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The Effectiveness of Dialectical Behavior Therapy (Based on Components of Tolerance and Emotion Regulation Disorder) on Depression Symptoms in Patients with psychosomatic Disorders

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Abstract

Introduction: In psychosomatic disorder focusing on dominant pain, a person suffers from physical symptoms and has constant worries, which usually lead to depression symptoms. The purpose of this research was to investigate the effectiveness of the two components of distress tolerance and emotional discipline on reducing depression in these patients.

Materials and methods: The current research design was semi-experimental (pre-test-post-test-follow-up) with a control group. The research population was also selected patients suffering from depressed psychosomatic disorders and divided into two experimental and control groups. These patients were examined using the diagnostic interview and the second edition of the Beck Depression and Anxiety Questionnaire in the pre-test, post-test and two-week follow-up stages. Then the experimental group received dialectical behavior therapy in 12 sessions (40 minutes). Multivariate analysis of variance with repeated measurements was used to investigate the effectiveness of distress tolerance and emotional regulation training on people with psychosomatic disorders (experimental group) and compare it with the control group.

Findings: This research was conducted in two groups of 20 people in the age range between 37 and 48 years. The results showed that after the time required until the follow-up phase, depression was significantly reduced in the treated group ($P<0.01$). Also, anxiety was significantly reduced in the treated group ($P<0.01$).

Conclusion: Considering the nature of the disease and suggestibility of people, psychosomatic disorders are compatible with other disorders such as depression and anxiety. It seems that dialectical behavior therapy reduces the symptoms of depression and anxiety by affecting the components of distress tolerance and emotional regulation.

Key words: psychosomatic disorders, dialectical behavior therapy, distress tolerance, emotional regulation, depression and anxiety

Introduction

A somatic disorder is a mental or psychiatric disorder that may manifest as physical symptoms. Many people sometimes feel physical symptoms in their body parts and worry that they might have a serious illness. Some people take these normal and everyday experiences very seriously and this causes disruption in their lives. When such concerns become obsessive and become a source of anxiety or depression, it is known as one of the symptoms of psychosomatic disorders and related disorders [1].

In this disorder, there are some physical symptoms that indicate physical or neurological diseases, but complete examinations and various tests do not discover any kind of physical disease [2]. These people believe that their problems are really physical and do not believe when they are told that there are no signs of a medical problem. Given that men are exposed to two large groups of stressors, i.e. stressors caused by biological identity and professional responsibilities [3]. They are more prone to suffering from physical and mental disorders and they react to this disorder in different ways such as physical diseases, chronic headache, vague pains all over the body and legs, and they have a history of visiting neurologists, internists and specialists. They have the ability [4].

People with somatic disorder first go to a general doctor and then they are referred to psychiatrists or clinical psychologists. It rarely happens that they take psychotherapy according to their own will because they do not consider their physical problems to be caused by an emotional cause and, unlike feigned disorders and maladjustment, they are not intentional symptoms [2].

Chronic pain is relatively common in these disorders, affecting about 30% of the American population. Since psychological factors can play a role in the aggravation of pain, sometimes it is not easy to say when the pain is excessive or too much, and they are upset, angry and depressed that other people and doctors question the intensity of the pain of these patients. are [1]. According to the researches, depression follows severe stress that occurs in the scope of life[5] and is one of the most common mood and emotional disorders and the biggest mental disorder of the current century and a general problem in today's modern life and the second most common mental disorder. It is cognitive and nearly 121 million people in the world suffer from it. In 2010, depression was the second most expensive disease in the world, while in 1990 it was in the fourth place [6].

This disorder is highly compatible with body shape disorders and disorders related to it, and these patients suffer from depression due to not accepting the severity of the pain and illness they think they have. Depressive disorder is known as a treatment-resistant diagnosis because it is often a recurrent chronic mental disorder [7] which, if untreated or ineffective, leads to

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maladaptive behaviors, which in turn It causes more major problems. One of the important consequences of increasing depression and its lack of proper treatment is suicide, suicide is a conscious act of self-harm, which is increasing as one of the social problems with the increase of mental disorders (especially depression disorder) in most societies [8].

The prevalence of depression disorders has caused many treatment methods, including drug therapy and psychotherapy, to be presented and investigated for it. Although the researches support the effectiveness of the current treatments, this effectiveness is relative and there is still no definitive treatment for the treatment of depression disorders that can be considered as a definitive solution for this disorder [9].

