



## The Effectiveness of Emotion-Focused Therapy Group on Difficulties in Emotion Regulation and Health Promoting Lifestyle in Obese Women

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### Abstract

**Background:** Obesity is one of the most common problems between women, which leads to many chronic diseases such as heart disease and cancer. Various factors, including emotional problems and lifestyle, play a special role in the obesity of women. The purpose of the present study was to investigate the effectiveness of emotion-focused therapy group (EFT-G) on the difficulties in emotion regulation and the health-promoting lifestyle of obese women referred to nutrition clinics in Mashhad in 2018.

**Methods:** In this study, twenty-four obese volunteer women were selected and assigned to two experimental ( $n=12$ ) and control ( $n=12$ ) groups. One meeting was held to explain the aims of the research and intervention. The experimental group received 90-minute weekly sessions for 2.5 months (10 sessions), while the control group did not receive any intervention. Before and after the training phase, all of the participants completed the demographic questionnaire. Finally, they had also completed the difficulties in emotion regulation scale and the health-promoting lifestyle profile. Data were analyzed by using SPSS 22 software.

**Results:** The outcomes of data analysis by using one-way and multivariate covariance analysis indicated that the EFT-G significantly reduced the overall score of difficulties of emotion regulation in obese women ( $Pvalue \leq 0.001$ ). These outcomes also represented that the health promotion lifestyle of mentioned women had significant improvement ( $Pvalue \leq 0.001$ ).

**Conclusions:** Generally, the results showed that the EFT-G leads to a decrease in the scores of difficulties in emotion regulation and an increase in the scores of health promotion lifestyle is relevant to obese women. Furthermore, this study illustrated that EFT-G can improve the difficulties in emotion regulation and the health promotion lifestyle of obese women.

**Keywords:** Emotion-focused therapy group, Obesity, Difficulties in emotion regulation, Health promotion lifestyle.

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on the rise in low and middle-income countries, particularly in urban settings.

At the social level is now believed that obesity is the result of eating too many unhealthy foods and not exercising. However, at the individual level, there are many underlying factors, which some of them have not been identified and may be significantly associated with weight gain and weight loss barriers.<sup>1</sup> Researches have shown the role of emotional factors in obesity, and it seems that negative emotions are one of the factors that play an important role in threatening public health by increasing the risk of obesity.<sup>2</sup> People with high appetite have more difficulties in emotion regulation than those with low appetite.<sup>3</sup> Emotion regulation studies have also emphasized that eating is a strategy or emotional response to emotional distress or an injury.<sup>4</sup> Emotional networks have been identified in the brain, which can trigger specific nutritional behaviors, lead to the obesity. Factors such as stress by activating a neural response network also increase emotional activity and provide functionality that can lead to obesity.<sup>5</sup> Theoretical models consider the difficulty in emotion regulation as a meta-diagnostic model of eating disorders<sup>6</sup> and show the association between emotion-related structures and lack of control in adult eating behaviors.<sup>7</sup> Emotional regulation is a skill that can predict normal changes in body mass index (BMI). It is notable that children with poorer emotion regulation are more at risk for obesity.<sup>8</sup> In regard, researches have shown the importance of emotion regulation in obesity. Khodapanah et al.<sup>9</sup> showed that cognitive emotion regulation plays an important role in predicting eating behaviors in overweight and obese individuals. Another set of analyzes generally represented that difficulty in emotion regulation is important in both neurotic overeating and eating pathology.<sup>10</sup>

Nevertheless, scientific findings express other contributing factors in obesity. One of the most important of these is the health promotion lifestyle. This term has a variety of definitions. According to Walker, a health-promoting lifestyle is "a pattern of perceptions and actions initiated by one's self that helps to maintain and enhance one's level of health and self-healing", which occurs personal persuasion and self-healing in addition to sustaining and enhancing one's level of health and well-being satisfaction. Modifying the lifestyle requires the change of behaviors that make up a large part of one's daily habits.<sup>11</sup> Researches have shown that there is a negative and meaningful relationship between eating behaviors and quality of life.<sup>12</sup> Obesity and overweight are strongly associated with sedentary lifestyle and inactivity in adults.<sup>13</sup> Other researches have also shown the role of lifestyle behaviors such as physical activity and nutrition in obesity.<sup>14</sup> Although systematic

