



# The effectiveness of emotion-focused therapy on body image among women with eating disorders during COVID-19 pandemic lockdown

Shadi Noroozi-Alou<sup>1</sup>, Fatemeh Sheykhiani-Kha<sup>2</sup>, Negar Pilban<sup>3</sup>, Farzaneh Asadi-Korom<sup>4</sup>,  
Ladan Hemmati<sup>5</sup>, Sara Mousavi<sup>6</sup>

1 Department of Psychology, Islamic Azad University, Ardabil Branch, Ardabil, Iran

2 Department of Psychology, School of Humanities, University of Guilan, Rasht, Iran

3 Department of Psychology, Islamic Azad University, Shiraz Branch, Shiraz, Iran

4 Department of Psychology, School of Literature and Humanities, Shahid Bahonar University, Kerman, Iran

5 Department of Psychology, School of Educational Sciences and Psychology, Tabriz University, Tabriz, Iran

6 Department of Psychology, Payame Noor University, Tehran, Iran

## Abstract

## Original Article

**BACKGROUND:** It was argued that the coronavirus disease 2019 (COVID-19) lockdown could affect eating disorders (EDs) by triggering EDs behaviors and exacerbating existing symptoms. This study was carried out to examine the effectiveness of emotion-focused therapy (EFT) on body image of women with EDs during the COVID-19 pandemic lockdown.

**METHODS:** This was a quasi-experimental study with pretest-posttest and a control group. The statistical population included all people with physical image disorder from September to October 2021. Thirty-four were selected using a purposeful sampling method. They were randomly assigned to experimental (n = 17) and control (n = 17) groups. The experimental group underwent eight sessions of 120-minute online treatment, one session per week. The control group did not receive any intervention until the end of the experimental group. Measurement tool was Cash Multidimensional Body-Self Relations Questionnaire (MBSRQ). The experimental group received eight sessions of EFT; however, the control group did not receive such training. The research data were examined through multivariate analysis of covariance (MANCOVA) in SPSS software.

**RESULTS:** The intervention yielded more substantial outcomes concerning the variables mentioned in the experimental group, surpassing the impact observed in the control group. Based on the scores from the appearance assessment scales (F = 0.39, P < 0.001), appearance orientation (F = 196.71, P < 0.001), and satisfaction with body area (F = 0.25, P = 0.61), there was a significant difference between the two groups. According to the eta-squared ( $\eta^2$ ), the appearance orientation scale had the most significant impact on the effectiveness of EFT. This means that only 0.87% of the difference in appearance orientation scores after the test could be attributed to the therapy's effectiveness.

**CONCLUSION:** Given the results of the current study and the research background, EFT can be recommended as an efficient interventional method to improve women's body image.

**KEYWORDS:** Emotionally Focused Therapy; Women's Body Image; Eating Disorders; COVID-19 Pandemic

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## Introduction

### Corresponding Author:

Ladan Hemmati; Department of Psychology, School of Educational Sciences and Psychology, Tabriz University, Tabriz, Iran

Email: ladanhemmati22@gmail.com

The coronavirus disease 2019 (COVID-19) pandemic started in Wuhan, China, in December 2019 and spread to more than 200 countries and territories by the end of April 2020, causing more than two million confirmed cases and more than 150000 confirmed deaths.<sup>1</sup>

The pandemic, officially characterized on March 11, 2020, had an immediate and profound effect on societies and brought social and economic life to a standstill. At the same time, it required adaptations of countries' health systems and urged primary care and hospitals to respond to new health needs and requirements challenges by changing organizations and processes more rapidly than ever.<sup>2</sup> Iran, as the second country to declare two deaths due to coronavirus, within 50 days after China on February 18, 2020, is still one of the countries to deal with most cases of COVID-19 infection and the subsequent deaths.<sup>3</sup> COVID-19 has been an unprecedented global crisis. As well as having a significant impact on public health, the pandemic led to measures such as quarantine, travel restrictions, and lockdowns that significantly affected digital screen time, dietary habits, lifestyle measures, and exposure to food-related advertising. At the same time, a reduction in physical activity, an increase in social media consumption, and an increase in fitness tutorials during the lockdown have contributed to body image issues.<sup>4</sup> People had no choice except to stay at home because the government prohibited them from leaving their homes unless necessary, otherwise imposing harsh penalties.<sup>5</sup>

