The Predictive Role of Difficulties in Emotion Regulation and Self-Control with Susceptibility to Addiction in Drug-Dependent Individuals

Abstract

Objective: The present study aimed to examine the predictive role of difficulties in emotion regulation and self-control in potential for addiction among drug-dependent individuals. **Method:** This was a correlational study which falls within the category of descriptive studies. The statistical population of the current study included all patients under treatment in outpatient health centers in Bam, among whom 315 individuals were selected through cluster sampling method as the participants of the study. Difficulties in Emotion Regulation Scale, Self-Control Scale, and Addiction Susceptibility Questionnaire were used for data collection purposes. **Results:** The results indicated that difficulties engaging in goal directed behavior, impulse control difficulties, lack of emotional awareness, and lack of emotional clarity (dimensions of difficulties in emotion regulation) had a significant positive correlation with potential for addiction. In addition, there was a negative significant relationship between self-control and potential for addiction among drug-dependent individuals. **Conclusion:** In addition to common methods of abstinence from drug dependence, teaching self-control and emotional control techniques to addicted patients can help them reduce their dependence.

Keywords: Emotion Regulation, Self-Control, Potential for Addiction

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Introduction

Health-threatening behaviors are placed among the most important psychosocial health-related challenges that most countries are involved in and impose widespread and serious problems on society (Center for Disease Control and Prevention, 2008). In a broad sense, risk behaviors can be considered as behaviors with potentially negative consequences (Baumagartner, Valkenburg & Peter, 2010). Aggression and physical conflict, suicidal thoughts, alcohol consumption, drug abuse, and sexual activity are included among high-risk behaviors (Springer, Parcel, Baumler & Ross, 2005). Several studies have shown that only a small part of the population that turns to the chronic use of nicotine, alcohol, and opium comes down with addiction to these substances. These studies have clarified some points as follows: All the individuals dealing with addictive substances do not become addicted; in fact, the long-term use of drugs is not a sufficient condition for addiction. Despite the prolonged use of cigarettes, alcohol, and opium, some consumers do not become addicted. On the other hand, some people become addicted only after several encounters with substances. Those who are prone to addiction tend to multiple substance use (Hiroi & Gatsuma, 2005). Addiction susceptibility theory suggests that some people are predisposed to addiction and if they get exposed to it, they will become addicted. However, if someone is not susceptible, s/he will not become addicted (Gendreau & Gendreau, 1970).

Emotional self-regulation is one of the factors that is closely related to substance use. Self-regulation or self-control refers to the organized efforts towards the regulation of thoughts, feelings, and actions to achieve specific goals (Myber, 2011). Emotional regulation refers to all approaches that are applied to reduce, boost, and increase emotions. Emotional regulation approaches are a combination of personality, social development, cognitive, and emotional approaches. In fact, emotional regulation includes a wide range of conscious, unconscious, physical, cognitive, and behavioral processes (Butt, Sanam, Gulzar & Yahya, 2013). Self-regulation is a complex phenomenon which is influenced by factors such as motivation, personality traits, temperament, gender, and cultural and environmental factors. Disorder in self-regulation is the cause of many addictive behaviors, including eating disorders, substance abuse, and depression. Self-regulation is the main cause of effective response in the area of issues such as impulse control, time management, and coping with emotions and stress. Many clinical conditions, such as anxiety, depression, and attention deficit hyperactivity disorder are considered as a person's limited ability in self-regulation (Murtagh & Todd, 2004). Positive emotions facilitates self-regulation while negative emotions harm it (Myber, 2011). Parker (2006) noted that addicted people encounter some difficulties identifying their own and others' emotions that cause such people to undergo some abnormalities in making a positive, constructive, and directive communication with others. Such

abnormalities lead to drug use tendency. The results of a study on the relationship between substance abuse and emotional intelligence showed that low levels of emotional regulation that are produced as a result of the inability to effectively cope with and manage one's emotions play some role in the initiation of drug use (Parker, Taylor, Eastabrook, Schell &Woo, 2008). In a study on the relationship between emotional intelligence and addiction, it was revealed that the youth and adolescents who received high scores in Multifactor Emotional Intelligence Scale test others have achieved very low levels of drug use, smoking, and alcohol consumption (Kun & Demetrovics, 2010).