## Introduction

Obesity is defined as unusual or excessive fat accumulation that presents a risk to health. A crude population measure of obesity is the body mass index (BMI), a person's weight (in kilograms) divided by the square of his or her height (in meters). A person with a BMI of 30 or more is generally considered obese. Obesity is one of the major risk factors for several chronic diseases such as diabetes, cardiovascular diseases, and cancers. Once considered a problem only in high-income countries, overweight and obesity are now dramatically

reviews, which help us decide how to treat obesity, are limited, Cochran's study has shown that lifestyle programs can be effective in weight loss.<sup>15</sup> Therefore, the weight loss programs can have the greatest impact, when people have a healthy lifestyle. Otherwise, studies have shown that many weight loss programs fail in the long run, and half of those who lose weight receive treatment again within a year.<sup>16</sup> Previous research on weight control has shown that moods and emotions play an important role in preventing weight loss and inducing recurrence.<sup>17</sup> One of the methods, which is nowadays considered in the treatment of obesity, is emotion-focused therapy (EFT). This approach is one of the effective interventions for people with eating disorders (both in terms of weight loss and later on the positive effects on their psychological problems). The main hypothesis of this treatment is that emotions are intrinsically consistent and contain important information.<sup>18</sup> These emotions are often learned in situations that invoke our inner emotional response and may be mistaken and incompatible. The automated emotional responses are learned when they are organized in the form of an emotional plan or program (as much as the internalized biological responses are integrated, with which they are integrated).<sup>19</sup> Repeated activation of maladaptive emotion schemas leads to impaired in adaptive functioning and emotion regulation, examples of which include a deep fear of abandonment or shame of incompetence.<sup>20</sup> After changing the incompatible emotional patterns, the psychological symptoms decrease and disappear because they no longer have to deal with emotions.<sup>18</sup> The EFT-G empowers the obese person to increase their emotional awareness, modify maladaptive emotions such as anxiety, depression, and hopelessness, and control semi-finished situations in the past and increase their psychological well-being. Interview analysis with people, who underwent EFT-G, revealed improvements in their performance in many areas, including significant reductions in the difficulties in emotion regulation.<sup>21</sup> In researches such as Wnuk, Greenberg and Dolhanty,<sup>18</sup> EFT-G indicated a significant decrease in the periods of emotional overeating, mood improvement, and improvement in emotion regulation and self-esteem for women with anorexia. Some of researchers such as Mahmoudvandi Baher et al.<sup>22</sup> showed also that the hope increased among divorced women EFT-G and the negative self-efficacy reduced. Researches done by Brennan, Emmerling and Whelton<sup>23</sup> also showed that the EFT-G improves self-criticism in patients with eating disorders.

Although the mentioned studies have investigated many components for the prevention and treatment of obesity and have relatively provided good results, almost none of the studies directly examined the effectiveness of EFT-G on the difficulty in emotion regulation and the health-promoting lifestyle of obese women. Therefore, this study has attempted to investigate two major variables in women's obesity, i.e. health-promoting lifestyle and difficulties in emotion regulation, which can be used in the treatment of obesity. In other words, the main question of this study is that whether the EFT-G is effective in the health-promoting lifestyle and the difficulties in emotion regulation of obese women?

## Materials and Methods

This research is done through convenience sampling and has a quasi-experimental design using a pre-test, post-test, and

control. The statistical population of the study consisted of obese women referred to nutrition clinics located in Mashhad between 2018 to 2019, who were diagnosed with obesity based on body mass index (BMI). Inclusion criteria included informed consent, body mass index above 30, female, age between 20 and 59, and the minimum education level, and exclusion criteria included suffering from another concomitant psychiatric disorder such as binge eating disorder, nervous appetite, personality disorders, psychotic disorders, substance abuse, severe family problems, which all participants participated in this study after the researcher's explanations.

