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Research Article

# Emotional and Social Loneliness in Individuals With and Without Substance Dependence Disorder

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Background: Loneliness is one of the psychological variables related to high risk behaviors that should be investigated more.

Objectives: The current study aimed to assess emotional, social, romantic, and familial dimensions of loneliness in drug abuser and nondrug abuser individuals.

Patients and Methods: Two hundred and twenty eight individuals were enrolled in this cross sectional study. Hundred and eighteen drug abusers were recruited through random sampling among the clients referred to Baharan Psychiatric Hospital, and 110 non-substance dependent individuals were selected from their companions, students, and staffs. In addition to clinical interview, the Iranian short version of the social and emotional loneliness scale for adults (SELSA-S) was used to evaluate the participants.

Results: There were statistically significant difference between the scores of all four emotional, social, familial, and romantic dimensions of loneliness in substance dependent individuals. Although there was no difference between the scores of men and women, the mean scores of romantic and emotional dimensions were higher in non-substance dependent women.

**Conclusions:** The feeling of loneliness is stronger in drug abusers rather than non-drug abusers that could develop the sense of being different from community and increase the probability of taking high risk behaviors and abusing drugs. Thus, it is suggested to consider the feeling of loneliness in all programs designed to prevent or treat addiction.

Keywords: Social Isolation; Loneliness; Substance-related Disorders

## 1. Background

Addiction is one of the most important health problems in the world, specially in Iran (1), and many factors are related to onset and maintenance of this common disorder. Since the ancient times, philosophers and scientists have known loneliness as one of the most complex psychological phenomena. At that time loneliness was a positive concept (2), which meant withdrawal from daily routine events to achieve more important goals in life (thinking, meditation, and spiritual connection), but nowadays it is not considered as a positive experience in psychological literature and refers to social withdrawal and poor social interaction.

Feeling of loneliness is a psychologically destructive and terrifying experience (3) that makes severe psychological and physical problems (4, 5). In social interaction, satisfaction is very important and critical for health. Sense of loneliness could make problems in social interaction and decrease the self-protective behavior potentials as a social threatening factor (6). It is believed that loneliness is a pervasive and dysphoric experience, which is the outcome of the expectation of individual and his or her current status. Feeling of loneliness has a direct relationship with the emotional domain and individual cognitive function and causes lack of adaptation in cognition, experience, and social expectations (7).

Studies are in favor of high prevalence of the sense of loneliness. Dykstra (8), and Ditommaso et al. (4) reported the prevalence rate about 8% to 10% and the other studies showed that 15% to 30% of people experience loneliness continuously. Heinrich and Gullone (6) believed that one out of four people suffer from chronic loneliness. A recent review by Hawkley and Cacioppo (9) revealed that about 80% of people aged lower 18 and 40% of the over 65 years reported feeling of loneliness at least sometimes.

Baumeister and Laery (10) argued about the basic needs and the feeling of belonging as essential motivations in individual's emotion, thinking, and behavior, which need at least a minimum of positive stable interpersonal relationship; therefore, an individual who develops problems in making and maintaining satisfactory relationship with the others will develop problems in satisfaction of the feeling of belonging, and this kind of deprivation

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leads to morbidity (10-13). Generally, drug abuse is a multifactorial disorder in which every factor has its specific and common effects on the development and maintenance of addiction (14). Thus, any intervention concerning the prevention and treatment of addicted individuals should consider these factors or variables (1). The current study assessed the status of loneliness as an individual psychological factor and compared it in individuals with and without substance dependence disorder.

## 2. Objectives

The current study aimed to assess emotional, social, romantic, and familial dimensions of loneliness in drug abuser and nondrug abuser individuals.

#### 3. Patients and Methods

In the current cross sectional study, 118 drug users who were referred to Baharan Psychiatric Hospital (affiliated to Zahedan University of Medical Sciences, Iran) and diagnosed as a case of addiction by a psychiatrist, were enrolled through random sampling method, and 110 individuals, without history of using narcotic drugs, were selected through available sampling method from drug abusers` companions, students or staff of the hospital as non-drug abuser group.

To assess the loneliness, the Iranian short version of the social and emotional loneliness scale for adults (SELSA-S) (15) was employed. The SELSA-S was initially developed by Ditommso et al. (4). They have reported Cronbach alpha of 0.87 to 0.90 for this questionnaire. Iranian form of SELSA-S was prepared and validated by Jowkar and Salimi (15). They reported Cronbach alpha values of 0.92, 0.84 and 0.78 for romantic, social, and familial subscales, respectively. The scale used in the current study is a 14-item scale with three subscales including romantic (four items), social (five items), and familial (five items) loneliness. Each item has five degrees of Likert rating scale from zero (completely agree) to four (completely disagree). Getting higher scores in each subscale means higher feeling of loneliness.

