

## Abstract

**Objective:** The present study aimed at investigating the moderating role of personality traits in the relationship between attachment styles and attitude towards drugs.

**Method:** To this end, 190 first-semester students of Tehran Payam Noor University (south center) in 2013-2014 were randomly selected and requested to revised adult attachment scale, Eysenck personality questionnaire, and attitude towards drugs questionnaire.

**Results:** The results of this study indicated that only avoidance attachment style could predict attitude towards drugs and this relationship could be significantly moderated by neuroticism.

**Conclusion:** The results of this study can have applications and implications in the development of treatment and training programs for addiction prevention in vulnerable populations.

**Keywords:** Attachment Styles, Personality Traits, Attitude towards Drugs, Neuroticism

# On the Relationship between Attachment Styles and Attitude towards Drugs: Moderating Role of Personality Traits

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## Introduction

Substance abuse is a complex disorder with high prevalence which affects various aspects of people's lives. A huge number of factors are involved in the emergence, persistence and treatment of this disorder. The most important factors of this category include biological, psychological, social, family, and transformation factors. In recent decades, the identification of risk factors in the incidence, prevention, and treatment of addiction has allocated a large amount of research. Some useful treatment methods for addiction are derived from attachment theory (Porter, 2007). Attachment style plays an important role in how people self-adapt and prevent risk behaviors like addiction (Nickerson & Nagle, 2005). Developmental psychology refers to attachment as the emotional bond between mother and infant. Attachment theory was introduced for the first time by Bowlby (1983). According to this theory, a consistent pattern is shaped over time between the infant and primary care, which becomes the origin of one's future beliefs and expectations and influences his/her future relationships, emotions, and behavior (Bowlby, 1983). Bowlby (1983) proposed the internal working model based on two variables: judgment about the independence and responsibility of attachment symbol and judgment about its value as a subject. Internal working model shapes a strategy that is used by an individual in his/her relationships with other, this pattern of communication is meant as attachment style (Porter, 2007). Bowlby believed one can see him/herself and others positively or negatively in this communication pattern person (Batholomew, 1990). Secure attachment style is formed when a person has a positive model of self and others, a children with secure attachment style have experiences rich in security and away from debilitating anxiety. In contrast, insecure style is characterized by anxiety and avoidance. Anxiety style is marked with a negative model of self while avoidant style is determined by the negative model of others (Feeney & Noller, 1996). Children with insecure attachment styles (avoidant and ambivalent) imagine the world as an insecure and stressful environment and do not have the ability to effectively and constructively cope with problems and stressful situations (Flores, 2004). Attachment style is associated with functions and disorders of adulthood. Separation from the safety-bringing source (mother/primary caregiver) can be associated with the disconnection of one's relationship with other people, his/her tendency to drugs, and turning to dreams in order to escape from the related fears and anxieties. Children with insecure attachment style will develop a heartless character that is characterized by emotional withdrawal, apathy, inability in establishing emotional loving relationship with others; and it finally orients them to addiction. In these conditions, insecure attachment is more likely to be associated with experience of negative emotions, poor coping skills, immature mechanisms, impaired cognitive style, and interpersonal conflict. These factors increase the likelihood of substance abuse (Borhani, 2013).

Attachment styles can be associated with substance abuse, affective problems, emotional problems, and interpersonal problems in adulthood (Paulk & Zayac, 2013; Doumas, Blasey & Mitchell, 2006; Molnar, Sadava, De Courville & Perrier, 2010; Thorberg & Lyvers, 2010). Davidson & Ireland (2009) investigated the relationship of drug abuse with coping styles, personality traits, and attachment styles. The results showed that the individuals with abnormal personality traits suffered from insecure attachment styles. There are strong reasons to believe that insecure attachment style is related to negative attitudes towards self (Borhani, 2013). People with insecure attachment style may not have the skills necessary to making communications. This will causes anxiety and depression. Since these people are less likely to engage in supportive relationships, they turn to drug use in times of stress to cope with the situation (Kassel, Wardle & Roberts, 2007).

According to Thorberg & Lyvers (2006) the patients under substance abuse treatment have reported higher levels of insecure attachment style and fear of intimacy. Attachment style can anticipate intimacy problems and both interpersonal and intrapersonal functions in drug abusers (Thorberg & Lyvers, 2010).

The results Molnar, et al. (2010) found that anxious attachment style is a risk factor for substance abuse. Caspers, Cadoret, Langbehn, Yucuis & Troutman (2005) proved the relationship between substance abuse and insecure attachment style. De Rick & Vanheule (2007) also showed that insecure attachment style may lead to dysfunctional behaviors and personality disorders. Jones (2009) showed that secure and insecure attachment can predict drug addiction and crime history in prisoners. Early social interactions affect internal working model and psychological characteristics of the person (Finkel & Matheny, 2000, Gervai, 2009; Roisman & Fraley, 2008) and play an important role in psychological disorders and lack of emotional regulation (Wedekind, et al., 2013).

