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Comparison of the Effectiveness of Compassion-Focused and Rational-Emotional Behavior Therapy on Weight Self-Efficacy and Self-Criticism

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Abstract

This study aimed to compare the effectiveness of compassion-focused intervention and rational-emotional behavior therapy among women on weight self-efficacy and self-criticism on an Overweight Diet. This study was a quasi-experimental design using a pre-test and post-test with a control group. The statistical population consisted of all women on an overweight diet that was referred to therapy clinics in Tehran from December 2019 to April 2020. Through a convenience sampling method, 45 overweight females were selected based on inclusion criteria and randomly assigned to a control and two experimental groups. Both experimental groups 1 (n=15), and 2 (n=15) were treated with compassion-focused therapy and rational-emotional behavior therapy for ten and eight weekly 90-minute sessions, but the control group (n=15) did not receive any treatment. At the start of the study, all participants completed using the Weight Efficacy Lifestyle Questionnaire (WEL) and the Levels of Self-criticism (LOSC) Scale. Multivariate analysis of covariance (MANCOVA) and One-Way Analysis of Covariance (ANCOVA) was applied by the SPSS-25 program ($P < 0.05$). The comparison of means and standard deviations in the pre-test and post-test phases of compassion-focused intervention to weight self-efficacy and self-criticism (21.60±4.77; 56.60±6.82) and (61.93±4.99; 27.40±5.60) have been shown respectively. Furthermore, there was a significant difference between post-test scores of compassion-focused intervention (CFT) and rational-emotional behavioral therapy (REBT) groups in terms of self-efficacy and self-criticism. The people in the REBT intervention group had better self-efficacy and self-criticism scores ($p = 0.001$). The findings showed that compassion-focused intervention (CFT) and rational-emotional behavioral therapy interventions could help with overweightness. Therefore, both intervention programs are recommended for improving weight self-efficacy and decreasing self-criticism among women on an overweight diet.

Keywords: Compassion, Rational, weight, self-efficacy, self-criticism.

Introduction

Obesity and its associated health implications are significant determinants of healthcare expenditures. Obesity-related drug expenses were predicted to reach $146 billion per year in 2008, accounting for around 10% of total healthcare expenditures. There is an urgent need to halt or reduce the spread of this epidemic (Faghri et al., 2016). In addition to genetic factors, lifestyle practices may play a significant role in the development of obesity, such as awareness, attitude, and dietary habits (Mousavi et al., 2018). Obesity leads to chronic diseases such as diabetes mellitus, coronary heart disease, and asthma, leading to increased national morbidity, disability, and burden costs (De Lorenzo et al., 2019). Self-efficacy is a behavior-specific term that plays a significant role in the process of behavior improvement, or trust in one's ability in a situation to achieve a task. Perceptions of one's ability to overcome barriers in a specific activity often predict future attempts to solve behavioral problems (Liou & Kulik, 2020). Self-efficacy is an integrative framework that in several treatment settings is effective. Self-efficacy in terms of weight loss refers to the confidence of a person in his or her ability to adhere to dietary guidelines. It has been recognized that ineffective weight loss habits, weight loss, preservation, and self-efficacy play an important role. People with high standards of effectiveness will participate in major behaviors associated with weight loss and continue to face barriers to weight loss. Changes in self-efficacy in eating, on the other hand, seem to be an even better indicator during care than at baseline (Ghannadiasl & Mahdavi, 2018).

Evidence now indicates that sustained weight loss involves behavioral self-regulation techniques, action planning, self-efficacy growth, autonomy, and motivation. Several psychological and emotional factors may, however, weaken the self-management of food and behavior. By placing motivations and emotions at odds with both physiological impulses to protect against energy shortages and environmental signals to overeat, attempting to lose weight can cause stress (Duarte, Stubbs, et al., 2017). Self-criticism is one of the most significant factors that can hinder successful weight loss. Depression, body image dissatisfaction, binge eating, and obesity are associated with embarrassment and self-criticism. Shame-based self-criticism can weaken eating behavioral self-regulation (Duarte, Matos, et al., 2017). Duarte et al. (2019) found that compassion, self-reassurance, and declines in shame and self-criticism mediate the effect of the intervention on reductions in binge eating symptoms. Bad self-evaluation, binge eating symptoms, vulnerability to hunger, and shameful eating were good predictors of dropouts (Duarte et al., 2021). Duarte et al. (2017) explored that the negative effect was correlated with guilt, self-criticism, and social comparison. Embarrassment, self-criticism, and feelings of inferiority can play a major role in the self-regulation of eating behavior in overweight individuals seeking to regulate their weight (Duarte, Matos, et al., 2017).

