

Abstract

Objective: The purpose of this study was to examine the mediating role of self-assertion in the relationship between family function and addiction tendency in a sample of second high school students in Sanandaj.

Method: The present study was a descriptive correlational one. Based on the population of second high school students in Sanandaj and based on the Cochran formula, 366 students were selected as the participants via multi-stage cluster sampling. The selected students completed the scales pertaining to family functioning, addiction tendency, and self-assertion.

Results: According to the results, family functioning had a positive correlation with self-assertion and a negative correlation with addiction tendency in students ($p < 0.01$). Also, the results showed that there is a negative relationship between self-assertion and addiction tendency in students ($p < 0.01$). Based on path analysis, self-assertion has a mediating role in the relationship between family functioning and addiction tendency among students ($p = 0.006$). **Conclusion:** In order to reduce addiction tendency, families should provide an intimate and responsive atmosphere for students so that they can increase their children's self-assertion and raise their awareness of drug use and its effects by means of quantitative and qualitative mutual respect and responsiveness. Students' awareness and ability to say no will have a negative effect on addiction tendency.

Keywords: family functioning, addiction tendency, self-assertion, school students

Mediating Role of Self-assertion in the Relationship between Family Functioning and Addiction

Soleimani, M., Mirderikvand, F.,
Veis-Karami, H., Ghareh-Veisi, S.

Soleimani, M.

Ph.D. Student of Educational Psychology, Lorestan University, Khorramabad, Iran, e-mail: majidsoleymani121@yahoo.com

Mirderikvand, F.

Assistant Professor, Department of Psychology, Lorestan University, Khorramabad, Iran

Veis-Karami, H.

Assistant Professor, Department of Psychology, Lorestan University, Khorramabad, Iran

Ghareh-Veisi, S.

Ph.D. Student of Educational Psychology, Lorestan University, Khorramabad, 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. 12, No. 50, Winter 2019
<http://www.etiadpajohi.ir>

Introduction

Substance abuse is one of the challenges that various communities are being involved in and has imposed significant personal, social, and health costs (Mousavi, 2010). It has been referred to as one of the four critical global problems that affect many aspects of the individual's life (Safari Hajat Aghayi, Kamali, & Esfahani, 2012). The World Health Organization (WHO) described drug addiction as a chronic or acute poisoning arising from the use of natural or industrial drugs in which the addicted person is in dire need of drug use at all cost (dependency) and, experiences a gradual increase in consumption (tolerance), and undergoes psychological and physical symptoms (withdrawal symptoms) in the case of not using drugs (Kia, & Hosseinpour, 2007). What was mentioned was a definition of addiction, while the tendency toward substance use refers to individuals' attitude towards and beliefs about the positive and negative consequences of drug use (Eriksson, 1982; as cited in Shahriari Dastjerdi, Hojjatzadeh, Kaikhayi, & Ramazani, 2013).

Among different theories and approaches to addiction explanation, the approach of risk and protective factors provides more beneficial predictions of people's attitude towards risk behaviors. According to this approach, exposure to high-risk behaviors can help with the real conduct of these behaviors in the future (Hawkins, Catalano, & Miller, 1992). There are six factors of individual dimension, family, school, peer group, community, and culture that can lead to high-risk behaviors, such as addiction (Taromian, 1999). Family is a center that is linked with social and emotional behaviors of the members (Meunier et al., 2011) and is considered an important factor in adolescents' addiction (Reza'ea, Eslami, & Mehdipour Khorasani, 2014). Javadi et al. (2011) showed that there is a direct relationship between family functioning and resilience to drug use among high school male students. Mirzayi, Nasirzadeh, Eslami, Sharifirard, & Hasanzadeh (2013), and Shahriari et al. (2013) reported the existence of a negative correlation between family function and addiction tendency. Tosifian, Ghaderi, Khaledian, & Farrokhi (2017) showed that there is a positive relationship between the functioning of the unhealthy family and craving for drug use. Wagner et al. (2010) showed that parenting supervision, family cohesion, and drug-related monitoring had a negative relationship with substance use, but loss of parents and family conflicts had a positive relationship with substance use. In the same way, Lin, Wu, & Detels (2011) reported that there is a negative relationship between perceived family support and substance use. Massah, HoseinSabet, Doostian, A'zami, & Farhoudian (2014) also reported a negative relationship between family functioning and addiction tendency.

