

Abstract

Objective: This study aimed to compare narcissistic, antisocial, and borderline personality traits among addicted prisoners, non-addict prisoners, and normal subjects. **Method:** This study employed a causal-comparative research method, with a sample size of 180 participants including addicted prisoners, non-addicted prisoners, and normal individuals (60 participants in each group) of Miandoab city who were matched in terms of demographic characteristics. For data collection purposes, narcissistic personality inventory NPI-16, Millon antisocial inventory-III, and borderline personality inventory were employed. **Results:** The results showed that there was a significant difference between addicted prisoners and normal subjects and also between addicted prisoners and non-addicted prisoners in terms of narcissistic traits while no significant difference was obtained between the non-addicted prisoners and normal subjects. **Conclusion:** The comparison of the aforementioned groups contains important information for the prevention and treatment of addiction and crime prevention.

Keywords: Narcissistic Personality, Antisocial Personality, Borderline Personality, Addicted Prisoners, Non-Addicted Prisoners.

On the Comparison of Narcissistic, Antisocial, and Borderline Personality Traits among Addicted Prisoners, Non-Addicted Prisoners, and Normal Subjects

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Research on Addiction Quarterly Journal of Drug Abuse

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

Vol. 8, No. 32, Winter 2015
<http://www.etiadjohi.ir>

Introduction

Mental disorders exist at high degrees in most countries of the world. Based on an estimation, 450 million people on earth suffer from mental disorders. These disorders, particularly personality disorders are more common among the population of prisoners and the prevalence of such disorders has been reported to range from 30% (Dadsetan, 2010) to 95% (Fazel & Danesh, 2002). In general, addiction or maladaptive pattern of substance abuse leads to a confusion or disorder that is of clinical significance. This model puts emphasis on the high frequency of maladaptive behaviors, loss of control, inattention to other pleasures and desires in favor substance use. Addiction occurs when a person turns to compulsive behaviors to obtain the desired substance and, then, loses his/her control in using that substance (Seligman & Rosenhan, 2011; Ganji, 2013).

Personality disorder is a set of sustainable patterns of maladaptive and inflexible behavior being derived from inner experience and behavior in which individuals are inflexible and deviated from cultural expectations (Atkinson et al., 2006). Findings on the comparison of personality traits between addicts and normal subjects have shown that the antisocial personality traits in prisoners are more active than those in normal people (Molavi et al., 2009; Navidian, Davachi & Bashardoost, 2002). Antisocial personality along with persistent behaviors is realized in a range of behaviors such as aggression, irresponsibility, being inconsiderate towards the neighboring people, endangering others, and inability to meet the specified obligations. This disorder is characterized by effective factors such as shortcomings in the ability of social learning in particular avoidance learning, low emotional motivation, genetic predisposition to commit crime, and brain disorders (Seligman & Rosenhan, 2011). Many researchers believe that people with borderline personality disorder, after antisocial disorder, are prone to the diagnostic criteria of substance abuse disorder more than any other psychiatric disorders and this probability has been reported to be more than 67% (Alilou & Sharifi, 2013). Borderline personality disorder is a broad category of personality traits whose main feature is the instability in various personality domains, including interpersonal relationships, self-image, emotions, and purposelessness (American Psychiatric Association, 2013). The most common diagnosis of personality disorder is that of borderline personality disorder that is made for inpatients and outpatients (Grouich, 1992, cited in Seligman & Rosenhan, 2011). Navidian et al., (2002) reported that prisoners gained higher scores in narcissistic disorder than normal subjects. Exaggeration and magnification models for receiving admiration, lack of empathy and intimacy with others, exploitative tendencies, and imagination about infinite success, power, and beauty are among the most important characteristic features of narcissistic personality disorder (Seligman & Rosenhan, 2011).

