

## The relationship between family-social factors and the substance abuse among the youth

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### ABSTRACT

*Drug abuse and dependency is a complex disorder associated with biological, psychological, social and spiritual causes. It effects and can easily destroy the foundation of individual and family, social, cultural life of a community. Identifying the preventive factors of this disorder can be helpful in better treatment plans. The purpose of the study was to examine the relationship between family and social factors and substance use with the mediation role of temperament, character, and psychological capitals. Method: The study was descriptive-correlational of structural equation modeling (SEM) and confirmatory factor analysis. To this end, 60 people were selected using a convenient sampling method. The research tools were Scale of the Factors Effective in Substance Abuse Tendency among the Youth, Cloninger's Temperament and Character Inventory (TCI), and Luthans' Psychological Capital Questionnaire (PCQ). SEM was used for data analysis. Results: The results showed that the temperament mediates the relationship between family and social factors and substance abuse. Moreover, character mediates the relationship between family and social factors and substance abuse. Moreover, psychological capitals mediate the relationship between family and social factors and substance abuse. Discussion and conclusion: According to the results, one can conclude that the effect of family and social factors on substance abuse is adjustable according to the temperament and character of addicts.*

*Keywords: Family-social factors, substance abuse, temperament-character, psychological capital*

### Introduction

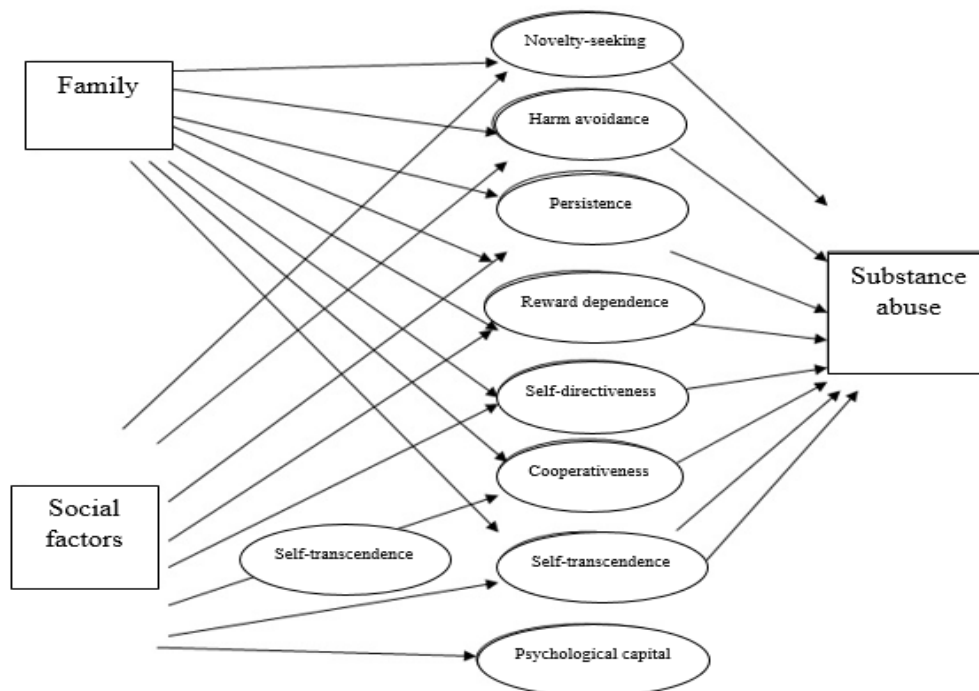
Drug addiction is a recurrent and chronic mental illness accompanied by severe motivational disorders and loss of behavioral control, causing personality destruction. Millions of people suffer from this disorder, usually happening with other mental illnesses and imposes various socioeconomic costs on the community (Dallas et al., 2010). Substance abuse and dependence on it have caused physical injuries like malnutrition, physical illnesses, death and possibly suicide, familial problems like divorce, domestic violence, and psychological problems like aggression, depression, stress, anxiety, and psychosomatic conditions (Alegría

et al., 2011). Moreover, problematic substance abuse causes widespread psychological and social consequences like difficulty achieving life goals and increasing interpersonal conflicts (Sloan et al., 2011). Despite the widespread harm of substance abuse, examining the causes of chronic substance abuse is an important source of information that can develop proper coping and intervention methods. Studies have identified factors like personality traits in the etiology of substance abuse and have strongly emphasized the role of personality traits in interacting with other environmental factors in initiating and continuing to use substance abuse problems (Dermody et al. , 2013).