The pandemic and subsequent efforts to reduce its spread have upended daily life, promoting widespread anxiety, stress, and uncertainty.<sup>6</sup> Notably, groups at risk for mental health concerns, such as eating disorders (EDs), may be disproportionately impacted during this crisis.<sup>7</sup>

Birgegard *et al.* demonstrated that three important patterns emerged: 1) higher current ED symptoms were associated with more significant anxiety, worry, and pandemic-related ED symptom increase, 2) patterns were relatively stable across time, although a concerning percentage (23%) who were symptom-free at Wave 1 reported the

re-emergence of symptoms at Wave 2, and 3) only a minority of participants (< 50%) with a current ED were in treatment, and of those in treatment, many reported fewer treatment sessions and decreased quality of care.<sup>8</sup> Moreover, in the study conducted by Chan and Chiu, increased ED symptoms, anxiety, and stress due to the pandemic were reported.<sup>9</sup> Considering the multiple disruptive consequences of the COVID-19 lockdown on individuals with EDs,<sup>10</sup> and especially during the first waves of a pandemic, home confinement could have an analogous adverse impact on weight management and weight gain.<sup>11</sup> Research has shown that individuals with EDs exhibit higher levels of ED symptoms and psychological distress compared to others despite the effect of restrictive measures, particularly during the initial lockdown phase, which may depend on the specific subtype of ED.<sup>12</sup>

Several research studies have shown that the COVID-19 pandemic is linked to an increase in body image issues, suggesting that stressors can lead to mental health issues like distorted body image and negative perceptions of one's body.<sup>13,14</sup> Negative body image is one of the leading causes of EDs such as anorexia and bulimia nervosa, and this new study adds to recent research showing that fear of COVID-19 and the consequences of the restrictions introduced to help combat it could be contributing to several serious mental health issues. The results of Swami *et al.* study showed that in addition to the effect of the virus, this epidemic can also lead to increased body image concerns. In some cases, these issues can have severe consequences, including EDs.<sup>15</sup> Significantly, the increase in epidemic anxiety and stress, as well as efforts to reduce its prevalence, may have adverse effects on other aspects of mental health, such as ED symptoms.<sup>7</sup>

The disease may also be a threat to body image.<sup>14,15</sup> Certainly, some pre-epidemic research – mostly with examples from women –

has shown that perceived stress (i.e., an individual's assessment of environmental stress) and stressful life events are associated with greater body dissatisfaction.<sup>15</sup> Effective body image actions should address individual feelings, including satisfaction/dissatisfaction, physical self-awareness, beliefs, ideas, and appearance-related behaviors.<sup>16</sup> The first path involves the emotional impact of the constraints. Higher social isolation and loneliness, impatience, and reduced physical and social activity due to the quarantine may increase stress and negative emotions, which have been reported to accelerate or maintain EDs. Negative mood is also known to increase food intake and cause ED symptoms such as overeating periods and subsequent cleansing behaviors in people with and without EDs.<sup>17</sup>

In the development and maintenance of ED, difficulty in emotion regulation (DER) is crucial. In a study of 2436 hospitalized female patients with anorexia, bulimia, and binge eating disorder (BED), 97 percent had at least one other detectable mental disorder, 94 percent had mood disorders, and 56 percent had anxiety disorders. Therefore, treating patients with ED needs to take their emotions into account.<sup>18</sup> Because negative emotion is one of the strongest predictors of EDs, the outcomes of psychological treatments could be improved by targeting emotional factors more specifically. Furthermore, innovative treatments for ED that target emotion specifically are emerging, including cognitive-affective therapy and cognitive-behavioral therapy (CBT) that targets emotion. The use of emotion-focused therapy (EFT) is a powerful treatment for EDs and provides a unique method of analyzing the causes of emotional difficulty (under-regulation or over-regulation of affect) in this population.<sup>19</sup>

Both the short-term and long-term consequences of having an ED and COVID-19 simultaneously are unknown, and with time, this is likely to become more apparent. It is,

therefore, vital that we rapidly develop a repository of comments, protocols, case histories, pertinent literature reviews, and empirical research on this topic. Moreover, in light of the above facts, it becomes essential to find out why body dissatisfaction increases during a biological disaster like COVID-19, especially the role of the media and peers, as well as to figure out how to conceptualize interventions to promote positive body image. During the COVID-19 pandemic, knowledge regarding the symptoms of EDs and negative body image has grown in diverse populations;<sup>8,10,15</sup> however, research and study into the symptoms of EDs and body image have not yet been conducted in Iranian women. For this study, we will be interested in exploring the effect of EFT on body image among women with EDs during the COVID-19 pandemic lockdown.