This article is taken from the author's Ph.D. thesis with the code of ethics: IR.IAU.MSHD.REC.1397.064. The approved ethical issues of the declaration of the world medical association of Helsinki<sup>24</sup> such as informed consent of the subjects, the confidentiality of the information obtained from them, and voluntary withdrawal from the study were also considered in this study.<sup>23</sup> Obese women were also selected for this research. This sample size is an appropriate size because the sample size for adults and children is usually considered between 8 to 20 according to the rules of group therapy.<sup>25</sup> In previous similar studies, the sample size in each group has been also considered equal to 12,<sup>18</sup> which is another confirmation for the sample size used in this study.

All of the participants were randomly divided into intervention (n=12) and control (n=12) groups. The experimental group received 90-minute weekly sessions for 3 months (10 sessions), while the control group did not receive any intervention. Finally, the control group also participated in a new intervention after completing the research. All of the women in this study also responded to all items of the difficulties in emotion regulation scale (DERS; Gratz & Roemer, 2004) and the health-promoting lifestyle profile (HPLP II; Walker & Hill-Polerecky, 1997) before and after the group therapy. Data were collected by using personal information forms (demographic questionnaire), which included information such as age, marital status, education degree, height, weight.

The DERS designed by Gratz & Roemer in 2004, which consists of 36 questions, which describes emotion regulation patterns in six subscales: Non acceptance of emotional responses (NONACCEPT), Difficulty engaging in goal-directed behavior (GOALS), impulse control difficulties (IMPULSE), lack of emotional awareness (AWARENESS), limited access to emotion regulation strategies (STRATEGIES), and Lack of emotional clarity (CLARITY), are measured in the Likert scale (always=5, often=4, sometimes=3, rarely=2, never=1). At this scale, items 1, 2, 6, 7, 8, 10, 17, 20, 24, and 34 are inverse, the higher the score, the greater the difficulty in emotion regulation. Gratz and Roemer (2004) reported reliability of this questionnaire based on the retest, 88%, and its internal reliability based on Cronbach's alpha for the whole scale, 93%, and for subscales above 80%.<sup>26</sup> In research done by Mazloom, Yaghoubi and Mohammadkhani,<sup>27</sup> the reliability of the Persian version was also investigated and Cronbach's alpha coefficient was 85% for the whole scale and 62 to 75% for the subscales. To determine the validity of the questionnaire, the scores of the questionnaire

were correlated with that of the Zuckerman emotionality questionnaire, which their correlation was also positive and significant. This indicates that the DERQ is valid (Pvalue=0.043,  $r=0.26$ ,  $n=0.59$ ).<sup>3</sup>

The health-promoting lifestyle profile II, which was designed by Walker et al. consists of 52 items, which measures six dimensions such as nutrition, exercise, health responsibility, stress management, interpersonal support and self-healing in a Likert scale (always=4, never=1). The internal consistency Cronbach's alpha for the original English version of HPLP-II was satisfactory, with 0.94 for the total scale of HPLP-II, and from 0.79 to 0.87 for its six subscales.<sup>28</sup> In the research of Mohammadi Zeidi, Pakpour Hajiagha and Mohammadi Zeidi<sup>29</sup> for investigating the reliability and the validity of the Persian version, Cronbach's alpha coefficient was 82% for the whole scale and 64% to 91% for the subscales. Analysis of covariance was used for data analysis by using SPSS 22 software.

The present therapy plan (table 1) was initially evaluated on five obese women based on valid psychologists, nutritionist,

and scientific articles. In addition, it was evaluated by three psychologists and one nutritionist, which they finally validated this plan.