### 4. Results

Hundred and fifty two participants were men (66.7%) and 76 were women (33.3%). In the drug abuser group, the age range was 16-55 (mean = 29.43, SD = 7.83), and in the drug non-abuser group the age range was 17-50 (mean = 27.99, SD = 8.54). Table 1 shows demographic characteristics of the participants. Results of the t-test indicate (Table 2) that individuals diagnosed with substance dependency scored higher on the romantic, family, social, and emotional subscales of SELSA than those of individuals without substance dependency. These differences were statistically significant (P < 0.001). Although there was no statistically significant difference between substance dependent men and women (Table 3) on loneliness scores

, results of the t-test showed a significant difference between scores of non-dependent men and women on romantic subscale.

**Table 1.** Demographic Characteristics of Participants <sup>a</sup>

	Substance Dependent	Substance Non- Dependent
Marital Status		
Married	62 (52.5)	56 (50.9)
Single	56 (47.5)	54 (49.1)
Education level		
Primary school	7 (5.9)	4 (3.6)
<high school<="" td=""><td>40 (33.9)</td><td>15 (13.6)</td></high>	40 (33.9)	15 (13.6)
High school	56 (47.5)	66 (60)
University	15 (12.7)	25 (22.7)
Total	118 (100)	110 (100)

<sup>&</sup>lt;sup>a</sup> Data are presented as No. (%).

**Table 2.** Comparing Individuals with and Without Substance Dependence Disorder Based on Subscales of SELSA-S <sup>a</sup>

	Substance Dependents	Substance Non- dependents	t-test	P Value
Romantic	$11.22 \pm 5.06$	$8.09 \pm 3.62$	5.33	0.00
Family	$15.61 \pm 4.62$	$10.79 \pm 3.54$	8.79	0.00
Social	$12.5 \pm 5.29$	$8.06 \pm 2.78$	7.83	0.00
Emotional	$26.83 \pm 8.27$	$18.88 \pm 5.83$	8.32	0.00

<sup>&</sup>lt;sup>a</sup> Data are presented as Mean  $\pm$  SD.

**Table 3.** Comparing Men and Women with Substance Dependence Disorder Based on Subscales of SELSA-S  $^{\rm a,\,b}$ 

	Men	Women	t-test	P Value
Romantic	11.22 ± 5.11	11.19 ± 4.95	0.03	0.9
Family	$15.8 \pm 4.43$	14.71 ± 5.46	0.97	0.3
Social	$12.24 \pm 5.16$	13.66 ± 5.58	1.11	0.2
Emotional	$27.03 \pm 8.06$	25.9 ± 9.33	0.56	0.5

<sup>&</sup>lt;sup>a</sup> Data are presented as Mean  $\pm$  SD.

**Table 4.** Comparing Men and Women Without Substance Dependence Disorder <sup>a, b</sup>

	Men	Women	t-test	P Value
Romantic	$7.12 \pm 3.06$	9.05 ± 3.9	2.87	0.00
Family	$10.65 \pm 4.01$	10.92 ± 3.02	0.4	0.68
Social	8.03 ± 3.05	$8.09 \pm 2.5$	0.1	0.91
Emotional	$17.78 \pm 5.8$	19.98 ± 5.71	2	0.04

 $<sup>^{\</sup>rm a}$  Data are presented as Mean  $\pm$  SD.

b Number of men = 97, number of women = 21.

b Number of men = 55, Number of women = 55.

#### 5. Discussion

According to the results of the current study, the difference of mean scores on the four dimensions of loneliness were statistically significant between drug abusers and non-abusers, higher in drug abuser group in all domains of social and emotional loneliness scale. In addition, the difference of the mean score of emotional domain, which is the sum of romantic and familial domains, was statistically significant between two groups. Similar findings reported by some other researchers such as Page (16).

Heinrich and Gullone (6) indicated that feeling of loneliness is a cognitive variable related to worse physical and mental health and has direct relationship with depression and alcohol abuse (17, 18), low self-esteem, low self-confidence, assertiveness, shyness (6, 19), disinhibited, high risk behaviors, anxiety, and tension (20). According to the results of the current study, which indicate the higher score of loneliness, drug abuse and entertaining themselves could be a way out of a feeling of loneliness and acquiring a feeling of security, also drug abuse could be a way to satisfy the emotional and psychological needs (20).