## Methods

This was a quasi-experimental study with pretest-posttest and a control group. The statistical population included all people with physical image disorder in 5<sup>th</sup>, 8<sup>th</sup>, and 13<sup>th</sup> districts of Tehran, Iran, from September to October 2021. By referring to psychological clinics located in the mentioned districts, 40 individuals who have physical appearance issues and meet the criteria outlined in the center's records were approached by clinic officials to explain the study's purpose and invite them to participate in the research if interested. The adequacy of the sample size was confirmed through G\*Power software ( $\alpha = 0.05$  and power of test = 0.90). In the control group, three people incompletely completed the questionnaire; hence, the researchers removed three people from the experimental group to have equal groups. Thus, 34 people were selected by purposive sampling method and, based on the table of random numbers, were randomly divided into experimental ( $n = 17$ ) and control ( $n = 17$ ) groups. Inclusion criteria included: having body image disorders, being female, married,

aged 20-50, having no health problems due to being overweight or obese, and not using a treatment program, any exercise, or diet other than these interventions. Exclusion criteria were: dissatisfaction to continue the study after having attended one session of the training course and not attending more than two sessions of the training course.

After obtaining the necessary permissions from the university and holding a briefing meeting with the officials of psychological clinics in the 5<sup>th</sup>, 8<sup>th</sup>, and 13<sup>th</sup> districts from September to October 2021 in Tehran, the process of conducting the research began. After selecting the sample, a briefing session was held, and the research objectives were

mentioned to the participants. The pre-test step was implemented before therapeutic intervention was carried out in the experimental group, the control group, and the post-test was implemented after the intervention. The intervention sessions were conducted by a psychotherapist who had completed specialized workshops in psychotherapy. The experimental group underwent eight sessions of 120-minute online treatment focused on EFT<sup>20</sup> (Table 1) on Skyroom software one session per week. The control group did not receive any intervention until the end of the experimental group. Then it underwent three online sessions of EFT to comply with the research principles.

**Table 1. The content of emotion-focused treatment (EFT)<sup>20</sup>**

Sessions	The content sessions
First	Drawing a relationship based on empathy and understanding with clients, assessing the expectations and concerns of clients, educating clients about treatment Distribution of brochures about emotion, emotional education, presentation of emotional registration sheet, emotional goal sheet, and emotional strengthening sheet
Second	Introductory discussion on BED, emotion regulation, and emotional regulation difficulty Teaching awareness of positive emotions, teaching awareness of negative emotions Allowing clients to admit their mistakes and identifying sources that prevent this acceptance and taking responsibility, ending the training discussion, taking time to review today's session, providing booklets for better understanding and education about excitement and overeating
Third	Mindfulness technique for better acceptance of emotions Allowing the client to state the consequences of the action (both for the other person and for themselves) and identifying barriers and limitations to self-forgiveness, preparing the client to practice two-chair technique
Fourth	Expressing and revealing conflicting aspects identified in homework Increasing the client's awareness of the consequences of delaying their acceptance and acknowledgment process Performing the two-chair technique to start reconciling the voices of the opposing side of the client
Fifth	Continuing to synchronize conflicting voices within the client Allowing the client to articulate their values and specify how they want to live with that value Performing the empty chair technique, returning to the needs and motivations associated with the shock action and identifying ways in which those needs will be met in the future in line with the client's values
Sixth	Compassion and self-relief, using relaxation techniques Determining the compensatory behaviors of the clients Two-chair conversation and facilitation in expressing and describing feelings, needs, and desires
Seventh	Helping clients recall overeating episodes by focusing on the positive changes since overeating and impulsivity Reliving the experiences of depression and guilt, replacing the remaining negative emotions with forgiving ones
Eighth	Helping the client identify progress and how to maintain it Giving an overview of applying forgiveness and acknowledgment process to other acts of shock

BED: Binge eating disorder

Complying with the ethical principles of the research, the researchers explained to candidates about the research design and assured them that their information would remain confidential. It should be noted that the project was carried out with the support of Tabriz University, Tabriz, Iran, with the ethical code number IR.TBZMED.REC 1400.145. The study was conducted by the ethical guidelines of the Declaration of Helsinki.

