Original Article

Role of Feeling of Loneliness and Emotion Regulation Difficulty on Drug Abuse

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Abstract

Introduction: The Risk behaviors such as drug abuse are prevalent anxiously in youth. Thus investigation and recognition of risk behaviors are important. The aim of the present study was to investigate relationship between loneliness and the difficulty in emotional regulation with drug abuse.

Materials & Methods: this research was descriptive- correlation. The sample was comprised of 452 students from Universities of Sistan and Baluchestan, Iran. Participants were selected by cluster sampling. The instruments were the Loneliness Scale, the Difficulty in Emotion Regulation Scale and the Drug Abuse. For statistical analysis, regression analysis methods were used.

Results : The results showed that there is a positive and significant relationship between loneliness and the difficulty in emotion regulation with drug abuse. The Enter regression analysis for prediction of the drug abuse showed that the loneliness predicts .09 and the difficulty in emotional regulation predicts .08 of the drug abuse variances ($P \leq .05$).

Conclusion: Therefore, it is recommended to university and cultural instructional planners to pay attention to variables of loneliness and emotional regulation as drug abuse risk factors and introduce especial and preventive programs in this subject.

Keywords: Loneliness, Emotion Regulation, Drug abuse

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Introduction

Adolescence is a critical period of development in which a range of high-risk health behaviors may affect one's health, social and academic functioning and many of these behaviors may continue to the adulthood [1]. Research indicates that adolescents and young adults have a tendency to detect hazardous situations that cause to increase capability for having a short life and even death [2]. Early onset of drug abuse and sexual activity are among the behaviors that have a greater adverse effect on developmental outcomes [3].

Aggression and physical-mental conflict, suicidal thoughts, alcohol drinking, drug abuse and sexual abuse activity are among high-risk behaviors [4] In a broad sense, risky behaviors can be considered as behaviors with potential negative consequences [5]. Social environment and the peers, access to substances like cigarette, alcohol, and drugs, attitudes of friends and family towards such behaviors, psychological causes and childhood experiences all affect the patterns of such behaviors [6]. A number of researchers argue that adolescence is the peak incidence of feeling of loneliness [7]. Feeling of loneliness is associated with some negative emotions such as anxiety, depression and fear of not being loved [8]. Some studies state that drug and tobacco [9] and alcohol use [10] are due to emotional and psychological problems associated with the perception of loneliness among adolescents. Elhageen describes loneliness as a despised, distressing and unpleasant experience which makes adolescents feel inferior, experiencing uncomfortable temper states [11]. The word "loneliness" refers to absence of social relations and isolation that could be due to environmental factors such as changing the location, losing dear ones, separation and rejection of others and/or of internal factors which outbreak along with other signs of depression [12]. Recent studies suggest that isolation and feeling of loneliness increase the risks related to general health issues including depression, tendency or proceeding to suicide, increasing level of stress and psychological pressure, cardiovascular disorders and stroke, significant decline in learning and memory, anti-social behavior, weakness in decision making, drug abuse, and defects in mental functions [13].

The emotion cognitive strategies model is among the most important models associated with the role of neural systems in controlling emotion. This class of models addresses various effective cognitive processes involved in regulating emotional acts. Cognitive regulation of emotions could be defined as emotional and cognitive provoked information management with conscious cognitive strategies [14]. Self-regulation is a multidimensional construct including processes of attention, cognition, motivation, emotion and behavioral effort to manage internal or external states of

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emotions[15]. Self-regulation encompasses conscious and unconscious processes and includes biological, psychological and social systems [16].

Processes involved in self-regulation are divided into two categories of social-emotional and cognitive. Regulation of emotions is an inseparable part of self-regulation. Self-regulation of emotions includes internal and external processes responsible for checking, assessing and changing emotional reactions on the basis of time characteristics and intensity of achieving to given goals [17]. Deficits in executive-emotional functions, and emotional self-regulation could lead to drug abuse problems. These deficits could be caused by toxic effects of alcohol or other substances [18]. Self-regulatory disorders affects substance abuse, eating disorders, emotional disorders, venereal diseases and unintended pregnancy, school failure, crime and delinquency, violence, misbehavior in family, obesity, gambling, financial saving failure and smoking, marital conflict, impulse control disorders and many other problems [19].

The fact that the amount of unhealthy and risky behaviors, including substance abuse, in adolescents and young adults is at an alarmingly high level shed lights on importance of studying and understanding the high-risk behaviors among adolescents and young people to strive toward planning and investing in health, mental and social welfare of adolescents and preventing them from substance abuse [20]. Since many studies have shown that the feeling of loneliness and difficulty in regulating emotions is associated with many behavioral problems, it was important to be investigated on role of emotional regulation and feeling of loneliness in pathology and epidemiology of drug abuse. Therefore the purpose of the current study was to investigate the role of loneliness and difficulties in emotion regulation on drug abuse among students. It seeks the answer to the question that how much the feeling of loneliness and difficulty in emotion regulation contribute to prediction of the drug abuse among students.

