



THE EFFECT OF LIFE SKILLS TRAINING ON REDUCING ANXIETY AND DEPRESSION IN DRUG DEPENDENT PEOPLE

Abazer Cheraghi¹, Masoud Hejazi²

1. Department of psychology, Zanjan Branch, Islamic Azad University, Zanjan, Iran.
2. Department of psychology, University of Zanjan, Zanjan, Iran.

ARTICLE INFO

Received:

03th Jun 2017

Accepted:

29th Nov 2017

Available online:

14th Dec 2017

Keywords: Drug dependence, anxiety, depression and life skills

ABSTRACT

The present study was aimed to investigate the effect of life skills training on the reduction of anxiety and depression in drug dependent people who referred to *drop-in center for harm reduction* of Zanjan City.

The population included 90 subjects all those with drug dependence who referred to drop-in center for harm reduction of Zanjan City. There was used Convenience Sampling Method. In this study, experimental method with pretest-posttest design containing control group was used. It was so that 30 people who had the necessary qualifications in accordance with Beck Inventory (Levels of anxiety and depression, mild, moderate and severe), were selected as qualified for the research. Then, the 30 selected subjects were randomly placed in experimental and control groups, each group including 15 people. Measuring tools were Beck Anxiety Inventory and Beck Depression Inventory. Teaching life skills to the Experimental Group was carried out during 8 sessions of 90 minutes.

To analyze the data, the frequency, the mean and standard deviation were used for descriptive purposes, and in the inferential part, Kolmogorov-Smirnov statistical test and analysis of covariance were utilized.

The findings indicate that the mean scores of control group at Depression and Anxiety decreased at post-test. Then, it can be concluded that life skills training had been effective in reducing depression of drug abusers and that, it can be applied as a method.

Copyright © 2013 - All Rights Reserved - Pharmacophore

To Cite This Article: Abazer Cheraghi, Masoud Hejazi, (2017), "the effect of life skills training on reducing anxiety and depression in drug dependent people" *Pharmacophore*, 8(6S), e-1173464.

Introduction

Today, from the viewpoint of psychology, drug addiction is regarded as a mental disorder. Based on the literature and previous studies, almost 90% of drug addicts have one or more other psychiatric disorders the most important of which include mood disorders (manic depression), anxiety disorders and antisocial personality disorder (1). Many studies have emphasized on the prevalence of psychiatric disorders such as anxiety and depression in patients with drug dependence (2). Depression maybe a sign of frustration of addicts, which is a barrier to effective treatment or the use of resources to combat addiction (3). In particular, drug abuse or drug dependence may cause depression in the addiction period or afterwards. It can also be considered as a result of depression. Because most studies have indicated that rates of depression among drug abusers (alcohol or drugs), is four times more than the others (4). On the combination of addiction and depression, Ochoa and Vicente (5) believe that: "about depression among drug abusers, it is often difficult to determine if the mood is gone as a result of drug use or represents deprivation symptoms and or is a primary mental illness". But, what is evident is the fact that the combination of addiction and depression, makes it harder to treat. Because when one feels disappointment, sadness or frustration, it is difficult to deal with his addiction and requires ongoing multilateral considerations. Thus, recovery can be facilitated by knowing the relationship between addiction and depression. It can also be facilitated by recognizing the prospect of dual diagnosis and making observations that cover both aspects (6).

Life skills include: "A set of capabilities that effectively deal with stress and develop useful and positive behaviors". These abilities enable the individual to accept responsibility for their social role, and without hurting themselves and others, deal effectively with requests, expectations and daily problems, particularly problems that arise in relation to others. Researchers and experts in psychology and behavioral sciences have approved the positive impact of life skills on the prevention and reduction of drug abuse, on utilizing intelligence capacity and capability, enhancing self-confidence, boosting self-perception, preventing aggressive behavior, depression, suicide and AIDS. Life skills enable us to realize our knowledge, attitudes and

values. Everyone has to learn to "what to do and how to do it". Successful learning of life skills affects our feelings about ourselves and others. In addition, a change created by these skills in an individual, cause a shift in the perceptions and attitudes of others toward the individual. Therefore, life skills are one of the major contributors to the development and promotion of mental health (7). With regard to these issues, the central question in this research is that: Do life skills training reduces anxiety and depression in drug dependent people?

Research Method

Concerning the objectives and the nature of the subject, the method was experimental method with pretest-posttest design containing control group. In this study, life skills training is considered as the independent variable, and anxiety and depression as the dependent variable. Statistical population of the research, 90 people, included all drug dependent subjects who referred to drop-in center for harm reduction of Zanjan City. Convenience Sampling Method was used. Thus, 30 people were selected as qualified for the research (they suffered levels of anxiety and depression; mild, moderate and severe) based on their scores at Beck Anxiety and Depression Inventories (a higher score of 14 at depression, and above 8 at anxiety). The subjects were randomly placed in experimental and control groups.

