Abstract

Objective: This study aimed at investigating the impact of anxious and avoidant attachment styles on addiction Method: This potential. was correlational study. The population of this study included all Shahid Beheshti University students in Tehran where a 253-student sample was selected by convenience sampling method. In so doing, 253 students were selected through convenient sampling. The participants responded to Zargar's Addiction Potential Questionnaire, Experiences in Close Relationships Scale, and Drug Attitude Scale. Results: The results of path analysis indicated that parental avoidance and anxiety attachment styles had a significant positive relationship with attitude to addiction drugs and potential. Conclusion: In general, drug attitude can act as a mediator between attachment and addiction potential.

Keywords: attachment, drug use attitude, addiction potential

Causal Model of the Impact of Anxious-Avoidant Attachment on Addiction Potential with Mediating Role of Attitude to Drugs

Hamednia, M.; Panaghi, L.; Habibi, M.; Mokhtonnia, I.

Hamednia, M.

M. A. in Family Therapy, Shahid Beheshti University, Tehran, Iran, E-mail: mhamedniya@yahoo.com

Panaghi, L.

Social Medicine Specialist, Associate Professor at Family Research Institute, Shahid Beheshti University, Tehran, Iran **Habibi, M.**

Assistant Professor at Family Research Institute, Shahid Beheshti University, Tehran, Iran

Mokhtonnia, L.

M.A. in Family Therapy, Shahid Beheshti University, Tehran, Iran



Research on Addiction Quarterly Journal of Drug Abuse

Presidency of the I. R. of Iran Drug Control Headquarters Department for Research and Education

Vol. 11, No. 42, Summer 2017 http://www.etiadpajohi.ir

Introduction

Drug abuse is a phenomenon with many physical, psychological, family, social and economic consequences, so that the drug user could show poor individual and social actions. Proper understanding of the psychosocial factors that underpin decision-making and behavior (drugs potential) would be effective in designing specific methods to solve this problem. Despite the fact that the role of individual and family factors is always discussed at the beginning and continuity of drugs potential, the impact of each of these factors on drugs potential is unclear.

The role and importance of the family in addiction potential and drugs use have been considered by researchers (McCullers, Sussman ,Dent & Teran, 2001), but what dimensions and factors are effective in this regard is a subject with significant importance. Nocombe and Richardson (2000) state that imitation of parents' behavior, internalization of values and behaviors within the family, and social control aspects of parenting and disciplinary activities are effective on children's drug use.

Yen, Chen & Chen (2007) state that factors such as parental role failure, parent-child conflict, family conflict, learning about parents' positive attitude toward drug use by the adolescents, alcohol and tobacco use by parents at home can be predictors of drug dependence.

Devary (2010), Rohner (2007) and wedekind et al. (2013) emphasized on the relationship between parental rejection and mental disorders in adolescents and the relationship between parental acceptance and their psychological coordination. Meanwhile, attachment styles are crucial as a developmental factor in shaping personality and behavioral trends (Cassidy, Jones & Shaver, 2013; Allen, Taimmer & Urquzia, 2014). An attachment system can be a psychological version of the immune system, that is, attachment system is a behavioral system to fight and reduce stress or anxiety caused by adapted fear; as the immune system is a biological system struggling with physical distress (Akgun, & Millier, 2015, Atkinson & Goldberg, 2011), Affecting the primary social interactions and psychological characteristics of the individual (Geravi, 2009). It Plays an important role in the development of personality disorders, lack of emotion *dysregulation* and anti-social behaviors (De rick & Vanheule, 2007; Vedkind et al., 2013).