Several studies have examined the role of individual, family, and social factors in substance abuse, in many of which the family is recognized as the strongest predictor. Family relationships are very important in starting substance abuse and the problems that arise (Fish et al., 2015). Most of the people abusing substances have various personality traits. These innate traits and special tendencies gradually expand and intensify the path of substance abuse. In other words, people with vulnerable personality traits are more likely to abuse drugs (Orki, Makry, and Kiai, 2013). Cloninger (1987) outlined two dimensions for personality in his scale: temperament, which is a biological part of personality with four subscales of novelty seeking, harm avoidance, reward dependence, and persistence, and the character dimension, which is the sociocultural component of personality and involves the subscales of self-directiveness are self-transcendence and cooperativeness. Studies show that negative parental behaviors are associated with high harm avoidance and low self-directiveness in adulthood (Takeuchi et al., 2011). The environment and parental care are associated with harm avoidance as children learn high harm avoidance to take adapt to threatening and stressful situations (Taylor et al., 2011).

Furthermore, there also been many studies on substance abuse based on psychological capitals. Psychological capital includes those psychological traits that contribute to a person's productivity and include self-perception, self-worth, purposefulness, and persistence against problems (Goldsmith et al., 2017). Psychological capital is a complex, interconnected structure with four components: perceptual-cognitive, i.e. hope, optimism, self-efficacy, and resiliency. In an interactive and valuable process, these components give meaning to one's life and continue one's efforts to change stressful situations, preparing one to enter the scene of action, and ensuring one's resilience and persistence in achieving one's goals (Parker et al. 2013). In the meantime, hope is a positive motivator considering bright goals for life. On the one hand, there is the motivation to seek the will to move towards the goals and on the other hand to study the appropriate ways to achieve the goals (Baily and Snyder, 2007). Fredrickson et al. (2013) showed that resiliency is associated with positive emotions and as a protective role in substance abuse tendency. People with a positive style of explanation are generally happier, more hopeful, and more satisfied with life, and less likely to abuse drugs. Moreover, studies have shown that substance abuse is associated with low resiliency and low mental health (Friedli, 2015).

Given the above points concerning substance abuse, various psychological, social, and biological factors are involved, but none of them alone can explain the causes of this phenomenon. As most of the studies in this regard are related to students and adolescence, given the research gap in the causes of substance abuse in youth and the need to design and implement a preventive program based on scientific findings, and considering temperament and character from Cloninger's bio-social theory and Luthans' psychological capital (2007), the study tried to provide a comprehensive cognitive causal model of substance abuse and an evaluation of its value. To this end, studying the relationship between family and social factors and substance abuse with the mediation of temperament, character, and psychological capitals is the purpose of the study.



**Figure 1: The assumed model of the factors affecting substance abuse**

### Ethical considerations

Obtaining a license to research the university's vice chancellor for research

Explaining the objectives of the study to each of the subjects in the study and obtaining their verbal consent

Ensuring the participants about the confidentiality of the information collected in the study

Informing people studied that participation in the study is optional and they can leave the study whenever they wish

### Method

The study was descriptive-correlational with SEM and confirmatory factor analysis that tried to observe and test the construction of internal relationships of the variables.

The population was the young people abusing drugs aged 16 to 29 in Arak in 2018, admitted to Ehyaye Zendegi Addiction and Psychiatric Resuscitation Clinic, Honar-e Zendeghi, Hayat-e Nou, Omid, Dey, Ayandeh and Miad-e Rahayi to quit substance abuse.

Given the research subject, the convenient sampling method was used to select the sample. To this end, 400 men were selected and studied in addiction treatment centers. It has to be noted that because of the sensitivity of the issue and the need to gain the satisfaction and trust of participants to cooperate honestly in the study, before completing the questionnaires, they were communicated effectively about the nature and purpose of the questionnaire and confidentiality and anonymity were emphasized.