In this study, the multivariate analysis of covariance (MANCOVA) was used to determine whether EFT might improve body image for women with EDs during quarantine. To check the normality of data distribution, the researchers administered the Kolmogorov-Smirnov test.

The equality of variances was evaluated by the use of Levene's test, and the equality of covariance was evaluated by adopting Box's M test. The obtained data were statistically analyzed using SPSS software (version 20, IBM Corporation, Armonk, NY, USA) at a significance level 0.05.

*The Multidimensional Body-Self Relations Questionnaire-Appearance Scales (MBSRQ-AS):*<sup>21</sup> MBSRQ is a self-report questionnaire that assesses individuals' attitudes toward different aspects of body image. It is suitable for adults and adolescents (15 years and older) use. The short form of MBSRQ-AS is a 34-item measure

comprising five subscales: appearance evaluation, appearance orientation, overweight preoccupation, self-classified weight, and the Body Areas Satisfaction Scale. The survey asks respondents to rate their level of agreement with statements such as "I like my looks as they are" and "I am physically unattractive", from (1) "definitely disagree" to (5) "definitely agree". When this measure is high, it indicates a greater degree of body dissatisfaction. Internal consistency analysis of the MBSRQ-AS total score and subscales revealed good reliability (Cronbach's alpha coefficient for total scale = 0.83).<sup>22</sup>

## Results

In this study, the mean  $\pm$  standard deviation (SD) of women's age was  $39.7 \pm 6.4$  years. Regarding educational level, most women (43.3%) were university graduates.

Table 2 shows that the average level of appearance evaluation, appearance orientation, and satisfaction with body area increased in the experimental group during the pretest-posttest period compared to the control group. Furthermore, the components of fitness orientation, overweight preoccupation, and self-classified weight in the experimental group in the pre-test and post-test stages all decreased compared with the control group.

**Table 2. Mean  $\pm$  standard deviation (SD) of the research variables in the experimental and control groups**

Variables	Phases	Experimental group (mean $\pm$ SD)	Control group (mean $\pm$ SD)
Appearance evaluation	Pre-test	22.13 $\pm$ 3.50	21.53 $\pm$ 3.09
	Post-test	25.80 $\pm$ 3.19	18.90 $\pm$ 2.49
Appearance orientation	Pre-test	42.90 $\pm$ 3.48	44.23 $\pm$ 4.14
	Post-test	69.33 $\pm$ 7.09	37.66 $\pm$ 2.38
Self-classified weight	Pre-test	9.80 $\pm$ 1.50	8.53 $\pm$ 2.09
	Post-test	10.20 $\pm$ 1.19	7.90 $\pm$ 1.69
Fitness orientation	Pre-test	38.16 $\pm$ 4.09	41.33 $\pm$ 5.04
	Post-test	36.33 $\pm$ 5.64	36.66 $\pm$ 6.38
Overweight preoccupation	Pre-test	6.23 $\pm$ 1.50	5.53 $\pm$ 1.09
	Post-test	5.20 $\pm$ 1.19	6.90 $\pm$ 1.69
Body areas satisfaction	Pre-test	23.23 $\pm$ 6.50	26.53 $\pm$ 5.09
	Post-test	35.20 $\pm$ 4.19	30.90 $\pm$ 5.69

SD: Standard deviation

In addition, the appearance orientation component in the pre-test and post-test stages was 42.90 and 69.33, respectively, with a higher mean score than the remaining components.

Based on the findings in table 3, it can be inferred that the intervention yielded more substantial outcomes concerning the variables mentioned in the experimental group, surpassing the impact observed in the control group. Based on the scores from the appearance assessment ( $F = 0.39$ ,  $P < 0.001$ ), appearance orientation ( $F = 196.71$ ,  $P < 0.001$ ), and satisfaction with body area ( $F = 0.25$ ,  $P = 0.610$ ), there was a significant difference between the two groups. According to the eta-squared ( $\eta^2$ ), EFT has the greatest impact on the appearance orientation scale. This means that only 0.87% of the difference in appearance orientation scores after the test can be attributed to the therapy's effectiveness.

## Discussion

This study aimed to assess the effectiveness of EFT on body image of women with EDs during the COVID-19 pandemic lockdown.