Various studies have reported high rates of personality disorders among addicted and non-addicted prisoners. The review of 62 studies conducted in 12 countries with a sample size of 22,790 prisoners and an average age of 29 years showed that 95% of male and 4% of female prisoners suffer from mental health problems and personality disorders (Fazel & Danesh, 2002). In the same way, 47% of men and 21% of women were diagnosed with antisocial personality disorder. The findings of other studies indicated that addicts and normal people significantly differed in the majority of NEO personality inventory scales, especially in problem solving scale (Bakhshipour Roodsary, Alilou & Irani, 2008) and in Millon inventory (Molavi, et al., 2009). Similarly, Taghaddosinejad, Saberi, Ghodoosi & Maghsoudlou (2002); Sepehrmanesh, Ahmadvand, Ghoreishi & Mousavi (2008), and Pahlavian, Zargar, Farhadinasab & Mahjoub (2003) evaluated the degree of personality disorders higher in substance abusers than normal people. Beirami, Vahedi, Esmaeali & Rezai (2009) conducted a similar study entitled "on the comparison of personality disorders among addicted prisoners, non-addicted prisoners, and normal people" on 150 participants (n = 50 per group) based on Millon inventory and the results showed that there was a significant difference among the three groups in terms of schizoid personality scales and histrionic personality disorder and a significant difference was also found between the addicted and normal groups in terms of avoidant scale. There was also a significant difference between addicts and non-addicts in terms of narcissistic, antisocial, sadistic, dependent, passive, and self-sadistic personality disorders. Navidian, et al. (2002) showed that borderline, narcissistic, and antisocial personality traits were the most prevalent ones in addicts, respectively. Sharifi & Modaber (2008) have reported antisocial and borderline personality disorders as the most common personality disorders among prisoners. Research results in many countries show that the presence of personality disorders among criminals and addicts is universal and significant. A research was conducted on 80 male prisoners with different condemnations such as execution in Greece and the results showed that prisoners have low physical health and low intellectual performance and personality and they are more prone to suicidal thoughts (Fotiadou, Livaditis, Manouc, Kaniotoud & Xenitidis, 2006).

The results of a study in Maryland of America showed that the chance of individuals' incarceration increases with the increase of scores in hostility, impulsivity, and sensation seeking subscales and an inverse correlation existed between the possibility of imprisonment and trust, openness, adaptation, modesty, and self-control (Samuels, et al., 2004).

Samochowiec, Konopka, Pelka-Wysiecka & Grzywacz (2013) concluded that benzodiazepine addiction is accompanied by higher mental-irritation, immature psychological defense mechanisms, and previous adverse life experiences and incomplete treatment of addiction is more likely to lead to addiction relapse. Darvishzadeh & Damavand (2010) compared the incidence of personality

disorders between 75 male substance abusers and 75 male non-addicts by means of Millon inventory and showed that the prevalence of personality disorders (in particular, borderline and antisocial personality disorders) in smokers was significantly higher than that in non-addicted participants. Meanwhile, no significant difference was found between the two groups in terms of narcissistic personality disorder. According to the above-mentioned research and results, this study aims to compare the morbid personality differences among addicted prisoners, non-addicted prisoners, and normal group.

Method

Population, sample, and sampling method

This study employed a causal-comparative research method, with a sample size of 180 participants including three 60-participant groups of addicted prisoners, non-addicted prisoners, and normal individuals. All the male prisoners (addicts and non-addicts) of Miandoab city's jail in the summer of 2004 constituted the statistical population of the study, which amounted to a total of 300 prisoners, i.e. 200 addicted prisoners and 100 non-addicted prisoners. The participants of the three groups were matched in terms of demographic characteristics, such as education, age, and social status. Addicted and non-addicted prisoners were selected via simple random sampling method while the normal people were the ordinary people in the community who were selected via convenience sampling method.

Instrument

Narcissistic personality inventory NPI-16: This scale is the short version of the 40-item narcissistic personality inventory which was developed by Ames, Rose & Anderson to measure the characteristics associated with narcissistic personality and consists of the pairs of items, one of which must be chosen by the respondents (2006). The items have been designed in yes/no formats wherein the choice yes is assigned one point while no point is assigned to the choice no and, thereby, the total score of the scale is obtained from the sum of the points. The test-retest reliability coefficients of this scale was reported by the major designers of the scale to be .85 during a 5-week interval.

The validation of this scale was fulfilled in Iran (Mohammadzadeh, 2009) and the concurrent validity of the scale was reported .77 through simultaneous administration of narcissistic personality scale and Millon clinical multi-axial inventory-III.