### Research tools

**1- Scale of the Factors Effective in Substance Abuse Tendency among the Youth:** The scale has 78 questions and was developed and standardized by Mohammadi, Pourghaz, and Raghib in 2013. In this scale, individual factors have 7 sub-components of positive attitude towards drugs, personality and psychological problems like depression, aggression, anxiety, intolerance of failure, curiosity and lack of religious beliefs, interpersonal and environmental factors have 3 sub-components of family, friends and the school and social factors have four components lack cultural, sports and recreational facilities, industrial development and socioeconomic deprivation, lack of access to service, support and counseling systems and the drug market

in Iran. The answer to each item is scored 1 to 5. A high score on each of these components shows the presence of threatening factors. The validity of this scale is estimated as 0.94 using Cronbach's alpha coefficient.

**Cloninger's Temperament and Character Inventory (TCI):** This scale includes 125 items where the person completes the test with answer correct/incorrect. Scoring is as 1 and 2, and some questions are scored reversely. It has four scales for temperament, including novelty-seeking, harm avoidance, reward dependence and persistence; and three scales for the character, including cooperativeness, self-directiveness, and self-transcendence. This test was first used by Kaviani in Iran in 2007 and its reliability coefficient reported for the Iranian version as 0.96 for novelty-seeking, harm avoidance 0.91, reward dependence 0.61, persistence 0.76, cooperativeness 0.95, self-directiveness 0.85, and self-transcendence 0.88.

**Luthans' Psychological Capital Questionnaires (PCQ):** This questionnaire has 24 questions, each of which has 6 items. The components of the questionnaire are as follows: the first 6 questions related to self-efficacy (from 1 to 6), the second 6 questions related to hope (from 7 to 12), and the third 6 questions related to resilience (from 13 to 18), and the fourth 6 questions related to optimism (from 19 to 24). The respondent answers each question on a 6-point Likert scale (from completely disagree to strongly agreeing). First, the score of each subscale was obtained separately and then the sum of them was considered as the total score of psychological capital to obtain the score of psychological capital. The scores of this questionnaire range from 24 to 144. Dastgerdi (2017) obtained Cronbach's alpha coefficient for the whole test as 0.80. Additionally, these coefficients were 0.76, 0.72, 0.79, and 0.82 for self-efficacy, hope, resilience, and optimism, respectively.

## Results

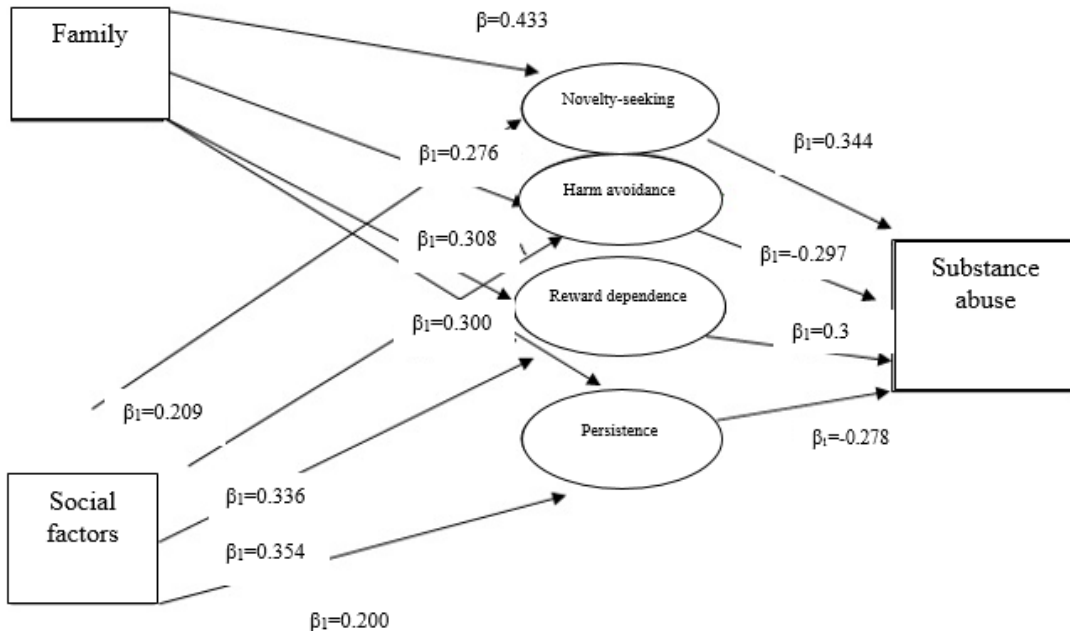
### Estimation and testing measurement patterns

The general indices of model fit for measurement patterns (confirmatory factor analysis) are given in the table below.