Personality traits is one of the most important predictors of addictive behaviors. Some theories have explained that a wide range of personality factors affect the onset and continuation of drug use. According to Eysenck (1997), substance use disorders are correlated with extraversion, neuroticism, impulsivity, and sensation seeking. Research has shown that there are certain personality traits in drug dependent people (Grant et al., 2004; Grana, Munoz & Navas, 2008; Rahmanian, Jena & Samiee, 2012; Rahmanian, 2008; Rahmanian & Hasani, 2005). For example, in a survey performed by Rahmanian & Jena (2013), the results showed that there was a significant difference between people dependent on opiates and ordinary people in terms of personality traits in such a way that extraversion and neuroticism in drug-dependent individuals were higher than those in normal people. In addition, Vaknin (2007) also showed that people with antisocial, passive-aggressive, and anxious personality are at greater risk for developing substance abuse.

According to the related literature and the impact of insecure attachment style and personality traits on the formation of substance abuse disorders, the current study investigated the moderating role of personality traits in the relationship between attachment style and attitude to drug abuse.

## **Method**

### **Population, sample, and sampling method**

Descriptive and correlational research methodology was used to assess and predict the relationship between the variables. All the first-semester students of Tehran Payam Noor University (south center) in 2013-2014 constituted the statistical population of this study. Among the population, the number of 210 participants was randomly selected while 20 participants were left out from the final analysis since their questionnaire had not been fully completed. Therefore, data analysis was done on the 190 participants. About 79.9 percent of the participants in the study were male and the remaining 22.1 percent were female. In terms of academic program, 73.7 percent of the participants were studying in bachelor's program and 24.2 percent of them were studying in master's program while the academic program of 2.1 of them had been left unanswered. The mean and standard deviation of participants' age were  $12.91 \pm 24.45$  years.

### **Instrument**

1- Revised adult attachment scale: This questionnaire was constructed by Collins & Read (1990) and includes a self-assessment of skills in building relationships and self-deception of forming close attachments and contains 18 items and three sub-scales (each consisting of 6 items). The three sub-scales are: a) depend – It measures the extent to which a person feels he/she can depend on others and is measured through the degree that depended are available when needed. b) Close- It measures the extent to which a person is comfortable with closeness and intimacy. c) Anxiety- It measures fear of having relationship (Mallinkrodt, et al, cited in Pakdaman, 2001). Collin & Read (1990, cited in Pakdaamn, 2001) prepared the contents of their questionnaire based descriptions of the Hazan & Shaver's Adult Attachment Questionnaire. Anxiety subscale is consistent with anxious-ambivalent attachment and close is a bipolar dimension which essentially puts together secure and avoidant descriptions. Therefore, closeness is in compliance with secure attachment and dependence sub-scale can be regarded as the of other avoidant attachment.

The items of the scale are rated on a 5-point scale ranging from 1 = not at all characteristic to 5 = very characteristic. The items numbered 6, 1\*, 8\*, 13, 12, and 17\* belong to secure attachment; items numbered 5\*, 2, 16&, 14, 7, and 18\* belong to avoidant attachment; and items numbered 4, 3, 9, 10, 1, and 15 belong to ambivalent / anxiety. The questions marked with an asterisk should be scored

negatively. Factor analysis has shown these three dimensions (construct validity). Collins and Reid, the Cronbach's alpha for the subscale of secure attachment, avoidant, and ambivalent in two samples of 173 and 100 students of, respectively, 81/0, 82.0, 78/0, 80/0, and vary from 850, 83 / 0 reported. Collins & Reid examined reliability of the scale on a 173-student sample and a 100-student sample and reported Cronbach's alpha coefficients of .81, .82; .78, .80; and .85, .83 for secure attachment, avoidant attachment, and ambivalent attachment, respectively. Pakdaman (2003) reported the reliability coefficient of .95 for the total scale through test-retest method.

2- Eysenck personality questionnaire (Adult Form): This questionnaire was constructed by Eysenck in 1963 to assess some aspects of personality such as introversion and extraversion, as well as identify some personality disorders such as psychoticism, anti-social disorder, neuroticism, and social desirability. Later on, this questionnaire underwent some changes and revisions and the current form emerged. The current form is a 90-item self-report scale that measures the factor named lying in addition to the other three factors-extraversion, psychoticism, and neuroticism. For each item, there are two alternatives, "Yes" and "No" wherein "Yes" is assigned 1 score in some item items and zero point in some other items and the same procedure for the alternative "No" holds true. The scoring of adult form of the scale is presented in the table below.