Self-control is among other variables that can influence drug abuse. Self-control refers to a state wherein one controls his/her behaviors, feelings, and instincts despite motivation to action (Friese & Hofmann, 2009). Mayer & Salovey (2003) introduced self-control as the correct application of emotions and believe that the power to regulate feelings leads to the increase of personal capacity to soothe oneself and understand anxiety, depression or common impatience. People with the internal self-control believe that success or failure depends on their effort or ability; however, people with external self-control believe that other factors such as luck or difficulty of tasks are effective in their success or failure. People with internal self-control believe that the reinforcement they receive is under control of their own behaviors and characteristics. In contrast, people with external self-control believe that reinforcement is controlled by others, fate, or chance. They have become convinced that they are incapable in terms of such external forces. These people believe that their behaviors and abilities have no effects on the reinforcements that they receive. They often attach little value to any attempt for the improvement of their own conditions. When they think they have little control over their present or future lives, for what reason they should work hard (Schultz, translated by Sayed Mohammadi, 2005). In a longitudinal study, Adalbajarnardotir and Rafnsson (2002) examined anti-social behavior and substance abuse in adolescents. The results of this study showed that the students with more anti-social behavior have lower levels of self-control are at higher risk of substance and alcohol abuse. Sussman, Dent & Leu (2003) showed that there was a significant negative relationship between self-control and cigarette smoking, alcohol consumption, marijuana use, and use of other drugs. Allahverdi Pour, Shafie, Azad Fallah & Emami (2006) reached the conclusion that adolescents with low self-control are at high risk of drug use. Taylor, Hiller & Taylor (2013) showed that both impulsivity and low self-control have a significant positive relationship with substance abuse. Visser, de Winter, Veenstra, Verhulst & Reijneveld (2013) reported that alcohol abusers had low self-control in comparison with non-abusers.

Emotion regulation plays an important role in one's adaptation with stressful life events. The increase of control and emotion regulation leads to the capability of effective mood management, increase of problem solving, and utilization of

emotions. Thus, this study aims to answer the following question: Are difficulties in emotion regulation and self-control predictors of susceptibility to addiction in drug dependent people?

Method

Population, and method, and sampling method

The current study is a correlational one which falls within descriptive design categories. All patients under treatment in outpatient health centers in Bam in 2004 constituted the statistical population of this study. According to statistics from the city centers, the statistical population amounted to the total of 1500 individuals. From among addiction treatment centers and clinics across the city of Bam, four centers were selected in the draw. Then, the number of 34 participants was randomly selected from each center while the number of 33 participants was randomly selected from one of these four centers, which amounted to the total of 135 participants. After receiving the consent of subjects for participation in this study, the researchers provided them with Difficulties in Emotion Regulation Scale, Self-Control Scale, and Addiction Susceptibility Questionnaire. The items of the questionnaires were read to illiterate participants by the researcher, but the literate ones were asked to carefully complete the questionnaires.

Instrument

1- Difficulties in Emotion Regulation Scale (DERS) (Gratz & Roemer, 2004): It is a self-report scale that was constructed for the evaluation of difficulties in emotion regulation in a more comprehensive format with respect to the existing conditions. This scale consists of 36 items and 6 sub-scales, namely non-acceptance of emotional responses (NONACCEPTANCE), difficulties engaging in goal directed behavior (GOALS), impulse control difficulties (IMPULSE), lack of emotional awareness (AWARENESS), limited access to emotion regulation strategies (STRATEGIES), and lack of emotional clarity (CLARITY). The response of each participant ranges from one to five (Alavi, 2009). Higher scores indicate greater difficulties in terms of emotional regulation. The items numbered 1, 2, 6, 7, 8, 10, 17, 20, 22, 24, and 34 of this scale are scored in reverse. In terms of the validity of this scale, the studies indicated the desired construct validity and predictive validity of the scale (Gratz & Roemer, 2004). The results pertaining to the validation suggest that this scale has high internal consistency (.93) and Cronbach's alpha coefficients in the subscales of non-acceptance, goals, impulse, awareness, strategies, and clarity were equal to .85, .89, .86, .80, .88, and .84, respectively. In addition, the reliability of this scale was obtained via test-retest method, which was equal to .88 for the total scale, and it was .69, .69, .57, .68, .89, and .80 for the subscales

of non-acceptance, goals, impulse, awareness, strategies, and clarity, respectively. In this study, Cronbach's alpha coefficients were obtained equal to .79, .60, .67, .70, .80, and .75 for non-acceptance, goals, impulse, awareness, strategies, and clarity, respectively.