Materials & Methods

The present study was a descriptive-analytic study and correlational type. Population of the study includes all undergraduate students of Sistan and Baluchistan Universities. All of undergraduate students were selected as subject and no another criteria were applied for this selection. The sample included 452 students who were selected through random cluster sampling and responded to the Scales of feeling of loneliness (SOFL), Difficult in Emotion Regulation Scale (DERS) and Drug Abuse (DA). Data were analyzed using Pearson correlation method and concurrent regression. Three questionnaires were distributed among

Scale of Feeling of Loneliness consists of 15 questions with right-wrong options that measured the feeling of loneliness in three communities of family, larger groups and

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friends. Coefficient of internal consistency of the scale in the German version has been reported 0.91 [21]. Also McWhirter reported the reliability of the scale to be 0.082. [22]. In Iran, Khoeinejad, Rajai and Moheb Rad reported the internal consistency of the scale as 0.86 for total of scale and in details, 0.83, 0.77 and 0.78 for families, larger groups and friends, respectively [23].

Scale of Emotional Regulation Difficulty is a self-report index designed by Graz and Romer to assess the difficulties in emotional regulation in a more comprehensive form compared to existing tools in this area. It consists of 36 items and 6 sub-scales including rejection of emotional responses, difficulty in handling purposeful behavior, difficulty with impulse control, lack of emotional awareness, limited access to emotion regulation strategies, and lack of emotional transparency. In relation to the validity of the scale, studies indicate sufficient predictive and construct validity. The results related to the reliability demonstrate that the scale has a high internal consistency in total (0.93) [24]. Moreover, the Cronbach alpha for the subscales of rejection, aims, impulse, awareness, strategies and transparency was 0.85, 0.89, 0.86, 0.80, 0.88 and 0.84, respectively. The reliability of the scale was calculated using test-retest method for the total scale (0.88, $P < 0.01$) and for the subscales of rejection, aims, impulse, awareness, strategies and transparency, the reliability was 0.69, 0.69, 0.57, 0.68, 0.89 and 0.80, respectively [24]. Further, the reliability and internal consistency of the scale which was translated into Persian were calculated with a pilot study on 48 student at Ferdowsi University and Mashhad University of Medical Sciences (31 women and 17 men). The results indicated high internal consistency for the total scale (α= 0.86). Among an Iranian population, the internal consistency for each subscale of rejection, aims, impulse, awareness, strategies and transparency were 0.75, 0.74, 0.76, 0.63, 0.74 and 0.85, respectively [25].

Drug Abuse Inventory is developed and validated by Kazemi and Nikmanesh [26].The questionnaire on drug abuse includes illegal substances, like marijuana, methadone, heroin, opium, crack, glass, ecstasy, pan, cigarette and alcohol. For scoring the questionnaire, subjects are asked to select an option on the scale of 0 to 4 to determine the amount of their use, i.e., zero represents no use and 4 stand for permanent users. To obtain reliability and validity of the questionnaire, after designing the questionnaire and asking experts' opinion about the content and formal validity of the questionnaire, the validity was obtained using internal consistency (Cronbach's alpha). Alpha coefficient of drug abuse was 0.84 [26].

Descriptive statistics as mean and standard deviations were used. Also the Pearson correlation and analysis regression were used for predicting the Drug Abuse by the Feeling of Loneliness and Emotion Regulation Difficulty colleges. Also for statistical analysis of data the SPSS/16 was used

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Results

The results represented in Table 1 indicate that difficulty in emotion regulation has the highest mean (X= 95.67) than other variables. The results also indicate that there is a significant positive relationship between drug abuse with feeling of loneliness(r= 0.088) and emotion regulation difficulty (r= 0.086) in students.

Regression results for predicting drug abuse, in Table 2, demonstrates that the feeling of loneliness predicted 0.006 of variations in drug abuse. β value indicates that each unit of variation in the feeling of loneliness changes students' drug abuse about 0.088. This prediction is significant at the level of 0.05 (P ≤ 0.02, df=1450, F=3.51). In addition, the results in Table 3 state that emotion regulation difficulty predicted 0.005 of variations in drug abuse. β value shows that each unit of variation in the emotion regulation difficulty changes students' drug abuse about 0.088. This prediction is significant at the level of 0.05 (P ≤ 0.03, df =1450, F=3.37).