## Results

In this study, 24 participants (women with  $BMI \geq 30$ ) were allocated into two control and experimental groups, which each group consisted of 12 women. The mean and standard deviation of the age for these women in the experimental group was  $40.4 \pm 9.2$  and in the control group was  $40.2 \pm 8.7$ . In the experimental (and control) groups, 16.7% (and 8.3%) of women hold below the diploma, 41.7% (and 66.7%) diploma, 8.3% (and 0.0%) associate's degree and 33.3 (and 25%) BS/BA degree. Marital status in the experimental (and control) groups were 16.7% (16.7%) single, 66.7% (75%) married, and 16.7% (8.3%) divorced. Table 2 presents the descriptive characteristics of scores of participants in the two experimental and control groups for the pre-test and post-test stages according to the difficulties in emotion regulation scale and health promotion lifestyle profile for these women.

**Table1. Emotion-focused therapy group sessions derived from Greenberg's model (2015)**

sessions	Title	content of the sessions / Steps
<b>Stage One : Transplant Therapy and Emotional Awareness</b>		
1	Transplantation and awareness and therapeutic alliance	The first session was held for creating the therapeutic alliance, introducing the volunteers, and explaining about the holding purpose and group formation. A description of the EFT was stated. In the following, the rules of the group such as confidentiality, respecting each other's rights, responsiveness was expressed.
2	The goals of treatment	The second session was included orientation of therapy and psychological introduction and education about obesity and emotion, which was consisted of a description of working principles on emotion and agreement with subjects about treatment goals.
3	Getting to know and identification the emotions	Review the previous session. Improve the awareness of internal experience, acceptance, and tolerance. Allow for the emotional experience. Focus on identification and naming emotions by words for helping the problem solution. We during this session also helped to learn more about their physical reactions against emotions without inhibiting and cutting them.
4	Discover markers and emotion scheme recognition	Review the previous session. Pay to different indicators at different levels of the processing process of clients. The therapist worked with a diverse set of indicators at various levels. The initial indicators include sub-indicators such as the audio quality of clients and the depth of experience and degree of arousal. During this session, we tried to highlight the frequency and role of clients in creating their experiences. We also emphasized the personal role and responsibility in creating the experiences and try to define emotion scheme.
<b>Step Two : Motivation and Exploration</b>		
5	Maintain an emotional experience in order to access the emotional information	Review the previous session. Arouse and discovery Initial emotions through the Gestalt technique such as two-chairs dialogue by putting their conflicting parts against each other and by talking to them. Then, the experience of those feelings for the emotional experience and connection with the emotion is used. In the process, the therapist by using the emotion regulation delivers clients to a degree of arousal to experience its easier And recognize that this is the primary or secondary excitement.
6	Revitalize the emotional experience in order to access information	Pay to the emotional experiences during last week and their experience from the previous session. Use motivational ways for reviving the experience of the subject such as Imaginal Confrontation. Pay to the signs and symptoms of the process at present for creating the best state that can strengthen and stimulate the key experiences and emotions. The client will be able to access information that they contain experience when the emotional experience of the client is stimulated.
7	Removing interruptions and overcoming breaks	Review the previous session. Discovery and overcome the interruptions and obstacles of emotion's expression, avoidance processes, and eliminating breaks through two- chairs activities on the personal break. Subjects do the breaking processes as the dramatic to experience themselves as the perpetrators of breaking processes.
8	Access to maladaptive emotion scheme	Review the previous session. Achieve initial emotions or central maladaptive emotional plans through arousing the stopped emotions. Work on the sub-markers and the Binding responsibilities, and achieve to obtained needs. The purpose of this session is the change of feelings, the achievement of hidden primary emotions, the interlinked automatic assessment, and finally the achievement of needs of clients.
<b>Step Three: Convert</b>		
9	Emotion processing and emotional scheme change	Review the previous session. Create new responses and emotional regulation for changing the form of the central maladaptive plan through improving contemplation to give meaning to experience, to give accrediting to new feelings, and the Protection of created sense relative to the person himself.
10	Consolidate adaptive emotions and end group therapy	Prepare the group to end meetings. Organize emotion after a change in the emotional process. Provide activities that can strengthen the changes. Encourage expression instead of overeating. Clients were participated by the therapist in experiential education to the intellectual strength of changes in person viewpoint.