Davidson and Ireland (2009), Khosrow Shahi (2010) investigated separately the relationship between parental attachment and drug use. The results of above study showed that attachment style affected the risk of drug use disorder. Individuals with insecure attachments might lack the necessary skills to form relationships, which may cause distress or 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). The subjects under drug 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; Paulk & Zayac, 2013). The reference to the cognitive element in drug abuse and addiction field is an emphasis on hidden mental processes, which are characterized by various terms such as tendencies, expectations, beliefs, attitudes and schemas. It is worth mentioning that cognitive and social structures such as attitudes are associated with behavior; in other words, if a person has a stable, prominent, strong and reasoned attitude toward the subject, h/she is highly probable to show the behavior which is highly associated with the mentioned attitude (Taylor, Pella & Cears, 2000). Davison & Neal (2001) recognize drug dependency as a gradual process that begins with a positive attitude towards the drug. The attitude directly or indirectly affects behavior, and positive attitudes toward drugs increase the likelihood of this highrisk behavior. Fazio's research (1995, 1990) identified the role of attitude accessibility with the moderating role of the relationship between attitude and behavior. In the primary research in the framework of this approach, the role of direct experience with the attitude issue was discussed. The studies done by Hajli et al. (2010), Rahmanian (2015) showed that family components such as attachment, insecurity in the family center and family cohesion were effective in the attitude of youth towards drug use. According to Borhani (2013), immature mechanisms, false cognitive style, intrapersonal conflicts, or insecure attachment would be highly associated with insecure attachment and these factors tend to increase the drug use potential. According to Robert & Christian (2012), negative attitudes towards drug use in incompatible families where adolescents have emotional and behavioral problems is more than those in the incompatible families who have adolescents with high mental health. Sharifi and Rezaei (2004), in the investigation of the relationship between addiction potential with insecurity in family, concluded that there is an association between insecurity in family and attitude of students to drug use effects, their interest in drug abuse and unrealistic imagination about the drug use risks.

Therefore, the evaluation of the positive and negative consequences of drug use is an important element in identifying the cause of the youth's tendency to the drug use. These evaluations are deliberately or unintentionally influenced by people's attitudes toward drugs and their effects and consequences. Regarding the research literature and the effect of attachment styles and drugs attitude in the formation of drug abuse disorders, the present study aimed at evaluating the following conceptual model using path analysis method. In other words, the main question of the present research is whether the proposed model is related to the direct and indirect effect of anxious-avoidant attachment on addiction potential?

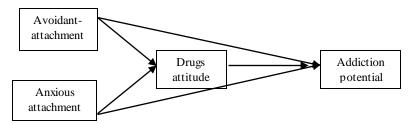


Figure 1: Conceptual model of direct and indirect attachment on addiction potential

Method

Population, sample and sampling method

This study was a correlational one. The population of this study included all Shahid Beheshti University students in Tehran in the academic year 2016-2017. The sampling method was convenience. By referring to the libraries of different faculties and student residences, individuals were asked to complete the questionnaires and, finally, 280 questionnaires were distributed by considering exclusion, of which 253 questionnaires were complete and included in the study. Of these, 122 individuals were boys (48%) and 131 were female (51%), of whom 135 students were dormitory residents (53%) and 118 were non-dormitory residents (46%).

Instruments

- 1. Addiction Potential Questionnaire: This questionnaire was developed by Zargar, Najarian and Namani (2006) and consists of 41 items and 5 lie detector items. The scoring is based on Likert Scale. The scoring follows 1 to 5 system. So that if the person chooses the perfectly correct option, score 5 is assigned, and if she/he chooses the completely wrong option, score 1 would be assigned to him/her. Two methods are used to calculate the validity of this scale. In criterion validity, the addiction potential questionnaire has differentiated two groups of addicted and non-addicted groups well. The convergent validity of the scale was calculated by correlating it with a 25-item scale of clinical symptoms (SCL-25), which is significant at the level 0.001. The scale reliability is reported to be 0.090 using Cronbach's alpha (Zargar, Najarian, Namani, 2008). In this study, Cronbach's alpha coefficient was 0.95.
- 2. Experiences in Close Relationships Scale: This questionnaire has been built by Brennan, Clark, & Shaver (1998). This scale includes 36 items that measure adults' attachment in two dimensions (each one consisting of 18 items) of anxious-avoidant attachment in love relationships; it includes four subscales of relationship with mother, father, friend and partner. The items are responded on a Likert scale ranging from 1 (never) to 7 (very much). Validity and reliability of both dimensions have been reported suitable (Shaver, 2002). This scale has been normalized in Iran by Maleki et al. (2013). The convergent validity of the anxiety dimension was confirmed by using the depression and anxiety scale of

the DASS-21 scale and its divergent validity was confirmed using Rosenberg self-esteem questionnaire. Divergent validity of avoidance was also confirmed by examining its relation to the extroversion subscale. The two-week test re-test reliability coefficient for the total score and the two dimensions of avoidance and anxiety were 0.87, 0.71 and 0.89, respectively (Maleki et al., 2013). Cronbach's alpha was calculated to be 0.84 and 0.89 in both anxiety and avoidance dimensions.