One of the approaches to family functioning is McMaster's model. In this model, the family's ability to solve family problems, direct and indirect methods of establishing emotional relationships among members, the role and responsibilities of each member for the proper functioning of the family, the

ability to respond quantitatively and qualitatively to members' stimuli and feelings, interests and values of the family, members' interests and activities, family control over members in high-risk situations, and, ultimately, the damage and overall health of the family are evaluated (Aroons, Macdonald, Canly, & Nioton, 2007). Therefore, family functioning, including conflict resolution, interpersonal relationships, the existence and enforcement of laws, and success in applying disciplinary patterns influences all family members (Minouyi, & Salehi, 2003). The weakness in family management, role ambiguity, lack of supervision and control, conflicts within the family, family members' attitude towards substance use, and emotional bond between family members are among the most influential familial factors in addiction tendency (Pazani, Borjali, Ahadi & Kersakian Moujambari, 2016).

Family not only affects individuals' physical and mental health, but also provides the necessary conditions for the development and growth of skills (Behfar, Aghamohammadian, & Mahram, 2006). Family, as a social institution, has such functions as emotional, social, communicative, economic, health, socialization, cultural, recreational, disciplinary, and assertion aspects (Betancourt, 2017). Accordingly, it seems that school students' assertion also affects the relationship between family function and addiction tendency. In this regard, Shahidi, & Sarihi (2008) showed that children in families with little control and high affection showed higher degrees of self-assertion than children in the families with a high level of control but little affection. Besharatipour (2010) showed that family coherence and flexibility were positively correlated with students' self-assertiveness. Khormayi, & Zare (2016) reported that family communication patterns are a positive predictor of self-assertion. Haji-Hassani, Shafi Abadi, Pirsaghi, & Bashirpour (2011) and Na'eam, & Sharif (2017) reported a negative correlation between self-assertion and addiction potential, and the linear regression in their research represented self-assertion was a negative predictor of addiction tendency. Al Saud (2006) found a negative relationship between self-assertion and addiction. Shahidi, & Jafari (2009) also found that there was a higher degree of self-assertion in non-addicted people than addicts. Gu, Lee, & Hong (2016) reported a significant negative relationship between substance use tendency and assertiveness. Similarly, Botvin & Griffin (2004) argued that self-assertion is one of the factors contributing to the disappearance of substance abuse. Self-assertion has been defined as one's demand for his/her rights and the direct expression of thoughts, feelings, and beliefs without violating the rights of others. In other words, self-assertion is a set of four components, namely open expression, control of emotion, consideration for others, and self-direction (Hargie, Saunders, & Dickson, 1994; translated by Beigi, & Firouzbakht, 2011).

Adolescents' tendency to drug use is on an increasing trend (Ferrence, Lothian, & Cape, 2000) because unique changes have made this period sensitive (Partov, 2010). Therefore, students seek identification in this period and take up

risky behaviors (such as drug use) (Newcomb, 1995). In addition to the family malfunctioning, which is the root of many personal problems and social dilemmas like addiction (Nouri, 2005; as cited in Reza'ea et al., 2014), self-assertion is also one of the interpersonal aspects that can influence addiction tendency by increasing dare and rejecting negative demands. Therefore, in order to prevent addiction in adulthood, the control of addiction tendencies in adolescence should be emphasized (White, & Hayman, 2004) so that we can prevent the waste of trained and educated human resources in Iran and reduce the detrimental material and spiritual effects of addiction among students. In addition to the above-mentioned points, the limited number of studies on the mediating role of self-assertion between family functioning and addiction tendency led the current authors to investigate the mediating role of self-assertion in the relationship between family functioning and addiction tendency. The suggested research model is as follows:

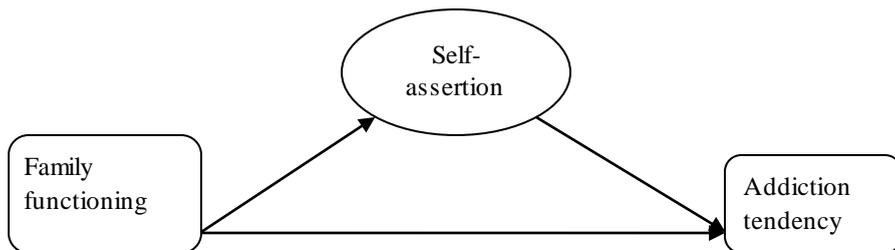


Fig. 1: Conceptual Model of Research

Method

Population, Sample, and Sampling Method

The present study was a descriptive correlational one. All second high school students in Sanandaj in the academic year of 2018-19 (7,618 students) constituted the statistical population of this study. According to the Cochran formula and the probability of participant loss, 400 students were selected as the sample units via multi-stage cluster sampling. From each district of Sanandaj city (districts one and two), two schools were selected. Then, four classes were selected from each school. By referring to the classes, the researcher explained the purpose of the research to the students and requested them to respond to the questionnaires if willing. To ensure the confidentiality of the research results, they were asked to use arbitrary codes instead of their names. After the completion of questionnaires, 34 incomplete and faulty questionnaires were excluded.

