

## Abstract

**Objective:** Distress tolerance and anxiety sensitivity are considered traumatic factors for substance use disorders. The aim of this study was to examine the effectiveness of group counselling based on acceptance and commitment therapy in distress tolerance and anxiety sensitivity among female substance abusers. **Method:** A quasi-experimental research method with pretest-posttest/control group research design was used in this study. The statistical population of this study included all the female substance abusers who were in drug rehabilitation centers of Arak city in spring 2016. Thirty female substance abusers were selected via convenience sampling method and were divided into control and experimental groups. Distress Tolerance Scale (DTS) and Anxiety Sensitivity Index (ASI) were used for data collection. The experimental group received eight 60-minute training sessions of ACT. Covariance analysis was used to analyze the data. **Results:** The results of data analysis showed that group counselling based on acceptance and commitment therapy increases distress tolerance and reduces anxiety sensitivity in female substance abusers in the experimental group compared with the control group. **Conclusion:** Group counselling based on acceptance and commitment therapy can be applied for substance abuse dependent women and it can be used as a psychological intervention alongside medical treatments. **Keywords:** group counselling based on acceptance and commitment therapy, distress tolerance, anxiety sensitivity, substance abuse

## The Effectiveness of Group Counselling based on Acceptance and Commitment Therapy in Distress Tolerance and Anxiety Sensitivity among Female Substance Abusers

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**Research on Addiction  
Quarterly Journal of Drug  
Abuse**

Presidency of the I. R. of Iran  
Drug Control Headquarters  
Department for Research and Education  
Vol. 11, No. 44, Winter 2018  
<http://www.etiadpajohi.ir>

## Introduction

Half of the population of each society is dedicated to women. Women play a crucial role in the family and society by virtue of their creation and nature. Many factors such as unfavorable social conditions, economic problems, family disputes, and high-risk behaviors in a spouse can lead to drug use tendency, moral deviations, etc. in women. What is certain is that addicted women are more vulnerable in society than men, because drug use in women is often accompanied by other social harm, including leaving home, prostitution and poverty. When a woman becomes addicted, she is not alone prone to personal and social consequences, but also the children and the family are influenced, and the family is dissolved. In this regard, the most important social complication of addiction in women is the family dissolution (Khademi, Leghayi and Alikhani, 2009). Addiction is a chronic and complex disease that depends on a variety of factors. Due to the complexity of women's roles than men's lives, every factor, including addiction in this society is of particular importance and increases the problems of this society. Addiction in women is different from that of men in terms of its causes, the prevalence and course of the disease and the response to treatment, and this is more harmful to women than men in addiction (Jafarzadeh, Nouri and Ramezanzadeh, 2015). Although the prevalence of addiction in men is higher than that of women, this gender gap is steadily decreasing in all nations (McHugh, Wigderson & Greenfield, 2014). In general, statistics show that women account for 9 percent of drug users in the society, and that women's dependence on substance abuse has quadrupled averagely in the last decade (Counter Narcotics Headquarters, 2014). Female drug abusers have been ignored in terms of historical aspects, research and prevention and treatment factors. As a result, it is important to close this gap at the joint level of prevention and treatment for Female substance abusers (Loeliger et al., 2016).

There are various theories about drug abuse and substance dependence; however, the majority of theorists believe that drug abuse is a multidimensional problem; there are several factors such as biological, psychological, social, and spiritual factors playing role in it. (Fisher, Elias & Riz, 1998). Among the effective psychological factors, we can refer to distress tolerance (Keough, Riccardi, Timpano, Mitchell & Schmidt, 2010) and anxiety sensitivity (Stewart, Zvolensky & Eifert, 2001). Distress tolerance is generally considered to be one's ability to withstand unpleasant internal states. In review of literature, distress tolerance is assumed in various ways, and sometimes it includes tolerance of various types of negative internal states such as negative emotion, ambiguity, uncertainty, disappointment and physical discomfort (Kaiser, Milich, Lynam & Charnigo, 2012). Two distinct forms of distress tolerance have been conceptualized. Distress tolerance has been referred to perceived capacity to withstand negative emotional and/or other aversive states (e.g., physical discomfort) and the behavioral act of withstand distressing internal states caused