3- Drug Attitude Questionnaire: This questionnaire was Developed and normalized by Delavar, Alizadeh and Rezaei (2004) to assess the attitudes of individuals to drugs in three dimensions of attitude toward the effects of drug use, attitudes toward the dangers of using drugs and attitudes toward drug use. The questionnaire consists of 49 questions based on a five-point Likert scale. In this questionnaire, every term (question) has five items, strongly agree, agree, no idea, disagree and strongly disagree, and one must choose an option that more reflects his or her feelings and opinions. Scoring method ranges from 1 to 5. Delavar et al. (2004) evaluated the validity of instrument scales between 0.88 to 0.96 between a sample of 946 individuals. Also the construct validity is verified through the analysis of the main components. In the present study, Cronbach's alpha coefficient for the whole scale was obtained 0.96.

Findings

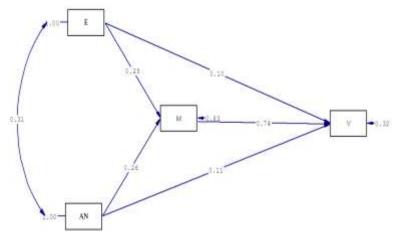
To analyze the results, SPSS and LISREL software were used. Of total sample, 48% of the male students (121 students) and 52% of female students (131 students) participated in the. The mean age of the sample was 23.14 with a standard deviation of 3.23 and in men, 23.08 with a standard deviation of 2.24 years. Out of these subjects, 53.2% were dormitory residents and 46.8% were native residents of Tehran city. Descriptive statistics and correlation matrix between variables are illustrated in Table 1.

Table 1: Descriptive statistics and correlation matrix between research variables

Variables	1	2	3	4	Mean	SD
1. Insecure avoidant attachment	-	-	-	-	58/15	17/35
2. Insecure anxious attachment	*0/32	-	-	-	21/81	11/68
3. attitude to drug use	*0/33	*0/36	-	-	99/07	30/42
4. addiction potential	*0/38	*0/39	*0/81	-	86/18	24/86

^{*}P< 0/001

In the next step, the path analysis was used to measure the direct and indirect effects of the independent variables. The path analysis also has assumptions that all the assumptions in this study were reviewed and verified. After examining the assumptions, the relationships between the variables were investigated using the LISREL8.8 software using maximum likelihood estimation. The output of the path analysis, which includes the relationships between variables along with the standardized beta coefficient, is shown in Figure 1.



* .E = Avoidance attachment; AN = anxiety attachment; M = drug use attitude; Y = addiction potential

Figure 2: The relationship between exogenous and endogenous variables with standardized beta coefficients

The parameters of path coefficients in the model, which are beta coefficients in the regression equation, have been reported in Figure 2. The significance value of these parameters is illustrated in Table 1. According to Figure 2, anxiety and avoidance attachment variables as exogenous variables and drug use attitude and addiction potential variables play a role as endogenous variable in the present research. The direct and indirect effects of the exogenous variable and significance of each of paths are presented in Table 2.

Table 2: Indicators of direct, indirect and total effects of each of the paths based on the theoretical model

P	Path		Effect type	В	Estimation standard error	T statistics
Independent	Mediating	Dependent				
variable 1. Insecure avoidant	variable	variable Addiction	Direct			
attachment	-	potential	effect	10/0	06/0	33/2
2. Insecure avoidant attachment	Drug use attitude	Addiction potential	Indirect effect	18/0	07/0	58/3
3. Insecure avoidant attachment	Drug use attitude	Addiction potential	Total effect	28/0	09/0	26/4
4. Insecure anxious attachment	-	Addiction potential	Direct effect	11/0	08/0	03/0
5. Insecure anxious attachment	Drug use attitude	Addiction potential	Indirect effect	19/0	10/0	95/3
6. Insecure anxious attachment	Drug use attitude	Addiction potential	Total effect	30/0	13/0	87/4
7. Drug use attitude	-	Addiction potential	Direct effect	74/0	03/0	37/17
8. Insecure avoidant attachment	-	Drug use attitude	Direct effect	25/0	12/0	65/3
9. Insecure anxious attachment	-	Drug use attitude	Direct effect	26/0	17/0	06/4