Research instrument

In the present study, the subjects were evaluated through the Beck Anxiety Inventory and the Beck Depression Inventory.

Beck Anxiety Inventory (BAI): This questionnaire is a 21-item scale that measures the severity of anxiety in adolescents and adults. The test was developed by Beck and Steer (8) to assess the severity of anxiety symptoms. Each of the test items describes one of the common symptoms of anxiety (mental symptoms of phobia). It is scored from 0 to 3 and, 63 is the maximum score that can be achieved, which is indicative of acute anxiety (8). Assessment of anxiety symptoms is important in diagnosis and treatment. So far, many scales have emerged according to the different views (9). The study of these scales indicates that there are problems in their theoretical and methodological features (10). Due to these problems, Beck and Steer (8) introduced the Beck Anxiety Inventory (BAI) which specifically measures the severity of clinical anxiety symptoms in people. Studies showed that this questionnaire has high reliability and validity. The coefficient of internal consistency (alpha coefficient) is 92%, its one-week test-retest reliability is 75% and the correlation between its constituents is from 30% to 76%. Five types of content, concurrent, construct, diagnostic, and factor validity have been evaluated and the results indicated that this tool was effective in measuring the severity of anxiety.

Beck Depression Inventory (BDI)

BDI items were primarily on the basis of the observation and attitudes and common symptoms among depressed psychiatric patients (11). The test has a total of 21 items related to different symptoms. The respondents are asked in the test to grade the severity of these symptoms on a 4-point scale from 0 to 3. The questions are related to the areas such as feelings of inability, failure, guilty feelings, irritability, sleep disturbances, and loss of appetite. It is a self-report test and takes 5 to 10 minutes to be completed. To understand the items, a reading ability of 5th or 6th grader is sufficient. The scores are ranged between a minimum of 0 to a maximum of 63. But, only in very severe levels of depression score of 40 to 50 is obtained. Normally, the scores of clinically depressed patients and maladjusted non-patients range from 12 to 40.

The questionnaire is widely used as a self-report tool to assess cognition related to depression. The 21 items of the questionnaire have been obtained out of the typical signs of depressed patients. Each of the items is scored from 0 to 3, depending on the severity of the situation reported by the patient (11). The results of Meta-analyses conducted on the Beck Depression Inventory (BDI) suggest that its internal consistency coefficient goes between 0.73 and 0.93 with an average of 0.86. Retest reliability coefficient, in terms of the time interval between running times and population type, ranged from 0.48 to 0.86. But, weekly completion of the questionnaire by the students over 7 weeks, showed decrease in the scores by 40 percent. These findings suggest that some reduction (approximately 10% of the variance) in the population of patients after intervention can be due to natural and spontaneous reduction and it is not the effect of therapeutic intervention (12).

Concurrent validity showed high to moderate correlation with clinical grading of mental patients (11). In addition, these tests have shown moderate correlation at similar depression grading scales.

Life Skills Training Sessions' Content

First session: Welcome, introduction and introducing the group one by one by themselves, the necessity of teaching life skills, life skills definition, history, introducing ten principle life skills and summarizing their goals, setting titles and time for upcoming meetings.

Second session: Self-Awareness training-definition of self-awareness, self-esteem and resiliency features of resilient people, the characteristics of the people aware of themselves, and the benefits of self-awareness.

Third session: Sympathy skills-definition of sympathy, sympathy barriers, the most important methods in sympathy particularly active listening, and sympathy benefits.

Fourth session: educating problem-solving and decision making skills, decision making definition, decision making process, the importance and benefits of the decision-making skills, problem-solving skills definition, activities and steps that are necessary to resolve the problem (problem definition, providing possible solutions, selecting and implementing appropriate solutions).

Fifth session: Educating effective communication skills and ability to establish and maintain interpersonal relationships, definition of effective communication skills, principle styles of effective communication (aggressive style, passive style and assertive style), knowing the elements of communication, definition of interpersonal relationship skills, the importance of effective interpersonal relationships and the benefits of interpersonal relationships.

Sixth session: educating creative thinking and creative thinking skills, definition of creative thinking, objectives and benefits of creative thinking, ways to promote creativity, definition of critical thinking, ways to promote critical thinking and critical thinking benefits.