Instruments

1. Family Assessment Device (FAD): This scale consists of 53 items and has been designed based on McMaster's theory by Epstein, Lawrence, & Bishop (Epstein et al., 1983; as cited in Miller et al., 2000). This scale has six subscales,

namely problem-solving, communication, roles, affective responsiveness, affective involvement, and behavior control. In addition to these six subscales, there is a general dimension called general functioning. The items of this scale are scored based on a 5-point Likert scale (from strongly disagree: 0 to strongly agree: 4). A high score on this scale reflects a better family functioning and a low score indicates poor family functioning. In this scale, the items numbered 3, 4, 6, 7, 9, 11, 12, 13, 17, 18, 19, 21, 25, 26, 27, 32, 33, 35, 40, 41, 42, 43, 45, 46, 48, 49, and 51 are scored in reverse order. The designers of the tool have reported the internal consistency coefficients of the subscales within the range of 0.72 to 0.92 (Miller et al., 2000). Zadeh Mohammadi, & Khosravi Ghafar (2006) have standardized this tool in Iran and its Cronbach's alpha coefficient reliability has been reported equal to 0.94. Also, this instrument enjoys a desired predictive and concurrent validity (Sanayi, 1999; as cited in Bakhshipour, Asadi, Kiani, Shir Alipour, & Ahmad Doost, 2012). The Cronbach's alpha coefficient reliability of this tool has been obtained equal to 0.84 in the present study.

2. Addiction Tendency Inventory: Zargar (2006; as cited in Zargar, Najarian, & Na'ami, 2008) constructed this scale based on Weed, & Butcher's questionnaire (1992) and in accordance with the Iranian culture. This instrument has 41 items (5 items pertain to lie detecting factor, items numbered 12, 13, 15, 21, and 33). This scale is scored based on a 5-point Likert scale (strongly disagree: 0 to strongly agree: 4). The designer of this scale showed that it enjoys a desired criterion validity, and can differentiate addicts from non-addicted individuals well. The construct validity of this scale has also been reported desired by estimating its correlation with Symptom Checklist-25 (SCL- 25) ($r=0.45$). He also reported Cronbach's alpha coefficient of 0.90 for this scale. In another study, the Cronbach's alpha reliability of this scale has been obtained equal to 0.99, and its criterion validity of construct validity have been reported desirable (Zarin Kalak, 2010). The reliability of this tool in the present study was obtained equal to 0.78 via Cronbach's alpha coefficient.

3. Assertion Inventory: This tool was constructed by Gambrill, & Richey in 1975 and contains 40 items. This instrument is scored on a five-point Likert scale (from very low: 1 to very high: 5). In this scale, questions focus on the ability to decline a request, express feelings, begin and terminate a relationship, respond to criticisms, and accept one's own limitations. A high score on this scale represents higher self-assertion and vice versa. To assess the validity of the scale, its designers obtained the factor loadings of the questionnaire items within the range of 0.39 to 0.70. In addition, the reliability coefficients of 0.81 and 0.83 were reported for this scale through Cronbach's alpha and split-half methods, respectively (Gambrill, & Richey, 1975). Rezapour Mirsaleh, Aboutorabi Kashani, & Ebrahimi Ghavam (2012) reported the reliability of this instrument using Cronbach's alpha coefficient (0.86). In the present study, the Cronbach's alpha reliability coefficient of this scale was obtained equal to 0.82.

Results

In this section, the results of data analysis are presented. At first, some descriptive statistics, including frequency distribution, mean, and standard deviation of the research variables are referred to. Then, the zero-order correlation matrix has been obtained for the whole sample. Subsequently, the assumptions of structural equation modeling have been investigated. In order to test the proposed model, structural relations between the research variables were calculated through statistical equation modeling.

Table 1: Descriptive Statistics of the Research Variables

<i>Variable</i>	<i>Min.</i>	<i>Max.</i>	<i>Mean</i>	<i>SD</i>
Family functioning	0	212	174.28	22.11
Addiction tendency	0	164	107.58	14.31
Self-assertion	40	200	171.39	19.42

The correlation matrix of the research variables has been presented in Table2.