Discussion and Conclusion

The purpose of this study was to investigate the conceptual model of the role of anxiety and avoidance attachment and drugs attitude on addiction potential among the students. In this model, anxiety and avoidance attachment was assumed to be directly and indirectly influenced through drug attitude on addiction potential. The results of the evaluation of the path analysis model indicated that the direct effect of anxiety and avoidance of parents on the addiction potential was confirmed. This result is consisting with the findings of Paleck and Zayak (2013), Allen, Times and Archosia (2014), McCaller, Susan, Dent & Throne (2001), Dwari (2010), Rohner (2007), Khosrow Shahy et al. 2009), Sekul Katz et al. (2003) and Hartab (1980). Bowlby (1980) considered the security that is created by attachment, as the most important feature of relationships throughout life and considered the initial relationship as a model for future social relationships. According to Bowlby, sensitive and responsive caregiving by providing comfort, protection give support consistent with their models of self and others as a safe basis. On the contrary, inappropriate caregiving is associated with anxiety, anger, denial of autonomy and selfdependency, and suppression of needs and vulnerability. Bowlby argued that the first attachment relationships lead to the growth of internal active patterns, including information about self, others, others and their relationship. This pattern determines the performance of a person throughout his life and forms his personality traits (Hennin, Sanderman & Sparangers, 2009). According to Ainsworth, attachment helps to reduce anxiety. What he calls the security basis, enables the child to leave the attached one and seeks around his surroundings. Mother's sensitivity and response are the main factors of secure attachment, but when an attachment is insecure, a kind of uncertainty (anxiety and doubt) arises in the child's mood (Kaplan & Sadocks, 2008). Individuals with anxiety attachment style tend to be close to others and are strongly sensitive to withdrawal symptoms. These individuals have a negative image of themselves and a positive image of others. Those with anxiety attachment experience more stress because of ineffective interpersonal relationships and lack of empowerment; they could turn to drug, alcoholism and tobacco for their relaxation. Individuals with avoidant attachment are always suffering from distress. They are distracted by the new situation and show negative emotions, and could escape from their unpleasant situations by resorting to ineffective emotional regulations such as drugs use.

In fact, if individuals with avoidant attachment have low self-esteem and anxiety, it's difficult for them to be in a reliable relationship, and failure to communicate causes a person to seek an insecure base (Kessel et al, 2007). The other result of the study indicated that the anxiety and avoidance attachment had a significant effect on drug attitude, as well as the effect of the drug attitude on addiction potential was found and this result is consistent with the studies of Robert and Christine (2012), Koter (2002), Hajli et al (2010), Rahmanian et al.

(2015). Another result of the study showed that the drug attitud has a mediating role in the relationship between anxiety and avoidance attachment of parents and addiction potential. And this result is consistent with the results of Borhani (2013) and Sharifi (2004). The direct behavioral experience results in the formation of clear, reliable and stable attitudes compared to the attitudes being created via indirect information about the attitude issue. Because of these features, it is believed that attitudes based on experience are more accessible and ultimately, are better determinants of one's future behavior (Fazio and Williams, 1986). In this regard, the role of drug attitude is so important that Albert Ellis stated that the thinking and attitude of addicted individuals leads them to drug use or withdraws them permanently from drug use. The type of the attitude of the addicted towards drugs is a kind of thinking that may be rational or irrational and often has an automatic, deliberate and permanent nature, and it is not easy to change this attitude. However, one of the ways that helps addicts to gain selfrecognition is to evaluate the type of attitude and to create negative addiction attitude. Aizen & Fishbien (1980) also emphasized the role of addiction attitude by adolescents and the youth, based on the rational action theory. According to this theory, cognitive attitudes refer to the results of two components of beliefs or expectations regarding the outcomes and consequences of a certain behavior and evaluation of behavioral outcomes. In fact, evidence suggests that mental attitudes and norms affect individual behaviors and behavioral intentions are the real determinants of behavior. Researches show that attitudes and mental norms of adolescents and the youth lead to the formation of intentions towards drugs and then start drug abuse (Kuther, 2002).