2- Tangney, Baumeister & Boone's self-control scale (2004): Although no research was found to have specifically examined psychometric properties of this questionnaire, Tangney, et al. (2004) investigated the reliability of this scale and reported the Cronbach's alpha coefficient of the full 36-item self-control scale equal to .89. They also reached similar results for the 13-item version of this scale. Items of this scale are responded based on a 5-point Likert scale (1 point for never and 5 points for very much). Higher scores indicate greater self-control. Brief self-control scale consists of two subscales, namely inhibitory and initiatory self-control. Ridder, Deboer, Lugtig, Bakker & Van Hooft (2011) conducted a study to assess the internal consistency of the two sub-scales. The results suggested that both sub-scales enjoyed high and similar internal consistency (.86). Furthermore, the correlation coefficient between the two sub-scales was equal to .68.

3- Addiction Susceptibility Questionnaire: This is an Iranian addiction potential scale which was constructed by Zargar in 2006 with respect to the mental state of Iranian society (cited in Zargar, Najarian & Na'ami, 2008). This questionnaire consists of two factors and 36 items in addition to 5 lie detecting items. All the items are yes/no questions in which the answer yes is assigned one point while the answer no is assigned no point. The total scores ranging from 1 to 18 indicate a very low potential for addiction, scores from 19 to 20 represent a low potential for addiction, scores from 21 to 22 indicate moderate susceptibility to addiction, scores from 23 to 24 represent a high potential for addiction, and score 25 or higher indicates a very high potential for addiction (cited in Zargar et al., 2008). Two methods were used to calculate the validity of the scale. Criterion validity distinguished potential for addiction of the questionnaire between addicts and non-addicts. Construct validity of the scale was calculated by correlating it with the 25-item Symptom Check List (SCl-25) that was obtained equal to .45. Cronbach's alpha coefficient of the scale was reported equal to .90 which is a desired value (Zargar, 2006 cited in Zargar et al., 2008). It is noteworthy that Cronbach's alpha of the scale in this study was obtained equal to .72.

Results

Out of the sample, the number of 23 participants (17%) was placed in the 15-25-year-old age group, the number of 74 participants (54.8%) was placed in the 26-36-year-old age group, the number of 35 participants (25.9%) was placed in the 37-47-year-old age group, and the number of 3 participants (2.2%) was placed in the 48-58-year-old age group. In terms of education, 4 participants

(3%) were illiterate, 63 participants (46.7%) had secondary school degrees, 54 participants (40%) had diploma degrees, 6 participants (4.4%) had associate's degrees, and 8 participants (5.9%) had bachelor's degrees.

Correlation matrix of the variables under study is presented in the table below.

Table 1: Correlation matrix of the variables under study

Variable	Addiction potential
Self-control	***-.42
Clarity	***.80
Strategies	**.17
Awareness	***.25
Impulse	**.19
Goals	***.22
Non-acceptance	.12

**P< .01, ***P< .001

To investigate the predictive role of difficulties in emotional regulation and self-control in potential for addiction, stepwise regression was used as follows. Only self-control could enter the equation that accounted for 18% of potential for addiction. Regression coefficients are given in the table below.