**Table 2. Mean and standard deviation of the research variables in the experimental and control groups in the pre-test and post-test**

Variable		Mean (and standard deviation)			
		Experiment Group		Control Group	
		Pre-test	Post-test	Pre-test	Post-test
Difficulties in emotion regulation	Nonaccept	16.41(4.9)	14.75(3.4)	14.4(5.2)	14.7(3.6)
	Goals	14.5(3.7)	13.9(2.9)	15.5(3.8)	15.08(3.6)
	Impulse	16(3.9)	11.9(2.8)	16.6(4.1)	16.4(4.4)
	Awareness	15.5(3.2)	12.7(1.9)	16.5(3.2)	16.4(4.1)
	Strategies	21.5(4.2)	19.2(3.8)	19.5(3.4)	20(3.08)
	Clarity	12.0(4.2)	11(3.8)	11.9(4.01)	11.8(3.8)
	Total score	96.0(15.4)	83.5(11.9)	94.5(9.8)	94.5(10.7)
Health promotion lifestyle	Nutrition	27.75(4.3)	28.7(4.1)	25.5(4.4)	25.91(4.2)
	Physical activity	36.75(6.9)	39.9(5.01)	32.4(6.5)	33.9(5.6)
	Health responsibility	20.9(3.5)	21.7(2.5)	19.5(4.3)	19.5(4.4)
	Stress Management	12.2(2.4)	14.03(1.8)	12.5(1.78)	12.5(1.5)
	Interpersonal relations	15.0(7.36)	16.2(5.9)	16.6(4.4)	16.8(3.9)
	Spiritual growth	18.5(2.5)	20.75(3.01)	18.6(2.7)	18.1(2.2)
	Total score	131.2(20.3)	141.4(16.02)	125.4(16.08)	126.8(13.9)

**Table 3. Assessment of defaults using multivariate analysis of covariance**

Variable	Variable dimensions	Levene's test		The same slope of the regression line	
		F	p	F	p
Difficulties in emotion regulation	Nonaccept	0.69	0.4	0.17	0.6
	Goals	0.12	0.3	3.8	0.06
	Impulse	0.6	0.4	4.03	0.56
	Awareness	7.4	0.12	0.43	0.5
	Strategies	0.7	0.4	1.03	0.3
	Clarity	2.5	0.12	0.62	0.44
	Total score	0.69	0.4	3.4	0.7
Health promotion lifestyle	Nutrition	4.6	0.05	0.03	0.86
	Physical activity	0.4	0.5	1.5	0.2
	Health responsibility	6.8	0.3	0.68	0.4
	Stress Management	2.2	0.15	0.11	0.74
	Interpersonal relations	2.4	0.13	1.67	0.2
	Spiritual growth	1.11	0.3	0.009	0.92
	Total score	0.15	0.69	1.2	0.28

**Table 4. Results of covariance analysis of the impact of eft-g on difficulties in emotion regulation and health promotion lifestyle in experimental and control groups**

Coherence variables	The dependent variables	Df	MS	F	p	η <sup>2</sup>
Difficulties in emotion regulation	Nonaccept	1	0.39	0.05	0.8	0.002
	Goals	1	10.95	1.29	0.26	0.06
	Impulse	1	131.09	11.14	0.003	0.34
	Awareness	1	81.99	7.6	0.01	0.26
	Strategies	1	5.7	0.7	0.41	0.03
	Clarity	1	6.5	0.58	0.45	0.02
	Total score	1	863.9	29.5	0.001	0.58
Health Promotion Lifestyle	Nutrition	1	23.07	5.21	0.03	0.19
	Physical activity	1	13.93	0.99	0.3	0.04
	Health responsibility	1	118.66	16.7	0.001	0.44
	Stress Management	1	9.35	4.46	0.04	0.17
	Interpersonal relations	1	20.14	1.6	0.21	0.07
	Spiritual growth	1	19.21	2.46	0.13	0.1
	Total score	1	57.09	62.79	<0.001	0.75

