Original Article

Comparison of the Effectiveness of Cognitive-Behavioral Therapy and Acceptance and Commitment Therapy in Reducing Craving in Women Consuming Crystal Drug

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Abstract

Background: The aim of this study was to compare the effectiveness of cognitive-behavioral therapy and acceptance-commitment based therapy in decreasing drug craving in women who were addicted to the crystal.

Materials and Methods: The research method was quasi-experimental pre-test-post-test with the control group and two methods; the cognitive-behavioral, and the acceptance and commitment therapy were separately followed for two experimental groups with a follow-up phase. The statistical population of this study was all women who were addicted to the crystal that referred to addiction treatment centers in Isfahan province during the period of August to October 2017. They were simultaneously depressed. The instruments used in the study were the Wilson, Guilford and Concrete protocol (2004) that is the treatment based on the acceptance, Carole's cognitive-behavioral therapy (1998), and Frankl (2002) craving for drug questionnaire, as well as repeated measures of variance analysis.

Results: Findings showed that cognitive-behavioral and acceptance and commitment therapies for craving of crystal usage are effective in women who have had crystal abuse. Between two methods of cognitive behavioral therapy, and acceptance and commitment therapy in the field of craving for the crystal in women that overcome drug addiction, there was a significant difference. The acceptance and commitment therapy had effects that are more therapeutic.

Conclusion: Therefore, this study provides a total empirical support for acceptance-based and commitment treatment in the treatment of women who were overcoming the crystal addition.

Keywords: Cognitive-behavioral therapy, Acceptance and commitment therapy, Craving for drug abuse, Women, Crystal

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Introduction

Addiction has been one of the greatest problems of human society. Consumption of drugs in different parts of the world has been regarded as being of some value by the culture of different societies¹ but in most societies addiction is an immoral and a person with a weak dishonesty. Some studies on women's populations in large cities acknowledge that drug addiction pattern is changing and new emerging forms of substance are emerging. Increasing trend of addiction necessitates to particular attention to the issue especially in female

addiction and it is necessary to identify the various gender-specific characteristics of addiction-dependent dependency. Design preventive interventions appropriate to the gender of women based on cultural and social characteristics is important². This is particularly important because women have less resistance than men to the harm of addictive substances, and their addiction and complete dependence on first use is much shorter than that of men. At the same time, due to gender characteristics such as physical problems or the support of spouses and the family, it is much more difficult to treat them. Women's dependence on health issues, poverty, violence, demoralization, and social exclusion is difficult to achieve for all³. In addition, to healthcare costs of abusive drug, depending on the psychoactive substance is high. There are many social costs for addiction, including reducing family income and generation, violence, security problems and corruption related issues¹.

Crystal is a chemical substance of the methamphetamine category and acts as a stimulant, which increases the activity of the nervous system⁴⁻⁶. Researchers suggests that dependency on addictive substances, such as crystal, with poor mental health⁷, mental health⁸, impulsive and risk behaviors⁹, and tendencies and readiness for addiction and craving¹⁰. In Parvizifard ,¹¹ he emphasized overlapping mood and anxiety disorders in crystal -dependent women. Also, in different areas of physical issues, research is different from the relationship between crystal consumption and high-risk sexual behaviors and the risk of various diseases, including sexually diseases¹². transmitted In psychology, drug dependence is a chronic disease. Which, due to psychological and physical resistance, will increase the craving for some time¹⁰. The craving of materials is a tendency to consume material and the conscious individual experience forms the core of the craving¹⁰. The craving for reciprocation is based on the beliefs that the substance needs to be consumed¹³. With regard to the risks and consequences of emerging substances, no drug has yet been approved for the treatment of addiction to stimulants such as crysta⁷ and the basis for its treatment is psychological interventions. In fact, for Drug addicts should use therapies in order to be able to strengthen healthy

