The Role of Moral Disengagement and Social Intelligence in Predicting Drug Use Craving among Substance Users

Ahmadi, Sh. ; Yaghooti, H. ; Fallahi, V.

Ahmadi, Sh.
M.A. in Psychology, University of Mohaghegh Ardabili, Ardabil, Iran, e-mail: ahmadishirin89@gmail.com
Yaghooti, H.
Senior Expert of Drug Control Headquarters, Ardabil, Iran
Fallahi, V.
M.A. in Psychology, University of Mohaghegh Ardabili, Ardabil, Iran

Abstract

Objective: Drug use craving is one of the most high-profile topics in the science of addictive disorders. This study aimed at determining the role of moral disengagement and social intelligence in predicting drug use craving among substance users. **Method:** A descriptive research method and a correlational research design were used for the conduct of this study. The substance users who had referred to departments of outpatient addiction in Kermanshah province in the first half of 2017 constituted the statistical population of this study. A total of 120 participants were selected through randomized cluster sampling. The data gathering tools consisted of three questionnaires, namely Bandura et al., Moral Disengagement Scale, Aungtontett Social Intelligence Test, and Somoza Drug Craving Scale. The collected data were analyzed using Pearson correlation and multiple regression analysis. **Results:** The results of correlation coefficients showed that craving has a positive relationship with the total score of moral disengagement and some of its components, including moral justification, advantageous comparison, ignoring the consequences, dehumanization, and attribution of blame; and has a negative relationship with social intelligence. The results of regression analysis showed that 15 percent of the variance of drug use craving is explained by moral disengagement and social intelligence. **Conclusion:** It can be argued that moral disengagement and social intelligence are among the variables associated with drug use craving that should be considered in the addiction treatment program.

Keywords: moral disengagement, social intelligence, craving, substance users

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Introduction

The main feature of substance abuse disorder is a set of cognitive, behavioral and physiological symptoms that show that the person continues to use the substance despite significant drug-related problems. An important feature of substance use disorder is a fundamental change in brain circuits that may continue after detoxification, especially in people with severe impairment. Symptoms of these changes in the brain can be observed in two types of behavior: (1) the person repeatedly quits addiction, but re-use it, (2) being exposed to stimuli as associated with addictive substance, they extremely crave for drug. Addiction can be defined as a stable state in which the individual's capacity to regulate compulsory behaviors of drug searching is reduced without considering the risk of serious negative consequences (American Psychological Association, 2013). Addiction is a complex disease characterized by some features such as compulsive behaviors, irresistible temptations, drug seeking behaviors and its continuous consumption, even when it has many negative consequences for the individual. Sustained drug use over time and its long-term toxic effects on brain function have led to a wide range of behavioral, psychological, social and physiological abnormalities that prevent the normal behavior and performance of addicts in the family, workplace and at a wider level in the community (Leshner, 1999). According to estimates in the United States, there are 24.6 million drug abusers, 8.9 million of them suffering from mental disorders (Substance Abuse and Mental Health Services Administration (SAMHESA), 2015).

After detoxification and entry into rehabilitation periods, drug users resume drug use within 90 days (McKay, Franklin, Patapis, & Lynch, 2006). One of the main reasons for this state is craving. Craving is considered as one of the main criteria for substance use disorder in the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders. Craving is one of the intense and longest topics we face in the science of addictive disorders. Based on pre-clinical and clinical studies, craving is considered as one of the most important predictors of relapse (Breese, Sinha, & Heilig, 2011). Craving is considered to be the main driving force in substance use disorder, with its effective regulation being associated with lower use and desirable outcomes (Kober, 2014). The concept of craving can be regarded as a personal experience and a multidimensional phenomenon, combined with desire to gain a pleasant feeling and overcome an unpleasant feeling (Rosenberg, 2009). The importance of craving is to the extent that almost every theory of addiction, craving, and the impact of its changes make it a central feature of drug dependence. A major problem in treating addiction is to predict and prevent relapse after a rehab program (Ohana, Maayan, Delayahu, Roska, & Ponizovsky, 2015). Adrian and Wayne (2013) have shown that craving, intense tendencies to experience the effects of drugs, are widely considered as significant barriers to overcome addiction. In clinical

and laboratory studies, craving is known as a significant predictive factor in drug use and relapse after treatment (witkiewitz, bowen, Douglas, & Sharon, 2013).