Table 2: Correlation Matrix of the Research Variables

<i>Variable</i>	<i>1</i>	<i>2</i>	<i>3</i>
1. Family functioning	-	-0.68**	0.79**
2. Addiction tendency		-	-0.61**
3. Self-assertion			-

** P<0.01

The current study aimed to examine the mediating role of self-assertion in the relationship between family function and addiction tendency in a sample of second high school students. Before the model assessment, regression assumptions were checked. The p-p graph was used to check the normal distribution of residues. Considering the placement of all points on the bisector of the first quarter, it was determined that the assumption of normal distribution has been observed. One common method for examining the normality assumption is to calculate skewness and kurtosis. The magnitude of the kurtosis coefficient was smaller than 3 and skewness coefficient is lower than 10, which show that the data have been normally distributed.

Table 3: Skewness and Kurtosis Statistics for Checking the Normal Distribution of Research Variables

<i>Variable</i>	<i>Skewness</i>		<i>Kurtosis</i>	
	<i>Index</i>	<i>Standard error</i>	<i>Index</i>	<i>Standard error</i>
1. Family functioning	1.88	0.13	2.88	0.26
2. Addiction tendency	1.09	0.13	2.09	0.26
3. Self-assertion	2.89	0.13	9.71	0.26

As it has been presented in Table 3, the assumption of normality of distribution has been observed in all variables based on skewness and kurtosis indices. After ensuring that the required assumptions have been met, path analysis was run in AMOS22 to evaluate the proposed model. In order to increase the mode fitness, the paths whose coefficients were statistically

insignificant were eliminated. In Fig. 1, the path diagram and the coefficients derived from the modified model are presented.

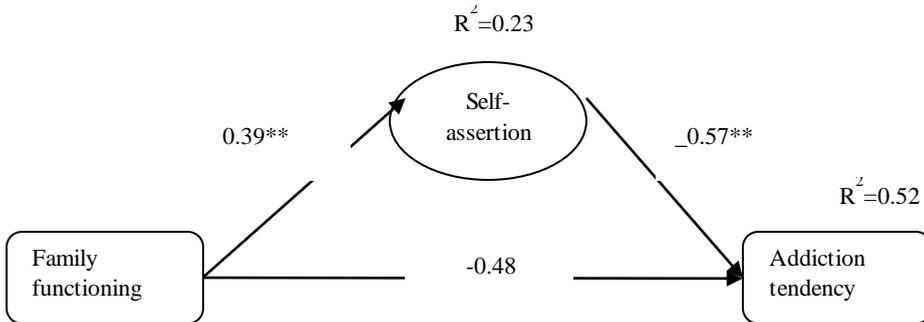


Fig. 2: Standard Coefficients of the Model of Family Functioning Relationships with Tendency toward Addiction with the Mediation of Self-assertion

According to the model, the standard path coefficients between family functioning and addiction tendency ($P < 0.01$, $\beta = -0.48$), family functioning and self-assertion ($P < 0.01$, $\beta = -0.39$), and self-assertion and addiction tendency ($P < 0.01$, $\beta = -0.57$). The fitness of the model was evaluated through fitness indices, including normed chi-square index (Chi-square ratio to degree of freedom), goodness of fit index (GFI), adjusted goodness of fit index (AGFI), comparative fit index (CFI), incremental fit index (IFI), and root mean square error of approximation (RMSEA). Based on the results of Table 4, all indices represent the optimal fitness of the model.

Table 4: Fit Indices of the Initial Model and Final Modified Model

<i>Index</i>	<i>Acceptable range</i>	<i>Index value of the initial model</i>	<i>Index value of the modified model</i>
CMIN/DF	$X^2/DF > 3$	14.91	0.59
CFI	$CFI > 0.9$	0.87	0.98
AGFI	$AGFI > 0.9$	0.71	0.98
RMSEA	$RMSEA > 0.9$	0.12	0.02
IFI	$IFI > 0.9$	0.78	0.99
CFI	$CFI > 0.9$	0.78	0.99

The standard coefficients of direct and indirect effects are presented in Table 5.

Table 5: Standard Coefficients of Direct, Indirect, and Total Effects of the Final Model

<i>Effect</i>	<i>Independent variable</i>	<i>Dependent variable Addiction tendency</i>
Direct	Family functioning	-0.48
Indirect	Family functioning with mediation of self-assertion	0.39
Total	Family functioning	-0.48
	Self-assertion	-0.57
	Coefficient of determination	0.25

As it has been shown in Table 5, the results indicate that the standard path coefficient between family functioning and addiction tendency equals -0.48, which is significant at the level of 0.003; consequently, the low function of family is effective in increasing addiction tendency. In addition, it has been shown that the standard path coefficient between self-assertion and addiction tendency equals -0.57, which is significant at the level of 0.004; therefore, high self-assertion leads to the reduction of addiction tendency.