Non drug abusers, who have real familial support system, do not need any compensation for their conflict by abusing drugs or taking high risk behaviors. Results of the current study indicated more sense of familial loneliness in drug abusers. In addition to the difference of the score rate of loneliness in the two groups, there was a more romantic feeling of loneliness in women rather than men in non-drug abusers, which is similar to the results of some other studies (such as Swami) (18). This negative feeling may cause individuals to develop different kinds of reactive compensations including passive withdrawal reactions such as walking, studying, doing exercise, watching movie, and playing music or passive depressive reactions, in this case individual is overwhelmed with feeling of loneliness and may develop crying, thoughtfulness, or abusing drugs (6).

In summary, social and emotional feeling of loneliness as a high risk factor may cause initiation of drug abuse and its maintenance, therefore it is suggested to consider this critical variable in prevention and treatment of addiction. However, it is necessary to conduct further studies to see what biological and environmental factors influence the development of social and emotional loneliness and how those factor can be incorporated in prevention and treatment protocols.

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# **Authors' Contributions**

Mohsen Hosseinbor and Seyaed Mojtaba Yassini Ar-

dekani have written whole of the manuscript, and Saeed Bakhshani, Somayeh Bakhshani have collected data.

#### References

- Bakhshani NM, Hosseinbor M. A comparative study of self-regulation in substance dependent and non-dependent individuals. Glob J Health Sci. 2013;5(6):40-5.
- Rosedale M. Loneliness: An exploration of meaning. J Am Psychiatr Nurses Assoc. 2007;13(4):201-9.
- Bekhet AK, Zauszniewski JA. Mental health of elders in retirement communities: is loneliness a key factor? *Arch Psychiatr Nurs*. 2012;26(3):214–24.
- Ditommaso E, Brannen C, Best LA. Measurement and validity characteristics of the short version of the social and emotional loneliness scale for adults. Educ Psychol Meas. 2004;64(1):99–119.
- Stickley A, Koyanagi A, Roberts B, Richardson E, Abbott P, Tumanov S, et al. Loneliness: its correlates and association with health behaviours and outcomes in nine countries of the former Soviet Union. PLos One. 2013;8(7).
- Heinrich LM, Gullone E. The clinical significance of loneliness: a literature review. Clin Psychol Rev. 2006;26(6):695–718.
- 7. van Baarsen B. Theories on coping with loss: the impact of social support and self-esteem on adjustment to emotional and social loneliness following a partner's death in later life. *J Gerontol B Psychol Sci Soc Sci.* 2002;57(1):S33–42.
- Dykstra PA. Older adult loneliness: myths and realities. Eur J Ageing. 2009;6(2):91–100.
- Hawkley LC, Cacioppo JT. Loneliness matters: a theoretical and empirical review of consequences and mechanisms. Ann Behav Med. 2010;40(2):218-27.
- Baumeister RF, Leary MR. The need to belong: desire for interpersonal attachments as a fundamental human motivation. Psychol Bull. 1995;117(3):497-529.
- Cacioppo JT, Ernst JM, Burleson MH, McClintock MK, Malarkey WB, Hawkley LC, et al. Lonely traits and concomitant physiological processes: the MacArthur social neuroscience studies. *Int J Psychophysiol.* 2000;35(2):143–54.
- Brown GK, Ten Have T, Henriques GR, Xie SX, Hollander JE, Beck AT. Cognitive therapy for the prevention of suicide attempts: a randomized controlled trial. *JAMA*. 2005;294(5):563-70.
- 13. Hawkley LC, Burleson MH, Berntson GG, Cacioppo JT. Loneliness in everyday life: cardiovascular activity, psychosocial context, and health behaviors. *J Pers Soc Psychol*. 2003;**85**(1):105–20.
- Hosseinbor M, Bakhshani NM, Shakiba M. Family functioning of addicted and non-addicted individuals: a comparative study. Int J High Risk Behav Addict. 2012;1(3):109-14.
- Jowkar B, Salimi A. Psychometric properties of the short form of the social and emotional loneliness scale for adults (SELSA-S). J Behav Sci. 2011;5(4):7-8.
- Page RM. Loneliness and Adolescent Health Behavior: Health Education; 1990.
- Cacioppo JT, Hawkley LC, Crawford LE, Ernst JM, Burleson MH, Kowalewski RB, et al. Loneliness and health: potential mechanisms. Psychosom Med. 2002;64(3):407-17.
- Swami V, Chamorro-Premuzic T, Sinniah D, Maniam T, Kannan K, Stanistreet D, et al. General health mediates the relationship between loneliness, life satisfaction and depression. A study with Malaysian medical students. Soc Psychiatry Psychiatr Epidemiol. 2007:42(2):161-6.
- Ladd GW, Kochenderfer BJ, Coleman CC. Friendship quality as a predictor of young children's early school adjustment. *Child Dev.* 1996;67(3):1103-18.
- Page RM, Cole GE. Loneliness and alcoholism risk in late adolescence: a comparative study of adults and adolescents. Adolescence. 1991;26(104):925–30.