by some types of stressors. People with low emotional distress tolerance may be subject to maladaptive response to distress and distressing situations. As a result, people with less distress tolerance may struggle to avoid negative emotions and/or aversive situations. In contrast, people with higher levels of distress tolerance may be more likely to give adaptive response to distress or distress eliciting situations (Vujanovic, Bernstein & Leyro, 2010). Individuals with low distress tolerance in an erroneous attempt to deal with their negative emotions are involved in behavioral confusion and by addressing some destructive behaviors such as drug use, attempt to relieve their emotional pain (Keough et al., 2010). Researches show that high levels of distress intolerance are associated with substance abuse (Kayser et al., 2012; Daters et al., 2005), higher drug use (Brandon et al., 2003), increased risk of drug use relapse (Daters and Et al., 2005), alcohol abuse disorders (Holliday, Pedersen & Leventhal, 2016), the level of nicotine dependence (Azizi, Mirzaie and Shams, 2010) and smoking quitting (Brown et al., 2008).

Anxiety sensitivity is one of the personality traits that have been considered today in addictive behaviors (Stewart et al., 2001). Anxiety sensitivity (AS) refers to the fear of anxiety-related physical sensations resulting from the belief that these sensations may have potentially harmful somatic, psychological, or social consequences. (Taylor, 2014). Physical sensations with anxiety include fast heartbeat, sweating, trembling, dizziness and concentration problems. Reiss & McNally developed the first comprehensive theory of anxiety sensitivity. Studies have shown that high levels of anxiety sensitivity are widespread in the general population and include the risk of developing various types of psychological problems such as anxiety disorders, alcohol and substance abuse problems, chronic pain problems and extreme health concerns. . Studies show that men and women are different in terms of anxiety sensitivity. Women tend to show higher levels of general anxiety sensitivity and report more physical health concerns than men (Stewart & Watt, 2008). Anxiety sensitivity correlates with the consumption of more drugs in adults. Theoretically, anxiety sensitivity exacerbates negative affect and thus increases the negative reinforcement of motivation to use drugs which may be the starting point for drug use from adolescence (Guillot, Pang, Kirkpatrick & Leventhal, 2015). Today, the role of anxiety sensitivity in the likelihood of a greater dependence on tobacco, alcohol problems and drug problems (Guilah et al., 2015), treatment discontinuation (Lauws et al., 2008), substance abuse and alcohol abuse disorders (Allan, Macatee, Norr, Raines, 2015), the difficulty of quitting marijuana (Buckner & Leen-Feldner, Zawlenski and Schmidt, 2009), start and stop smoking (Assayag, Bernstein, Zawlenski, Steeves and Stewart, 2012) and prediction of addiction tendency (Khalaji, 2014) has been considered.

Substance abuse disorders are described by the frequent and abusive use of drugs or alcohol, which often leads to distress and disruptions in social, personal and occupational fields. Some of behavioral therapy approaches have including