Antisocial scale of Millon Clinical Multi-axial Inventory-III: This inventory was developed by Theodore Millon in 1994. The second and third versions of the questionnaire were validated in Iran by Khajeh Mougahi (1994) and Sharifi (2002), respectively and the psychometric characteristics of them are consistent

with the findings reported by Millon. Although the above-mentioned instrument has been constructed for clinical populations, it has also been employed for non-clinical groups in some studies (Choca, Vandenberg & Shanley, 1997). In the present study, the 17-item antisocial personality scale was used which is answered by yes = 1 and no = 0. The total sum of the scores of questions constitutes the score of antisocial scale. The internal consistency reliability coefficient of antisocial scale has been reported .77 and Sharifi (2002) obtained Cronbach's alpha coefficient and retest reliability of the scale equal to .95 and .96, respectively.

Borderline personality inventory: This questionnaire was developed by Leichsenring (1999) to measure borderline personality traits in clinical and non-clinical samples. The items of this scale are answered by yes = 1 and no = 0. This questionnaire consisted of four factors as follows: identity diffusion (items numbered 8, 15, 26, 33, 36, 37, 42, and 47), primitive defense mechanisms (items numbered 1, 9, 10, 16, 29, 39, 40, 49, and 52), reality testing (items numbered 7, 12, 13, 21, 26, 36, and 41), and fear of closeness (items numbered 5, 14, 19, 20, 21, 23, 25, 28, and 52). The total score of borderline personality is obtained via the sum of the scores of the factors. Several studies have reported high internal consistency and test-retest reliability for the scale (Cronbach's alpha in the range of .68 to .91 and test-retest reliability in the range of .73 to .93). This questionnaire has been translated and validated in Iran by Mohammadzadeh (2010). For the Persian version of this questionnaire, the concurrent validity coefficients with borderline personality scale and its construct validity have been reported to be ideal. Test-retest reliability of the whole scale has been obtained .80 and this coefficient has been reported .63, .73, .66, and .62 for the subscales of identity diffusion, primitive defense mechanisms, reality testing, and fear of closeness, respectively (Mohammadzadeh, 2010). In this study, the total score of borderline personality has been used for data analysis since the subscales of the questionnaire share a high overlap.

Results

Descriptive statistics for the variables of the study are presented in the table below for each group.

Table 1. Descriptive statistics of the variables for each group

<i>Variable</i>	<i>Addicted prisoners</i>		<i>Non-addicted prisoners</i>		<i>Normal subjects</i>	
	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>
Narcissistic	5.45	2.63	3.53	3.02	2.88	1.78
Antisocial	13.80	3.82	11.13	3.90	6.15	3.53
Borderline personality	26.06	7.57	22.06	10.30	9.88	5.96

Multivariate analysis of variance should be used to compare the three groups on the variables. One of the assumptions of using this parametric test is the equality of covariance matrices. Box's test results indicated that this assumption has not been met ($P < .001$, $F = 3.690$, $M \text{ Box} = 42.45$). In case of the violation of the equality of variances and equality of covariance matrices, Pillai's trace has been recommended to be used for the interpretation of multivariate test (Pallant, 2010).

The results of MANOVA test implicated the existence of a significant linear combination of the variables in groups ($\eta^2 = .29$, $P < .001$, $F = 19.240$, Pillai's trace = .59). Univariate analysis of variance was used to evaluate differences in patterns as follows.

Table 2: Results of univariate analysis of variance

<i>Variable</i>	<i>Mean square</i>	<i>F</i>	<i>Sig.</i>
Narcissistic	106.83	16.610	.0005
Antisocial	904.67	63.990	.0005
Borderline personality	4263.33	64.180	.0005

As it can be seen in the above table, there is a significant difference in all the variables. Tukey post hoc test was used to specify where the differences exactly lie. The results suggested that addicted prisoners' scores significantly differed from the scores of non-addicted prisoners and the normal group ($P < .001$). According to the descriptive statistics, addicted prisoners have been reported to receive significantly higher scores in narcissistic trait while no significant difference was found between non-addicted prisoners and normal group in this trait. In terms of antisocial trait and borderline personality, a significant difference was also found between the mean scores of the three groups ($P < .001$).

According to the descriptive statistics, addicted prisoners received higher scores in antisocial trait and borderline personality than the other two groups. Similarly, non-addicted prisoners gained higher scores than the normal group.