Table 1. Mean and standard deviation between feeling of Loneliness, emotion regulation difficulty and drug Abuse n= (452)

Variable	Mean	Standard deviation
Drug abuse (taking pan, heroin, cocaine, crystal and glass, drug use in the form of injection and alcohol beverage)	12.30	2.67
Feeling of Loneliness	31.72	9.23
Emotion Regulation Difficulty	95.67	20.35

Table 2. Results of Inter regression to predict drug abuse (pan, opium, hashish, heroin, cocaine, glass, crystal and drug use in the form of injection and alcohol beverages)

Variable	R	R square	F	Adjusted R Square	ß	Durbin-Watson	P
Feeling of Loneliness	0.088	0.008	3.51	0.006	*0.088	1.88	0.05
Emotional Regulation Difficulty	0.08	0.007	3.37	0.005	*0.086	1.88	0.05

Criterion Variables: Drug Abuse

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Discussion

Drug abuse in adolescence and young adults could be associated with psychological-social and mental health issues in adolescence and adulthood. In fact, adolescence may cause addiction in adulthood. Researchers have found that more than 90% of addicted adults have begun drug abuse from their adolescence [27]. Among criminal behaviors, using drug and marijuana, drinking alcohol, smoking cigarettes, and engaging in sexual behavior in adolescents are the most frequent ones. Using drugs during adolescence has long-term negative effects on neurological-cognitive and behavioral function. For example, adolescents who have used drug have experienced behavioral, emotional changes and cognitive processes that are characterized as non-development in emotion regulation, aggression and impulsivity [28].

Results of examining the correlation between feeling of loneliness and difficulties in emotion regulation indicated a positive significant relationship between drug abuse and feeling of loneliness and emotion regulation difficulty among students. Regression results showed that the variable of feeling of loneliness explains 0.006 of drug abuse and emotion regulation difficulty explains 0.005 of drug abuse ($P \leq 05/0$). The results of the present study are consistent with a number of previously conducted studies.

Studies have indicated that with reduction of social relations and accession of feeling loneliness, serious physical and mental health problems emerge [29,30]. Feeling of loneliness could be due to environmental factors such as changing the location, losing dears, separation and rejection of the others and/or of internal factors which emerge along with other signs of depression [12]. Shute showed that the isolation and feeling of loneliness increase the risks associated with general health including depression, tendency or proceeding to suicide, increasing level of stress and psychological pressure, cardiovascular disorders and stroke, significant decline in learning and memory, anti-social behavior, weakness in decision making, drug abuse, and defects in mental functions [13]. Asher and Paquette argue that loneliness could be both a life experience and could potentially be harmful [10]. Research findings have confirmed that the feeling of loneliness is an etiological factor influencing health and well-being of different populations and it can cause serious immediate and long-term consequences on individuals' mental health [31]. Hawkley, Burleson, Bernston and Cacioppo concluded that individuals with feelings of loneliness have less positive emotions in their social interactions and the feeling of loneliness is correlated with having less intimacy, more uncertainty and conflict [32]. Many research studies have shown that people reflect their loneliness with isolation, depression, anxiety, drug use, delinquency, school failure and suicide [9, 10, 33].

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A great number of studies acknowledged the role of negative emotions in the etiology and survival of addiction behaviors. In a study, individuals who were unable to tolerate smoking cessation interventions more than 24 hours (comparing to those who could tolerate the action fully) reported more depressive and negative mood symptoms in response to stress and demonstrated less endurance during stressful experiences [34]. Evidence indicate that a combination of poor impulse control, stressful life events, suicidal behavior and drug use can increase the possibility of negative consequences associated with these behaviors [35, 36].

Without considering the potential consequences of emotional reactivity and impulsivity, the risk and adventure of beginning drug use in adolescence increases. Adolescents with severe problems in impulse control experience early drug use and poorer prognosis. Similarly, boys with impulse control issues are more likely to demonstrate drug use disorder [28]. Exposure to the drug use could be a risk factor to increase the engagement in the drug use. Family effects such as drug use by relatives and peers and friends impact including approval of drug use from friends and drug use offers, predict the risk of starting drug use and increase in drug use in adolescence [37]. Arshell and Alterman found that negative affect reduction is the common cause of alcohol consumption among the clients treated for alcohol use disorders. Such findings demonstrate that alcohol or other drugs influence the regulation of mood states, especially negative emotions [38]. Moreover, Sony et al reported that negative mood increases the amount of alcohol use and found that individuals experience high levels of alcohol and other drug consumption due to depression and anxiety. Also, these individuals are likely aroused to alcohol or other drug use by negative emotions [39]. Thule, Weiss, Adams and Gratz indicated that impairments of emotion regulation significantly predict risky sexual behaviors, depression, emotional disorders, and the intensity of drug abuse [40].

Thus, it could be concluded that feeling of loneliness and difficulties in emotion regulation in adolescents and young adults can lead to stress, anxiety and depression and if the person is weak in controlling emotions, he or she will experience stress and anxiety in stressful circumstances and therefore the person will start drug use to control and reduce negative emotions. While if the person has the ability to regulate emotions, he could reduce the psychological inability when encountering with stressful factors and adopt effective ways to cope with problems and difficulties.

Conclusion

Therefore, in order to accurate, realistic and effective planning to reduce and control drug abuse, it is recommended that education and cultural stakeholders of universities identify underlying risk factors of feeling of loneliness and emotion regulation difficulty and thereby

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prevent them through appropriate measures. On the other hand, necessary training should be provided for students through workshops, newsletters and training manuals about management methods to reduce feelings of loneliness and emotion regulation.

Limited sample size and lack of demographic and confounding factors are among the limitations of the present study.

Conflict of Interest: The Authors have no inflicted of interest.

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