

Abstract

Objective: Today, the tendency to narcotics and psychotropics abuse in girls is among social harms that has attracted the attention of officials and experts in various fields, such as sociology, medical science, psychology, etc. The present study aims at investigating the relationship between awareness of the effects of narcotics and psychotropics abuse and related laws, and the rate of tendency to use these drugs in female students.

Method: A descriptive-causal research design was employed for the conduct of this study. The research population consisted of second high school students in Tehran where 399 ones were selected through the combination of cluster sampling method and non-relativistic classification. The data gathering tool in this study was a questionnaire. **Results:** The level of awareness of the effects and consequences of drug abuse among 64% of school students and the awareness of drug-related rules among 85% of school students were high. Also, the rate of drug abuse tendency in 54% of students was low. **Conclusion:** As the level of awareness about the effects of drug use increases, drug use tendency decreases. Therefore, it is always possible to raise the level of knowledge among students regarding the prevention of drug abuse tendency by using educational and training strategies.

Keywords: narcotics, awareness of the effects of drug abuse, awareness of drug-related rules, tendency to drug use, female students

On the Relationship of Awareness of Rules and Effects of Narcotics and Psychotropics Abuse with Tendency to Use these Substances among Female School Students

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Introduction

Drug consumption has increased dramatically among societies, especially among adolescents and young people, in recent decades (Melchior, Chastang, & Guld, 2007). In this regard, the global widespread of alcohol consumption, opiate use, cigarette smoking, and psychotropic drugs have risen among adolescents (Kelly, Becker, Wolff, Graves, & Spirito, 2017). At present, the increasing rates of drug abuse and drug use tendency, especially among adolescents and young people, are among the social traumas that have attracted the attention of authorities and practitioners, such as sociologists, physicians, psychologists, etc. Statistics show that about 16% of Iranian addicts are under the age of 19 years, and 28% of them turn to addiction between the ages of 20 and 24 years (Bahreini, 2013). According to the report issued by Welfare Prevention Department, 4% of self-introduced addicts are under 15 years of age and 24.4% of them begin to take drugs between the ages of 15 and 19 years and 56.3% start drug use at the age of 24 years old and below (Asadi, Hosseini, & Shahsavari, 2016). Based on the statistical data collected about the number of drug-related prisoners during the six years from 2005 to 2010, 42.8% of the total prisoners of all crimes constitute drug addicts and drug traffickers (Heidari, 2014). It is worth noting that adolescents are more susceptible to drug use for their age specific features; for instance, they wish to create a situation for challenging their self-centered emotions, displaying their sense of independence, acquiring the permit for entry into peer groups, and relieving the tensions of the growth period. This causes the incidence of problems, such as delinquency, drug use in peer groups, educational problems, suicide, and continued drug use in adulthood (Wong, Hockenbery, Wilson, Winkestein, & Kline, 2003). Research findings in this domain have shown that a lack of awareness of the harms and consequences of drug use has been highlighted among the factors of drug abuse tendency. In this regard, Rather, Bashir, Sheikh, Amin, & Zahgeer (2013) showed that the level of awareness and the socioeconomic level of the family are effective in addiction (Na'emi, & Tajabadi, 2017). In the same vein, Kiani, Shamloo, & Sadeghi (2011) concluded that 53% of addicts seeking help for treatment had no knowledge of the side effects of psychoactive substance use. Similarly, Mardani (2015) showed that there is a difference between students' attitudes towards the effects of drug use, drug use tendency, and drug use risks. In a research conducted by Bastami (2013), the relationship between the level of addictability and attitudes toward drug use among high school students in Khorramabad was examined and the results showed that the students' addictability is influenced by their attitudes towards narcotics. This study showed that psychological training can change people's attitude towards addiction. Mokhtari, Nazer, Alipour, & Aghamohammad-Hassani (2013), in their study, reported that the correct knowledge and awareness of the groups were not more than 50%. In a study conducted by Levine, Clemenza, Rynn, & Lieberman (2017), it was also found that there is a strong correlation between