Avoiding weight recovery includes therapeutic techniques in which self-regulation skills, action planning, self-efficacy growth, autonomy, and motivation are acquired in relapse coping and weight loss maintenance (WLM) (Duarte et al., 2021). Several initiatives have tried to move beyond weight self-monitoring by integrating other components of the mechanism of self-regulation (Bennett et al., 2018). The majority of these approaches have contributed to significant weight loss. However, these strategies have arguably not

optimally harnessed the potential of self-efficacy, as they either fail to prompt the preparation of actions, do not integrate action planning as an iterative aspect, or determine the actions to be planned. In addition, some of the strategies that direct participants are implemented face-to-face by iterative action planning, which is resource-intensive and difficult to execute on a wide scale. Researchers have created a new weight loss intervention to minimize self-criticism to take full advantage of the self-efficacy method as a self-help tool (Frie et al., 2020).

Recent research suggests that helping people develop self-reassurance and self-compassionate abilities in a variety of physical and mental health issues, including problems with food and body image, may help protect against the continuing effects of shame and self-criticism (Kirby, 2017; Steindl et al., 2017). Compassion-focused therapy (CFT) was designed to help individuals with high levels of guilt and self-criticism. A motivational approach follows the CFT model to build the drive to resolve and relieve or avoid this suffering (Gilbert, 2009). Via a series of compassionate mind training activities, CFT offers psycho-educational approaches to motivation and emotion control processes and the promotion of a conscious and compassionate orientation towards oneself and others. There is proof of CFT's efficacy in enhancing aspects of mental well-being and relieving binge 16 eating symptomology (Bennett et al., 2018; Duarte et al., 2021; Frie et al., 2020; Kirby, 2017; Steindl et al., 2017). Compassion-based approaches may help redirect maladaptive eating habits (e.g., binge eating) and weight-related self-evaluation in the sense of weight management towards improved coping, minimizing loss of eating control, and avoiding relapse (Duarte, Matos, et al., 2017).

Rational Emotive Behavior Therapy (REBT) is another approach, implying that the critical aspect of therapy is to help individuals shift their irrational beliefs to rational beliefs. Demandingness is an unrealistic belief in which a person believes that their environment must or should completely adhere to their desires. This is not only irrational but completely baseless and unhelpful (Turner, 2016). It is the first intervention to enable users to plan weight loss actions regularly, to the best of our understanding. The purpose of this paper was to compare the effectiveness of compassion-focused intervention (CFT) with rationale-emotional behavior therapy (REBT) when it comes to weight self-efficacy and self-criticism. The following hypotheses have been formulated in the direction of the research purposes:

Hypothesis 1: There is a significant difference between a compassion-focused intervention (CFT) and rational-emotional behavior therapy on weight self-efficacy.