To determine the significance of indirect effects, Bootstrap sampling method with 95% confidence interval of distribution of effects was used. According to Table 4, the results of the significance test of indirect effects indicated the significant mediation of self-assertion in the relationship between family functioning and addiction tendency; in this way, self-assertion has a mediating role in the relationship between family functioning and addiction tendency.

Discussion and Conclusion

The aim of this study was to investigate the mediating role of self-assertion in the relationship between family functioning and addiction tendency in school students. The first finding showed that family function has a negative relationship with addiction tendency in students. This finding is consistent with those of the studies carried out by Javadi et al. (2011), Mirzayi Alaviyeh et al. (2013), Shahriari et al. (2013), Tosifian et al. (2017), Wagner et al. (2010), Lin et al. (2011), and Massah et al. (2014). To interpret this finding, one may argue that as McMaster's model refers to the absence of emotional relationships, missing roles, and lack of values and norms in family's unfavorable functioning (Aarons et al., 2007), students seek a favorable social base to receive support when they, as children of these families, are exposed to the risks and problems associated with substance abuse (Liu, Li, Lu, Liu & Zhang, 2010). However, they do not have a good base of support to be able to solve problems; therefore, they join friendly groups at any cost and they are offered drug use. On the other hand, they continue drug use in order to calm down and forget about the problems due to the positive and wrong attitudes that they have obtained about drugs from different ways. When students do not perceive any warm and intimate relationship in the family environment and are not assigned any value

and credit, they lose attachment and bond with the family. After the loss of their belonging to a safe base (i.e., family), their self-esteem decreases; therefore, they try to receive false self-esteem and compensate for it through substance abuse (Ra'easi, Anisi, Yazdi, Zamani, & Rashidi, 2008).

The next finding of the current research showed that family functioning has a positive relationship with self-assertion in students. This finding is in the same line with the findings reported by Shahidi, & Sarihi (2008), Besharatipour (2010), and Khormayi, & Zare (2016). With different functions (Betancourt, 2017), family affects the social and emotional behaviors of its members (Meunier et al., 2011). Family influences its members' mental and physical health and provides a good opportunity for the development of skills (Behfar et al., 2006) through direct and indirect methods, including desirable emotional relationships, the definition of individual roles and tasks, the quantity and quality of responding to members' needs and feelings, and provision of support in sensitive and vulnerable situations (Aarons et al. 2007). Self-assertion is one of these skills that can be reduced or increased based on the functions of family.

The other finding of the present study showed that there is a negative relationship between self-assertion and addiction tendency in students. This finding is consistent with those of the research conducted by Haji-Hasani et al. (2011), Na'eam, & Sharif (2017), Al Saud (2006), Shahidi, & Jafari (2009), and Gu et al. (2016). To explain this finding, it can be argued that the students with low self-assertion skills have low self-esteem and have a sense of loneliness (Hojjat, et al., 2016) and reticence (Borna, & Savari, 2010) in different situations. For this reason, they do not have the ability to refuse impertinent requests and have poor self-assertion skills (Na'eam, & Sharif, 2017) because they think that they avoid losing their limited social and friendly relationships in this way. Students experience extensive friendships during their studies. By joining different groups, they seek collective consent from the group and induce a positive attitude towards themselves. Friendly groups are not necessarily desirable or undesirable, but some friendly groups regard non-normative behaviors as a privilege and revive such members with open arms. For this reason, students view the group members as onlookers and consider themselves as the actor with respect to the period during which they study. Therefore, they match themselves with the group's collective attitude and do not show any resistance in order to attract the members' attention.

The main finding of the current study showed that self-assertion has a mediating role in the relationship between family functioning and addicting tendency in students. Accordingly, the desirable function of the family has a negative effect on addiction tendency and has also an indirectly effect on the decline of addiction tendency with the mediation of self-assertion. As it was mentioned earlier, family functioning, along with the various supports that may have for its members, may weaken or strengthen self-assertion in members. Regardless of the growth or suppression of self-assertion by the family, one of

the functions of the family is the growth of self-assertion among its members (Betancourt, 2017). The desirable function of family not only directly affects addiction tendency, but also indirectly affects members' self-assertion and reduces addiction tendency in students. Based on McMaster's model, family, with its desirable function, provides its members with the opportunity to express feelings and emotions, and respects its members through timely and accountable responsiveness (Aarons, 2007). This interactive approach in family not only enhances students' self-esteem, but also strengthens the sense of autonomy in them by providing quantitative and qualitative responses and, thereby, they can easily express their needs and demands inside and outside of the family or refrain from accepting others' requests without criticizing. These students will have the power to say no and assert themselves by experiencing different socially and physically dangerous environments through the independence of vote that they hold and the awareness they receive from the family.