exposure to cannabinoids and substance use in adolescents. However, exposure to narcotics cannot confirm one's tendency to narcotics, but knowledge and attitude have a significant impact on this issue (as cited in Khedri, 2016). In addition, Nebhinani, Nebhinani, Misra, & Grewal (2013) indicated that knowledge about and attitude towards drug are critical for prevention and treatment of drug abuse, especially in adolescents (as cited Khedri, 2016). Botvin, & GriffBotvin (2000) also found that there was a relationship between drug use and attitudes towards it. In a study entitled "Cannabis use and its socio-demographic correlates among in school adolescents in Zambia", Siziya et al. (2013) showed that people's awareness and the low level of socioeconomic status of families are effective in addiction. According to a study carried out in Iran, the use of substances by women and girls is associated with various factors, such as the lack of true awareness and knowledge of drugs, spouse or friends' pressure, the need to escape from reality, poverty or coping with it, domestic violence, and sexual abuse (Mohseni, 1992).

It is noteworthy that tendency is a fundamental concept in social studies. These studies have referred to tendency as the beliefs that influence individuals' thinking, feelings, and behaviors (Baron, & Byrne, 1977). In other words, tendency is a combination of cognition, emotion, and the ability to act toward one task. Tendency is one's beliefs about the outcome and consequence of everything that s/he intends to do and the value that s/he assigns to the outcome and consequence (Bagheri, & Bahrami, 2013). It is believed that addiction tendency can affect individuals' attitudes towards drug abuse (Na'emi, & Tajabadi, 2017). The tendency to drug use is influenced by numerous individual, familial, and social factors. A large portion of etiological explanation for drug use can be accounted for by psychoanalytic, biological, genetic, social, cultural, behavioral, and cognitive considerations (Kendler, Heath, Neale, Kessler, & Evaes, 1992; Meyer, Jardine, & Martin, 1991; Bennett & Wolin, 1990; Stein, & Kosten, 1999; as cited in Reza'ea, 2012). Each of these theories has presented various explanations and analyses in drug use tendency. In recent years, the cognitive approach has found justifiable explanations in the field of psychopathology, especially substance use and abuse (Hessel brock, Hesselbrock, & Epstein, 1998; as cited in Reza'ea, 2012). The mention of cognitive and consciousness element in the field of addiction and substance abuse aims to lay emphasis on hidden mental processes that are described by various terms, such as tendencies, expectations, beliefs, attitudes, and schemas. It is important to note that cognitive and social constructs, such as attitudes are correlated with behaviors. In other words, if a person has a stable, prominent, strong, and reason-based approach to a particular subject, s/he is likely to conduct a behavior that is highly related to the mentioned attitude (Taylor, Peplau, & Cears, 2000). Therefore, the evaluation of positive and negative consequences of drug use is the central element in the recognition of the cause of young people and adolescents' drug use tendency. These types of evaluations