incidence management, traditional cognitive-behavioral therapy, motivational interview, drug counseling, couple therapy, and family therapy have been identified effective on the treatment of drug use disorders (Carroll & Onken., 2014; McHugh et al., 2010; Smedslund et al., 2011). Recently, contextual cognitive-behavioral approaches such as acceptance and commitment therapy (e.g. Hayes et al., 2012), dialectical behavioral therapy (e.g., Linehan, 1993), mindfulness-based relapse prevention (e.g., Witkiewitz Et al. , 2005) have been used to treat drug use disorders. A key difference between contextual cognitive-behavioral approaches and traditional cognitive-behavioral approaches is to emphasize mindfulness and acceptance strategies to reduce the impact of intrinsic motivations on substance use behavior (such as changing context and function, therefore, craving, distress and thoughts of drug use are less likely to lead to drug use (Lee, An, Levin & Twohig, 2015). An acceptance and commitment approach is one of the famous third-generation cognitive-behavioral counseling techniques using mindfulness, acceptance, and cognitive diffusion skills to increase psychological flexibility (Izadi and Abedi , 2012). If this approach is used for drug abuse disorders, instead of drug use, the clients in combination with the methods of acceptance and the mindset of the relationship with the internal experience (for example, in response to craving or escape from the negative feeling), simultaneously moving forward develops meaningful activity patterns that are inconsistent with substance use (Lee et al., 2015).

Empirical data on acceptance and commitment therapy in the treatment of various disorders is increasing. Acceptance and commitment therapy has shown that drug abuse disorders are better than the 12 steps of recovery method for multiple drug users (Hayes et al., 2004). Also, acceptance and commitment treatment was effective on the treatment of marijuana dependence (Tueig, Shoenberger and Hayes, 2007), methamphetamine (Smout et al., 2010), methadone (Stotts et al., 2013) and alcohol dependence (Luciano, Gómez, Hernández & Cabello, 2001; Petersen & Zettle, 2009) and smoking quitting (Gifford et al., 2004). All of these studies show the power of this approach in treating drug abuse disorders and support the goals of this study.

Today, addiction and drug use are widespread as a dilemma among Iranian women. Female drug abusers are among the severely vulnerable groups. Therefore, they should be considered from various aspects, including the risk of exposure to prostitution and the birth of addicted children and AIDS. Considering the role of women in the education of their children and their essential role in the family, it is necessary to pay attention to the abnormal situation of drug abuse- dependent women and to extract some strategies for their abstinence and relapse. Considering the importance of distress tolerance and anxiety sensitivity in substance abuse and the effective results of the acceptance and commitment approach on substance abuse patients, given that no research has been done in this field, this study evaluates the effectiveness of group

counseling based on acceptance and commitment therapy in distress tolerance and anxiety sensitivity among female substance abusers.

## **Method**

### **Population, sample and sampling method**

A quasi-experimental research method with pretest-posttest/control group research design was used in this study. The statistical population of this study included all the female substance abusers who were in drug rehabilitation centers of Arak city in spring 2016. The sampling method is convenience method. Thirty female substance abusers were selected via convenience sampling method and were divided into control (15) and experimental groups (15).

Having an incentive to participate in the program and obtaining the consent of the individuals and the necessary cooperation with the researcher were considered during the initial interview. The inclusion criteria were: age range of 20 to 40 years, willingness and informed consent for participation in research and being able to read and write. Exclusion criteria were: Having major physical and mental diseases that prevented active participation in the group and a diagnosis of drug dependence for less than one year.

### **Instrument**

1. Distress Tolerance Scale: Distress Tolerance Scale is developed by Simmons and Gaher (2005) and is a self-report instrument with 15 items in which individuals are asked to rate their acceptance or opposition via some sentences on a five-point Likert scale of, totally agree (1), to totally disagree (5). High score indicates high distress tolerance. Four forms of distress tolerance are assessed by this scale. 1. Tolerance (for example: feelings of distress are unbearable to me) that are measured with questions 1, 3 and 5; 2. Evaluation (for example: discomfort and distress is always a great test for me) being measures with questions 6, 7, 9, 10, 11 and 12; 3. Absorption (For example: my emotional distress is so severe that it completely dominate me) that is measured with questions 2, 4, and 15; 4. Regulation (for example: when feeling distressed or discomfort I must immediately think about it), which is measured by Questions 8, 13 and 14. Distress tolerance had a negative relationship with affective distress measures ( $r = -0.59$ ) and maladaptation ( $r = -0.51$ ) and positive relationship with positive excitement measures ( $R = 0.26$ ). The alpha coefficients for these subscales are 0.72, 0.82, 0.78, 0.70 and 0.82 for the total scale, respectively. The intraclass correlation after six months was 0.61. Also, it has been shown that this scale has good initial criterion validity and convergence validity. This scale correlates positively with mood acceptance and has negative relationship with coping strategies scales of using alcohol and marijuana, as well as their use for recovery (Simmons and Gahar, 2005; quoted by Ismaili Nasab, 2014).