Based on the findings, EFT had the greatest impact on the appearance orientation scale. The studies in line with the results of this study, Vuillier *et al.*,<sup>24</sup> Glisenti *et al.*,<sup>19</sup> Rodgers *et al.*,<sup>11</sup> demonstrated that EFT significantly

improved binge-eating psychopathology and objective episodes of binge-eating. Participants who attended weekly EFT sessions for three months reported significantly fewer binge-eating episodes and binge eating psychopathology than a control group of patients without BED. Additionally, three months after EFT sessions were administered to patients with BED, binge eating scores did not change significantly, indicating that the improvements made during treatment were maintained. Rodgers *et al.* note that those who already suffer from EDs may experience worsening symptoms during a pandemic. An ED path is characterized by disruptions in daily routines and restrictions on activities (such as limited physical activity, grocery shopping, food insecurity, social seclusion, reduced access to treatment, and irregular sleep). Research by Robertson *et al.* found that during the COVID-19 pandemic lockdown, women had difficulty controlling their eating, were more food-focused, and had a more rigid sense of appearance.<sup>25</sup>

The early results indicate that the COVID-19 pandemic and associated anxiety and stress due to the pandemic are aggravating symptoms of EDs and negative body image.<sup>23</sup> In fact, during the lockdown, people spent more time on the Internet and watching television.

**Table 3. Results of multivariate analysis of covariance (MANCOVA) on research variables in experimental and control groups**

Source of change	Variables	SS	df	MS	F	P	$\eta^2$
Experimental group	Appearance evaluation	472.30	1	472.30	39.03	< 0.001	0.570
	Appearance orientation	9026.30	1	9026.30	196.71	< 0.001	0.870
	Self-classified weight	1.59	1	1.59	0.25	0.610	0.009
	Fitness orientation	104.40	1	104.40	3.02	0.090	0.090
	Overweight preoccupation	1.29	1	1.29	0.84	0.360	0.020
	Body areas satisfaction	131.91	1	131.91	4.05	0.040	0.120
Control group	Appearance evaluation	350.80	9	12.09			
	Appearance orientation	1330.60	9	45.88			
	Self-classified weight	179.40	9	6.18			
	Fitness orientation	1001.80	9	34.54			
	Overweight preoccupation	44.22	9	1.52			
	Body areas satisfaction	924.40	9	3.49			

SS: Sum of squares; df: Degree of freedom; MS: Mean squares

Others have a concern that individuals who have EDs may have been adversely affected by more time spent on cooking or participating in exercise classes.<sup>11</sup> Unfortunately, as reported in previous studies, maladaptive and avoidant behaviors, such as EDs, alcohol use, self-medicating, and self-harm, are common coping mechanisms for people suffering from the pandemic.<sup>26</sup> Patients who use EFT can uncover and modify their emotional experiences (emotional schemas), engaging them in perceptions, emotions, cognition, physical experiences, and behavioral forms of individual reactions.<sup>24</sup>

During EFT sessions, the patients' access to adaptive emotions helps them modify maladaptive emotions (like shame, chronic fear, etc.). This process can be enhanced by the patients' access to adaptive emotions in the session.<sup>11</sup> The purpose of inappropriate eating is to release negative emotions, whereas bingeing is to escape self-awareness through excessive eating and purging.<sup>24</sup> Through this therapeutic approach, people can express positive feelings, rebuild emotional strength, change the way they interact, and regulate their emotions.<sup>20</sup> Based on the EFT model, emotions organize experience via emotion schemes derived from emotional experiences. Central mechanisms of change in EFT include identifying primary maladaptive emotions concealed by secondary symptomatic emotions and having arrived at these emotions.<sup>19</sup>

This study, like any other study, has limitations. One limitation of this study was the difficulty in establishing communication among group members at the beginning of the treatment program due to online sessions. The lack of control over intervening variables such as age, economic situation, number of children, lack of partner's body mass index (BMI), lack of participation of husbands of women with body dysmorphia, and lack of follow-up period are among other limitations of this study. Ultimately, loss of therapeutic support,

feeling unworthy of support, and experiencing "isolated connections" online were exacerbating factors for these participants. In Iran, this study is new, and researchers need to conduct this study on other sample groups to verify its results. It is possible to analyze participants' trajectories and maintain benefits over long-term follow-up.

### Conclusion

There is emerging evidence that EFT for ED effectively assists clients in experiencing and processing unpleasant emotions to lessen the reliance on EDs as emotional coping mechanisms during the COVID-19 pandemic lockdown.

### Conflict of Interests

Authors have no conflict of interests.

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