To investigate the validity of the hypothesis (e.g. normal distribution of scores, equality of variances, homogeneity of covariance, matrixes), Kolmogorov-Smirnov results showed the normal distribution of difficulty in emotion regulation and lifestyle Health promotion scores (Pvalue>0.05). Levene's test results also showed the equality of variance (Pvalue>0.05). In other words, there was the equality of variance for the total score of emotion regulation difficulties (F=0.69 and

Pvalue>0.05) and the total score of lifestyle health promotion (F=0.15 and Pvalue>0.05). Also, the results of the box test confirmed the equality of the covariance matrix (Pvalue>0.05). Therefore, according to the results of Kolmogorov-Smirnov, Levene and box tests, the condition of covariance analysis is appropriate. Investigating the effectiveness of EFT-G on Difficulties in Emotion regulation and health promotion lifestyle of obese women by using the covariance analysis



presented in table 4 showed that the mean score of difficulties in emotion regulation for the intervention group was a significant decrease compared to the control group. Its effect was equal to ( $F=29.52$  and  $Pvalue<0.001$ ) and the Eta coefficient of this effect also indicated that 58% of the changes in difficulties in emotion regulation of obese women were related to group therapy. This depicts an acceptable effect size. About the effectiveness of EFT-G on the health promotion lifestyle of obese women, it illustrated that the changes related to the post-test health promotion lifestyle score were significant. The Eta coefficient of this effect also indicated that the emotion-focused therapy group explains 75% of changes in lifestyle health promotion in obese women. This indicated an acceptable effect size.

## Discussion

The purpose of this study was to investigate the effectiveness of emotion-focused therapy group (EFT-G) on the difficulties in emotion regulation and health-promoting lifestyle in obese women. The descriptive results in table 2 generally indicated that the EFT-G significantly reduced the scores of difficulties in emotion regulation and increased the scores of lifestyle health-promoting of obese women in the experimental group compared to that of the control group. According to reviews we did, no research in Iran and abroad has been conducted on the efficacy of EFT-G on the difficulties in emotion regulation of obese women or their lifestyle health-promoting. Therefore, these findings have been considered as one of the most recent achievements in the field of obesity. These results have been compared with other studies in terms of similar variables. Accordingly, researchers have identified emotion regulation as one of the causes of obesity, and they have believed that emotions play an important role in endangering the public health by increasing the probability of obesity.<sup>1</sup> The results of other research also indicate that emotional regulation is associated with obesity and that the EFT-G is effective in the emotion regulation of people with eating disorders. For example, Wnuk, Greenberg and Dolhanty<sup>18</sup> in a study showed that the EFT-G improves mood, emotion regulation, and self-efficacy in women with anorexia nervosa. Lafrance Robinson, McCague and Whissell<sup>21</sup> in another study showed that the EFT-G reduces the difficulties in emotion regulation for women and men with depression and anxiety.

The EFT-G helps individuals to change their problematic emotions by using several techniques, such as emotion processing, which include awareness of healthy underlying emotions and transforming maladaptive emotions.<sup>30</sup> In EFT-G, clients are encouraged to question their distressing thoughts and to treat self-criticism in the context of EFT-G.<sup>25</sup> The EFT-G empowers the obese person to increase their emotional awareness, modify maladaptive emotions (such as anxiety, depression, and hopelessness), control their semi-past status and increase their psychological adjustment.<sup>31,32</sup>