Discussion and Conclusion

This study aimed to compare narcissistic, antisocial, and borderline personality traits among addicted prisoners, non-addict prisoners, and normal subjects. The MANOVA results indicated the significance of the linear combination of dependent variables (narcissistic, antisocial, and borderline) between groups. The results of one-way ANOVA test was indicative of the availability of a significant difference among groups in terms of narcissistic personality trait. The results showed that addicted prisoners and non-addicted prisoners were significantly different in terms of the above-mentioned variable, so were the addicted prisoners and ordinary people. These results are consistent with the results obtained by Molavi, et al. (2009), Navidian, et al. (2002), and Beirami, et al. (2009). However, no statistically significant difference was found

between ordinary people and non-addicted prisoners which is not consistent with the result obtained by Beirami, et al. (2009). A person with narcissistic personality has a feeling of grandiosity in almost every aspect of his/her life, needs others' praise, and shares no feeling of empathy with others. This situation begins in late adolescence and before adulthood (American Psychiatric Association, 2013). Similarly, the results showed that the mean score of the addicted prisoners was higher than that in non-addicted prisoners; and this value in non-addicted prisoners was higher than that in ordinary people. These grandiose and narcissistic features in addicted and non-addicted prisoners probably cause exploitative behaviors, abuse of others, and non-cautious behaviors and this process possibly accounts for criminal acts in addicts and prisoners.

Among other results of the present study was that a significant difference was obtained in antisocial personality trait among the groups. The results of Tukey test showed that there was a significant difference among each of the three groups. This result is consistent with the results of the studies undertaken by Molavi, et al. (2009), Fazel & Danesh (2002), Navidian, et al (2002), Beirami, et al (2009), Sharifi & Modaber (2008), Taghadosi, et al. (2002), Sepehrmanesh, et al. (2008), and Darvishzadeh & Damavand (2010). In the present sample, the mean score of antisocial personality in addicted prisoners has been reported higher than that in ordinary people. The prevalence of antisocial personality disorder in DSM-5 has been estimated from 2% to 3.3%. The highest rates of antisocial personality are found in the men with alcohol use disorders and in such locations as rehab clinics, prisons, and forensic settings. These disorders are also more common when they are under the influence of undesired social and economic situations (e.g., poverty) and socio-cultural conditions (e.g., immigration). People with antisocial personality do not respect the rights of others in almost every aspect of life and violate their rights; they are law-breakers, exploitative, emotionless, selfish, and irresponsible. They do not feel remorseful about their wrong actions (American psychiatric Association, 2013). Such behavioral patterns bring about interpersonal problems and citizenship issues and give way to legal problems at the community level and development of addiction at the individual level.

The results also showed the existence of a statistically significant difference in borderline personality disorder between the three groups. This finding is consistent with those of the studies conducted by Alilou & Sharifi (2013), Molavi, et al. (2009), Navidian, et al (2002), Sharifi & Modaber (2008), and Sepehrmanesh, et al (2008). In the present sample, scores of the borderline personality in addicted prisoners were higher than those in non-addicted prisoners and normal individuals. According to the results obtained in the present study, diagnostic criteria for borderline personality disorder can be addressed for addicted and non-addicted prisoners. Individuals with borderline personality disorder show instability in all aspects of life, interpersonal relationships, self-

concept (self-knowledge), feelings, and emotions; such people are very impulsive and suffer from identity diffusion. Similarly, these individuals have the history of impulsive behavior and show needs for severe drug dependence along with fear of abstinence. This state starts before adulthood and will be present in various situations of life (American Psychiatric Association, 2013; Markowitz, 2014).

As per psychodynamic perspectives, substance use is a means to compensate for defective performance. Initial views on Freud's psychoanalytic theory tended to focus on oral dependency and libidinal drives. Freud knew people with antisocial nature and believed that search of selfish pleasure and destructive biological stimulations put people in conflict with the demands of social groups. The guarantee of the survival of society requires that individuals can harness these impulses or put them in another direction. Newer approaches view addiction as reflective of emotional shortages in individuals' growth. Medications are taken to reduce annoying emotional states or to stand as a defense mechanism in relation with an internal conflict (Treece & Khantzian, 1986; Dadsetan, 2010). These inappropriate psychological strategies cause individuals' behavioral conflicts with society. Alfred Adler introduced some common problems, such as problems related to human behavior towards others, employment problems, and emotional problems in human life that humans employ a variety of lifestyles to resolve such problems. Dominant lifestyle is associated with antisocial behavior and addiction. Adler shows aggressive attitude to be followed by slight social awareness. Such a person behaves regardless of the behavior of others. Extreme form of these types of people is aggressive, delinquent, or sociopathic and invasive to others. Also, less dangerous type of such people become dependent on drugs or commit suicide, they believe that they harm others by attacking themselves (Schultz & Schultz, 2011).