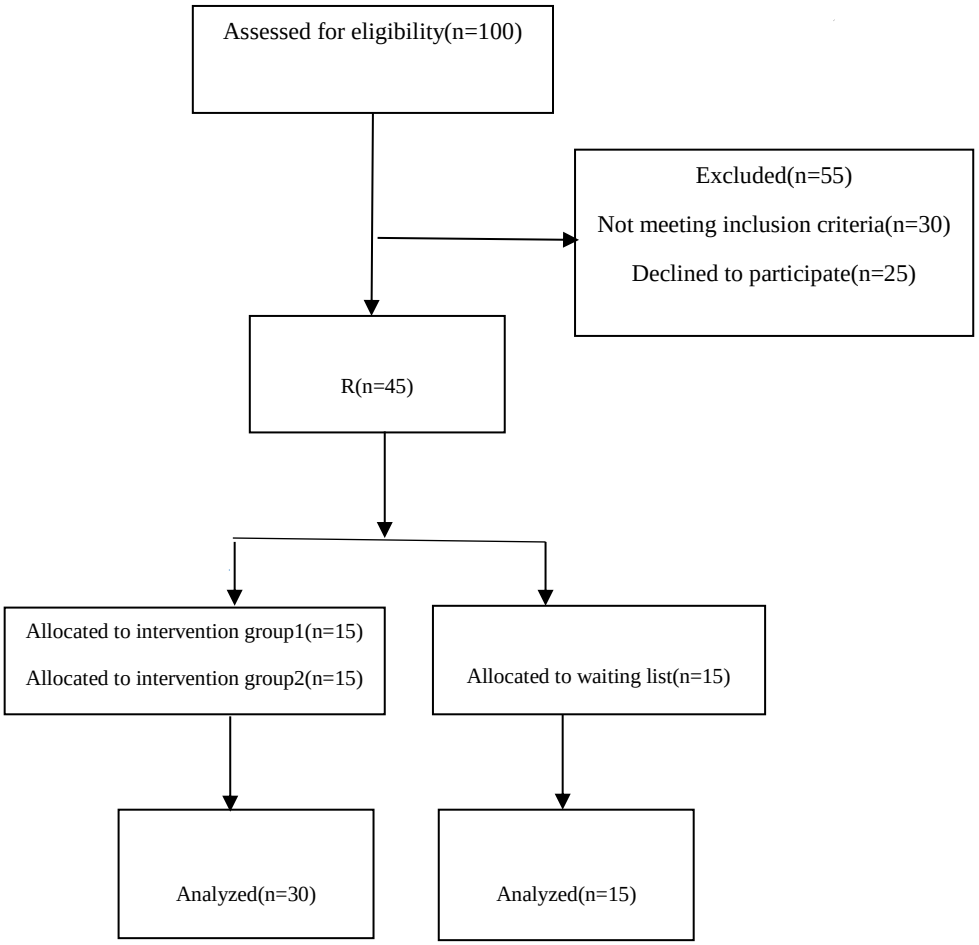
Hypothesis 2: There is a significant difference between a compassion-focused intervention (CFT) and rational-emotional behavior therapy on self-criticism.

Methods

This study was a quasi-experimental design using a pre-test and post-test with a control group. The statistical population consisted of all women on an overweight diet that was referred to therapy clinics in Tehran from December 2019 to April 2020. Through a convenient sampling method, we selected 45 overweight females (from 100 women

narrowed down according to the inclusion criteria and randomly assigned them to control and experimental groups. Inclusion criteria were BMI 25-29.5 and complete voluntary consent to engage in a project. Exclusion criteria include serious illness, psychotic symptoms, and pregnancy. Furthermore, the estimated sample size for each group was 15 individuals, whereas according to similar studies conducted in Iran, the sample size was estimated at between 15 and 20 individuals per group (15). Initially, 100 people declared their willingness to participate in the study; over three weeks, they were interviewed by telephone and given explanations about the research. At this stage, 45 individuals were approved. The Research Ethics Committee of Ahvaz Islamic Azad University approved all research processes and methods. Also, written informed consent forms were obtained from all participants.

Fig. 1: The patient flow is reported



The Body Mass Index (BMI) was once calculated by the use of weight (kg)/height2 (m2). A BMI of 25.0 kg/m2 or greater is regarded as overweight, and a healthful BMI degree from 18.5 to 24.9 kg/m2. BMI applies to most adults aged 18 to 65 years (Vickers, 2017). This index is calculated by dividing a person's weight in kilograms by their height squared in meters, and it determines whether they are slim, overweight, or obese. A nutritionist calculated the participants' body mass index for this analysis. With a Seka sensitivity scale of 100 grams, the participants' weight was measured and reported with the least amount of coverage and without shoes.