**Table 1: Scoring of Eysenck personality questionnaire (Adult Form)**

<i>Factors</i>		<i>Items</i>
<b>Psychoticism</b>	Yes	22, 26, 30, 33, 43, 46, 50, 65, 67, 74, 76, 79, 83, 87
	No	2, 6, 9, 11, 18, 37, 53, 57, 61, 71, 90
	Yes	3, 7, 12, 15, 19, 23, 27, 31, 34, 38, 41, 47, 54, 58, 62, 66, 68, 72, 75, 77, 80, 83, 88
<b>Neuroticism</b>	No	-----
	Yes	1, 5, 10, 14, 25, 32, 36, 40, 45, 49, 52, 56, 60, 64, 70, 82, 86
<b>Extraversion</b>	No	21, 29, 42
	Yes	13, 20, 35, 55, 78, 89
<b>Lying</b>	No	4, 8, 16, 24, 28, 39, 44, 48, 51, 59, 63, 69, 73, 81, 85

Cronbach's alpha coefficients for three components of extraversion, neuroticism, and lying have been reported to range from .79 to .85 and that for psychoticism has been reported to range from .68 to .74 (Eysenck & Eysenck, 1985). The reliability of extraversion, neuroticism, and lying was obtained within the range of .8 to .9 through test-retest method during a one-month interval through the conduct of a study on normal people while this value was reported to range for .71 to .83 for psychoticism (Spielberger, Reheiser, Carlos & Foreyt, 2000). Test-retest reliability coefficient within a two-month interval on an Iranian sample was reported as follows: psychoticism = .72, extraversion = .92, neuroticism = .89, and lying = .88 which represents a very high and acceptable reliability for this questionnaire (Kaviani, 2003). In addition,

Barahani (cited in Ganji, 2012) reported the reliability of extraversion, neuroticism, and lying equal to .69, .77, and .47, respectively.

3- Attitude towards drugs questionnaire:

This self-reporting scale was constructed by Nazari (2000) and consists of 32 items that are scored based on a Likert scale. In terms of scoring, the items measuring positive attitude to addiction are responded by the alternatives "strongly agree, agree, no idea, disagree, strongly disagree" and are assigned 5, 4, 3, 2, and 1 points, respectively. In contrast, the items measuring negative attitude to addiction are scored in reverse (the responses "strongly agree, agree, no idea, disagree, strongly disagree" are assigned 1, 2, 3, 4, and 5 points, respectively). Thus, a respondent's score on the whole questionnaire ranges from 32 to 160. It is noteworthy that higher scores indicate favorable attitudes toward drug use and addiction. Face and content validity and internal consistency and parallel-form reliability of this scale have been reported to be the desired. In addition, internal consistency through Cronbach's alpha test equaled .89 (Nazari, 2000).

## Results

The correlation matrix of the variables under study is presented in the following table.

**Table 2: Correlation matrix of the variables under study**

<i>Variable</i>	<i>Psychoticism</i>	<i>Neuroticism</i>	<i>Extraversion</i>	<i>Anxious attachment</i>	<i>Avoidant attachment</i>	<i>Secure attachment</i>
<b>Attitudes to drugs</b>	.033	.208**	-.045	.098	.202**	-.015
<b>Secure attachment</b>	.072	.132	.072	.018	.054	-
<b>Avoidant attachment</b>	.139	.332**	.101	.107	-	-
<b>Anxious attachment</b>	.008	.150*	.029	-	-	-
<b>Extraversion</b>	.107	.175*	-	-	-	-
<b>Neuroticism</b>	.428**	-	-	-	-	-

\*  $p \leq .05$  & \*\*  $p \leq .01$

Regression analysis was performed to assess the moderating effect of personality traits on the relationship between attachment style as the predictor variable and attitude to drugs as the criterion variable. Based on Baron & Kenny's model (1986), hierarchical regression analysis is a reasonable statistical method to evaluate the effect of moderating variable on the significance of the relationship between the predictor variable and criterion variable. To this end, the main effect of the predictor variable and the moderating variable on the criterion variable and also the interaction effect of predictor  $\times$  moderating variables on the criterion variable should be examined (Frazier, Tix & Barron, 2004). The results of the analysis are presented in the table below.