Some evidence suggests that a person's engagement to morality can contribute to substance use disorder. Moral disengagement is a term used to refer to the extent of interest and addressing ethical issues. Bandura, Barbaranelli, & Caprara (1996) showed that individuals with high moral disengagement tend to participate in delinquent behaviors, show higher levels of aggression, and lower levels of sin and have a tendency to social benefit. According to theoretical basics, moral disengagement is not a fixed trait, but a cognitive orientation toward the world that grows over time and is influenced by the social context in which one works (Moore, 2008). Newton, Andrews, & Champion

(2014) on a research on adolescents showed that, moral disengagement is one of the risk factors for alcohol and cannabis use in adolescents. Also, moral disengagement is a critical mechanism for antisocial behaviors (Hyde, Shaw, & Moilanen, 2010); and is related to aggressive behaviors (Kokkinos, Voulgaridou, Mandrali, & Parousidou, 2016). Thomas, & Afroditi Pina (2016) showed that moral disengagement plays an important role in facilitating and reinforcing sexual harassment. Goodman, Henderson and Patterson-Bedley and Goldstein (2015), by studying the relationship between psychosocial properties of drug users, concluded that those who had a sense of responsibility and greater responsibility for their problem and recognize it, that there was a greater willingness to change and quit and lack of craving among them.

It seems that one of the factors that play an important role in the phenomenon of relapse after treatment and craving is social intelligence. People in social situations do not act the same for individual differences. These individual differences in psychology literature refer to social intelligence. Social intelligence, first used by Sorndike (1920) was used to explain human behavior and deeds of human being and is defined as the ability to understand others and act and behave intelligently in relation to others; social intelligence is the universal term including a wide range of intrapersonal and interpersonal skills and consists of the components of social information processing, social awareness and social skills (Rezaei and Khalilzadeh, 2009); in other words, social intelligence has the ability to successfully engage in any environment (Albrecht, 2009). Considering that the relationship of social intelligence in the substance users has not been studied directly; and since social intelligence is the product of emotional intelligence skills, the skills acquired in the presence of others, which include social awareness and relationship management. Thus, the term close to social intelligence is emotional intelligence. In the studies of Kun, & Demetrovics (2010), it has been shown that lower levels of emotional intelligence (decoding, emotional differentiation, and emotion regulation) play a key role in the tendency to cigarette smoking, alcohol use, and drug use. Emotional intelligence plays a role in the craving, meaning that emotional intelligence training has a direct positive effect on the lack of craving until the

end of the course of treatment, says Cordovil, Timary, Cortesi, Mikolajczak, & Luminet (2010) reported that EQ is effective in craving, it means that training EQ has a positive and direct effect on the lack of craving to the end of treatment course. Individuals with social intelligence have characteristics such as group organization, negotiation to solve problems, personal relationships, and the ability to sympathize with others, and social analysis, and an internal understanding of the emotions, motives, and interests of others. Goleman, 2006). There is a negative correlation between social intelligence and interpersonal problems (Besharat, 2005). There is a negative relationship between social anxiety and its aspects with social intelligence (Hampel, 2011). Dumitrescu, Badiţãb, Dogaru, Tomab, & Duţãb (2014), in a study conducted on students concluded that social intelligence was associated with students smoking. Therefore, according to above items, the present study seeks to answer the question of whether moral disengagement and social intelligence can predict craving among individuals with substance dependence.

Method

Population, sample and sampling method

A descriptive research method and a correlational research design were used for the conduct of this study. The substance users who had referred to departments of outpatient addiction in Kermanshah province in the first half of 2017 constituted the statistical population of this study.

A total of 120 people were selected by random cluster sampling from the statistical population and participated in the study. The method of data collection in this study was to firstly make a list of all outpatient addiction centers in Kermanshah province, which included 19 centers, and then two centers were randomly selected and then after referring to the relevant centers, all the files of the clients were available. Then 60 drug users from each center were selected. Subsequently, they were asked to respond individually and in the center to answer questionnaires of craving, moral disengagement and social intelligence. In order to comply with the ethical considerations, after obtaining informed consent from the participants and a full explanation of the purpose and method of the investigation, they were assured that their information would remain confidential.

Instrument

1- Moral Disengagement Scale: This scale has 32 questions designed to assess a person's ability for moral disengagement (Bandura et al., 1996). The moral disengagement scale assesses 8 moral disengagement mechanisms including: moral justification, Euphemistic Labeling, Advantageous comparison, displacement of responsibility, diffusion of responsibility, distortion of consequences, devaluating, attributing blaming. Each of these 8 mechanisms is measured by 4 items. Individuals responded the questions of this questionnaire on a five-item Likert scale from totally disagree (1), to totally disagree (5). The higher items in each subscale indicate the higher level of that mechanism, the

higher scores for the total factors also show high moral disengagement. This questionnaire showed a high correlation in the moral judgment test, and the reliability coefficient is reported to be 0.82 (Bandura et al., 1996). Its reliability coefficient in the present study was 0.76 for moral justification, 0.76 for Euphemistic Labeling, 0.80 for advantageous comparison, 0.77 for displacement of responsibility, 0.76 for liability diffusion, 0.79 distorting consequences, 0.75 for attributing blaming, 0/79 for dehumanization and for the total moral disengagement score of 0.90.