In this research, it was attempted to investigate the direct and indirect effects of family functioning on students' addiction tendency through the mediation of self-assertion. The findings of this study recommend that families should create an interactive, intimate, and respect-based environment in the family so that students can raise their needs and obtain information about social harms, including addiction. Senior high school students are at the peak of puberty and seek curiosity and more information. If they are poorly informed about the quality of family functioning and have little awareness of substance abuse, they will tend to friendly groups and try to fully accept the positive and negative norms of such groups in order to receive support. On the other hand, they differentiate themselves from other drug users by means of the personal myths dreaming in their minds (Berk, 2007; translated by Mohammadi, 2011), and they believe that they will never experience substance abuse by their tendency to addiction and recreational use of drugs. The results of this research recommend that cultural and social planners and managers, such as educationalists, audio and television experts, law enforcement authorities, municipality officials, cultural planners, etc. should explain the key role of families in increasing or reducing self-assertion and addiction tendency of family members. For example, school administrators can hold periodic meetings with students' parents and provide them with knowledge about the atmosphere of high-risk families and appropriate methods of coping with children in accordance with children's age. It is expected that cultural and social institutions address the family factors involved in addiction more than ever in addition to addressing the emotional effects of addiction. In addition, the findings of this research recommend that psychologists use family therapy to go for addiction treatment. The most important limitation of the research was the challenges available in the items of Addiction Tendency Scale where the disciplinary committee of Sanandaj Education Department demanded that some of the items should be changed structurally. Since only male students constituted the statistical population of this

study, it is recommended that further research be carried out on female students at different school programs in future.

Reference

- Aarons, G. A., McDonald, E. J., Connelly, C. D., & Newton, R. R. (2007). Assessment of family functioning in Caucasian and Hispanic Americans: reliability, validity, and factor structure of the Family Assessment Device. *Family Process*, 46(4), 557-569.
- Al Saud, B. S. A. (2006). *Addiction, Alienation and Assertiveness in Saudi and English Drug Addicts* (Doctoral dissertation, University of London).
- Bakhshipour, B., Asadi, M., Kiani, A., Shir Alipour, A., & Ahmad Doost, H. (2012). Relationship of Family Functioning with Couple Marital Conflicts on the Eve of Divorce, *Knowledge & Research in Applied Psychology*, 13 (2), 11-21.
- Behfar, Z., Aghamohammadian, H., & Mahram, B. (2006). Family Functioning of Adolescent Girls With Internalizing Disorders and in Dispatched Families, *Journal of Advances in Cognitive Science*, 8 (2), 21-30.
- Berk, L. (2007). *Psychology of Development (from Adolescence to the End of Life)*, translated by Yahya Seyyed Mohammadi (2011). Tehran: Arasbaran Publication.
- Besharatipour, M. (2010). *Relationship of family cohesion and flexibility with self-assertion in first year high school students in Bandar Imam Khomeini*, M.A. Thesis, Islamic Azad University of Marvdasht.
- Betancourt, T. S., Ng, L. C., Kirk, C. M., Brennan, R. T., Beardslee, W. R., Stulac, S., Moshashi, C., Nduwimana, E., Mukunzi, S., Nyirandagijimana, B., Kalisa, G., Cyamatare, F. R., & Sezibera, V. (2017). Family-based promotion of mental health in children affected by HIV: a pilot randomized controlled trial. *Journal of Child Psychology and Psychiatry*, 58(8), 922-930.
- Borna, M., & Savari, K. (2010). Simple and multiple relationships of self-esteem, loneliness, and self-assertion with shyness, *Journal of New Advances in Behavioral Sciences*, 5 (17), 53-62.
- Botvin, G. J & Griffin, K.W. (2004). Life Skills Training: Empirical Findings and Future Directions. *Journal of Primary Prevention*, 25(2), 211-232.
- Ference, R., Lothian, S. and Cape, D. (2000). *Contemporary patterns of nicotine use in Canada and the United States*. In R. S. Robert, J., Room, R. and Poe, M. (Eds). *Nicotine and Public Health*. American Public Health Association, Washington DC: 287-300.
- Gambrill, E. D., & Richey, C. A. (1975). An assertion inventory for use in assessment and research. *Behavior Therapy*, 6(4), 550-561.
- Gu, H. J., Lee, O. S., & Hong, M. J. (2016). The relationship between SNS addiction tendency, self-assertiveness, interpersonal problems and in college students. *Journal of the Korea Academia-Industrial Cooperation Society*, 17(4), 180-187.
- Haji-Hassani, M., Shafi Abadi, A., Pirsaghi, F., & Bashirpour, M. (2011). Prediction of Addiction Tendency based on the Degree of Aggression and Self-assertion in university Students, *Quarterly Journal of Research on Addiction*, 5 (20), 41-54.
- Hargie, O., Saunders, C., & Dickson, D. (1994). *Social skills in Interpersonal Communication*, translated by Beigi, & Firouzbakht (2011). Tehran: Roshd Publication.