Dialectical behavioral therapy is a technique based on accepting the patient as he is and at the same time helping him to change by teaching interpersonal skills, distress tolerance skills, emotion regulation skills and awareness skills[10]. The researches of Miller, Rathus, and Linehan [10], Vanden Bosch, Verhuel, Schippers, Brink [11] showed the effect of this therapy in reducing impulsivity. , showed self-harm, emotion regulation and improving mood and emotional issues such as depression, anxiety, anger, emotional instability and irritability.

According to the results of previous research, despite the high prevalence of mental disorders, less than 0.01 people with these disorders refer to psychiatric health centers, and the rest of the people with mental disorders and problems remain untreated or show their symptoms as physical diseases. Therefore, the aim of this study was to investigate the effectiveness of two components of dialectical behavior therapy on reducing depression and anxiety in these patients.

Materials and methods

The general design of this research is a semi-experimental design of unequal control group design. The statistical population consisted of patients who referred to the general physician at Razi Hospital in Tabriz and were diagnosed with psychosomatic disorders in 2021. The research sample included 40 patients suffering from depressed psychosomatic disorders who met the criteria for entering the research.

These criteria were: minimum third middle school education, age range between 37-48 years and lack of personality disorder, exclusion criteria were: absence of more than 2 consecutive sessions and 3 different sessions.

Sampling was based on available sampling method. In this way, the people with the necessary criteria were selected and the researcher, using clinical interview, introduced the people who met the entry criteria into the research and consent was obtained from them, and 40 people from the community group were selected as a sample group. 20 people (experimental and control groups) were selected to answer the questionnaire of the second edition of the Beck Depression and Anxiety Questionnaire in the form of pre-test, post-test and follow-up.

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Research tools

Revised form of Beck, Stern and Braun Depression Questionnaire: [12] This tool is one of the most suitable tools for reflecting depression. This questionnaire has 21 items that measure the physical, behavioral and cognitive symptoms of depression. Each item has 4 options that determine different degrees of depression from mild to severe. This questionnaire measures the psychological features of depression rather than physical and physiological discomforts and has a correlation of 0.75 with Hamilton's questionnaire [13]. The 21 items of the Beck depression questionnaire are classified into three groups: emotional symptoms, cognitive symptoms, and physical symptoms. The meta-analysis results of the Beck depression questionnaire indicate that its internal consistency coefficient is between 0.73 and 0.93 with an average of 0.86, and the alpha coefficient for the patient group is 0.86 and the non-patient group is 0.81.

Beck, Stern and Brun anxiety questionnaire: [12] This tool is one of the most suitable tools for measuring anxiety. This questionnaire has 21 items. In the Beck questionnaire, each question containing four options is scored in a four-part spectrum from 0 to 3. Each test item describes one of the common symptoms of anxiety (mental, physical and panic symptoms). The total score ranges from 0 to 63. This describes the common symptoms of anxiety (mental, physical and panic symptoms). Its internal consistency coefficient is between 0.72 and 0.84 with an average of 0.78, and they reported an alpha coefficient of 0.95 for the patient group and 0.91 for the non-patient group.

Dialectical behavior therapy training: Dialectical behavior therapy is presented as a supportive therapy that requires a strong joint relationship between the therapist and the therapist. Treatment seekers in standard dialectical therapy receive three main forms of therapy: individual therapy, skills group, and telephone communication.

In individual treatment, the treatment seekers received individual sessions once a week, which usually last for one hour. Weekly psychotherapy sessions begin by exploring a problematic event or behavior, i.e., a chain of events from the previous week, and by examining the proposed solutions that have been used and the factors that make Joe's treatment difficult to use more adaptive solutions. have made, it ends. During and between sessions, the therapist actively teaches and reinforces adaptive behaviors. Emphasis is placed on teaching patients how to manage emotional trauma rather than reducing it or removing it from the crisis.

Calling the therapist between sessions is a part of dialectical therapy behavior methods, quoted by [15].