As it was said, it can be concluded that the drug use attitude as a cognitive element has a mediating role in the relationship between attachment and addiction potential and, by secure attachment, we can make some changes in the attitude of the youth toward drugs. The results of this study are of great importance in developing educational and preventive programs in the tendency of the youth to use drugs. Similar to other studies, this research has been confronted with some limitations. Also, the current research was conducted merely on students, so it is not possible to generalize the results to other age groups with different levels of education. The results of this research can be used to develop educational and therapeutic programs for preventing drug use among vulnerable groups. It is suggested that for more generalization, further research would be carried out with a sample outside the university with a different education and age range.

Reference

Atkinson, L., & Goldberg, S. (2011). Attachment approach in the treatment of mental disorders. Translated by Zaynab Khanjani; Fatemeh Hadavandkhani; Mohammad Rasool, Mossery, Tehran: Arjmand Publication.

- Bahadori Khosroshahi, J., Hashemi Nosrat Abad, T., Biraami, M. (2010). Relationship between Attachment Styles and Resilience with Drug Abuse. *Quarterly Journal of Addiction Research*, 9 (47), 33 -25.
- Hajli, A., Zakriya, M. A., Hojjati Kermani, S. (2010). People's Attitude to Drug Abuse in the Country. *Journal of Social Issues Review*, 1 (2), 80-62.
- Rahmanian, M., Zamani, M. Alibazi, H. (1394). Relationship between attachment style and Drugs attitude: the role of moderating personality traits. *Quarterly journal of addiction*, 9 (33), 134-122.
- Zargar, Yadollah; Najarian, Bahman; and Naiami, Abdul Zahra (2008). Investigating the relationship between personality traits (excitement, assertiveness, and psychological hardiness), religious attitude and marital satisfaction with drug addiction potential. *Journal of Educational Sciences and Psychology*, 1 (3), 120-99.
- Kaplan, & Sadock (2008). Summary of psychiatry, behavioral sciences and clinical nursing. Translated by H. Rafiee. Arjmand Publishing.
- Mohammadzadeh, J., Khosravi, M., Rezaei, A. A. (2012). Investigating the attachment styles as one of the predictive variables in male youth addiction in the city of Ilam. *Journal of Research in Health Systems*, 8 (7 Special journal), 1165-1159.
- Akgun, E., & Mellier, D. (2015). The Evaluation of Social Competence and Internalizing & Externalizing Problem Behaviors of French and Turkish Children by their Attachment Representations. *Anthropologist*, 20(1, 2), 13-21.
- Allen, D., Timmer, S. G., & Urquzia, V. (2014). Parent-Child interaction therapy as an attachment-based intervention: Theoretical rationale and pilot date with adopted children. *Children and Youth Services Review*, 47, 334-341.
- Ajzen, I. & Fishbin, M. (1980). *Understanding attitudes and predicting social behaviors*. Englewood cliffs, New Jersey: prentice- Hall Inc.
- Anastasia, A. (1990). Psychological Testing. New Yurok: Mac Millan.
- Bandura, A. (2007). An agentic perspective on positive psychology. In S. J. Lopez (Ed.). *The science of human flourishing*. New York: Praeger.
- Borhani, Y. (2013). Substance abuse and insecure attachment styles: A relational study. Journal of Trans disciplinary Writing and Research from Claremont Graduate University, 2(1), 142-159.
- Broome, A. K. (1989). *Health psychology: Processes and application*. Chapman and hall.
- Cassidy, J., Jones, J., & Shaver, P. R. (2013). Contributions of attachment theory and research: A framework for future research, translation and policy. *Development and Psychopathology*, 25, 1415-1434.
- Davidson, S. & Ireland, C. A. (2009). Substance misuse: the relationship between attachment styles, personality traits and coping in drug and non-drug users. *Drugs and Alcohol Today*, 9(3), 22-27.
- Davison, G. C., & Neal, J. M. (2001). *Abnormal psychology*. New York: John Willy and Sons. Inc.
- De Rick, A., & Vanheule, S. (2007). Attachment styles in alcoholic inpatients. *European Addiction Research*, 13, 101-108.
- Dwairy, M. (2010). Parental Acceptance–Rejection: a Fourth Cross-Cultural Research on Parenting and Psychological Adjustment of Children. *Journal of Child and Family Studies*, 19(1), 30-35. DOI: 10.1007/s10826-009-9338-y.