**Table 1: General indices of model fit measurement patterns**

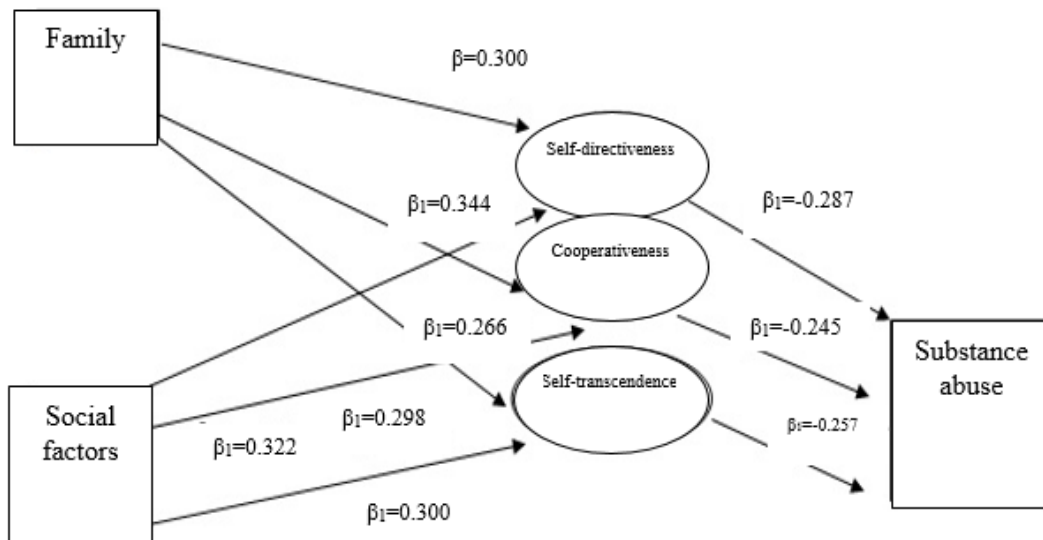
Grouping indices	Index	Abbreviation	Value	Acceptable Fit
Absolute fitness indices	Chi-square	X <sup>2</sup>	0.81	Larger than 5%
	Good of fitness index	GFI	0.91	GFI > 90%
	Adjusted goodness-of-fit index	AGFI	0.92	AGFI > 90%
Comparative fit indices	Non-normed fitness index	NNFI	0.94	NNFI > 90%
	Normed fitness index	NFI	0.96	NFI > 90%
	Comparative fit index	CFI	0.90	CFI > 90%
	Incremental fit index	IFI	0.96	IFI > 90%
Parsimony fitness indices	Parsimony normed fit index	PNFI	0.78	Above 50%
	Root mean square error of approximation	RMSEA	0.064	RMSEA < %10
	Minimum discrepancy per degree of freedom (CMIN/DF)	CMIN/df	2.99	Value between 1 and 3

The results of Table 1 show that the overall indices confirm that the data support the patterns.



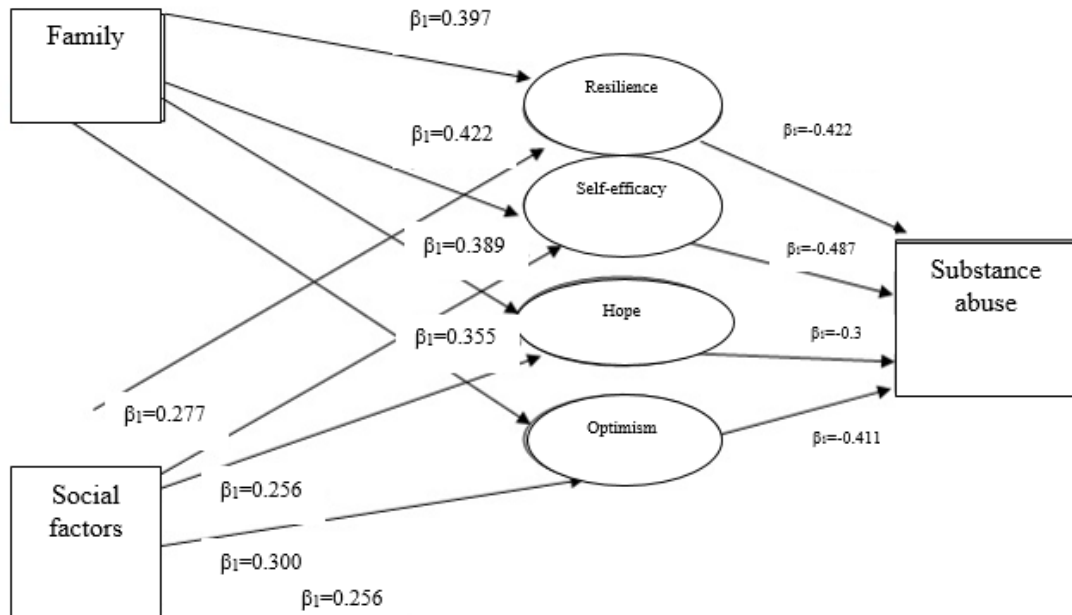
**Figure 2: Mediation of the temperament in the relationship between family-social factors and substance abuse**