behaviors in addition to cognitive improvement. The use of cognitive-behavioral therapies can be effective in restoring and strengthening the psychological characteristics of addicts¹⁴. Similarly, cognitive and behavioral techniques, in which this learning therapy plays an important role in drug continuity and dependence¹⁵, and in identifying situations where substance abuse is high and avoiding These situations and effective coping with emerging events ¹⁶ and the way in which cognitive processes are interpreted are self-conscious thoughts, and the reduction of oppressions, including tempting beliefs, thoughts, and craving for drugs¹⁵. These results have led to improvements in this therapeutic approach¹⁷ and led to third wave therapy¹⁸. Adherence-based therapy helps to accept uncontrollable internal experiences, but does not attempt to control and change them, but by creating faults and assuming them as a background of awareness, it helps the individual to not take internal and external experiences seriously. And he undertakes to move in the direction of values in changing his behavior¹⁹. In treatment based on acceptance and commitment, unlike cognitive-behavioral therapy, internal experiences such as thoughts and selfeducation are not investigated, but the way in which people respond to and experiment with their own experiences is considered²⁰. Additionally, treatment based on acceptance and commitment, as opposed to cognitive-behavioral therapy, has less focus on controlling and reducing symptoms and internal learning, and is more focused on accepting symptoms and focusing on improving quality of life in the shortterm and goal-oriented manner in increasing values and moving in their direction ¹⁸ Therefore, researchers consider acceptance and commitment therapy to maintain an avoidance of substance¹⁹, reduce drug intake, and improve mental health, better and more effective than cognitive-behavioral therapy²¹. In Iran, there is no research on the comparison of cognitivebehavioral therapies based on acceptance and commitment in the field of craving for women who are leaving the crystal. The question is raised:

1. Do two Cognitive-Behavioral Therapies, based on Acceptance and Commitment Therapy, on the craving of women who are leaving the crystal?

2. There is a significant difference between the efficacy of treatment based on admission and behavioral

cognitive behavioral therapy in reducing the drug craving in leaving women?

Methods

The research method was extended pre-test-posttest with control group with a follow-up period of three months. The statistical population of this study consisted of all women leaving the referral center to addiction treatment centers in Isfahan province during the period of September to December, 1395. A randomized simple sampling method was used to select 45 randomly selected patients from 80 of the women who were leaving and 15 subjects in the treatment group and 15 The cognitive-behavioral group therapy (and 15 people) was placed in the control group. After collecting the data, the data were used in three stages of the mixed-group in-group variance analysis.

A moment craving questionnaire: Franken and Hendricks ²² have a total of 13 questions and are rated based on Likert scale (from full to full score). The factor analysis of the DDQ Persian version justifies 73.63% of the variance of the data. The validity of the questionnaire was 0.83 for the willingness and intention to use, 0.83 for negative gain and 0.84 for control, and the reliability of the test for the first factor was 0.83 and the second was 0.82 and the third factor was 0.41. Came. In Iran, (18) confirmed the validity and reliability of 0.14 for the purpose of the desire and intention to use, 0.81, negative strengthening 0.85 and control 0.84. In the present study, the reliability coefficient of Cronbach's alpha was 0.84 for the total test and the coefficients for the target domain were 0.85, the negative reinforcement was 0.83 and the control was 0.85. According to the research method, the effectiveness of the two groups (the independent variable ACT, CBT), so in order to collect the samples according to the referral of women by accessible method by two-stage sampling, three groups (two groups of experimental and one control group) Were selected randomly from the number of people eligible for inclusion criteria and the implementation of the therapeutic process according to two treatment and commitment protocols based on 15 minutes and 90 minutes of cognitive-behavioral therapy protocols in 15 sessions of 90 minutes simultaneously in length Maximum quarterly interval from the beginning of September to the month of month (and the quarterly follow-up period in January) 1 395 were performed groupwise during the week. During the implementation

Table 1: Content of acceptance and commitment therapy sessions.

First, second, and second, introduction to the number of sessions and hours of attending therapeutic sessions, the goals and the course of treatment. Discussion about secrecy limits, specifying the type of treatment relationship: using the metaphor of two mountains. An overall measure of addiction: clients were asked to describe their thoughts and actions, an introduction to creative distress. Presenting the assignment

Third / fourth: Performance Measurement: At the beginning of each session, an examination is performed to determine if outof-field issues have been addressed to the participants in the treatment. Reviewing the reactions to the previous meeting, and the task: If the referral did not perform the task, the therapist examined the variables of the agent, in other words, conduct behavioral analysis in order to ascertain the obstacles and create creative helplessness in the person until the inability to work Repeat their own reconnaissance. They use the metaphor of the pit.

Fifth / **Sixth**: Introducing the knowledge of the mind to the individual and that the references by using this method will be able to internalize the experiences of their own thoughts, the emotions of the physical and intimate inner experiences of the past and the future, and to experience in the present and to focus more on life, and then do the exercises of mindfulness Like anchoring

Seventh / Eighth: Reviewing the response to the previous session, at this stage, given that creative distress, the introduction of control as a matter and willingness / acceptance are related to each other, so when discussing the conflict with the thoughts of the unification of these three The phenomenon was discussed with each other. ,And. Learning to accept internal experiences without trying to control or respond to them Using metaphors of bus and uninhabited passengers.