are intentionally or unwittingly influenced by individuals' attitudes toward narcotic drugs, their effects, and consequences (Beythe-Maroon, Austin, Fischhoff, Palmgren, & Jacobs-Qua, 1994). In this regard, the role of drug attitude is so important that some researchers believe that addicts' way of thinking and attitude lead them to relapse into drug use or avoid them from narcotics permanently. The type of addict's attitude towards drugs is some thinking that may be rational or irrational, and often has an automatic, permanent, and unconscious nature. It is not easy to change this attitude. However, one of the methods that helps addicts achieve self-awareness is to examine how to create a negative attitude toward addiction (Reza'ea, 2012). It is noteworthy that Ajzen, & Fishbein's Theory of Reasoned Action pays central attention to the role of adolescents and young people's attitudes toward addiction. According to this theory, cognitive attitudes refer to the outcomes derived from two components of beliefs or expectations about the consequences of a certain behavior and the assessment of behavioral outcomes. In fact, evidence suggests that mental attitudes and norms affect individuals' behaviors, and behavioral intentions are determinants of the real behavior. Research in this regard shows that adolescents and young people's mental attitudes and norms lead to the formation of positive intentions towards narcotics and, then, result in taking drugs (Kuther, 2002). In this realm, Sutherland (1947) believes that misbehavior is learnable, and the mainstream of learning is accomplished in the communication process of intimate groups, such as friends and family and during their educational period from school to university. Individuals can be easily affected and turn to misbehavior when they have little knowledge and awareness about the physical effects of drug abuse and are placed in different social groups, especially infected environments or friends. Therefore, from among the protective factors and risk factors of substance abuse, people's attitudes are the most prominent factors that are of interest to psychologists and sociologists (Cooper, Frone, Russel, & Muder, 2007). Accordingly, one of the most important preventive methods for changing attitudes towards drug abuse is to inform people of its harmful effects. One of the strategies for the people's consciousness raising, especially adolescents, is education and training that can prevent the spread of this social phenomenon (Na'emi, & Tajabadi, 2017). From among the individual complications associated with drug abuse are damages to the body and soul. Physical injuries include physical pain, excessive fatigue, jaundice and numbness of the teeth, increased blood pressure, weakening of the central nervous system, respiratory diseases, infectious diseases, lung and pharynx cancer, heart and liver problems, infertility, and abortion, while psychological injuries include neuropathic stimulation, depression, nervousness, hallucination, delusion, anxiety, and sudden madness (Mo'alemi, 2010). In addition, social harms, such as rule violation, committing crimes, distrust in society, weakness of family foundation, prostitution, and beggary are among the consequences of drug use (Reza'ea Nasab, 2007). With regard to the above-

mentioned points, it can be inferred that if individuals' level of awareness, especially female school students, is improved about the harmfulness of drug abuse and relevant laws, and their attitudes towards the perpetration of various types of behavioral abnormalities, such as drug use and the deliberate committing of related offenses, will change and will not turn to the voluntary choice of adverse behaviors. Hence, awareness and education play an important role in addiction prevention, reduction of drug use tendencies, crime, and delinquency. The present study seeks to investigate the relationship of awareness of rules and effects (physical, psychological, and social) of narcotics and psychotropics abuse with tendency to use these substances among female school students in senior high schools of Tehran.

Method

Population, Sample, and Sampling Method

The statistical population of the present study consisted of senior high school students in Tehran (equivalent to 1,583,343 students). The sample of 384 people was obtained through Cochran formula. Due to the possibility of having outliers and incomplete responses, the number of questionnaires was considered slightly higher than the estimated sample size. Therefore, 399 subjects were selected through random cluster sampling method. At first, two regions were randomly selected from the 22 municipal districts of Tehran (Districts 5 and 13). Then, three state schools were selected from each district from among the state schools in these two districts (according to the list of Education Department). Non-relativistic cluster sampling was also used because the sample size in each school was disproportionate to the number of students in each grade in that school. Based on the school's cooperation rate, 209 female students from the fifth district and 190 ones from the 13th district (academic grades of 10, 11, and 12) completed the questionnaire.

Instruments

1. Awareness Scale of Effects and Consequences of Substance Abuse and Relevant Rules: This researcher-constructed questionnaire contains 14 items and was designed with reference to the Counter Narcotics Lawbook by using Askari's (2017) questionnaire on legal awareness. Confirmatory factor analysis was employed in order to assess the validity of the items and see whether or not questions related to the awareness of the effects of substance abuse and the awareness of the drug-related laws are appropriate. Based on the results of factor analysis, five factors were extracted. These factors were named according to the theoretical foundations of the research and the content of the questions loaded on the extracted factor. The five factors' names are interest in drug use, attitude toward risks, attitude toward physiological effects, attitude toward psychological effects, and attitude toward social effects of drug use. Cronbach's alpha

coefficient of 0.89 was obtained for awareness of the effects of drug abuse and 0.86 was obtained for the awareness of drug-related laws.