This treatment was implemented based on the work of Mckay, Wood, and Brantley (Mckay, Wood, Brantley) [13], which was planned based on Linehan's (Linehan) [16] skills training book, and for each skill (emotional regulation and distress tolerance) 6 A group meeting was held. In sessions 1 to 6, the basic skills of coping with chaos and returning attention include (fundamental acceptance, returning attention, developing a plan for returning attention, self-

soothing, and creating a relaxation plan) and advanced skills of coping with chaos, including (imagining from a safe place, discovering values, identifying strength superior, living in the present, using self-encouraging confrontational thoughts, affirming self-talk and formulating coping strategies) and in sessions 7 to 12, fundamental and advanced emotional regulation skills including (identifying emotions, how emotions act , overcoming obstacles to healthy emotions, reducing vulnerability to disturbing emotions, self-observation, reducing cognitive vulnerability, increasing positive emotions and coping with emotions, acting against strong emotional desires and problem solving) according to the training protocol became. Before and after the treatment, they answered the pre-test and post-test during the individual interview session, and 2 weeks later, they answered the follow-up questionnaire in a group meeting. The results were analyzed using multivariate analysis of variance and independent t test. Ethical considerations that have been observed in this research and regarding the effectiveness of the treatment were also taught to the control group at the end of the research (outside the study).

Findings

This research was conducted on 40 people in two experimental and control groups, where each group consisted of 20 people. The age range of the participants in the experiment was between 37 and 48 years. The average age of the experimental group was 41.77 and the control group was 39.13 years. To ensure that there is no significant difference between the two groups in the level of depression and anxiety, a t-test was conducted independently of their pre-test scores, and no significant difference was observed between the two groups.

Table 1. Demographic characteristics of subjects (n=40)

Variable	group	Average	Standard deviation	Sig
Age (years)	Control	39.13	2.11	0.553
	Experimental	41.77	2.29	
Time since depression (months)	Control	23.12	8.17	0.087
	Experimental	20.86	7.69	
Elapsed time from psychosomatic disorders (months)	Control	32.05	10.69	0.435
	Experimental	30.22	11.36	

A summary of the individual characteristics of the subjects in the control and experimental groups is presented in Table 1.

To investigate the effectiveness of distress tolerance training and emotional discipline on people with psychosomatic disorders (intervention group) and compare it with the control group, multivariate analysis of variance with repeated measurements was used, and the results of multivariate analysis of pre-test scores were used. , then the test and follow-up are shown in table 2 and diagram one.

Information about subjects' depression with the Beck scale is presented in Table No. 2 and Chart No. 1.

Table number (2) shows the statistical indices of covariance related to depression.

Table (2): The results of the covariance test on the depression scale

Variable	Source of change	Groups	F	Sig	Partial Eta Squared	Observed Power
Depression	Within Groups	Test time	62.103	0.000	0.620	1.000
		Test time * Error group	72.066	0.000	0.655	1.000
	Between Groups	Error group	16.764	0.000	0.306	0.979

* Interaction or combined effect of two factors

According to the results of table (2), in the experimental and control groups, the level of depression in the pre-test, post-test and follow-up shows a significant difference (P<0.01). The mean depression scores of the experimental group in the follow-up and post-test were significantly lower than the pre-test. Also, there was a significant difference in the level of depression between the groups (control and experimental) (P<0.01). Also, a significant interaction between test time and group was observed (P<0.01). The squared value of eta in this case is equal to 0.655 and therefore 65.5% of the changes in the dependent variable (depression level) are explained by the independent variable of the experimental group (dialectical therapeutic behavior with the components of distress tolerance and emotional regulation).

