

*Research Paper*

## **Comparison of the Effectiveness of Mindfulness-Based Cognitive Therapy and Emotion-Based Therapy on Body Image Dissatisfaction in People with Eating Disorder Symptoms**

**Rezaei, Mahrokh<sup>1</sup>; Mohammadkhani, Parvaneh<sup>2</sup>; Jafari Roshan, Marjan<sup>3</sup>**

1. Corresponding Author: PhD student in Psychology, Department of General Psychology, Faculty of Psychology, Islamic Azad University, Central Tehran Branch, Iran; m.rezaei.psycho@gmail.com

2. Professor of Psychology, Social Welfare Management Research Center, University of Social Welfare and Rehabilitation Sciences, Tehran, Iran; parmohamir@yahoo.com

3. Associate Professor of Psychology, Department of General Psychology, Faculty of Psychology, Islamic Azad University, Central Tehran Branch; marjan.jafariroshan@gmail.com

### **Abstract**

The aim of this study was to compare the effectiveness of mindfulness-based cognitive therapy and emotion-based therapy on body image dissatisfaction in people with eating disorders. The research method was quasi-experimental pre-test-post-test with a control group and a follow-up period. The statistical population included patients with eating disorders in Chamran Hospital. A total of 36 patients were selected by available methods and divided into three groups (mindfulness-based cognitive therapy, emotion-focused therapy and control) and completed the body image concern questionnaire of Littleton et al. Analysis of data by repeated measures analysis of variance showed that both treatments were effective in reducing dissatisfaction with body image and there was no significant difference between the two treatments. Therefore, therapists can use both approaches for people with eating disorder symptoms.

**Keywords:** Eating disorders, body image, emotion-based therapy, mindfulness.

### **Introduction**

Body image dissatisfaction is one of the most widespread structures studied in the field of eating disorders research and has a positive relationship with eating disorders and the symptoms of these disorders (Sala et al., 2020). According to Huellemann, et al. (2021), body image is related to a person's awareness of his body. According to research, mindfulness is one of the possible causes that can affect body image anxiety (Yari et al., 2020). Also, Pintado et al. (2017) and Roosta, et al. (2015) have positively evaluated the effect of mindfulness therapy on body image. Research by Sala, et al. (2020) and Pisetsky, et al. (2019) confirm the usefulness of mindfulness-based cognitive therapy in the treatment of eating disorders. Other psychological therapies related to eating disorders include Emotion-Based Therapies (EFT) (Glisenti et al., 2018), which improve binge eating disorder (Glisenti et al., 2021) and improve body image (Williams et al., 2018) has been effective. A review of previous research in this regard showed that there was no study to compare the effectiveness of these two treatments, so in the present study the following hypothesis was tested:

There is a difference between the effect of mindfulness-based cognitive therapy and emotion-based therapy on body image dissatisfaction in people with eating disorders.

## **Method**

The method of this research was quasi-experimental pre-test and post-test with a control group and a three-month follow-up period. The statistical population of this study included patients referred to the psychiatric clinic of Chamran Hospital in the second half of 2020, who according to the relevant psychologist had disorders that were classified as eating disorders. A total of 36 patients were selected by convenience sampling method and randomly assigned to two experimental groups and one control group (12 individuals in each group). The first group received mindfulness-based cognitive therapy and the second group received emotion-based treatment, and the control group did not receive any treatment during this period. Individuals in all three groups completed the Littleton, et al. (2005) Body Image Concern Questionnaire. This questionnaire consists of 19 items. Littleton, et al. (2005) reported the reliability of this questionnaire by Cronbach's alpha method of 0.93 and the validity coefficient through correlation with the Body Dysmorphic Disorder Scale of 0.83. Data were analyzed using repeated measures analysis of variance and LSD post hoc test.

## **Findings**

First, the assumption of normality of the distribution of variables was examined using the Kolmogorov-Smirnov test, which claimed that the distribution of variables was normal. Also, the box test results showed that the condition of homogeneity of covariance matrices of variance was correctly observed. The results of Machley sphericity test also showed that the Machley sphericity hypothesis was observed and the results of Levin test also showed that the assumption of variance homogeneity was observed ( $P < 0.05$ ).

Comparison of the mean scores of body image dissatisfaction in the experimental and control groups shows that there is no significant difference between the pre-test scores of body image dissatisfaction in the control group and experimental groups, but in the post-test stage, body image dissatisfaction scores in groups. The test is significantly higher than the control group, also in the follow-up phase, the scores of dissatisfaction with the body image in the experimental groups are significantly lower than the control group.

In order to test the effect of mindfulness-based cognitive therapy and emotion-oriented therapy on body image dissatisfaction, repeated measures analysis of variance was used. According to Table1, the level of significance related to the stage for dissatisfaction with the body image related to both tests is less than 0.05, so it can be accepted that there is a significant difference between the mean scores of this variable in the pre-test, post-test and follow-up stages. There is also and considering the significance of the interaction of stage by group and the significance of group effect, it is concluded that the rate of change of these variables during the pre-test, post-test and follow-up stages was not the same in the control group and the two experimental groups. It can be concluded that both treatments have been effective on body image dissatisfaction and have reduced body image dissatisfaction due to the difference in means.

**Table 1. summarizes the results of repeated measures analysis of variance for body image dissatisfaction**

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Stage	592.444	1.252	473.039	40.325	0.0001	0.647
MBCT Stage * Group	1066.333	1.252	851.418	72.580	0.0001	0.767
Group	1540.125	1	1540.125	6.344	0.020	0.224
Stage	458.694	1.433	320.102	43.352	0.0001	0.663
EFT Stage * Group	881.194	1.433	614.946	83.282	0.0001	0.791
Group	1208.681	1	1208.681	4.500	0.045	0.170

In Table 2, considering the significance of the mean differences, it can be said that both treatments had a significant effect on body image dissatisfaction. Also, considering the difference between the means, it can be said that the difference between body image dissatisfaction in the cognitive group based on mindfulness and emotion-oriented group was not significant, so these two treatments are not significantly different in terms of the effect on body image dissatisfaction.

**Table 2. LSD post hoc test for body image dissatisfaction**

	Mean Difference (I-J)	Std. Error	Sig.
<b>MBST-control</b>	75.13	3.776	0.001
<b>Control-EFT</b>	42.12	3.776	0.002
<b>MBST -EFT</b>	-1.33	3.776	0.726

## Conclusion

The results showed that in both treatments, the level of dissatisfaction with body image was significantly reduced and there was no significant difference between the two treatments. These results are consistent with the findings of Glissent, et al. (2021), Sala, et al. (2020), and Pistski, et al. (2019). Explaining the results, it can be said that in both treatments, the person's relationship with his thoughts and emotions goes out of the abnormal state and approaches the normal state, and also the person's avoidance decreases, which improves the dissatisfaction with the body image. One of the limitations of the present study is that the participants of this study were limited to the clients of a clinic. It is also suggested that both treatments be used as effective ways to reduce body image dissatisfaction in people with eating disorders.

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