2. **Addiction Potential Scale:** The foreign form of Addiction Potential Scale has originated from one of the three subscales of Minnesota Multiphasic Personality Inventory-2, which was made by Weed, Butcher, Mckenna, & Benporath (1992, as cited in Zeinali, Vahdat, & Easavi, 2008) and consists of 39 items. In Iran, Zargar (2006) developed an Iranian Addiction Potential Scale with respect to the national culture. In this study, the Iranian Addiction Potential Scale (Zargar, 2006) was used to assess addiction potential. This scale consists of 36 items with 5 lie detecting items. The items are scored on a continuum from zero (strongly disagree) to 3 (strongly agree). It consists of two subscales, namely passive addiction potential and active addiction potential. In the active subscale, the majority of items pertained to antisocial behaviors, desire to use drugs, positive attitude to drugs, and sensation seeking, respectively while in the passive addiction potential, most of the items referred to lack of assertiveness and depression. The reliability of this scale was calculated by Zargar, & Ghaffari (2009) and reported the Cronbach's alpha coefficient of 0.90 for the total scale. The alpha coefficient of the first factor (active) was 0.91 and that of the second factor (passive) equaled 0.75. Eshrati (2010) used this scale and obtained the Cronbach's alpha reliability values of 0.70, 0.71, and 0.62 for the total scale, active addiction potential, and passive addiction potential, respectively. Moreover, Zargar (2006) assessed the criterion validity and construct validity of this scale. In terms of criterion validity, this scale was administered to a number of clients presenting to the addiction treatment of Ahvaz city and their mean score was compared with that of employees of an industrial company in Ahvaz. The results were indicative of a significant difference. In terms of the construct validity of this scale, the correlation coefficient of the Iranian Addiction Potential Scale with Symptom Checklist-25 (SCL- 25) was calculated and the coefficient of 0.45 was obtained, which was significant (Karamirad et al., 2014). In this study, the reliability of the scale was estimated by the internal consistency method and the Cronbach's alpha coefficient of 0.78 was obtained.

Results

About 52.4% of the students' population was in District 5 and 47.6% were in District 13. The number of equal students was selected from each grade. The percentage of students in the tenth grade is 30.6%, it was 39.3% in the eleventh grade, and it was 30.1% in the twelfth grade. The number of students in the field of Humanities (58%) was higher than that in the others. Subsequently, students of Mathematics (33%) and students of Experimental sciences (8%) constituted the sample population. The descriptive statistics of the research variables are presented in Table 1.

Table 1: Descriptive Statistics of the Research Variables

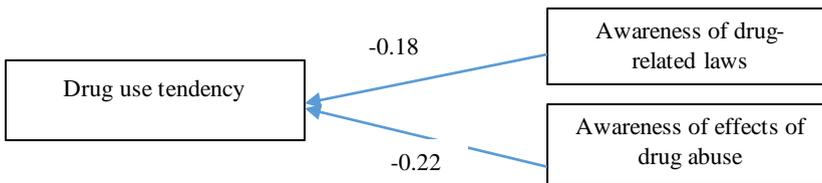
	<i>Awareness of effects and consequences of narcotic and psychotropic abuse</i>			<i>Awareness of drug-related laws</i>			<i>Drug tendency</i>		
	Low	Medium	High	Low	Medium	High	Low	Medium	High
Frequency	10	132	257	4	56	239	216	148	35
Percentage	2.5	23.1	64.4	1	14	85	54.1	37.1	8.8

Pearson correlation was used to examine the relationship between awareness of effects and consequences of narcotic and psychotropic abuse, awareness of drug-related laws, and drug tendency. The results showed that there is a relationship between awareness of drug-related laws ($r = -0.30, p < 0.001$) and awareness of the effects of substance abuse ($r = -0.27, p < 0.001$). Stepwise regression analysis was run to investigate the predictive role of awareness of effects of drug abuse and awareness of drug-related laws in tendency to drug use.