Ninth / tenth / eleventh: teaching self-acceptance and self-expression of inner experiences, self-efficacy and self-reliance, self-observation instead of self-conceptualization, so that a person fails to interact with them and, along with the consciousness and acceptance of psychological flexibility, is created in person. Applying the metaphor of the wind And the cloud

Twelve / thirteen: Performance metrics, review of responses to the previous meeting, review of the assignment: the introduction of values and assistance to identify the person to determine their valvitation and move in their direction (assignment of values), this was accomplished by completing a Valuation Questionnaire To help with the guidance of the authorities outside of the support of the therapist, the references should be emphasized.

Fourteenth / fifteenth: Making a commitment to the designated values of the individual. Going in and out of the values of the person who, in the event of non-commitment to the goals set, performs functional analysis to determine the barriers to the values. Golestan metaphor

Table 2: Summary of Cognitive-Behavioral Therapy Group Meetings.

Cognitive Group Behavioral Learning Program with examples and implications of the main concepts of cognitive therapy such as triggering events, beliefs, and the environment. Identifying the high-risk situations of self-contained thoughts. Schemas and external risk factors, and triggering factors and coping with drug use	First / Second: Introducing
Teaching awareness of the relationship between thinking and emotion and employing functional analysis to identify and counteract negative thoughts, and knowing the emotional consequences and helping one in identifying logical errors and compiling appropriate logic for them with example and practice	Third / fourth
Predicting intrusive triggers such as craving and mental states, and external factors such as the location of the time and the use of coping strategies and anticipating potential skeletons, and helping to identify the content of negative internal schedules using vertical arrows	Fifth / Sixth
Teaching skills of not telling and criticizing what the opposition is and what it is doing, and teaching the rules of effective opposition, and playing the role of disagreements in dealing with people who consume materials	Seventh / Eighth
Learning mindfulness for depression and relaxation in confronting your thoughts. Teaching the person in the variability of beliefs and attitudinal analysis. At this stage, participants learn that beliefs are changing and changing beliefs is a natural process that is the result of cognitive reconstruction.	Ninth / tenth / eleventh
Learning to criticize and cognize, and to understand the signs of anger, and the way it manages, and to change the perceptual assumptions with the goal of looking at the powerful power of cognitive change, that is, perceptual change.	Twelve / thirteen
Problem solving skills training, and using solutions tailored to the individual and company's conditions in self-help groups. Programming for self-change behavior, identifying alternative behavior, and being able to behave and behaviors Learn to use flashcards to distance yourself from your thoughts.	Fourteenth/ fifteenth

of the therapeutic process, 3 patients in the ACT group and 5 in the CBT group and 3 in the control group were excluded, for the control group, sessions without psychotherapy (15 Session, 90 minutes, conversation with neutral content) were conducted simultaneously with two experimental groups, namely, the three groups were the craving drug questionnaire before the beginning of the session and after the end of the desired period of post-test and follow-up period of three Monthly. After collecting information, the hypothesis and research question were investigated and the results were compared with each other.

The content of Acceptance and Commitment Therapy sessions: The treatment protocol based on admission and commitment in addiction was designed by Wilson, Guilford and Concrete (2004). This treatment program was performed on a sample group during 15 sessions for 90 minutes in a group of 8 sessions, twice a week, one session Weekly (to practice the previous training session) and 7 other sessions once a week.

Results

Mean of pre-test scores of desire and intention subscales, negative strengthening of substance use and non-control of consuming materials in both experimental and control groups (ACT and CBT) and control were almost equal. However, in the posttest of the above subscales, the mean scores of two experimental groups (ACT and CBT) were significantly lower than the mean scores of the control group, which is due to the efficacy of the two treatments in reducing the craving of the substance. Normalizing the data with Shapiro Hawk's data is normal and, given the lack of Significance of the box of variance test is identical and insignificance of the homogeneity error of variances by Levin's test in variables The slope of the regression and parametric statistical method of analysis of variance assumptions matched and mixed-group variance is observed.

The results of Table 4 shows that there was a significant difference between the craving scores in the pre-test stages with post-test, pre-test with follow-up and posttest with follow-up. The comparison of averaged means showed that scores of craving components in the posttest and follow-up stages were significantly reduced compared to the pre-test stage. In addition, there was a significant difference between the scores of craving components in the post-test phase and the follow-up stage, so that the craving scores in the follow-up phase are significantly less than the post-test stage, which indicates the effectiveness of both cognitive-behavioral therapies and treatment-based Adoption and attentiveness to reducing drug.