The Weight Effectiveness Lifestyle Questionnaire (WEL): This questionnaire was used to test the beliefs of individuals regarding their ability to regulate their weight by avoiding eating in different circumstances, such as food availability, negative feelings, physical discomfort, positive eating habits, and social pressure to eat (Clark et al., 1991). Using a 10-point scale ranging from 0 (not confident) to 9, the participants were asked to rate their confidence to resist the temptation to eat (very confident). The scores of participants on each subscale were determined within each subscale by combining scores. Based on a pilot study, Cronbach's alpha of 0.83 was used to determine internal consistency. Confirmatory factor analysis showed that the model had acceptable goodness of fit indices (Ahmadipour & Ebadi, 2019). A correlation coefficient of 0.73 was calculated for the Persian version of this scale to determine its validity.

The Levels of Self-criticism (LOSC) Scale: The scale was developed by Lewis (Lewis, 2008). Self-criticism at two levels is calculated by this scale: internalized self-criticism and relative self-criticism. As a negative view of oneself against others, comparative self-criticism is characterized. Self-critical people also appear to base their self-esteem on expectations of how others feel about them and may perceive other people as superior, critical, and/or aggressive. The comparison of interpersonal animosity is also one of the traits of self-criticism (Thompson & Zuroff, 2004). Internalized self-criticism toward one's internal norms is defined as a negative view of oneself. There are 22 elements in the LOSC Scale which are scored on a 7-point scale ranging from 0 to 6. Items 6, 8, 11, 12, 16, 20, and 21 have reverse ratings. The items on the internalized subscale for self-criticism are 1, 3, 5, 7, 9, 11, 13, 15, 17, and 19, and the items on the subscale for comparative self-criticism are 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 21, and 22. On a 7-point scale ranging from 1 (strongly disagree) to 7, items on the LOSC scale are measured (strongly agree). On this scale, higher scores mean a higher degree of self-criticism encountered by a person. A rating between 22 and 44 shows low levels of self-criticism and a rating between 45 and 66 shows moderate levels of self-criticism in the individual. Finally, a ranking above 66 suggests elevated levels of self-criticism. In Iran, Saadati Shamir et al. reported good internal consistency for this scale (alpha = 0.69 from Cronbach) (SAADATI et al., 2019). In this research, the validity of the Persian version of the scale was calculated using Cronbach's alpha with a value of 0.82.

Statistical analysis

In addition to descriptive statistics, including mean, standard deviation, the chi-square test, Multivariate analysis of covariance (MANCOVA), One-Way Analysis of Covariance (ANCOVA), and Normality tests were employed to interpret the results, the SPSS-25 program was used for all the analyses. It should be noted that the level of significance was $P < 0.05$.

Table 1: Content and Treatment Sessions

compassionate intervention training sessions	***Rational-emotional behavior therapy intervention, Ellis (REBT) sessions***
Session 1: Overview of the session: Introduction of the therapist. Introducing members of the party and getting to know each other.	Session 1: building communication and building trust, a general understanding of the logic of Ellis' approach
Second Session: Assignment and review of the prevention session; examining the way people treat themselves (critical or compassionate style), defining self-criticism and its causes and consequences, introducing three emotion regulation systems and how they interact, and defining compassion. The meeting focused on self-education and introduced its features.	s
Session 3: Overview of the session: The meaning of compassion and a review of the previous session? CFT treatment features and skills and how it affects one's moods. Explaining the presence of the mind and its training; talking about difficult situations and people's reactions; performing mindfulness-breathing exercises at the end of the session.	Session 3: Awareness of how beliefs are formed
Session 4: Reviewing the assignment and the previous session, doing soothing breathing exercises (to relieve anxiety), identifying and creating a safe place, introducing mental imagery and its training, and performing a compelling illustration exercise.	Session 4: recognizing logical errors and misconceptions
Session 5: Overview of the session: Reviewing the assignment and the previous session, developing self-compassion, and introducing and applying concepts: wisdom, ability, warmth, and responsibility in creating compassion; completing letter-writing assignments.	Session 5: Teaching how to recognize and control frustrating, pessimistic, inefficient, and debilitating thoughts
Session 6: Overview of the session: Reviewing the assignment and the previous session, writing Part II of the Letter of Intent.	Session 6: Changing and eliminating misconceptions and replacing beliefs and correct cognition according to the ABCD model
Session 7: Overview of the session: Reviewing the assignment and the previous session, focusing on self-compassion, and identifying its different dimensions (attention, thinking, feeling, and behavior); discussing compassionate thinking and teaching the influence of thoughts on anger, anxiety, and emotions; practicing raisin eating with the presence of mind.	Session 7: Recognize unpleasant emotions and change them
Session 8: Overview of the session: Reviewing the assignment and the previous session, recalling compassion skills, and explaining the role of compassion in controlling emotions; teaching how to think; reviewing the training of compassionate and critical thinking.	Session 8: Work on dysfunctional behaviors to change them according to the ABCD pattern
Session 9: Overview of the session: Reviewing the assignment and the previous session, recalling compassionate skills, and performing breathing relief and session techniques.	Session 9: Teaching problem-solving methods