Seventh session: Teaching coping skills to deal with the excitements –definition of the skills to deal with emotions, definition of rage, signs of rage, rage causes, rage components, rage management and control practices.

Eighth session: Definition of skills to deal with stress, stress definition, stress coping skills definition, sources of stress and stressors, coping strategies and adaptive ways of coping.

At the last meeting, evaluation of the group (post-test) was performed and we appreciated all the members for their participation in the training course.

Findings

At first, descriptive data was presented and then inferential analysis of the research hypothesis was stated.

Anxiety situation:

Table 1. Descriptive data of the scores on anxiety at pre and post-test

Variable	Pre-test		Post-test	
	mean	Standard deviation	mean	Standard deviation
Experimental group	24.13	11.23	16.47	6.36
Control group	24.80	9.60	25.07	8.03

Based on the results of the descriptive indicators, it can be stated that mean scores of both experimental and control groups were not significantly different at pre-test. However, in the post-test, significant changes can be seen in the of score anxiety variable, either compared to pre-test or in comparison with the post-test of the control group.

Depression situation:

Table 2. Descriptive data of the scores on depression at pre and post-test

Variable	Pre-test		Post-test	
	mean	Standard deviation	mean	Standard deviation
Experimental group	28.00	12.59	22.6	11.56
Control group	26.67	9.89	30.13	8.32

Based on the results of the descriptive indicators, it can be said that mean scores of both experimental and control groups were not significantly different at pre-test. However, in the post-test, significant changes have been seen in the score of depression variable, either compared to pre-test or in comparison with the post-test of the control group.

Research Hypothesis

At first, assumptions of the analysis of covariance were studied.

a) Studying the normality of data distribution

Table (3) studying the normality of the data distribution using the Kolmogorov-Smirnov test

Variable			Kolmogorov-Smirnov test		
			Value	Degree of freedom	Significance level
Variable	Depression	Experimental group	187	15	0.165
		Control group	190	15	0.150
	Anxiety	Experimental group	188	15	0.161
		Control group	144	15	0.200

Table (3) shows that none of the groups at a significance level of depression and anxiety scores is smaller than 0.5. So we can conclude that scores distribution and normal distribution are not significantly different and there are scores of normal condition. In other words, the distribution of the sample scores is normal at depression.

b) Checking the homogeneity of the covariance in within-group scores of subjects

Table 4. The results of Levine test in studying the homogeneity of the covariance in within-group scores of subjects

Variable	F value	Df1	Df2	Significance level
Depression	2.38	1	28	0.134
Anxiety	0.599	1	28	0.461

Table (4) indicates that F-value of Levine is not significant at $Q=0.05$. Therefore, the assumption of homogeneity of covariance is established.

c) Surveying correlation of the slope of regression

Table 5. Surveying correlation of the slope of regression

variable	F value	Degree of freedom	Significance level
Depression interaction and research groups	1.86	1	0.184
Anxiety interaction and research groups	7.74	1	0.100

Table (5) shows that F-value is not significant at $ds=0.05$. Then, the assumption of the slope of regression is established.

Hypothesis (1): Life skills training is effective in reducing anxiety of drug dependent people.

To test this hypothesis, One-way Analysis of Covariance (ANCOVA) was used as follows:

Table 6. The results of the analysis of covariance on the first hypothesis

Natural Resources Index	Sum of squares	Degree of freedom	Mean of squares	f-value	Significance level	Eta coefficient
Diffraction effect	327.17	1	327.17	7.72	0.01	0.222
Group Effects	526.35	1	526.35	12.42	0.002	0.315
Error	1143.495	27	42.35			
Total corrected	2025.37	29				

According to the data in table (6), f-value ($F=12.42$) with the freedom degree (1, 27) is significant at $\alpha=0.5$. Therefore, it can be concluded that life skills training is effective in reducing anxiety. Eta value shows that life skills training effect on anxiety reduction is as much as 31.5 percent. Therefore, the hypothesis is effective by 95 percent. The comparison between the mean of experimental and control groups suggest that the mean of experimental group has declined at post-test. So, we can say that life skills training reduces anxiety.

Hypothesis (2): Life skills training is effective in reducing depression of drug dependent people.

To test this hypothesis, One-way Analysis of Covariance (ANCOVA) was used as follows:

Table 7. The results of the analysis of covariance on the second hypothesis

Natural Resources Index	Sum of squares	Degree of freedom	Mean of squares	f-value	Significance level	Eta coefficient
Diffraction effect	214.49	1	214.49	2.205	0.149	0.075
Group Effects	461.54	1	461.54	4.74	0.038	0.149
Error	2626.84	27	97.29			
Total corrected	3266.97	29				

According to the data in table (7), f-value ($F=4.74$) with the freedom degree (1, 27) is significant at $\alpha=0.5$. Therefore, it can be concluded that life skills training is effective in reducing depression. Eta value shows that life skills training effect on depression reduction is as much as 14.9 percent. Therefore, the hypothesis is effective by 95 percent. The comparison between the mean of experimental and control groups suggests that the mean of experimental group has declined at post-test. So, we can say that life skills training reduces depression.