Table 3: Regression coefficients of potential for addiction based on emotion regulation and self-control

Predictor variable	B	SD	β	t	Sig.
Self-control	-.14	.03	-.42	-2.170	.0005

Discussion and Conclusion

The aim of this study was to investigate the predictive role of difficulties in emotional regulation and self-control in potential for addiction among drug-dependent people. Results showed that the potential for addiction has a significant positive relationship with difficulties engaging in goal directed behavior, limited access to emotion regulation strategies, impulse control difficulties, lack of emotional awareness, and lack of emotional clarity. On the other hand, it was revealed that there is a significant negative correlation between self-control and potential for addiction. In addition, the results of multiple regression analysis on the prediction of potential for addiction also indicated that self-control, in itself, could predict .17 of variance in potential for addiction in the first step. These results are consistent with the results of the studies conducted by Allahverdi Pour et al. (2006), Parker et al. (2008), Kun & Demetrovics (2010), Taylor et al. (2013), and Visser et al (2013). Positive emotions facilitate self-regulation while negative emotions damage self-regulation (Myberg, 2011). Addicts encounter difficulties in identifying their own emotions and others'. This causes them to face problems in establishing positive, constructive, and directive relationship with other people. This is the

cause of attitudes towards drugs (Parker 2006). In a research entitled emotional intelligence as a moderator of stressor–mental health relations in adolescence, Sarah & Davis (2012) found that emotional intelligence acts as a source of protection against environmental stressors and prevents people from tendency to drugs. In a study, entitled on the relationship between emotion regulation strategies and interpersonal behavior among substance abusers, Abolqasemi, Zahed, Elah Gholilo & Narimani (2010) stated that one of the possible reasons for the tendency to substance use is the difficulties and shortcomings in the area of emotions. In the face of stressful events, people encounter emotional failures which originate from basic cores of psychopathology. Khantzian (1997) believes that disorders in emotional regulation and low tolerance are the main causes of addiction. It seems that low tolerance of people force them to find an immediate way to get rid of emotions. Since lack of emotional clarity takes up the highest variance among all the variables, one can argue that these people may have more difficulty in identifying emotions rather than in controlling them. Taylor et al. (2013) showed that both impulsive state and low self-control have a significant positive relationship with substance abuse.

Chauchard, Levin, Copersino, Heishman & Gorelick (2013) found that people with low self-control have difficulty in predicting long-term negative consequences of their own behavior; therefore, they review the consequences of their addictive behaviors to a lesser extent. In contrast, people with high self-control feel guilty to a greater extent and are motivated for treatment since they can easily recognize their future abusive behaviors as risky and costly ones. Rachline (1995) believes that people with high self-control benefit from greater commitment as well. For example, they feel committed to refrain from drinking alcohol or taking other drugs. Therefore, it seems that if people with higher levels of self-control have pledged themselves not to use drugs, they can remain faithful to their commitments more easily. However, people with lower self-control levels are likely to be less loyal to their commitments and easily violate their commitment not to use drug.

The results of this study suggest that people with lower self-control contemplate the outcome of their behavior to a lesser extent and try to immediately their own desires. Therefore, these people do not reflect upon the consequences of drug use and seek instant pleasure in drinking alcohol and using other drugs. People with lower levels of self-control are less likely to adhere to their commitments and easily break their commitment to restraint from drug use. To account for the relationship between alcohol consumption and self-regulation, one can argue that people with low self-control are unable to control their use of drugs, therefore, they turn to alcohol in order to regulate their emotions. Various studies show that there is a higher number of alcohol users among the individuals who have weak self-regulation skills. Alcohol consumption also brings about difficulties for self-regulation by affecting attention, cognition, and emotion. When people are under pressure to use drugs,

poor management of emotions increases the risk of substance abuse. On the contrary, effective management of emotions reduces the risk of substance abuse. The ability to manage emotions causes the individuals to use appropriate coping strategies when placed in situations involving high risk of substance abuse. In the same way, people who have a high level of positive emotional regulation are equipped with a greater ability to anticipate the needs of others. They understand the unwanted pressures of other people and prepare their own emotions in a better way and, thereby, they show more resistance to drug use. In contrast, those who have low positive emotional regulation are often oriented to substance abuse to deal with their negative emotions. Therefore, one can suggest this possibility that disorder in emoting regulation and self-regulation whether behavioral or executive self-regulation is correlated with substance abuse. One of the limitations of this study regards the generalizability of these results since only the addicts of Bam city constituted the participants of the sample. Therefore, care and discretion should be exercised in generalizing these results. Psychotherapists and specialists of addiction treatment are recommended to assist their patients reduce degree of dependence on drugs by teaching emotion regulation and self-control techniques along with conventional addiction treatment techniques.

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