2- Social Intelligence Questionnaire: This questionnaire was developed by Aungtontett (2008) to measure social intelligence of individuals, and its main form consists of 45 two-choice (right-false) rated on zero and one. In this test, items 2, 3, 6, 13, 18, 20, 21, 24, 29, 37, 38, 41, and 44 are scored in reverse order. Of course, based on the results of Saffarinia, Selgi and Tavakoli's study (2011), the internal consistency of the 5, 10, 14, 16, 17, 26, 33, 39, and 40 items is not appropriate with the total score of the questionnaire. Removing these 9 items reduced the number of test questions to 36 items. In addition, these researchers validated the social intelligence test in Iran using Cronbach's alpha, test re-test, and split -half, respectively, 0.78, 0.75, 0.76, and its concurrent validity with the Shrink EQ questionnaire as 0.75 (Safarian et al., 2011). Its reliability coefficient in the present study was 0.80.

3- Drug Craving Scale: This self-report scale consists of eight items by Somoza, Dyrenforth, Goldsmith, Mezinskis, & Cohen (1995), measuring the duration, frequency and severity of drug craving on a 5-point Likert scale from never (0) to very high (4); this test shows a high correlation with the severity of addiction scores and the Cronbach's alpha coefficient is reported to be 0.88. The reliability coefficient in this study was 0.79.

Findings

The mean age was 34. 51 and the standard deviation was 9.84 years. Twenty (16.7%) had primary education, 30 (25%) secondary education, 42 (35%) high school education, 18 (15%) Diploma students, 7 (5.8%) BA, and 3 people (2.5%) had higher education. 3 (2.5%) had state jobs, 64 (53.3%) had business, 45 (37.5%) were unemployed and 8 (6.6%) were retired. In terms of monthly income, 42 (35%) stated their monthly income lower than 300 thousand toman, 26 (21.6%) between 300-500 thousand toman, 47 (39%) between 500 thousand to one million toman And 5 (4.7%) reported more than one million tomans. 95 people (79.1%) had previous quit history.

To analyze the data, Pearson correlation coefficient and multiple linear regression were used. The assumption of the linear relationship between the predictive and criterion variables according to the distribution of variables (indicating the linear relationship between the predictor and criterion variables), the assumption of the normal distribution of the data using the Kolmogorov test Smirnov ($P > 0.05$), the assumption of the independence of the residuals using the Durbin-Watson statistic (ranging 1.5 to 2.5), and the assumption of the lack

of multiple colinearity between the Independent variables, using the Tolerance Index (greater than 0.1), was confirmed. The descriptive statistics of the variables studied are presented in Table 1.

Table 1: Descriptive Statistics of Moral Disengagement variables and its Components, Social Intelligence and Craving

Variables	*Mean*	*SD*	*Variables*	*Mean*	*SD*
Moral disengagement	109/76	35/65	**Distortion of consequences**	14/61	6/05
Moral justification	12/58	2/77	**dehumanization**	13/99	6/19
euphemistic language	12/10	2/42	**Attributing blame**	14/43	5/33
Advantageous comparison	14/43	5/39	**Social intelligence**	14/68	4/02
Displacement of responsibility	13/92	5/49	**Craving**	28/38	2/17
Responsibility diffusion	13/70	6/26			

The correlation matrix of the variables studied is presented in Table 2.

Table 2: Correlation Matrix of Moral Disengagement and its Components and Social Intelligence with Craving

Predictive variables	*N*	*R*	*Significance*
Moral disengagement	120	0/34**	0/001
Moral justification	120	0/31*	0/005
euphemistic language	120	0/11	0/19
Advantageous comparison	120	0/27*	0/005
Displacement of responsibility	120	0/14	0/11
Responsibility diffusion	120	0/19	0/65
Distortion of consequences	120	0/29**	0/001
dehumanization	120	0/32*	0/05
Blame attributing	120	0/30*	0/05
Social intelligence	120	-0/34**	0/001

* P <0.05, ** P <0.01

Multiple regression was used to predict craving using enter method. The results showed that predictive variables predicted 15 percent of craving. Regression coefficients are presented in Table 3.