2-Anxiety Sensitivity Index: This questionnaire was developed by Reiss, Paterson, Gursky, and McNenny (1986) and has 16 items on a five-point Likert scale ranging from zero (very untrue) to four (very true). Each point reflects the notion that anxiety feelings are experienced in an unpleasant way and can lead

to harmful consequences. The degree of fear experience is defined by anxiety symptoms with higher scores which has three subscales: fear from somatic symptoms (3, 4, 6, 8, 9, 10, 11 and 15), fear from losing cognitive control (2, 5, 12, and 16) questions and fear from one's anxiety symptoms being spotted by people around. (1, 7, 13 and 14). Cronbach's alpha is 0.93 (Nayef, Tol and Gratz, 2012; quoted by Seyed Gholami, 2013). The test re-test reliability was 0.75 after two weeks and 0.71 for three years (Reis et al., 1986; quoted by Seyed Gholami, 2013).

### **Procedure**

After obtaining the required permit from the Wellbeing Office of the Markazi province, members of the group were voluntarily selected from female substance abusers in drug rehab center of Khateresabz. After doing sampling and random assignment in experimental and control group, the sample members completed the distress tolerance scale and the anxiety sensitivity questionnaire as a pretest. Then, group intervention counseling based on acceptance and commitment was performed in 8 sessions of 60 minutes for the experimental group. The members of the control group did not receive any intervention during this period. At the end of the 8th session, both groups received post-test. The structure of the sessions was extracted and used based on the therapy protocol based on acceptance and commitment therapy (Hayes, Strosahl & Wilson, 1999). The structure of the sessions and content of each session is presented in Table 1.

**Table 1: Structure and Contents of Sessions**

<i>Sessions</i>	<i>Content of sessions</i>
<b>First</b>	Members' acquaintance with the consultant and each other, description of the rules of the group, implementation of pre-test and presentation of the topic of creative despair.
<b>Second</b>	Presentation of control issues and creative hopelessness and explaining ineffectiveness of controlling negative events using metaphors.
<b>Third</b>	Introducing mindfulness and relationship with the present, providing acceptance topics and costs of unwillingness: unclean / clean discomfort.
<b>Fourth</b>	Introducing a diffused concept of troublesome thoughts and emotions, training to separate assessments from personal experiences and adopt a position of observing thoughts without judgment.
<b>Fifth</b>	Teaching mindfulness techniques and exercising conscious concentration, introducing the topic of derealization of thoughts, including observing, naming and releasing thoughts.
<b>Sixth</b>	Presenting the topic to consider self as the background, metaphor of the chessboard, and performing related exercises.
<b>Seventh</b>	Presentation of value issues, identification of members' living standards and valuation based on the importance of them.
<b>Eights</b>	Provide commitment topics, planning for members' commitment to track values, summary of concepts and performing post-test.

## Findings

The education of the members of the study was 53.3% under the diploma, 36.7% had diploma, 6.7% associate and 3.3% with BA. Also, 53.3% was between 20-30 and 46.7% at the age range of 30-40 year. The descriptive statistics of the variables studied are presented in Table 2.