As Figure 2 shows, family-social factors have an indirect effect through the mediating role of temperament on substance abuse in subjects. In other words, novelty-seeking (0.43), harm avoidance (0.27), reward dependence (0.30), and persistence (0.30) have played a mediating role in the relationship between family factors and substance abuse. Additionally, novelty-seeking (0.20), harm avoidance (0.33), reward dependence (0.35), and persistence (0.20) have played a mediating role in the relationship between social factors and substance abuse.



**Figure 3: Mediation of the character in the relationship between family-social factors and substance abuse**

As Figure 3 shows, family-social factors have an indirect effect through the mediating role of character on substance abuse in subjects. In other words, self-directiveness (0.30), cooperativeness (0.34), self-transcendence (0.26) have played a mediating role in the relationship between family factors and substance abuse. Moreover, self-directiveness (0.32), cooperativeness (0.29), self-transcendence (0.30) have played a mediating role in the relationship between social factors and substance abuse.



**Figure 4: Mediation of psychological capitals in the relationship between family-social factors and substance abuse**

As Figure 4 shows, familial-social factors have an indirect effect through the mediating role of psychological capital on subjects' substance use. In other words, resilience (0.39), self-efficacy (0.42), hope (0.38), and optimism (0.35) have played a mediating role in the relationship between family factors and substance abuse. Moreover, resilience (0.27), self-efficacy (0.25), hope (0.30), and optimism (0.26) have played a mediating role in the relationship between social factors and substance abuse.

### Discussion and Conclusion

Explanation of substance abuse variance based on family and social factors through the mediating role of temperament was examined using SEM. The results showed that family-social factors had an indirect effect on substance abuse using the role of temperament. Therefore, novelty-seeking, harm avoidance, reward dependence, and persistence have a positive mediating role in the relationship between family-social factors with substance abuse, which is implicitly in line with the theory of social learning of Bandura (2001), findings of Fish et al. (2015), Gliantz and Hartel (2002), Jamshidi (2019), Mohammadi, Mehryar, and Suri (2018) and Ghanbari Zarandi et al. (2016).

An explanation of the results, one can state that according to the Center for Substance Abuse (2001), family factors have a great effect on the tendency of young people to abuse substance, the most important of which are poor family supervision, poor family ties, family conflicts, and positive parental attitudes. Children are affected by family thoughts and beliefs, and parents' positive attitudes will undoubtedly be passed on to their children. The theory of family interaction focuses on the link between child and parent as the most important protective factor and emphasizes the three aspects of parenting as the most important conditions for raising healthy children: positive and sustainable emotional bonds, regulating strict and flexible rules and regulations, and psychological autonomy. As family conflicts increase, parent-child

interactions and parental supervision decrease. Therefore, with the reduction of parental supervision, adolescents are more affected than deviant peers and are more likely to be involved in general behavioral problems (such as antisocial and sexual behaviors) high risk, academic failure, and substance abuse (Javadi et al., 2011). High levels of harm avoidance, characterized by features like escapism and avoidance of dangerous, cautious, and isolated situations, act as a barrier to the symptoms of addiction and irritability. As a result of substance abuse, these people acquire false self-esteem and act regardless of the behavioral and traumatic consequences. Low harm avoidance, such as self-confidence against uncertainty, leads to many efforts with minimal discomfort, and the disadvantage of this is the unresponsiveness to the risk and unrealistic optimism, and the potential consequences are risky in situations where the risk is likely to be high that increases the severity of symptoms like irritability and impulsivity in drug addict people (Zuckerman, 1993).

