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

Nikmanesh Z<sup>1\*</sup>, Kazemi Y<sup>2</sup>, Khosravi M<sup>3</sup>

# ARTICLEINFO

Article Type: Original Article

Article History:

Received: 21 Apr 2015

Revised: -

Accepted: 22 May 2015

Keywords: Loneliness Emotion regulation Drug abuse

#### ABSTRACT

**Background:** The Risk behaviors such as drug abuse are prevalent anxiously in youth. Thus investigation and recognition risk behaviors are important. The aim of the study was to investigate on relationship between loneliness and the difficulties in emotion regulation with drug abuse.

*Methods:* This research was descriptive correlation. The sample was comprised of students of University of Sistan and Baluchestan, southeastern of Iran. Participants were selected by cluster sampling. The instruments were the loneliness scale, the difficult in emotion regulation scale and the drug abuse. For statistical analysis, Pearson correlation and regression analysis methods were used.

**Results:** The results showed that there is a positive and significant relationship between loneliness and the difficulties in emotion regulation with drug abuse. The Enter regression analysis for prediction of the drug abuse showed that the loneliness predicted 0.09 and the difficulties in emotion regulation predicted 0.08 of the drug abuse variances.

**Conclusion:** Regard to the results, it is recommended to university and cultural instructional planners to pay attention to variables of loneliness and emotional self-regulation as drug abuse risk factors and introduce especial and preventer programs in this subject.

Copyright©2015 Forensic Medicine and Toxicology Department. All rights reserved.

▶ Implication for health policy/practice/research/medical education: Role of Feeling of Loneliness and Emotion Regulation Difficulty on Drug Abuse

▶ Please cite this paper as: Nikmanesh Z, Kazemi Y, Khosravi M. Role of Feeling of Loneliness and Emotion Regulation Difficulty on Drug Abuse. International Journal of Medical Toxicology and Forensic Medicine. 2015; 5(4): 185-91.

### 1. Introduction:

Adolescence is a critical period of development in which a range of high-risk

Corresponding author: Nikmanesh Z, MD. Associate Professor, Department of Psychology, University of Sistan and Baluchestan, Zahedan, Iran

E-mail: zahranikmanesh@yahoo.com,

Nikmanesh@ped.usb.ac.ir

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 and that has increased their capacity for not having a long life and even death (2). Early onset of drug abuse and sexual activity are

<sup>&</sup>lt;sup>1</sup> Department of Psychology, University of Sistan and Baluchestan, Zahedan, Iran

<sup>&</sup>lt;sup>2</sup> Department of Education, University of Sistan and Baluchestan, Zahedan, Iran

<sup>&</sup>lt;sup>3</sup> Prisons Office Zahedan, Zahedan, Iran

among the behaviors that have a greater adverse effect on developmental outcomes (3).

Aggression and physical conflict, suicidal thoughts, alcohol drinking, drug abuse and activity sexual 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 peers, access to substances like cigarette, alcohol, and drugs, attitudes of friends and family toward such behaviors, psychological causes 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 consider that drug and tobacco use (9) and alcohol use (10) are due to and psychological problems emotional associated with the perception of loneliness among adolescents. Elhageen describes loneliness as a despised, distressing and unpleasant experience which makesadolescents 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 dears, 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 depression, including tendency proceeding to suicide, increasing level of and psychological stress 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 emotions (15). Self-regulation encompasses conscious and unconscious processes and includes biological, psychological and social systems

Processes involved in self-regulation are divided into two categories of socialemotional and cognitive. Regulation of emotions is an inseparable part of selfregulation. Self-regulation of emotions includes internal and external processes responsible for checking, assessing and changing emotional reactions on the basis of characteristics and intensity achieving to given goals (17). Deficits in executive-emotional functions, emotional self-regulation could lead to drug abuse problems. These deficits could also 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 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 of substance abuse (20). Since many studies have shown that the feeling of loneliness and regulating difficulty in emotions associated with many behavioral problems, the purpose of the current study is to investigate the role of loneliness and difficulties in emotion regulation on drug abuse among students. It seeks the answer this question that how much the feeling of loneliness and difficulty in emotion regulation contribute to prediction of the drug abuse among students.

#### 2. Materials and Methods:

The study was a descriptive-correlational. Population of the study includes all undergraduate students of Sistan and Baluchistan University. The sample included 452 students who were selected through random cluster sampling and responded to the scale of feeling of loneliness, emotional regulation and drug abuse. Data were analyzed using Pearson correlation method and concurrent regression. Three questionnaires were distributed among

The participants, Scale of Feeling of Loneliness consist of 15 questions with right-wrong options measuring the feeling of loneliness in three dimensions of family, larger groups and friends. Coefficient of internal consistency of the scale in the German version has been reported 0.91 (21). McWhirter reported the reliability of the scale to be 0.082 (22). In Khoeinejad, Rajai and Moheb Rad the internal consistency of the scale, based on the sample group, and was equal to 0.86 which were 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 of the 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). reliability Further. the and internal consistency of the scale which was translated into Persian were calculated with a pilot study on 48 student at Ferdowsi University Mashhad University of Medical Sciences (31 women and 17 men). The results indicated high internal consistency for the total scale ( $\alpha$ =0.86). Among an Iranian population, the internal consistency for each subscale of rejection, aims, impulse, awareness, strategies and transparency was 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. The questionnaire on drug abuse includes illegal substances, such as marijuana, methadone, heroin, opium, crack, glass, ecstasy, pan, cigarette and alcohol. For scoring the questionnaire, subjects are asked to select an option between 0 and 4 to determine the amount of their use, i.e., zero represents no use and 4 means permanent use. 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 we used SPSS software, version 16 for analysis of data.

