.033	.398	.691	.186	5.380
	Mature	-.017	.024	-.054	-.715	.475	.222	4.506
	Neurotic	-.003	.021	-.008	-.126	.900	.326	3.067
	Immature	.021	.012	.101	1.733	.084	.382	2.620

Table 3 indicated that  $\beta$  (sig) became 0.559 (0.000) for neuroticism, 0.157 (0.060) for extraversion, -0.025 (0.749) for openness, -0.069 (0.407) for agreeableness, 0.033(0.690) for consciousness, -0.054(0.475) for mature defenses, -0.008 (0.900) for neurotic defenses, and 0.101(0.084) for immature defenses. The variable of neuroticism became statistically significant, because its value was less than 0.05, but other variables didn't. In other words, the variable of neuroticism predicted changes in the dark triad component of narcissism more than other variables.

Table 4. The correlation coefficients of the dark triad component of psychopathy with big five factors, defense mechanisms.

	Psychopath	Neuro	Extro	Open	Agree	Conscie	Mature	Neurotic	Immature	
Pychopath	1.000									
Pearson Correlation		.839	1.000							
	Neuro									
	Extro	.808	.898	1.000						
	Open	-.448	-.500	-.450	1.000					
	Agree	-.493	-.534	-.480	.872	1.000				
	Conscie	-.514	-.573	-.548	.826	.844	1.000			
	Mature	-.557	-.604	-.555	.790	.797	.849	1.000		
	Neurotic	.586	.620	.596	-.597	-.629	-.644	-.669	1.000	
	Immature	.533	.545	.525	-.568	-.587	-.612	-.641	.765	1.000

According to Table 4, the correlation was statistically positive and significant between the dark triad component of psychopathy with extraversion (0.808), neuroticism (0.839), neurotic defenses (0.586) and immature defenses (0.533) at the significance level of 0.01. Furthermore, the correlation was statistically negative and significant between the

dark triad component of psychopathy with openness (-0.448), agreeableness (-0.493), consciousness (-0.514) and mature defenses (-0.557) at the significance level of 0.01.

Table 5. Analysis of Variance (ANOVA) for Simple Linear Regression.

Model	SS	df	MS	F	Sig.
1 Regression	7903.691	8	987.961	115.106	.000 <sup>a</sup>
Residual	2935.409	342	8.583		
Total	10839.100	350			

a. Predictors: (Constant), Immature, Extro, Open, Neurotic, Mature, Conscie, Agree, Neuro

b. Dependent Variable: Pychopath

Table 5 showed that F became 115.106 within the significance level of 0.000 that was less than 0.05. It was concluded that this model was significant. In other words, the variables of extraversion, neuroticism, neurotic defenses, immature defenses with openness, agreeableness, consciousness and mature defenses could properly explained the dark triad component of psychopathy.

Table 6. Linear regression coefficients of the dark triad component of psychopathy in terms of big five factors and defense mechanisms

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	$\beta$			Tolerance	VIF
1	(Constant)	-2.421	1.265		-1.913	.057		
	Neuro	.247	.032	.527	7.810	.000	.174	5.755
	Extro	.138	.033	.271	4.156	.000	.187	5.360
	Open	.020	.023	.053	.853	.394	.204	4.899
	Agree	-.032	.025	-.083	-1.260	.208	.184	5.425
	Conscie	.033	.025	.087	1.331	.184	.186	5.380
	Mature	-.029	.023	-.074	-1.247	.213	.222	4.506
	Neurotic	.014	.021	.034	.694	.488	.326	3.067
	Immature	.017	.012	.064	1.411	.159	.382	2.620

Table 6 indicated that  $\beta$  (sig) became 0.527 (0.000) for neuroticism, 0.271 (0.000) for extraversion, -0.053 (0.394) for openness, -0.083 (0.208) for agreeableness, 0.087(0.184) for consciousness, -0.074(0.213) for mature defenses, 0.034 (0.488) for neurotic defenses, and 0.064 (0.159) for immature defenses. The variables of neuroticism and extraversion became statistically significant, because its value was less than 0.05, but other variables didn't. In other words, the variables of neuroticism and extraversion predicted changes in the dark triad component of psychopathy more than other variables.

### Discussion and Conclusion

The main aim of the present study was to investigate to the role of big five personality factors and defense styles in prediction of dark triad in the college students of Tabriz University. It was implicated that the variables of extraversion, neuroticism, neurotic defenses, immature defenses with openness, agreeableness, consciousness and mature defenses could properly explained the dark triad component of narcissism. In other words, the variable of neuroticism predicted changes in the dark triad component of narcissism more than other variables. It was concluded that the variables of extraversion, neuroticism, neurotic defenses, immature defenses with openness, agreeableness, consciousness and mature defenses could properly explained the dark triad component of psychopathy. In other words, the variables of neuroticism and extraversion predicted changes in the dark triad component of psychopathy more than other variables.

Hypothesis (1) was consistent with the research findings of Muris, Winands, and Horselenberg (2003), Chabrol, Leichsenring, (2006), Presniak et al. (2010), Ly (2011), and Evren et al. (2013). In support of these accounts, it is said that more narcissistic individuals respond to threats to their self-worth by promoting and exaggerating their assets. Although research demonstrated the strong self-favoring bias of narcissistic individuals, this bias appears only on selecting traits (e.g., extraversion, openness, intelligence), not on other socially approved traits such as agreeableness or conscientiousness. Narcissists actually believe their claims to superiority, consistent with a self-deceptive bias. Grandiose narcissism is highly related to DSM-5 Antagonism whereas vulnerable narcissism is

more highly related to DSM-5 Negative Affectivity Hypothesis (2) was consistent with the research findings of Miller et al. (2010), Hodson et al. (2009). Psychopathy is negatively associated with Big Five agreeableness, largely because of their socially noxious nature. However, this trait also has a unique pattern of relationships with the remaining Big Five traits. For example, Psychopathy is negatively related to conscientiousness. Psychopathy seems to be at least partially determined by low ability to empathize with others, but psychopaths are also actively motivated to cause harm, they perceive the world as particularly hostile or untrustworthy.

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