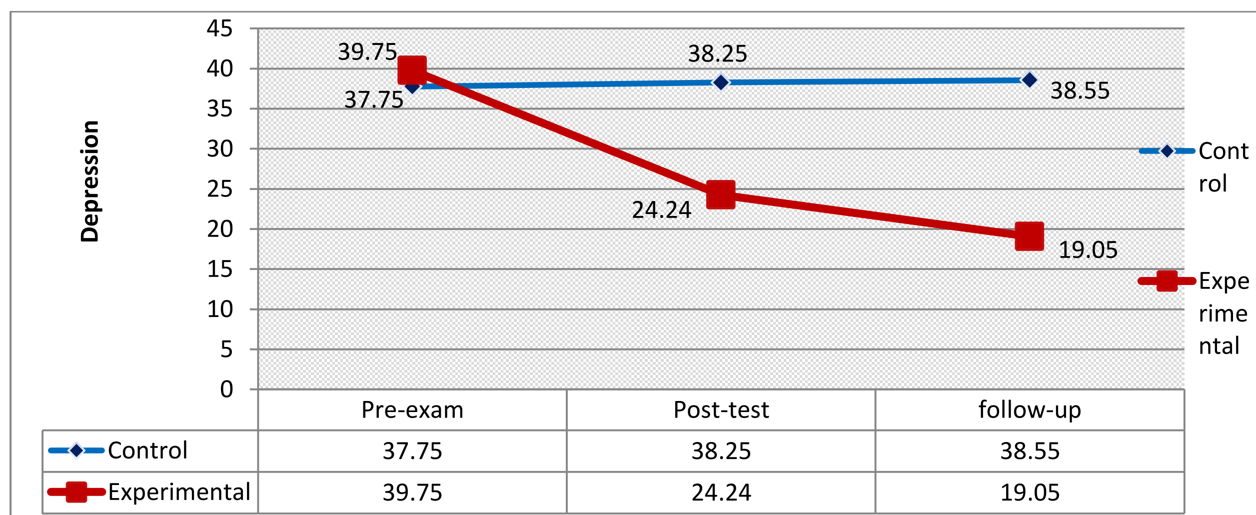

Figure (1) the level of depression in the three stages of the test by group

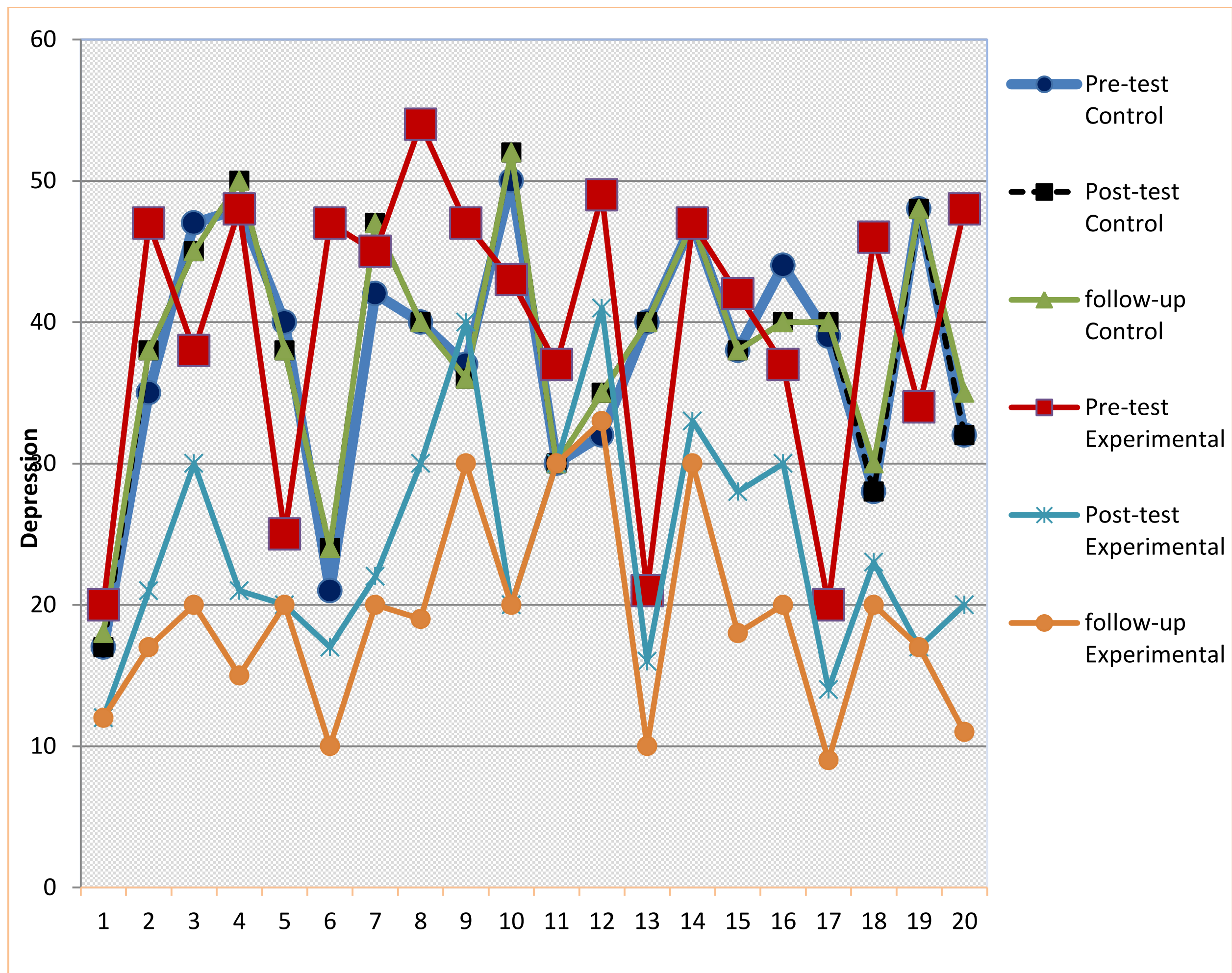

Figure (2): The level of depression in the control and experimental groups in the three stages of pre-test, post-test and follow-up

Information about subjects' anxiety with the Beck scale is presented in Table No. 3 and Chart No. 3.

Table No. (3) Shows the statistical indices of covariance related to anxiety.

Table (3): The results of the covariance test in the anxiety scale

Variable	Source of change	Groups	F	Sig	Partial Eta Squared	Observed Power
Anxiety	Within Groups	Test time	49.083	0.000	0.564	1.000
		Test time * Error group	77.345	0.000	0.671	1.000
	Between Groups	Error group	15.985	0.000	0.296	0.974

* Interaction or combined effect of two factors

Based on the results of table (3), in the experimental and control groups, the level of anxiety in the pre-test, post-test and follow-up shows a significant difference (P<0.01). The average anxiety scores of the experimental group in the post-test were significantly lower than the pre-test. Also, the changes in the level of anxiety between the groups (control and experimental) had a significant difference (P<0.01). Also, a significant interaction between test time and group was observed (P<0.01). The squared value of eta in this case is equal to 0.671 and therefore, about 67% of the changes in the dependent variable (anxiety level) are explained by the independent variable of the experimental group (dialectical behavioral therapy with the components of distress tolerance and emotional regulation).