- Hawkins, J. D., Catalano, R.F & Miller, J. U. (1992). Risk and protective factor for alcohol and other drug problems in adolescence and early adulthood: Implications for substance abuse prevention. *Psychological Bulletin*, 112, 64-105.
- Hojjat, K., Sajedi, M., Reza'ea, M., Nowroozi Khalili, M., Rahimi, A., & Einbeigi, E. (2016). The effect of Assertiveness skill training on self-esteem and loneliness of female students with addicted parents, *Journal of North Khorasan University of Medical Sciences*, 8 (4), 675-684.
- Javadi, R., Aghabakhshi, H., Rafi'ea, H., Asgari. A., Bayan Memar, H., Abdi Zarin, S. (2013). Relationship between family functioning and resilience of drug use in high school male students, *Journal of Social Welfare Research*, 11 (41), 421-444.
- Kia, A., & Hosseinpoor, J. (2007). A Survey on Media Attitudes to Addiction, *Journal of Law Enforcement*. 9 (1), 27-57.
- Khormayi, F., & Zare, M. (2016). Investigating the Relationship between Dimensions of Family/ Professor Communication Models and Assertiveness in University Students with the Mediating Role of Emotion Regulation, *Journal of Learning and Education Studies*, 8 (2), 68-91.
- Lin, C., Wu, Z., & Detels, R. (2011). Family support, quality of life and concurrent substance use among methadone maintenance therapy clients in China. *Public health*, 125(5), 269-274.
- Liu, H., Li, J., Lu, Z., Liu, W., & Zhang, Z. (2010). Does Chinese culture influence psychosocial factors for heroin use among young adolescents in China? A cross-sectional study. *BMC public health*, 10(1), 563-570.
- Massah, O., HoseinSabet, F., Doostian, Y., A'zami, Y., & Farhoudian, A. (2014). The role of sensation-seeking and coping strategies in predicting addiction potential among students. *Practice in Clinical Psychology*, 2(3), 173-180.
- Meunier, J. C., Roskam, I., Stievenart, M., Moortele, G., Browne, D. T., & Kumar, A. (2011). Externalizing behavior trajectories: The role of parenting, sibling relationships and child personality. *Journal of applied developmental psychology*, 32(1), 20-33.
- Miller, I. W., Ryan, C. E., Keitner, G. I., Bishop, D. S., & Epstein, N. B. (2000). "Factor Analyses of the Family Assessment Device," by Ridenour, Daley, & Reich. *Family process*, 39(1), 141-144.
- Minouyi, M., & Salehi, M. (2003). The practicality, reliability, validity, and standardization of AAS, APS, and MAC-R tests for the identification of high school male students exposed and susceptible to substance abuse in Tehran, *Quarterly Journal of Research on Addiction*, 3, 77-112.
- Mirzayi, M., Nasirzadeh, M., Eslami, A., Sharifirard, G., & Hasanzadeh, A. (2013). The Impact of Family Functioning on Young People's Dependence on Industrial Drugs, *Journal of Health Education and Health Promotion*, 1 (2), 19-30.
- Mousavi, M. (2010). The Effectiveness of Life Skills Training in Reducing Drug Abuse among Students, *Quarterly Journal of Research on Addiction*, 4 (13), 73-87.
- Na'eam, M., & Sharif, A. (2017). The role of self-control, self-assertiveness, and depression in students' addiction tendency, *Journal of Law Enforcement*. 4 (14), 19-42.
- Newcomb, M. D. (1995). *Identifying high-risk youth: Prevalence and patterns of adolescent drug abuse*. In E. Rahdert, D. Czechowize, & Amsel (Eds). *Adolescent*