The theory of the conflicting process of acquired emotion strongly influences the views pertaining to addictive behavior and is based on the assumption that physical and psychological functions react against them by coping with the primary effects of stimulants and, thereby, become adaptive. This theory explains the increase of motivation for the persistence of substance use that this increase is based on three phenomena of emotional pleasure, emotional tolerance, and emotional withdrawal (Solomon & Corbit, 1974).

In accordance with the approach of conditioning and positive reinforcement, drug use whether occurring rarely or obsessively, can be seen as the behavior that can be maintained with its consequences. Positive reinforcement patterns emphasize the pleasurable effects of drugs and it is asserted that these highly reinforcing effects are the main cause of drug use. These patterns have been formed in the schools of active and respondent behaviorism and psychology (Seligman & Rosenhan, 2011). With the increase of activities in the areas of limbic system, especially anterior cingulate cortex and amygdala, drug users

respond to drug-related stimuli. This activity has been shown to be followed by some types of drugs, including cocaine, opiates, and cigarette (Sadock & Sadock, 2013). Accordingly, drug-dependent prisoners are often reinforced by pleasing consequences and psychological rewards due to the presence of emotional and rigid personality traits and patterns. As well, environmental positions and the circumstances call for more the behaviors associated with personality traits. In summary, it can be concluded that prisoners and addicts benefit from lower rate of positive and normative dimensions of personality traits and show more severe abnormal patterns and more intense clinical symptoms. Few studies have been conducted on addicted and non-addicted prisoners.

Since the present study was conducted on only men in one prison and data were gathered just through questionnaire; therefore, it is suggested that some research be conducted on both males and females with a larger sample size in different prisons across the country. Given the high rates of personality disorders among addicts, prisoners and also according to the security-based and educational nature of organization of prisons and educational institutions, it is recommended that executive educational and psychotherapeutic programs be set in prisons for the treatment of drug addiction and addicts' behavioral problems.

Reference

- Alilou, M. & Sharifi, M. (2013). *Borderline personality disorder*, Tehran: Arjomand Publication.
- American Psychiatric Association. (2013). *Diagnostic and Statistical Manual of Mental Disorders*. Washington, DC: APA.
- Ames, D. R., Rose, P., Anderson, C. P. (2006). The NPI-16 as a short measure of narcissism. *Journal of Research in Personality*; 40, 440–450.
- Atkinson, R., Atkinson., R., Smith, E., Daryl, J. & Nolen-Koeksema, S. (2006). *Hilgard's Introduction to Psychology*, translated by Braheni, et al., Tehran: Roshd Publication.
- Bakhshipour Roodsary, A., Alilou, M. & Irani, S. (2008). On the comparison of personality traits and disorders and coping strategies between self-referring substance abusers and normal people, *Journal of Psychiatry and Clinical Psychology*, 14 (3): 289- 297.
- Beirami, M., Vahedi, H., Esmaeali, A. & Rezai, R. (2009). On the comparison of personality disorders among addicted prisoners, non-addicted prisoners, and normal people, *Quarterly Journal of Psychology*, University of Tabriz, 5 (15), 49-70.
- Choca, J. P., Vandenberg, E., Stanley, L. A. (1997). *Interpretive guide to Millon Clinical Multiaxial Inventory*. Washington DC: APA.
- Dadsetan, P. (2010). *Criminal psychology*. Tehran: Samt Publication.
- Darvishi Zadeh, M., Jilardi Damavandi, A. (2010). The incidence of personality disorders among substance dependents and non-addicted psychiatric clients. *Procedia - Social and Behavioral Sciences*, 5, 781-784.