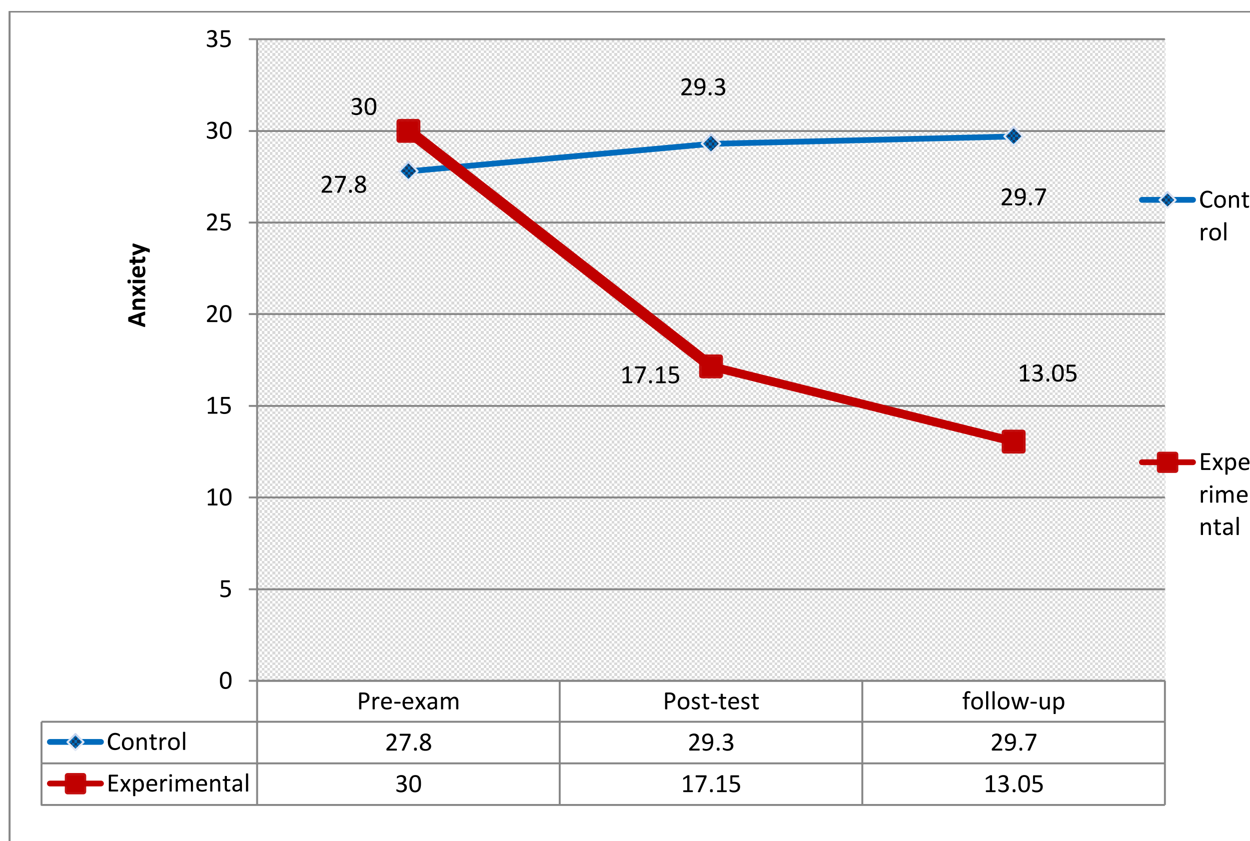

Figure (3) the level of anxiety in the three stages of the test by group

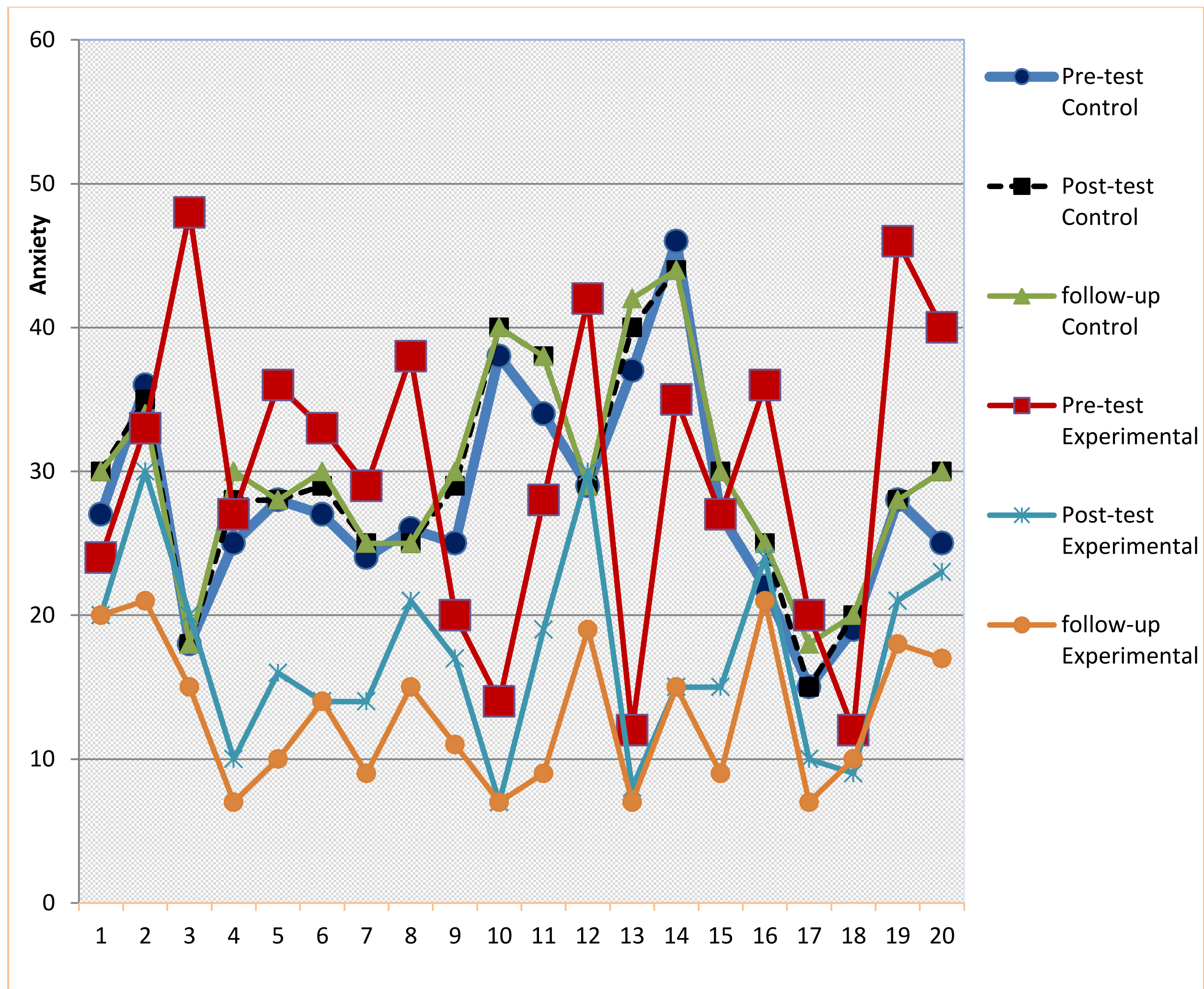

Figure (4): The level of anxiety in the control and experimental groups in the three stages of pre-test, post-test and follow-up

Discuss

The pre-test and post-test scores of the patients clearly showed a decrease in the depression and anxiety scores of patients with psychosomatic disorders after the implementation of dialectical behavior therapy training compared to the control group, which is a sign of confirmation of the effectiveness of dialectical behavior therapy.

In this treatment, clinicians are asked to help treat Joe in understanding disruptive behaviors as acquired behavior to solve problems. Joe's treatment lacks the necessary skills to respond in a more creative way. This is one of the reasons that the dialectical therapeutic behavior has been fruitful in this research, in line with this result, we can refer to the researches of Miller, Ratos and Linehan [10], van den Bosch, Verhol and Skippers [11] and Krueger, Schoviger, Sipos , Arnold, Kahl (Kroger, Schweiger, Sipos, Arnold, Kahl, Schunert) [17], all of which confirm the

effectiveness of dialectical therapy behavior and its group skills training in reducing self-harm behaviors, regulating emotions and improving a number of issues. Mood and emotions such as depression, anxiety, anger, emotional instability and irritability in the studied people.

On the other hand, this finding can be seen in line with the report of Robins and Koons (Robins, Koons) [18] that dialectical behavior therapy has a significant effect in reducing the symptoms of depression and anxiety. Also, the results of internal research support the results of this research. Alavi et al.'s research [9] indicated the effectiveness of dialectical behavior therapy in reducing the symptoms of depression and anxiety ($p<0.001$) and a significant increase in the indicators of comprehensive alertness and distress tolerance, but the subjects of the test group compared to the control group in The index of emotional regulation difficulties did not show a significant decrease. The improvement observed in the test group was maintained in the one-month follow-up.