The results of the analysis of variance indicated that

	Group	Pre-Test		Post-Test		Follow up	
Variables		М	SD	М	SD	М	SD
Desire and	ACT	33	3.05	15.33	1.45	14.78	1.44
purpose of consumption	CBT	33.40	2.97	15.67	1.88	15.03	1.80
1	Control	33.20	2.65	33.33	3.44	-	-
Negative boost	ACT	22.04	2.55	13.13	1.81	13.15	1.86
for drug use	CBT	21.66	2.16	14.04	2.46	14.17	2.40
	Control	22	2.20	21.93	1.28	-	-
Lack of control	ACT	11.53	1.60	6.20	1.26	6.23	1.24
for substance use	CBT	11.60	1.55	6.60	1.05	6.57	1.15
	Control	11.80	1.37	11.93	1.39	-	-
Craving drugs	ACT	66.60	4.53	34.67	2.84	34.42	2.64
	CBT	66.66	3.99	36.33	3.35	36.10	2.32
	Control	67	4.09	67.20	3.66	-	-

Table 3: Mean and standard deviation of pre-test and post-test of craving for materials in experimental and control groups.

Table 4: Summary of results of Bonferroni post hoc test in the experimental group (first and second) and control.

levels	ST-Error	Main-Def	Sig
Pre-Post Test Pre - Follow up	0.137 0.346	3.336* 2.95*	0.001 0.001
Post- Follow up	0.247	9.641*	0.001

Table 5: Summary of the results of repeated measure variance analysis. The study of the effect of treatments on the variance of craving.

Source of dispersion	sum of squares	Df	Main of squares	Analysis of variance	Sig
Dementia subscales, negative	257698.62	2	1288.3144	13.549	0.000
advancement in drug use, lack of control			9		
for substance use, craving for substances and groups					
Intergroup interaction	2.722	1	2.722	19.50972	0.000
Interaction between groups × time	32270.1624	2	1613.0815 2	11.649	0.000
Error	1.348.7746	75	1379.9487		

Table 6: Summary of mixed group variance analysis results.

Comparison	Sources Change	Main of squares	Df	sum of squares	F	Sig	Eta
ACT group - control group	group	1422.124	2	711.62	63.702	0.000	0.959
	Error	64.472	39	1.653			
CBT group -	group	1575.354	2	787.677			
control group	Error	64.606	40	1.615	51.661	0.000	0.931

there was a significant difference between the mean score of post-test of craving for women leaving the crystal in experimental group 1 or ACT and two or CBT and control and follow up. Table 6 results showed that both methods CBT and ACT were significantly superior to the control group, and the effect size calculated for the treatment effect based on acceptance and commitment was slightly higher than that of the control group (Eta2 = 959) Cognitive-behavioral therapy was more than control group (Eta2 = 0.931). Both cognitive behavioral therapy (CBT) and acceptance and commitment (ACT) are effective on craving scores. However, the effectiveness of acceptance and commitment therapy (ACT) is more than cognitive behavioral therapy (CBT) therapy on craving scores.

Discussion

Regarding the analysis, following the purpose of the study on the effect of cognitive-behavioral acceptance and commitment therapy and cognitive-behavioral therapy on reducing the craving of women leaving the Crystal, both methods have been effective in reducing the craving of women leaving the Crystal, and also There is a significant difference between the mean of post-test scores and the effect of acceptance and commitment therapy and cognitive-behavioral therapy on the reduction of craving for leaving the Crystalin the experimental and control group. Results showed that there was a significant difference between the mean scores of post-test and follow-up of the two groups in the control group, and acceptance-based therapy and cognitive-behavioral therapy were effective in reducing craving. There was a significant difference between the efficacy of two treatments based on acceptance and commitment and cognitivebehavioral behavior in drug craving. Comparison of means shows that the scores of craving components in the post-test and follow-up stages are significantly different from that of the pre-test, and the mean scores of craving in post-test and remission have decreased significantly. This results from the effectiveness of two methods of treatment (CBT) and (ACT) on craving for drug use.

These findings are in line with the findings of the study, Behroozian et al.²³ pointing to the effectiveness of group CBT therapy in preventing drug repression and slipping. Kiani, Ghasemi and Pourabbas ²⁴ in their study of the effect of ACT therapy on reducing craving Crystal, point to the effectiveness of CBT therapy in reducing drug craving. Spears et al.⁹ in a research study, cognitive-behavioral therapy is effective in reducing drug craving. Lee, Nann, Levine and Tolling ¹⁷ found that the treatment was effective in reducing substance abuse disorder and reducing

return and craving for drugs, based on acceptance and commitment to adolescent drug craving. McCallin and Zolenski⁸ refer to the ACT effect on reducing the tendency for Crystalconsumption. Bidman et al²⁵, McClain and colleagues⁸, in the study of the effect of adherence-based treatment and commitment to improving drug craving, concluded the efficacy of adherence treatment and commitment to reducing craving and drug relapse.