# 3. Results:

The results represented in table 1 indicate that difficulty in emotion regulation has the highest mean ( $\mu$ =95.67) than other variables. The results in Table 2 indicate that there is a significant positive relationship among drug abuse, feeling of loneliness and emotion

**Table 1:** The mean of vital signs in patients by from of pill

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:** Correlation between drug abuse and the emotion regulation difficulty and feeling of loneliness

Variable	Emotional Difficulty	Regulation	Feeling of Loneliness	P
Drug abuse (taking pan, opium and hashish, heroin, cocaine, glass, crystal and drug use in the form of injection and alcohol beverage)		0.086	0.088	0.03

**Table 3:** 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	В	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

regulation difficulty among students. Regression results to predict drug abuse in Table 3 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 $\leq$ 0.05, df=1450, F=3.51). In addition, the results in table 3 indicate 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 \le 0.05, df=1450, F=3.37).

### 4. Discussion:

Drug abuse in adolescence and young adults could be associated with psychologicalsocial and mental health issues adolescence and adulthood. In fact. adolescence may cause addiction 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 longterm negative effects on neurologicalcognitive 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 difficulty regulation 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≤0.05). 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, disorders cardiovascular 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).

A great number of studies acknowledge 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).

considering Without the potential consequences of emotional reactivity and impulsivity, the risk and adventure of beginning drug use in adolescence increases. with severe Adolescents problems impulse control experience early drug use and poorer prognosis. Similarly, boys with impulse control issues are more likely to drug use disorder (28). demonstrate 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 other drug consumption due and depression and anxiety. Also, 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/she will experience stress and anxiety in stressful circumstances and therefore he/she will start drug use to control and reduce negative emotions. This is while if the person has the ability to regulate emotions, he/she could reduce psychological inability when encountering with stressful factors and adopt effective ways to cope with problems and difficulties. Limited sample size and demographic and confounding factors are among the limitations of the present study.

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

## Acknowledgements

We are deeply grateful to students who participated and helped us to accomplish the study. Also, the Research Deputy of Sistan and Baluchestan University is appreciated for financial supports.

#### References

- 1. Harriette B, Fox M, Mcmanus A, Arnild KN. Significant multiple risk behaviors. The National Alliance to Advance adolescent Health. 2010;8:1-10.
- 2. Stoiber K, Good B. Risk and Resilience Factors Linked to Problem Behavior among Urban, Culturally Diverse Adolescents. School Psychology Review. 1995;27:1-18.

- 3. Mancini JA, Huebner AJ. Adolescent risk behavior patterns: effects structured time-use, interpersonal connections, self-system characteristics, and socio-demographic influences. Child and Adolescents Social Work Journal. 2004;21:647-68.
- 4. Springer A, Parcel G, Baumler E, Ross M. Supportive social relationships and adolescent health risk behavior among secondary school students in El salvador. Social Science & medicine, 2005;62:1628-40.
- 5. Baumagartner SE, Valkenburg PM, Peter J. Assessing Causality in the Relationship Between Adolescents' Risky Sexual Online Behavior and Their Perceptions of this Behavior. J Youth Adolesc. 2010;39(10):1226–39.
- 6. Everet S, Malarcher, A. Relationships between cigarette, smokeless Tobaceo and cigar use and other health risk behaviors amony us highschool students. Journal of School Health. 2000;70:234-40
- 7. Antognoli-Toland PL. Adolescent loneliness: Testing a predictive model. Journal of Theory Construction & Testing. 2000;4:7-13.
- 8. Wright S. Loneliness in the workplace. Unpublished Doctoral dissertation. University of Canterbury. 2005.
- 9. Page RM. High school size as a factor in adolescent loneliness. High School Journal. 1990:73:150-3.
- 10.Asher SR, Paquette JA. Loneliness and peer relations in childhood. Current Directions in Psychological Science. 2003;12:75-8.
- 11.Elhageen A. Effect of Interaction between Parental Treatment Style and Peer Relations in Classroom on the Feeling of Loneliness among Deaf Children in Egyptian Schools. Unpublished M.D. Dissertation, eberhard-Kars-university. 2004.
- 12. Cacioppo J, William P. Loneliness: human nature and the need for social connection. New York: Norton 2008.
- 13.Shute N. Why loneliness is bad for your health. U.S. News and World Report. (2008). Found online at http://health.usnews.com/articles/ health/ 2008/11/12/why-loneliness-is-bad-for-your-health.html.
- 14.Zare H, solgi Z. Investigation of the Relationship between Cognitive Emotion Regulation Strategies with Depression, Anxiety and Stress in Students. Journal of Research in mental health. 2013;6(3):19-29.
- 15.Hofmann W, Brandon J, Baddeley AD. Executive function and self- regulation. Trends in Cognitive Sciences. 2012;16(3):174-80.