Table 2: Regression Coefficients for Drug Tendency based on Awareness of Rules and Drug Abuse Effects

<i>Variable</i>	<i>B</i>	<i>SD</i>	β	<i>t</i>	<i>Sig.</i>
Constant	46.40	3.57	-	13.008	0.0005
Awareness of rules	-0.21	0.06	-0.18	-3.509	0.001
Awareness of effects	-0.16	0.04	-0.23	-4.373	0.0005

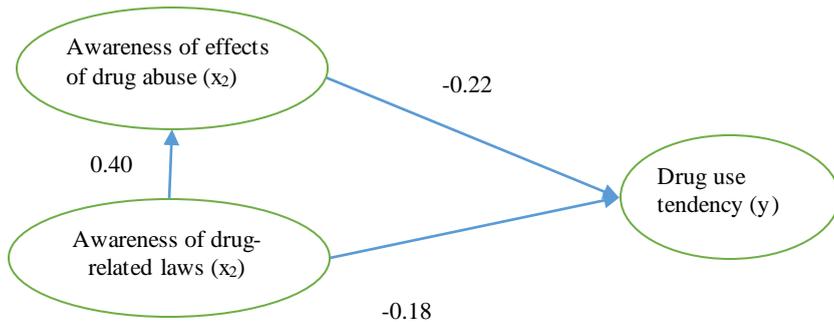
According to the above table, the variables of awareness of drug-related laws explain 0.18 of the variance of drug use tendency and the variable of awareness of the effects of substance abuse accounts for 0.23 of drug use tendency variance. Since the beta level is higher in the awareness of the effects of substance abuse, it is considered as the dependent variable in the next stage.



According to the above table, the awareness of the effects of drug abuse, which had a larger beta in the first stage, is presented here as the dependent variable. The variable of awareness of drug-related laws, as the independent variable, accounts for 0.40 of the variance of the effects of substance abuse.



Finally, the regression coefficients of the research model are as follows:



Regarding the statistical model obtained from the path analysis and the above tables, the awareness of the effects of drug abuse only directly affects the dependent variable, i.e., the tendency towards drug use, and its effect rate is 0.22 with an inverse direction. The variable of awareness of drug-related laws both directly or indirectly affects the dependent variable, and its final effect is 0.26, which has also an inverse direction.

Discussion and Conclusion

The aim of this study was to determine the relationship of awareness of rules and effects of narcotics and psychotropics abuse with tendency to use these substances among female school students. The results of this study confirmed the main hypotheses of the research. It was shown that cognitive and social constructs, such as attitudes, are associated with behavior. As far as a person acquires a stable, outstanding, powerful, and reasoned attitude towards a subject, s/he is likely to show a behavior that has a high relationship with the mentioned attitude. Accordingly, awareness, attitude, and mental norms of adolescents and young people lead to the formation of intentions toward narcotics and, then, drug use. This finding is consistent with the research findings obtained by Rather et al. (2013), and Levine et al. (2017) where it was reported that exposure to narcotics cannot confirm drug use tendency. But their knowledge and attitudes have a significant impact on this issue. Also, this finding is in the same line with the research finding obtained by Nebhinani et al. (2013) where it was found that awareness of and attitudes towards drug use are of critical importance in the prevention and treatment of substance abuse, especially in adolescents. In this regard, the results of the study carried out by Botvin, & GriffBotvin (2000) also showed that there was a relationship between attitudes towards and beliefs about substance use and the onset of drug use. Also, the consistency of this research finding with that of the study conducted by Mardani (2015) lies in the existence of relationship between attitude towards and awareness of the effects of drug abuse and substance abuse. The results of this research are consistent with the findings of Nosrati's research (2015), which indicates that there is a direct relationship between the awareness of drug-related laws and the reduction of

crimes and drug use tendency. In the studies carried out by Levine et al. (2017) and Bastami (2013), it has been identified that individuals' awareness and attitudes are also effective in their addictability, and that awareness and attitudes are effective in the intensity of tendency. Thus, in confirmation of Sutherland and Hoffman's view, it can be admitted that misbehavior is learnable rather than hereditary. The core of learning, especially in childhood, takes place in the communication process of intimate groups, such as friends and family. According to Hoffman, the best way to internalize ethical norms is to provide individuals with advice, argumentation, and consciousness raising about the consequences of their own behavior and others' behavior. According to the theory, if, from an early age, awareness of the effects of drug abuse is provided to students in various ways, especially in school education, they are oriented to drug use to a lesser extent. As Hirschi, & Hiddenson point out, social control is dependent on educational institutions. As education makes a great contribution to consciousness raising, as a social control tool, it can reduce crime and substance abuse.

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