**Table 2: Descriptive Statistics of the Variables Studied by Groups and Type of Test**

Variables	Groups	N	Pretest		Posttest	
			Mean	SD	Mean	SD
<b>Distress tolerance</b>	Experiment	15	27/2	4/55	34/8	6/39
	Control	15	29/6	4/72	30/87	5/38
<b>Anxiety sensitivity</b>	Experiment	15	36/87	7/6	30/07	9/35
	Control	15	35/87	6/38	35/53	5/75

To investigate the effectiveness of group counseling based on acceptance and commitment to increase distress tolerance, multivariate covariance analysis is used. One of the assumptions of this analysis is the equality of error variances. The results of the Leven's test showed that this assumption was established. Also, the results of the Box test showed the equality of covariance matrices ( $M_{box}=12.06$ ,  $F=1.02$ ,  $P>0.05$ ). Finally, there was no significant difference in the pre-test scores by examining the regression slope between the two groups ( $P> 0.05$ ). Regarding the establishment of multivariate covariance analysis assumptions, results showed significant differences in linear composition of distress tolerance components (Wilk's Lambda=0.23,  $F=7.18$ ,  $P<0.001$ ). To analyze the differences models, Univariate covariance analysis was used as follows.

**Table 3: Univariate Covariance Analysis Results to Examine Patterns of Distress Tolerance Components**

Variables	Mean of squares	F statistics	Significance	Eta squared
<b>Emotional distress tolerance</b>	17/82	7/27	0/012	0/21
<b>Attention absorbed by distress</b>	30/71	6/5	0/017	0/19
<b>Appraisal of distress</b>	81/54	5/29	0/029	0/16
<b>Behaviors to alleviate distress</b>	22/36	14/02	0/001	0/34

As can be seen, group counseling based on acceptance and commitment has improved all components of distress tolerance. In addition, to examine the effectiveness of group counseling based on acceptance and commitment in reduction of anxiety sensitivity, multivariate covariance analysis is used. One of the assumptions of this analysis is the equality of covariance matrix. The results of the Box test showed the establishment of this assumption. ( $M_{box}=8.64$ ,  $F=1.27$ ,  $P>0.05$ ). Also, the results of Leven's test showed the equality of error variance ( $P>0.05$ ). Based on the establishment of assumptions, the multi-variate covariance analysis was performed and the results showed the significant difference of two groups in linear composition of anxiety sensitivity components

(Wilk's Lambda=0.67, F=3.74, P<0.05). To analyze the differences models, Univariate covariance analysis was used as follows.

**Table 4: Univariate Covariance Analysis Results to Evaluate the Difference Models in Anxiety Sensitivity Components**

<i>Variables</i>	<i>Mean of squares</i>	<i>F statistics</i>	<i>Significance</i>	<i>Eta squared</i>
<b>Fear from somatic symptoms</b>	25/22	6/48	0/017	0/19
<b>fear from losing cognitive control</b>	34/03	7/46	0/011	0/22
<b>Fear from one's anxiety symptoms being spotted by people around.</b>	11/83	6/79	0/015	0/20

According to Table 4, in all the components of anxiety sensitivity, there is a difference between the groups under study. According to the descriptive statistics, it can be concluded that the intervention has reduced the scores of the anxiety sensitivity components.

### **Discussion and Conclusion**

In this research, we examined the effectiveness of group counseling based on acceptance and commitment therapy in distress tolerance and anxiety sensitivity among female substance abusers. Findings showed that group counseling based on acceptance and commitment improved and increased distress tolerance in all its subscales (tolerance, absorption, evaluation, and regulation). Greenberg (2015) in a study showed that short intervention based on acceptance and commitment increased the students' distress tolerance. The results of Stats et al. (2009) showed that the acceptance and commitment approach that focuses on the inevitably distressed acceptance with drug quitting can result in methadone detoxification results Brown et al., 2008 in a study to enhance the distress tolerance in the early onset of smokers, applied the therapy based acceptance and commitment in their treatment protocol and the result was the increase of distress tolerance. In explaining this finding one can state that distressed intolerance behaviors are subsets of the broader concept of "experiential avoidance" (Hayes et al., 1996). The therapy strategies that aim at avoidance are helpful in increasing distress tolerance. One of these strategies is treatment based on acceptance and commitment, which adapts strategies from acceptance-based approach mostly targeting increasing distress tolerance among drug users (Zavalenski et al., 2011). Acceptance and commitment-based therapy explicitly use the main designed processes to reduce ineffective and problematic avoidance of emotional pain, target experiential avoidance by increasing empirical acceptance and thought awareness (Walser, 2015). ) Therefore, it can be stated that a group counseling based on acceptance and commitment can help female substance abusers to increase distress tolerance.