- 16.Tiffen L. Is there a relationshipe between substance use, affect regulation and negative symptoms of schizophrenia? Vacation scholarship 2005/2006 report.
- 17.Liebermann D, Giesbrecht GF, Muller U. Cognitive and emotional aspect of self-regulation in preschoolers. Cognitive development. 2007;22:511-29.
- 18.Loas G, Otmani O, Lecercle C, Jouvent R. The relationships between the emotional and cognitive components of alexithymia and dependency in alcoholics. Psychiatry research. 2000;96:63-74.
- 19.Claes L, Bijttebier P, Eynde F, Mitchell JM, Faber R, Zwaan M, Mueller A. Emotional reactivity and self- regulation in relation to compulsive buying. Personality and Individual Difference. 2010;49:526-30.
- 20.Boyer TW, Byrnes JP. Adolescent risk-taking: Integrating personal, Cognitive, and social aspects of judgment. Journal of Applied Developmental Psychology. 2008;30:23-33.
- 21. Schmidt N, Sermat V. Measuring Loneliness in different relationships. Journal of personality and social psychology. 1983;44:1038-47.
- 22.McWhirter BT. Factor analysis of the revised UCLA Loneliness Scale. Current Psychology: Research and Review. 1990;9(1):56-68.
- 23. Khoynezhad GR, Rajaei AR, Moheb-e-Raad T. To Investigate Mathematical Cognitive Abilities (Spatial and Numerous) and Their Correlation With Educational Development, Mental Age and Gender. Knowledge & Research in Applied Psychology. 2008;9(34):75-92.
- 24.Gratz KL, Roemer L. Multidimensional assessment of emotion regulation and dysregulation development, factor structure and initial validation of the difficulties in emotion regulation scale. Journal of psychopathology and behavioral assessment. 2004;26(1):41-54.
- 25. Alavi Kh. Group dialectical behaviour therapy efficacy in reducing depressive symptoms in Mashhad colleges. MS Thesis, Ferdowsi University. 2010.
- 26.Kazemi Y, Nikmanesh Z. The relationship between religiosity, self-control and drug abuse. Journal of Urmia Nursing And Midwifery Faculty. 2011;9(3):174.
- 27. Tapert SF, Aarons AG, Sedlar GR, Sandra AB. Adolescent Substance Use and Sexual Risk-Taking Behavior. Journal of Adolescent Health. 2001;28(7):181.
- 28.Dawes MA, Mathias Ch, Richard DM, Hill-Kapturczak N, Dougherty D M. Adolescent

- suicidal behavior and substance use: Developmental Mechanisms. Subst Abuse. 2008;31(2):13-28.
- 29.Row J, Kahn R. Successful aging. The Gerontologist. 1997;37:440-3.
- 30. Van Tilburg T. Loosing and gaining in old age: Changes in personal network size and social support in a four-year longitudinal study. Journals of Gerontology Series B-Psychological Sciences & Social Sciences. 1998;53:313-23.
- 31.Henrich LM, Gullone E. The clinical significance of loneliness: A literature review. Clinical Psychology Review. 2006;26:695-718.
- 32.Hawkley LC, Burleson MH, Bernston G, Cacioppo J. Loneliness in everyday life: Cardiovascular activity, psychosocial context, and health behaviors. Journal of Personality and Social Psychology. 2003;85:105-20.
- 33. Jones H, Hebb L. The experience of loneliness: objective and subjective Factors. The International Scope Review. 2003;5(9):41-68.
- 34.Hendershot CH, Witkiewitz K, George W H, Marlatt G. Relapse prevention for addictive behaviors.Substance Abuse Treatment, Prevention, and Policy. 2011;6:17.
- 35.Bridge JA, Goldstein TR, Brent DA. Adolescent suicide and suicidal behaviour. J child psychol psychiatry. 2006;47:372-94.
- 36.Dalton EJ, Cate-Carter TD, Mundo E. Suicide risk in bipolar patients: The role of comorbid substance use disorder. Bipolar disorder. 2005;5:58-61.
- 37.Maharaj R, Nunes P, Renwick SH. Health risk behaviours among adolescents in the English-speaking Caribbean: a review. Child and Adolescent Psychiatry and Mental Health. 2009;3:10.
- 38.Thorberg FA, Lyvers M. Negative mood regulation (NMR) expectancies, mood, and affect intensity among clients in substance disorder treatment facilities. Addictive behaviours. 2006;31:811-20.
- 39.Cheethama A, Allen NB, Yücel M, Lubman D I. The role of affective dysregulation in drug addiction. Clinical Psychology Review. 2010;30:621–34.
- 40. Tull MT, Weiss N, Adams C, Gratz K. The contribution of emotion regulation difficulties to risky sexual behavior within a sample of patients in residential substance abuse treatment. Addictive Behaviour. 2012;37(10):1084-92.