- Fazio, R. H. (1995). Attitudes as object evaluation association: Determinants, consequences, and correlates of attitude accessibility. In R. E. Petty & J. A. Krosnick (Eds.). *Attitude strength* (pp.247_282).
- Gervai, J. (2009). Environmental and genetic influences on early attachment. *Child and Adolescent Psychiatry and Mental Health*, 8(1), 25–28.
- Freeman, H., & Brown, B. B. (2001). Primary Attachment to Parents and Peers during Adolescence: Differences by Attachment Style. *Journal of Youth and Adolescence*, 30(6), 653-674.
- Hinnen, C., Sanderman, R., Sprangers, M. A. (2009). Adult attachment as mediator between recollections of childhood and satisfaction with life. *Clinical Psychology and Psychotherapy*, 16(1), 10-21.
- Kassel, J. D., Wardle, M. & Roberts, J. E. (2007). Adult attachment security and college student substance use. *Addictive Behaviors*, 32, 1164-1176.
- Kuther, T. L. (2002). Rational decision perspectives on alcohol consumption by youth: revising the theory of planned behavior. *Journal of addictive Behavior*, 27, 35-37.
- McCullers, W. J., Sussman, S., Dent, C. W. & Teran, L. (2001). Concurrent prediction of drug use among high-risk youth. *Journal of Addictive Behaviors*, 26(1), 137-142.
- Newcomb, M. D., Richardson, M. A. (2000). Substance use disorders. In Hersen, M., American RD, editors. Advanced abnormal child psychology. New Jersey, 18(1), 21-32.
- Paulk, A., & Zayac, R. (2013). Attachment style as a predictor of risky sexual behavior in adolescents. *Journal of Social Sciences*, 9(2), 42-47.
- Robert, S., Ash, L., Christian, M. (2012) the moderating effect of family emolument on substance use risk. *Journal of Addictive Behaviors*, 32, 1036-1082.
- Rohner, R. P., Khaleque, A., & Cournoyer, D. E. (2007). *Introduction to Parental Acceptance-Rejection Theory, Methods, Evidence, and Implications*. University of Connecticut, Center for the Study of Parental Acceptance and Rejection, retrieved at: www.cspar.uconn.edu.
- Shaver, P. R. & Mikulincer, M. (2002). Attachment-related psychodynamics. *Attachment and Human Development*, 4, 133-161.
- Taylor, S. E., Pelau, L. A, & Cears, D. O. (2000). *Social psychology*. Tenth edition. NJ: Prentice- Hall Inc.
- Thorberg, F. A., & Lyvers, M. (2010). Attachment in relation to affect regulation and interpersonal functioning among substance use disorder in patients. *Addiction Research and Theory*, 18(4), 464-478.
- Wedekind, D., Bandelow, B., Heitmann, S., Havemann, U., Engel, K.R., Huether, G. (2013). Attachment style, anxiety coping, and personality-styles in withdrawn alcohol addicted inpatients. *Substance Abuse Treatment, Prevention, and Policy*, 8(1), 1-13.
- Wellston, K. A., Wellston, B. S., Smith, S., & Dobbins, C. J. (1987). Perceived control and health. *Current Psychological Research and Reviews*, 6, 5–25.
- Yen, J. Y., Yen, C. F., Chen, C. C., Chen, S. H., KO, C. H. (2007). Family Factors of Internal Addiction and Substance Use Experience in Taiwanese Adolescents. *Cyber Psychology & Behavior*, 10(3), 320-362.