The effectiveness of group counseling based on acceptance and commitment on distress tolerance of female substance abusers can be explained by the processes governing it. Zavlensky et al. (2011) state that healthy distress

tolerance provides conscious awareness of internal states (emotions, excitement, active motivation), and the ability to not respond automatically and without knowledge of an annoying stress with a change strategy (avoidance ) and / or habitually neglects distress alert symptoms; therefore, distress intolerance and excessive tolerance behaviors may occur without conscious awareness. In group counseling sessions based on acceptance and commitment, emphasis is placed on awareness of the present moment and the mindfulness exercises and was performed at most of the sessions of mindfulness exercises. By mindfulness-based strategies, non-judgment awareness and observation of situations or distressing experiences such as annoying feelings were practiced. Increased awareness of distress and the ability to judge about ignoring or responding to signs of tension or discomfort is the first important step in increasing healthy distress tolerance (Zavalenski et al., 2011). Acceptance strategies were used to facilitate the increase in the inclination to live with distressing incidents and perseverance in distressing works. With diffusion exercises, the group members tried to allow their thoughts to come and go instead of being caught up in the thoughts. By substituting themselves as context, they learnt to be a ground to experience unwanted and painful thoughts and feelings without being engaged in them. On the other hand, the clarification of values and commitment to doing actions in line with the values, despite the problems, helped them to get rid of being caught up in negative thoughts and feelings, and find more sense of vitality, meaning and purposefulness. By acceptance and mindfulness methods, the members of the group learned connection with internal experiences (such as unpleasant thoughts, physical sensations, in response to craving or escape from negative feelings) along with an upward move in creating significant models of activity. Considering the specific features of group counseling based on acceptance and commitment, as well as the techniques used in this approach, including mindfulness, diffusion and acceptance, it seems reasonable that group counseling based on acceptance and commitment increases the distress tolerance in female substance abusers.

Also, the findings of this study showed that group counseling based on acceptance and commitment significantly decreased anxiety sensitivity and its subscales (Fear from somatic symptoms, fear from losing cognitive control and fear from one's anxiety symptoms being spotted by people around) among female substance abusers. Findings of the research are consistent with the researches of Lanza, Garcia, Lamelas & Menéndez (2014), Menendez et al. (2014), Swain et al. (2013), Fledderus et al. (2013); Meuret et al. (2012); Ayurft and Heffner (2003); Barlow et al. (2000) Is. Lanza et al. (2014) in a study on female prisoners with substance use disorder showed that acceptance and commitment therapy led to a progressive decrease in the anxiety sensitivity of these women, which was lower in the follow-up period. In the study of Menendez et al. (2014), in order to compare two traditional cognitive-behavioral therapies and acceptance and commitment treatment for female substance-abuse