Statistical analysis of data relevant to the health promotion lifestyle scale averagely showed that the post-test in the experimental group had a significant increase compared to that of the control group. These findings were consistent with other

research conducted at Iran and abroad. For example, Oswaldy et al.<sup>33</sup> in a study showed that therapeutic interventions by focusing on emotion regulation skills reduce the eating behaviors in obese or overweight women. Dolhanti,<sup>30</sup> who investigated the effectiveness of EFT-G on people with eating disorders, indicated that the EFT-G significantly helps to the people's emotion regulation and leads that people for managing their distress try more to change undesired eating patterns. Micanti et al.<sup>4</sup> also showed that eating behaviors are related to the balance of different characteristics of the mental dimensions involved in the emotion regulation system. These behaviors can also provide remarkable clinical information. Therefore, they are part of the diagnosing criteria of obesity and treatment plan. In this regard, people, who have successfully undergone treatment, later returned to their eating disorder, which they usually attribute their relapse to their inability to cope with negative emotions in most cases.<sup>30</sup> In the study of Kamper et al.<sup>34</sup> have been done a therapeutic technique with a focus on the emotionally focused therapy (EFT), dietary counseling (DC) and combination therapy (CT) in patients with an eating disorder (BED) and obesity for determining the effect of psychopathology and quality of life, The results of this study indicated the benefit of EFT in treating patients with BED and obesity. These results also emphasized the usefulness of techniques focused on cognitive-emotional processing to alter the psychopathology of eating disorder and obesity-related well-being.

Overall, this treatment helps obese women can identify their emotions. In the following, this treatment also causes that the mentioned women can adjust their emotions during this new experience and transforms their maladaptive emotions, which is a factor for removing obstacles located on the health promotion lifestyle.

This study, like all studies with regard to the conditions and possibilities of scientific research, contains limitations, which researchers can consider and eliminate them in future research. One of the limitations of this study was to exclude men from the community. Hence, it is suggested that further research focuses on men in order to determine their effectiveness. Another limitation of this study, which is important in researches done on the questionnaires, is that has been used to collect information from self-report methods. Although we tried that subject to provide accurate answers in this study, it is good that this issue has been considered when is interpreted the results. About the level of literacy of subjects, although the minimum level of education has been considered the end of elementary school, some of the subjects (two subjects) had difficulties reading and understanding questions, that we had readied and received questions and responses as orally. Another limitation of this study was the ignoring of the follow-up stage. Therefore, we suggest that this issue be considered in future research. Since, there is a high prevalence of obesity in our community, especially among women, it is recommended to use the EFT-G for preventing and treating obesity problems and other psychological consequences of obesity. In this study, ten sessions of group therapy were also performed. It seems that the number of sessions can be increased and its effects on the effectiveness of the research components are re-examined. Therefore, it is recommended that this treatment be used as an

effective method in health centers, hospitals, nutrition clinics, counseling centers and other psychiatric services for the emotion regulation of different individuals, especially women with disabilities, nutrition, obesity, and overweight because this method can be used to reduce the physical and psychological damage resulted from obesity in the women.

The outcome of this research showed that EFT-G could reduce the difficulties of emotion regulation and emotional problems in obese women. These outcomes also released that this therapy could improve the health promotion lifestyle of aforesaid women. Despite research on the EFT-G, which some of which have been addressed, none of the mentioned studies so far have been conducted in the form of EFT-G on obese women and related problems. According to this need for community and its growing process and also its widespread acceptance between those concerned, it seems that it is necessary that the outcome of this treatment be used in group terms with obese women. In fact, emotion regulation causes that obese women regulate emotions, which triggers eating behaviors through it. Hence, emotion regulation also causes these women to focus more on their maladaptive emotions. This approach can create better and more consistent emotions in obese women and improve their lifestyle. Therefore, EFT-G can be one of the effective treatments for improving emotion regulation and the health-promoting lifestyle of obese women.

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## Conflict of Interest

The authors declare that they have no conflict of interest.

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