**Table 3: Regression analysis representing the moderating effect of personality traits on the relationship between attachment style and attitude to drugs**

<i>Step</i>	<i>Criterion variable: attitude to drugs</i>	<i>F</i>	$\Delta R^2$	<i>t</i>	$\beta$	<i>Sig.</i>
	Predictor variables					
1	Secure attachment style	3/096	0/048	-0/376	-0/027	0/707
	Avoidant attachment style			2/714	0/196	0/007
	Anxious attachment style			1/076	0/077	0/283
	Moderating variable					
2	Psychoticism	2/135	0/032	-0/775	-0/061	0/230
	Neuroticism			2/349	0/020	0/020
	Extraversion			-1/205	-0/087	0/439
	Predictor $\times$ moderating					
3	Avoidant attachment $\times$ psychoticism	0/960	0/044	-0/093	-0/011	0/926
	Avoidant attachment $\times$ neuroticism			1/910	0/185	0/050
	Avoidant attachment $\times$ extraversion			-1/105	-0/106	0/271

As shown in the table above, the results of the first step suggested that the scores of avoidant attachment style are predictors of attitudes toward drug use in such a way that this style accounts for 4.8% of the variance in attitudes towards drug use. In the second step, the scores of extraversion, psychoticism, and neuroticism as moderators entered regression analysis to assess the predictive power of personality traits on the attitude towards drugs. The results of the second step revealed that 3.2% of the variance of attitude towards drug use is accounted for by neuroticism. Since only the relationship between drug use and avoidant attachment style was significant, the interactive effects of each of the personality traits on avoidant attachment style was examined in the third step in order to assess the moderating effect of personality traits on the strength of the relationship between attitude towards drugs and attachment style. The results of this indicated that only neuroticism among personality traits was moderator of the relationship between attitude towards drugs and avoidant attachment style.

## Discussion and Conclusion

The aim of this study was to investigate the moderating role of personality traits in the relationship between attachment style and attitude towards drugs. The results showed that avoidant attachment style can be a predictor of attitude towards drugs and neuroticism can moderate this relationship. This result is consistent with that of the studies done by Paulk & Zayac (2013), Dumas, et al. (2006), Molnar, et al. (2010), Thorberg, & Lyvers (2010), and Williams & Kelly (2005). Attachment style plays an important role in dealing with difficult situations of life and coping with stress. According to Williams & Kelly (2005), unsafe people turn to drug use as a mechanism of self-treatment for the suppression of their negative emotions and affects. Factors such as the lack of proper interaction between the child and the mother, emotional deprivation in childhood, low confidence, and the great distance between parents and children reduce one's ability in coping with stressful situations and lead him/her to drug

use (Vakalahi, Harrison & Janzen, 2001). According to Bowlby, the first attachment relationships lead to the growth of internal working models that include information about self, others, and the relationships between them. These models specify one's performance during the life and shape his/her personality traits (Hinnen, Sanderman & Sprangers, 2009). When children do not consider their emotional source as responsible and accessible, avoidant attachment style is activated in them. The most characteristic feature of such people is that they regard self and others negatively and become neurotic and anxious since they do not feel secure in this relationship. Therefore, they make some efforts to overcome negative emotions, and maximize or minimize attachment needs and, accordingly the level of vulnerability in them raises (Hirschi, 1969). Moreover, Kaplan's self-derogation theory (1980) can also explain the results of the current study. According to this theory, people with insecure attachment style may try to acquire a sense of social acceptance and self-worth by tendency to unconventional communities and groups. In this context, there is often the possibility of visiting and communicating with the friends and relatives involved in drug use. From another point of view, high scores in neuroticism can be associated with a lack of emotional stability in people (Rahmanian & Jenna, 2013). Therefore, a person with avoidant attachment style and without emotional stability feels insecure and, thereby, tends to dependence on an affective source. Since these people have experienced the loss of this source, they have a higher tendency to use drugs in order to achieve stability. It is evident that there is lack of confidence and self-regulation in individuals with insecure attachment style. Since they feel rejected from the social network due to lack of family support, they feel that they do not have any control over life and become disappointed by feelings of guilt and despair. As a result, they experience intense anxiety and stress, which leads to the lack of compatibility with problems. Then, they tend to risky behaviors such as drug use to control their mental conditions. Daringly, it can be claimed that the main cause for the tendency of people with avoidant attachment to addiction is high correlation with neuroticism and difficulty in making relationships (Kassel, et al., 2007). In fact, if people with avoidant attachment are considered as people with anxiety and low self-esteem, it will be clear that placement in a reliable relationship is difficult for such people and failure in communicating along with rejection lead them to seek a secure base. According to the above-mentioned points, insecure attachment and neuroticism can be associated with tendency to drug use in that both of the variables have commonalities in terms of anxiety. On the one hand, drug use is opted for to reduce anxiety in making interpersonal relationships; on the other hand, drug use is selected as a safe base at hand and one sets him/herself in a position where there is no need for establishing any relationships with others. Avoidant attachment style provides one with such conditions that breeds neuroticism. This causes the devastation of relationships and tends one to a direction where there is a weaker need for relationships. In

fact, this state is secure for such people. The results of this research can have many applications and implications towards the development of training and treatment programs to prevent drug use in the vulnerable population. Since the present study was conducted only on a sample of students, it is recommended that future research be carried out on another setting other than university and on a sample with different educational levels.

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