Gonzalez-Menendez et al²⁶ are concerned with the effects of treatment based on acceptance and commitment and cognitive-behavioral therapy on craving for substance use. On the basis of cognitive theory, as well as psychological incentive theory in addiction, radical craving in the narrators is the thoughts and attitudes of the individual in need of material And it works, and it seems that craving is controlled by automated cognitive-emotional processes, in such a way as to be active in the person, a multidimensional process that includes: desire or desire to consume, self-conscious thoughts related to the need for materials, and motivation for release for release. An unpleasant emotional state is associated with a favorable emotional state. In addition, the role of anxiety, stress and stress in the onset, continuity and relapse of addiction has been confirmed that ineffective drug use beliefs to escape from unpleasant situations such as anxiety will cause craving for drugs (McCallin and Zolensky⁸. Cognitive-behavioral therapy improves the ability to adapt to stressful situations such as craving by improving coping styles with psychological stress. As a result, learning effective and effective coping strategies reduces tensions and decreases anxiety through behavioral mechanisms. Investigators make use of treatment based on acceptability and commitment Laila considers effective mechanisms such as acceptance, increase awareness, attendance now, observation without judgment, and avoiding empirical avoidance in combination with cognitive behavioral therapy techniques and increasing the efficacy of therapies. Spisser et al9, therefore, Increasing the psychological flexibility in the treatment of admission and the process of creating mind-thinking thinking increases the ability of a person to cope with craving for consumption, and admission, how to respond to the experiences of the individual and extending these experiences to the uncontrolled or tune-

up experience. Brickeret al²⁷. Faulting is effective in mentally obsessed with the preparation and use of substances, and the change in the meaning of words reduces the impact of automatic thinking and changes in how one responds to effective conditions²⁸. By focusing on cognition and commitment in the value path Increasing adherence to thoughts and internal experiences reduces addictive and effective repeat behaviors and decreases the desire for craving for drugs²⁹, also in the answer to the second question: The efficacy of treatment based on There is a significant difference between admission and behavioral cognitive behavioral therapy in reducing substance craving in women leaving the material. Comparing effectiveness The treatment based on acceptance and commitment and cognitive-behavioral behavior in the craving of the substance showed a significant difference between the mean index and the effect size calculated for the treatment-based treatment and acceptance therapy was slightly higher than cognitive behavioral therapy than the control group (952 / 0Eta2 = The control group (Eta2 = 0.931), both methods of cognitive-behavioral therapy (CBT), based on acceptance and commitment (ACT), are effective on craving scores, but the efficacy of acceptance and commitment therapy (ACT) than cognitive-behavioral therapy CBT) has been shown to increase the craving scores indicating the effectiveness of adherence-based treatment and cognitive-behavioral therapy, which is consistent with the results Research: Ghamari Givi, Maghsoud, Rawari and Esmaili² In a study comparing the effectiveness of cognitive-behavioral therapy and adherence-based therapy and commitment to reducing the symptoms of cracker users, the results of the study indicated that treatment based on commitment and acceptance was more effective than Cognitivebehavioral therapy has been shown to reduce the symptoms of cracking. Grift and Conradi (2014) the effect of cognitive-behavioral examined acceptance and commitment and cognitive-behavioral therapy on reducing return and desire to consume substance. The results showed that cognitivebehavioral acceptance and commitment therapy and cognitive-behavioral therapy in reducing the rate of return, an increase in the duration of treatment remained effective. Comparison of the two methods indicated the superiority of treatment based on

acceptance and commitment. Spears et al^{9,} in a research comparing treatments based on admission and cognitive-behavioral therapy in craving drugs, found that acceptance and commitment therapy compared with cognitive-behavioral therapy could be more effective in reducing the craving of addicted people in the long run. Have. Losada et al. 18 compared the effectiveness of cognitive-behavioral therapy with adherence-based therapy and concluded that adherence-based therapy was more effective in reducing desire and craving and psychological wellbeing.

Conclusion

Applied Research Applicant: Based on the results of admission and commitment therapy as a new and effective approach in the field of addiction, it has the necessary practical capability in clinical practice. By emphasizing values and committing references in the direction of values and assistance, seriously neglecting Vamial's experiences Uncontrollable will lead to psychological flexibility in the individual and make an effective change in the quality of life of these people.

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