The conclusion

In this method, people are taught to regulate their emotions in efficient and healthy ways. During skills acquisition training, the therapist assesses the deficits related to goal-oriented abilities and teaches clients the necessary skills through training and coaching. At this stage, the therapist supports the client's acquired skills and increases the probability of using these skills, thereby increasing the sense of self-efficacy in the treated people.

The innovation of this research was the emphasis on disorders that were consistent with psychosomatic disorders, and the emphasis was on skill deficiencies and skills training. In this treatment, we need the active participation of patients in the process of change, and the main role of the therapist is to coordinate the care of the patient, the effectiveness of this treatment on these disorders can be mentioned, as well as the emphasis on accepting and trying to change with a creative way of effectiveness. This was the cure.

The limitation of the research was that the pre-test was taken from patients who had higher depression than the normal state of life because they had been neglected by the doctor and referred to a psychologist for psychotherapy, and the follow-up period was short due to lack of access. In the long term and also the lack of depression test based on DSM5 was one of the limitations of this research. For future researches, it is suggested that in addition to paying attention to the above limitations, this method should be analyzed in women suffering from this disorder and their type of pain.

References

1. Alavi K, Modarres Gharavi M, Amin-Yazdi SA, Salehi Fadardi J. Effectiveness of group dialectical behavior therapy (based on core mindfulness, distress tolerance and emotion regulation components) on depressive symptoms in university students. J Fundamentals of Mental Health. 2011; 13(2):124-35.