- Duane P. Schultz & Sydney E. Schultz (2011). *Theories of Personality*, translated by Seyed Mohammadi, Y., Tehran: Virayesh Publication.
- Fazel, S. & Danesh, J. (2002). Serious mental disorder in 23 000 prisoners, a systematic review of 62 surveys. *European Psychiatry*, 359, 545–55.
- Fotiadou, M., Livaditis, M., Manouc, L., Kaniotoud, E., Xenitidis, K. (2006). Prevalence of mental disorders and deliberate self-harm in Greek male prisoners. *International Journal of Law and Psychiatry*, 29, 1, 68–73.
- Ganji, M. (2013). *Psychopathology*, Tehran: Savalan Publication.
- Khajeh Mougahi, N. (1994). *Preliminary preparation of the Persian version of Millon Clinical Multiaxial Inventory–II (MCMI-II)*, MA Thesis in Clinical Psychology (unpublished), Iran University of Medical Sciences.
- Leichsenring, F. (1999). Development and first results of the Borderline Personality Inventory: A self-report instrument for assessing borderline personality organization. *Journal of Personality Assessment*, 73(1), 45-63.
- Markowitz, H. (2004). *Diseases and personality disorders*, translated by Kafi Masouleh, M. & Karimi, T., Tehran: Arjomand Publication.
- Martin E. P. Seligman & David L. Rosenhan (2011). *Abnormal Psychology*, translated by Seyyed Mohamadi, Y., Tehran: Arasbaran Publication, 2nd Volume.
- Mohammadzadeh, A. (2009). Validation of narcissistic personality inventory on an Iranian context, *Fundamentals of Mental Health*, 44, 274-281.
- Mohammadzadeh, A. (2010). Validation of Borderline Personality Questionnaire on Pyame Noor University students of East Azerbaijan Province, *Research Project of Payame Noor University of East Azerbaijan Province*.
- Molavi, P., Sadeghi Movahed, F., Abolhassanzadeh, M., Mash'oufi, M., Mohamadnia, H., Deilami, P. & Arab. R. (2009). On the investigation of personality disorders among the people suffering from drug abuse disorder referring to addiction treatment centers in Ardabil in 2008, *Journal of Ardabil University of Medical Sciences*, 9 (4), 325-333.
- Navidian, A., Davachi, A. & Bashardoost, N. (2002). On the investigation of personality characteristics of drug addicts referring to the rehabilitation center in Zahedan, *Hakim Journal*, 1 (5), 17-22.
- Pahlavian, A., Zargar, M., Farhadinasab, A. & Mahjoub, H. (2003). A comparative study of personality characteristics between drug addicts and non-addicts living in Hamadan, *Journal of Hamadan University of Medical Sciences and Health Services*, 1 (2), 55-62.
- Pallant, J. (2010). *A step by step guide to data analysis using SPSS*, translated by Rezaei, A., Tabriz: Forouzesheh Publication (Published in English in 2007).
- Sadock, B. & Sadock, V. (2013). *Kaplan and Sadock's Synopsis of Psychiatry: Behavioral Sciences/Clinical Psychiatry*, translated by Pourafkari, N., Volume 2, Tehran: Shahrab Publication (Published in English in 2007).
- Samochowicz, J., Konopka, A., Pelka-Wysiecka, J., Grzywacz, A. (2013). Psychosocial characteristics of benzodiazepine addicts compared to not addicted benzodiazepine users. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, 40 (10), 229-235.

- Samuels, O., Bienvenua, O., Cullena, b., Costa J, P., Eatona, W., Nestadta, G. (2004). *Comprehensive Psychiatry*. 45, (4) 275–280.
- Sepehrmanesh, Z., Ahmadvand, A., Ghoreshi, F. & Mousavi, Gh. (2008). On the investigation of personality traits of intravenous drug abusers in Kashan prison in 2006, *Scientific Journal of Feiz*, 12 (1), 69-75.
- Solomon, R. L., Corbit, J.D. (1974). An opponent process theory of motivation. *Psychological Reviews*, 81(2)119-45.
- Sharifi, A. (2002). *Validation of Millon Clinical Multiaxial Inventory III*, MA thesis (unpublished), University of Isfahan.
- Sharifi S. & Modaber, A. (2008). The prevalence of psychiatric disorders in prisoners of Sanandaj, *Fundamentals of Mental Health*, 40, 311-316.
- Taghaddosinejad, F., Saberi, M., Ghodoosi, A. & Maghsoudlou, S. (2002). On the comparison of factors effective in crime increase between patients with schizophrenia and patents with antisocial personality disorder, *Journal of Forensic Medicine*, 28 (5), 5-9.
- Treece, C., Khantzian, E.J. (1986). Psychodynamic factors in the development of drug dependence. *Psychiatric clinics of North America*. 9.399-412.