Discussion

By comparing the mean scores of anxiety after educating both groups, research findings indicated differences between the two groups and that, significant differences were observed in the levels of anxiety. This reduction in the anxiety of the experimental group was 31.5 percent. Therefore, it can be concluded that life skills training reduces anxiety. The results of this study are consistent with other researches (13-21).

This can be said in explanation that life skills training is effective in reducing anxiety because anxiety is caused by the lack of skills and predicted position. If we realize our worthy on the basis of the behavior of the others, we have made a big mistake. If people do not treat us well, we feel depressed and angry and if they are good for us, we feel anxious. It is because we think, they are good now but they maybe not in the future. Self-acceptance is the only way out of this trap (22). Drug-abuse accompanied with anxiety disorder worsen prognosis and remarkably increases the risk of suicide among patients with unipolar major depression and bipolar disorder (23). In this regard Taromian (24) states that anxiety disorder is a mental illness which possibly generates drug abuse and addiction. Some people with this type of mental illness tend to use drug to relieve suffering and bring relaxation. He has also confirmed the effect of life skills training in reducing anxiety and drug abuse. On the other hand, are search found that life skills training, stress and anxiety management have been effective in reducing drug abuse (25). Overall, the findings of this study showed that life skills training reduces anxiety and reduction in anxiety can also be effective in reducing drug abuse. In order to take the advantages of useful and effective educational interventions, factors such as cultural, religious, social, economic, personal and family aspects should be observed.

By comparing the mean scores of anxiety after educating both groups, research findings indicate differences between the two groups and that, significant differences were observed in the levels of depression. Therefore, it can be concluded that life skills training reduces depression. The results of this study are consistent with other researches (26-29, 20, 15). It can be stated on the explanation of the effectiveness of life skills training in reducing depression that depression and drug abuse have a two-way relationship. Feelings of depression can cause a person to engage in drug abuse to escape the suffering and relax. And addiction and drug abuse can exacerbate feelings of depression and convert it into a self-destructive mode. In fact, these two conditions aggravate each other in a vicious cycle. A study in America has shown that between 15 and 50 percent of people, who abused rugs, are depressed (30). In this regard, Afqheh & Khalilian (31) showed in their study that the about 42.4 percent of those with addiction suffered depression before their tendency to drug abuse and that, only 12 percent depressed after drug abuse. According to the findings, many addiction researchers concern depression accompanied with drug abuse to be a major problem. They believe inconstant debate about simultaneous determination and diagnosis of mood disorders and drug abuse problems. Also in a study Smith (15) found that life skills training significantly contributes to reduce anxiety and depression. On the other hand, Taromian (20) believes that life skills training is effective in reducing depression and drug abuse. As a result, regarding these findings, it seems that teaching life skills helps individuals to avoid negative practices and the reduction in depression will effectively lead to the reduction in drug abuse.