ISSN 2515-8260 Volume 09, Issue 07, 2022

2. Association AP. Diagnostic and Statistical Manual of Mental Disorders and Statistical Manual of Mental Disorders (4th edn) (DSM^IV): Washington, DC: APA; 2000.
3. Association AP. Diagnostic and statistical manual of mental disorders: Washington, DC: APA; 2013. 133-7 p.
4. Beck AT, Steer RA, Brown GK. Beck depression inventory-II. San Antonio. 1996; 78(2):490-8.
5. Chew CE. The effect of dialectical behavioral therapy on moderately depressed adults: A multiple baseline design: University of Denver; 2006.
6. Fathiashtiani A, Dadsetan M. [Psychological Tests Personality and Mental Health]. Tehran: Besat 2008.
7. Ganji M. Abnormal psychology based on DSM-5 Tehran: Savalane pub; 2013.
8. Jamilian H, Malekirad A, Farhadi M, Habibi M, Zamani N. Effectiveness of Group Dialectical Behavior Therapy on Expulsive Anger and Impulsive Behaviors. Glob J Health Sci. 2014; 6(7):116-23.
9. Karbalaei Mohammad Meigouni A, Ahadi H, Sharifi HP, Jazayeri SM. Effects of dialectical behavior therapy with medical therapy vs. medical therapy alone in reducing suicidal thoughts in patients with major depressive disorder and recent history of attempted suicide. J Apply Psycho. 2011; 4(16):25-41.
10. Kroger C, Schweiger U, Sipos V, Arnold R, Kahl KG, Schunert T, et al. Effectiveness of dialectical behaviour therapy for borderline personality disorder in an inpatient setting. Behav Res Ther. 2006;44(8):1211-7. DOI: 10.1016/j.brat.2005.08.012 PMID: 16226222
11. Lambert KG. Rising rates of depression in today's society: consideration of the roles of effort-based rewards and enhanced resilience in day-to-day functioning. Neurosci Biobehav Rev. 2006; 30(4):497-510. DOI: 10.1016/j. neubiorev.2005.09.002 PMID: 16253328
12. Linehan MM. Skill training manual for treating borderline personality disorder. New York, USA: The Guilford press; 1993.
13. Mckay M, Wood J, Brantley J. The Dialectical Behavior therapy 11skills workbook united states of America. New Harbinger publications, Inc 2007.
14. Miller AM, Rathus JH, Linehan MM. Dialectical behavior therapy with 11suicidal adolescents. New York: Guilford; 2007.
15. Robins CJ, Koons CR. Dialectical behavior therapy of sever personality disorders. In: Magnavita JJ. (Editor). Handbook of personality disorders: Theory and practice. Philadelphia: Wiley and sons; 2004. 221-5 p.
16. Sharp LK, Lipsky MS. Screening for depression across the lifespan: a review of measures for use in primary care settings. Am FAM Physician. 2002; 66(6):1001-8. PMID: 12358212
17. Van den Bosch LM, Verheul R, Schippers GM, van den Brink W. Dialectical Behavior Therapy of borderline patients with and without substance use problems. Implementation and long-term effects. Addict Behav. 2002;27(6):911-23. PMID: 12369475

ISSN 2515-8260 Volume 09, Issue 07, 2022

18. Zamani N, Ahmadi V, Ataaei Moghanloo V, Mirshekar S. Comparing the effectiveness of two therapeutic methods of dialectical behavior therapy and cognitive behavior therapy on the improvement of impulsive behavior in the patients suffering from major depressive disorder (MDD) showing a tendency to suicide. Scientific J Ilam Univ Med Sci. 2014; 22(5):45-54.
19. Zamani N, Habibi M, Darvishi M. Compare the effectiveness dialectical behavior therapy and cognitive-behavioral group therapy in reducing depression in mothers of children with disabilities. J Arak Univ Med Sci. 2015; 18(94):32- 42.
20. Zamani N, Habibi M. Comparison effectiveness of Dialectic Behavioral Therapy and Cognitive Behavior Therapy on mental health in the mother of Children with Special needs. J Res Health Soc Develop Health Promotion Research Center. 2015.