dependent prisoners, in the experimental group, after an 18 month follow-up, the anxiety sensitivity was reduced in the cognitive subscale. The results also confirm the results of the study by Meuret et al. (2012) and Barlow et al. (2000) on the effect of acceptance and commitment therapy on the reduction of anxiety sensitivity. In these studies, there was a significant reduction in anxiety sensitivity in individuals with panic disorder. In the study of Ayurft and Hefner (2003), women with high anxiety sensitivity received acceptance and commitment therapy; finally these women reported low avoidance behaviors and less severe fears and cognitive symptoms, with less catastrophic thoughts were found. In the study of Swain et al. (2013), acceptance and commitment therapy was effective in anxiety treatment. In another study, Fledderus et al. (2013) showed the importance of targeting psychosocial flexibility during acceptance and commitment intervention to reduce the symptoms of depression and anxiety. The research of Rajabi and Yazdkhasti (2014), "The Effectiveness of Group Treatment of Acceptance and Commitment on Anxiety and Depression in Women with MS disease", showed the effectiveness of this treatment in reducing anxiety and depression in MS patients. Concerning the explanation of this finding, it can be said that the purpose of acceptance and commitment-based treatment is the creation of psychological flexibility, which includes the person's desire to engage in value-oriented activities while attending private events (Bach & Moran, 2014). Correlation studies have shown that psychological inflexibility predicts anxiety and anxiety sensitivity (Hayes et al., 2006). Also, high anxiety sensitivity is strongly and positively correlated with the desire to experiential avoidance (Forsyth, Parker & Finlay, 2003). An acceptance and commitment - based treatment attempts to eliminate the inflexible process that tends to avoid or escape from annoying personal events, such as thoughts, feelings, memories, and physical sensation that is the characteristic of experiential avoidance.

In sum, regarding the effectiveness of group counseling based on acceptance and commitment in anxiety sensitivity of female substance abusers, the educational content was presented and practiced in sessions, the aim of the first phase of group counseling based on acceptance and commitment is to establish an acceptance ground for aversive discomfort, thoughts and emotions. In the initial sessions, by metaphors and exercises, the costs of past efforts of the members of the group to control and manage anxiety and distressing feelings were investigated, and the useless control was clarified for them. Then, women began to learn some of the basic skills of staying with distress, disturbing emotion and thoughts, and viewed it as an observed based on mindfulness. These exercises helped them empirically communicate with the thoughts, emotions, memories and physical sensations they feared and avoided. They learned to practice mindfulness skills in the face of disturbing emotions. Mindfulness exercises are an important skill for learning because it eliminates the pas experience avoidance strategies designed to control or reduce the anxiety disorder caused by value-based activities (Ayfert et al., 2009). Finally, it was

focused on learning to discover the values of life of the members of the group and identifying obstacles to the values and committing them to achieve goals and moving in the direction of values. In this approach, mindfulness exercises, with acceptance and diffusion techniques, as well as detailed discussions about the values and goals of the individual, and the necessity of explication of values and behavioral commitment, all contribute to a significant reduction of anxiety sensitivity in female drug abusers.

One of the limitations of the present study is the lack of follow up study due to the time limitation and lack of access to the clients. The low level of literacy of some of the participants made the transfer of concepts of these approaches as problematic. Based on the results of this study, it is suggested that the approach used in this study should be used on larger groups and the male group to estimate the reliability of the method with higher confidence and consider follow-up stage. On the other hand, the efficiency of treatment based on acceptance and commitment on other drug users such as alcohol and cigarettes, etc., is investigated with regard to variables such as type and duration of use. Also, acceptance and commitment treatment can be compared with other common treatments for substance dependence disorders, including matrix therapy.

According to the results, this study suggests that acceptance and commitment therapy was applied on female substance abusers can be used as a psychological intervention along with other interventions. Also, it can be a good treatment to increase distress tolerance and reduce the anxiety sensitivity of drug dependent women. The importance of this finding is that, based on local and international researches, distress tolerance and anxiety sensitivity is associated with several stages of drug use, including the onset, duration, frequency of use and relapse, and distress tolerance and anxiety sensitivity can cause drugs use relapse among female quitters. Hence, group counseling based on acceptance and commitment can be a complementary aspect of the treatment of addiction and an appropriate intervention to enhance the capability of substance abuse -dependent individuals on and reduce the relevant harm and prevent the addiction relapse among the recovered ones.

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