- drug abuse: Clinical assessment and therapeutic intervention. Rockville, MD: National Institute on Drug Abuse.
- Partov, M. (2010). *Attitude, Resilience, and substance use status in adolescents at risk: Measuring an explanatory model of the role of mediating variables and effective mechanisms*, PhD Dissertation in Psychology of Health. University of Tehran.
- Pazani, F., Borjali, A., Ahadi, H., & Kersakian Moujambari, A. (2016). Potential Factors for Being Addicted in Adolescents: Psychosocial Factors and Co-Dependency, *Quarterly Journal of Social Health and Addiction*, 3 (11), 127-154.
- Ra'easi, F., Anisi, J., Yazdi, M., Zamani, M., & Rashidi, S. (2008). Comparison of mental health and parenting styles between addicted and non-addicted people, *Journal of Behavioral Sciences*. 2 (1), 33-41.
- Reza'ea, A., Eslami, B., & Mehdipour Khorasani, M. (2014). The role of the family in youth's addiction tendency in the city of Varamin, *Sociological Studies of Youth Journal*, 5 (15), 27-50.
- Rezapour Mirsaleh, Y., Aboutorabi Kashani, P., & Ebrahimi Ghavam, S. (2012). Effectiveness of Assertive Skills Training on Improvement of Assertion and Self-esteem of Third to Fifth Grade Low-assertive Girl Students in Tehran, *Journal of Clinical Psychology and Personality*, 19 (7), 77-90.
- Safari hajat aghaii, S.S. H., Kamaly, A & Esfahani, M. (2012). Meta-Analysis of Individual and Environmental Factors that Influence People's Addiction Tendencies. *International Journal of High Risk Behaviors and Addiction*, 1(3), 92-99.
- Shahidi, S., & Jafari, M. (2009). Comparing locus of control, assertiveness and general health among young drug addicts in Iran. *Iranian Journal of Psychiatry*, 4(2), 46-51.
- Shahidi, S., & Sarihi, N. (2008). The Relationship between Parenting Styles and Self-assertion Ability and Studying the Effect of Self-assertion Training Program on Students, *Journal of Contemporary Psychology*, 3 (1), 14-23.
- Shahriari, S., Dastjerdi, R., Hojjatzadeh, N., Kaikhayi, R., & Ramazani, A. (2013). Role and family functioning in university students' tendency to addiction and substance abuse, *Journal of Zabol University of Medical Sciences*. 5 (4), 59-67.
- Taromian, F. (1999). *Substance Abuse in Adolescents and Young People*. Tehran: Tarbiat Publication.
- Tosifian, N., Ghaderi, K., Khaledian, M., & Farrokhi, N. (2017). Structural Modeling of Family Function and Drug Craving in Addicted People under Methadone Maintenance Treatment with an Emphasis on the Mediating Role of Self-Compassion, *Quarterly Journal of Research on Addiction*, 11 (44), 209-226.
- Wagner, K. D., Ritt-Olson, A., Chou, C. P., Pokhrel, P., Duan, L., Baezconde-Garbanati, L., Soto, D. W. & Unger, J. B. (2010). Associations between family structure, family functioning, and substance use among Hispanic/Latino adolescents. *Psychology of Addictive Behaviors*, 24(1), 98-108.
- Weed, N. C., Butcher, J. N., McKenna, T., & Ben-Porath, Y. S. (1992). New measures for assessing alcohol and drug abuse with the MMPI-2: The APS and AAS. *Journal of personality assessment*, 58(2), 389-404.
- White, V. Hayman, J. (2004), Australian secondary students' use of over the counter and substance in 2002, *National Drug Strategy Monograph Series*, No. 56. Canberra, Australian Government Department of Health and Ageing.
- Zargar, Y., Najarian, B., & Na'ami, A. (2008). Investigating the relationship of personality traits (sensation seeking, assertiveness, psychological hardiness),

religious attitude, and marital satisfaction with addiction potential among employees of an industrial company in Ahvaz, *Journal of Educational Science and Psychology*, 15 (1), 99-120.

Zarin Kalak, H. (2010). *The effect of resilience components training on reducing addictability and changing attitudes of high school students living in Tehran suburbs toward drug use*, M.A. Thesis, Allameh Tabataba'i University.

Zadeh Mohammadi, A., & Khosravi Ghafar, M. (2006). Preliminary review of psychometric properties and validation of Family Assessment Device (FAD), *Quarterly Journal of Research on Addiction*, 2 (5), 69-89.