Table 3: Craving Regression Coefficients based on Predictive Variables

Predictive variables	*B*	*SD*	*β*	*T statistics*	*Significance*
Constant	29/707	1/227	-	24/206	0/0005
Social intelligence	-0/15	0/047	-0/296	-3/198	0/001
Moral disengagement	0/013	0/006	0/412	2/100	0/05
Moral justification	0/162	0/092	0/212	1/755	0/05
euphemistic language	0/102	0/097	0/019	0/856	0/12
Advantageous comparison	0/067	0/115	0/010	0/586	0/559
Displacement of responsibility	0/036	0/116	0/020	0/308	0/759
Responsibility diffusion	0/103	0/121	0/052	0/853	0/396
Distortion of consequences	0/096	0/088	0/019	0/098	0/27
dehumanization	0/197	0/092	0/370	2/136	0/05
Blame attributing	0/143	0/121	0/071	0/188	0/238

Discussion and Conclusion

This study aimed at determining the role of moral disengagement and social intelligence in predicting drug use craving among substance users. Positive correlation of craving with total moral disengagement score and moral justification components, advantageous comparison, distortion of consequences, dehumanization and attributing blame and prediction of drug craving based on total moral disengagement score, moral justification and dehumanization are consistent with the findings of Hyde et al. (2010), Niton et al. (2014), Goodman et al. (2015), Kokinous et al. (2016) and Thomas and colleagues (2016). Kleinjan, Van Den Eijnden, & Engels (2009) studied the role of disengagement beliefs and nicotine dependence on smoking quit and concluded that high levels of cigarette addiction are associated with following disengagement beliefs. A part of these results also showed that moral disengagement may be the basis for many anti-social behaviors of adolescents. In explaining these findings, it can be said that moral disengagement is referred to the lack of a person's desire to address moral issues. In other words, the subject of ethics is the best justification for how the nature of the behavior depends on the situation. Although a person may have decisive moral principles, there are some mechanisms that can be used to prevent a person to blame himself for acts worthy of blame. These mechanisms enable individuals to defy their moral principles without considering themselves humiliating, Bandura attributes most abusive behaviors to these mechanisms, rather than the weak moral standards, according to Bandura (1986) "Because internal controls undergo differential actions, the dramatic changes in the moral conduct of individuals without altering their personality structure or their own assessment systems can be created. Self-sanction processes justify many inhuman behaviors, not personality defects. "On the one hand, as individuals use moral disengagement mechanisms, dramatic changes occur in their moral acts, without changing their personality structure or their personal evaluation systems; these self-sanction processes justify (abnormal justification of unsuitable behaviors) many of inhuman behaviors (without any kind of embarrassment in the person) cause people to continue to deal with their problem behaviors, including drug use. In fact, people by justifying their actions, consider their behavioral consequences less and by using drugs enjoy immediately of drug use; since craving is characterized by a lack of control over intrusive thoughts that insist on drug use, these people reuse drugs after quitting and finishing the course of treatment.

The negative relationship of craving with social intelligence and the prediction of craving with social intelligence is consistent with Besharat's studies (2005), Kahn et al. (2010), Cordovil et al. (2010), Hample (2011) and Dumitrescu et al. (2014). It can be deduced that addicts have lower social intelligence and are facing problems with regard to their social connections, their correct perception, and the proper processing of interpersonal relationships. These problems make it the individual lose analysis ability, decision making and

selection of proper behavior and be drawn to maladaptive behaviors in encountering with stressful situations and difficulties of life; since social intelligence plays a crucial role in routine behaviors of individuals and can protect them against harmful behaviors. People with poor social skills are not only vulnerable to factors that encourage drug use, they tend to use drugs as alternatives for adaptive coping strategies. In a study conducted on students, Dumitrescu et al. (2014) in a study on students, concluded that social intelligence was associated with the smoking of students. In other words, social intelligence is a special feature that reflects individual abilities; a person with low social intelligence, if exposed to cigarette or addictive substances, due to weakness in his social skills and inability to deal logically and appropriately does not have the ability to recognize that position, because of the lack of awareness and weakness of social skills, when dealing with the problems, these individuals reuse drugs. Also, social intelligence can be a protective factor against craving for drugs. Because individuals with high social intelligence know how to be invoked in different situations and have the ability to understand and analyze their own situations and others, this ability makes it possible to express resistance through adjusting their emotions and thoughts against the acceptance of inappropriate behavior, including addition relapse.

Therefore, according to the results of this study, it can be concluded that substance abusers with high moral disengagement and low social intelligence have more craving and desire for drugs after quitting and finishing the treatment period. These findings suggest that these two variables are important factors that are involved in the craving of addicts. The lack of control of the type of substance due to the use of more than one type of drug by most people during the last month leading up to the time of research was the main limitation of the present study; it is suggested that future studies, the type of substance is controlled. Considering this research and the importance of moral disengagement and social intelligence in craving, it is suggested to present educational workshops to reduce and cope up with moral disengagement strategies and improve the social intelligence level of substance abusers.

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