References

1. Naghibi KH et al. Diagnosis and treatment of addiction. Esfahan: Isfahan University of Medical Sciences Publications.2002.
2. Grothues J, Bischof G, Reinhardt S, Hapke U, Meyer C, John U, Rumpf HJ. Intention to change drinking behaviour in general practice patients with problematic drinking and comorbid depression or anxiety. *Alcohol and Alcoholism*. 2005 Jul 4; 40(5):394-400.
3. Niaura R, Britt DM, Shadel WG, Goldstein M, Abrams D, Brown R. Symptoms of depression and survival experience among three samples of smokers trying to quit. *Psychology of Addictive Behaviors*. 2001 Mar;15 (1):13.
4. Hazelden P. *Pacts about Addiction and Depression*” Mental Health Center. 2004
5. Ochoa E, Vicente N. Depression and substance abuse. *European Psychiatry*. 1996 Jan 1; 11:324s.
6. Petrie TA. Coping Skills, Competitive Trait Anxiety, and Playing States: Moderating Effects an the Life Stress-Injury Relationship. *Journal of sport and exercise psychology*. 1993 Sep;15(3):261-74.
7. Taromian F. Application of self-assessment questionnaires in the study of pattern and prevalence of drug use among high school students, Part II, ZHarfay-e-tarbiat Monthly, 10. 2000.
8. Beck AT, Steer RA. Beck anxiety inventory (BAI). *BiB* 2010. 1988;54.
9. Costello CG, Comrey AL. Scales for measuring depression and anxiety. *The Journal of psychology*. 1967 Jul 1;66(2):303-13.
10. Dobson KS. The relationship between anxiety and depression. *Clinical Psychology Review*. 1985 Jan 1;5(4):307-24.
11. Beck AT, Steer RA, Brown GK. Beck depression inventory-II. San Antonio. 1996;78(2):490-8.
12. Gary GM. *Handbook of Psychological Assessment*. 2003.
13. Botvin GJ, Eng A, Williams CL. Preventing the onset of cigarette smoking through life skills training. *Preventive medicine*. 1980 Jan 1;9(1):135-43.
14. Botvin GJ, Baker E, Dusenbury L, Botvin EM, Diaz T. Long-term follow-up results of a randomized drug abuse prevention trial in a white middle-class population. *Jama*. 1995 Apr 12;273(14):1106-12.
15. Smith EA, Swisher JD, Vicary JR, Bechtel LJ. Evaluation of life skills training and infused-life skills training in a rural setting: Outcomes at two years. *Journal of Alcohol and Drug Education*. 2004 Jun 1;48(1):51.
16. Botvin GJ, Wills TA. Personal and social skills training: Cognitive-behavioral approaches to substance abuse prevention. *Prevention research: Deterring drug abuse among children and adolescents*. 1985;63:8-49.
17. Gorman DM, Gorman DM, Conde E, Gorman DM, Conde E, Huber Jr JC, Gorman DM, Conde E, Huber Jr JC. The creation of evidence in ‘evidence-based’ drug prevention: a critique of the strengthening families’ program plus life skills training evaluation. *Drug and alcohol review*. 2007 Jan 1;26(6):585-93.
18. Gorman DM. The “science” of drug and alcohol prevention: the case of the randomized trial of the Life Skills Training program. *International Journal of Drug Policy*. 2002 May 31; 13(1):21-6.
19. Botvin GJ, Kantor LW. Preventing alcohol and tobacco use through life skills training. *Alcohol research and health*. 2000 Dec 22; 24(4):250-7.
20. Taromian F. Application of self-assessment questionnaires in the study of pattern and prevalence of drug use among high school students, Part I, Special number, ZHarfay-e-tarbiat monthly, 10. 1999.
21. Haji-Amini Z, Ajali A, Fathi-Ashtiyani A, Ebadi A, Dibaei M, Delkhosh M. The effect of life skills education on adolescent emotional reactions. *J Behav Sci*. 2008; 3 (3):263-9.
22. Yari S. The Effect of Life Skills Training on Mental Health and Control Source in Adolescents. Master's Degree in General Psychology, Tonekabon, Islamic Azad University of Tonekabon, Iran.2007.
23. Kaplanand Sadok. *Summary of Psychiatry*. Translated by N. Pourafkari. Tehran: Shahr-e-ab publications. 2007.
24. Taromian F. *Facts about healthy living without drug abuse*. Tehran: Tarh-o-Naghsh publications. 2010.
25. Botvin GJ, Schinke SP, Epstein JA, Diaz T. Effectiveness of culturally focused and generic skills training approaches to alcohol and drug abuse prevention among minority youths. *Psychology of addictive behaviors*. 1994 Jun;8(2):116.
26. Musekamp G, Bengel J, Schuler M, Faller H. Improved self-management skills predict improvements in quality of life and depression in patients with chronic disorders. *Patient education and counseling*. 2016 Aug 31;99(8):1355-61.
27. Nemati Sogolitappeh F, Mahmood Aliloo M, Babapur Kheyroddin J, Toufan Tabrizi M. Effectiveness of group life skills training on decreasing anxiety and depression among heart patients, after bypass surgery. *Iranian Journal of Psychiatry and Clinical Psychology*. 2009 May 15;15(1):50-6.
28. Esmat Panah OB, Khakshoor H. The Effect of Life Skills Training on Drug Attitudes in Patients Referring to Treatment Centers and Addiction Rehabilitation. *Quarterly Journal of Research on Addiction*. 2009; 3 (12): 1-10.
29. Amiri-barmkuhi A. Teaching life skills to reduce depression. *Iranian Psychology Quarterly*, No.20. 2009.
30. Momtazi S. *Family and Addiction*. Zanjan: Mahdis Publications. 2003.
31. Afqheh S, Khalilian AR. Studying the actors associated with addiction in Mazandaran province. *Journal of Mazandaran University of Medical Sciences and Health Services*, No.12, 1996.