Explanation of substance abuse variance based on family and social factors through the mediating role of character was examined using structural equations. The results showed that family-social factors had an indirect effect on substance abuse using the role of a character. Thus, self-directiveness, cooperativeness, and self-transcendence play a positive mediating role in the relationship between family-social factors with substance abuse, and this finding is implicitly in line with the results of Glantz and Hiyrtil (2004), Jahan Shahlou et al. (2016). Ghanbari Zarandi et al. (2016) and Khalili (2007) are aligned.

One can claim that the low levels of self-directiveness in these individuals based on neurological approaches show the concept of escape and inhibition of the response, which puts drug addicts at greater risk for impulsivity and behavioral problems (Biederman et al., 2008).

Explanation of substance abuse variance based on family and social factors was examined through the mediating role of psychological capital using SEM. The results showed that social-family factors had an indirect effect on substance abuse using the role of psychological capital. Thus, resilience, self-efficacy, hope, and optimism play a positive mediating role in the relationship between family-social factors with substance abuse that is implicitly in line with the results of Goldstein, Falconer, and Wickerley (2018), Parastou (2013), White (2006) Arab (2018) and Siah Kamari, Karami and Azizi (2018).

People with high resilience possess more power to control their impulses, which reduces their tendency towards addiction. People with low resilience lose their motivation when faced with problems, are inflexible towards life changes, and are always afraid, so they tend to abuse drugs in threatening situations. They become stressed and think of themselves as a victim and helpless person in times of crisis and unable to find safe and secure solutions using problem-solving techniques (Ghanbari Talab and Fouladchang, 2015).

### **Limitations**

1- Using self-report tools is associated with the problem that subjects may not be fully honest in expressing their problems and answering questionnaires.

2- Lack of appropriate literature for the study to compare the results with each other

3- The studied samples were only men that reduced the generalization of the results to women.

4- Only men admitted to the Addiction Treatment Center in Arak participated, which limited the generalizations of the above to other addicts who do not want to quit an addiction, which will cause restrictions on the external reliability of the study.

5- Convenient sampling is the last limitation of the study, making generalizing the results difficult.

### **Suggestions**

It is recommended that in future studies random sampling be used to select the samples, and other tools such as in-depth interviews be used besides the questionnaire. Furthermore, it is suggested that the variables studied in this study be studied among different types of addicts (men and women), and the results are compared with the results of this study in future studies.

According to the results, it is suggested that the necessary training be provided on how to communicate with children and create a positive and lasting emotional bond as a protective factor for parents, and to create a negative attitude towards drugs and correct misconceptions and neutral beliefs and increase self-directiveness and resilience among parents and children. Additionally, the results can be used in the

prevention and pathology of the addicts, and the educational and therapeutic methods can be used to enhance the temperament and character of drug addicts in the long run.

## References

- [1] Baily, T.C., & Snyder, C.R. (2007). Satisfaction with life and hope: A look at age and marital status. *Psychological Record*, 57, 2, 233-240.
- [2] Biederman, J., Petty, C. R., Dolan, C., Hughes, S., Mick, E., Monuteaux, M. C., & Faraone, S. V. (2008). The longitudinal course of oppositional defiant disorder in ADHD boys: Findings from a controlled 10-year prospective longitudinal follow-up study. *Psychological Medicine*, 38 (7), 1027-1035.
- [3] Dallas, T. X., David, W., & Julie, K. (2010). Staley behavioral neuroscience of drug addiction. *Biosocieties*, 39, 22-26.
- [4] Dastgerdi, M. (2017). The Effectiveness of Fordis Happiness Training on Psychological Capital and Quality of Life in Patients Visiting Methadone Addiction Treatment Centers. Master Thesis, Islamic Azad University, Ferdows Branch
- [5] Dermody, S. S., Cheong, J., & Munuck, S. (2013). An evaluation of the stress negative effect model in explaining alcohol use. The role of components of negative affect and coping style. *Substance use & Misuse*, 48, 297-308.
- [6] Fish, J. N., Maier, C. A., & Priest, J. B. (2015). Substance abuse treatment response in a Latino sample: the influence of family conflict. *Journal of substance abuse treatment*, 49, 27-34.
- [7] Fredrickson, B. L., Tugade, M. M, Waugh, C. E. & Larkin, G. R. (2013). A prospective study of resilience and emotions following the terrorist attacks on the United States. *Journal of Personality and Social Psychology*, 84 (2), 365-376.
- [8] Friedli, L. (2015). Mental health, resilience, and inequalities. *WHO Regional Office for Europe*, 66, 1-3.
- [9] Ghanbari Zarandi, Z., Mohammadkhani, Sh., & Hashemi Nasab, M. (2016). Structural model of substance abuse in adolescents: the direct and indirect role of individual, psychological, family, and social factors. *Journal of Addiction Research*, 10 (38), 87-102
- [10] Goldsmith, A. Veum, J., & Darity, W. (2017). Unemployment, Joblessness, Psychological Well-Being, and Self-Esteem: Theory and Evidence. *Journal of Socio-Economics*, 26, 133-158.
- [11] Luthans, F. (2012). Psychological capital: Implications for HRD, retrospective analysis, and future directions. *Human Resource Development Quarterly*, 23 (1), 1-8.
- [12] Luthans, F. (2017). Leading and developing health and safety through collective psychological capital. In *Leading to Occupational Health and Safety*, ed. K Kelloway, K Nielsen, J Dim off. New York: Wiley. In press
- [13] Luthans, F., & Avolio, B. J. (2014). Brief Summary of Psychological Capital and Introduction to the Special Issue. *Journal of Leadership & Organizational Studies*, 21 (2), 125-129.
- [14] Luthans, F., & Youssef, C. M. (2017). Psychological capital: An evidence-based positive approach. *Annual Review of Organizational Psychology and Organizational Behavior*, 4, 339-366.
- [15] Luthans, F., Bruce, J. Avoli, & Yusuf, K. (2013). Psychological capital of the organization: a change in the competitive advantage of human capital. Translated by Abdul Rasool Jamshidian and Mohammad Forouhar. Tehran: Ayge Publications.
- [16] Mohammadi, M., Mehryar, A.H., & Suri, A. (2018). The mediating role of the components of temperament, character, and individual beliefs for the relationship between family and social factors and substance abuse. *Psychological Methods and Models*, 9 (34), 69-93.
- [17] Mohammadkhani, Sh. (2006). Structural model of substance abuse in adolescents at risk: Assessing the effect of life skills training on intermediate factors of substance abuse. Ph.D. Thesis, University of Social Welfare and Rehabilitation Sciences
- [18] Mohammadkhani, Sh. (2007). Structural model of substance abuse in adolescents at risk: Assessing the direct and indirect effects of individual and social factors. *Journal of Psychological Health Research*, 1 (2), 5-16
- [19] Parastou, M. (2013). Assessment, resilience, and substance use status in adolescents at risk: Assessment of the explanatory model of the role of intermediate variables and effects mechanisms. Ph.D. Thesis in Health Psychology, University of Tehran.
- [20] Parker, C., Baltes, B., Young, S., Huff, J., Altmann, R., Lacost, H., & Roberts, J. (2013). Relationships between psychological climate perceptions and work outcomes: a meta-analytic review. *Journal of Organizational Behavior*, 24, 389-416.
- [21] Siah Kamari, R., Karami, J., & Azizi, Z. (2018). The effectiveness of resilience education in preventing the recurrence of substance abuse in men who refer to addiction treatment centers in Kermanshah, Second Conference on Social Sciences, Psychology and Educational Sciences, Jiroft, Gostaran Conference.
- [22] Snyder, C. R. (2012). Hope and academic success in college. *Journal of educational psychology*, 97, 820-826.
- [23] Takeuchi, M. S., Miyaoka, H., Suzuki, M., Tomoda, A., Yokoo, A. I., Tsutsumida, R., & Kitamura, T., (2011). The relationship of temperament and character dimensions to perceived parenting styles in childhood: A study of a Japanese university student population. *The Open Family Studies Journal*, 4, 9-14.
- [24] Taylor, S. E., Way, B. M., & Seeman, T. E., (2011). Early adversity and adult health outcomes. *Development and Psychopathology*, 23, 939-954.
- [25] Zuckerman, M. (1993). P-impulsive sensation seeking and it's behavioral, psychophysiological, and biochemical correlates. *NeuroPsychobiology*, 28, 30-36.