Session 10: Reviewing the assignment and the previous session, summarizing the previous sessions, and discussing the quality of the sessions; asking the members to select and perform one of the exercises that they found most useful from the previous sessions.	Session 10: Provide programs to sustain the achievements

Results

Most people in the experimental group with rational-emotional behavior therapy were between 29 and 36 years old. Also in the group with compassion-focused intervention, the highest age group was between 29 and 36 years, and finally, in the control group, 1 person was between 20 and 28 years and ten people were between 29 and 36 years, and the remaining four people were between 37 and 45 years old. Also, the level of education in the control group had the highest bachelor's degree compared to the rational-emotional behavior therapy and the compassion-focused intervention groups.

Table 2: Description of variables at baseline in the pre-test, post-test

variable	groups	Statistical index	Mean ±SD	kurtosis	skewness
Weight Self-Efficacy	**Pre-test**	Control	21.47±5. 30	0.119	-0.886
		Compassion-focused intervention	21.60±4.77	0.182	-0.712
		Rational-emotional behavior therapy	23.53±7.75	0.868	0.872
	Post-test	Control	22.93±6.94	-0.332	-1.100
		Compassion-focused intervention	56.60±6.82	0.563	-0.865
		Rational-emotional behavior therapy	46.07±5.049	0.573	-0.150
Self-criticism	**Pre-test**	Control	66.13±6.91	-0.927	1.36
		Compassion-focused intervention	61.93±4.99	-0.515	-0.211
		Rational-emotional behavior therapy	63.80±10.37	0.728	1.66
	Post-test	Control	63.40±6.64	0.338	1.122
		Compassion-focused intervention	27.40±5.60	0.621	0.298
		Rational-emotional behavior therapy	32.40±6.311	0.266	0.656

In the pre-test and post-test phases of the compassion-focused intervention, the mean and standard deviation for self-efficacy were respectively 21.60±4.77 and 56.60±6.82. The results of and weight self-efficacy in the pre-test and post-test of the rational-emotional behavior therapy phase stages were 23.53±7.75 and 46.07±5.049, respectively. There was no sign of weight self-efficacy in the pre-test and post-test of the control group (Table 2). According to the findings, the mean and standard deviation of self-criticism in the pre-test and post-test of Compassion-focused intervention stages were 61.93±4.99 and 27.40±5.60, respectively. The results of the and self-criticism in the pre-test, post-test of

the Rational-emotional behavior therapy phase stages were 63.80±10.37 and 32.40±6.311, respectively. There was no significant self-criticism in the pre-test and post-test of the control group (Table 2).

To determine the normalization of the distribution of variable scores, the Shapiro–Wilk test was used, which was confirmed due to the lack of significance obtained from the normal distribution of scores (P>0.05). The results of Levene for homogeneity test of variances of dependent variables in the groups showed that the variance of the weight self-efficacy (F=0.488, P=0.617) and self-criticism (F= 0.204, P=0.816) variables (P>0.05) in the group are homogenized. In this study, the box test for evaluating the equality of covariance matrix variables in the experimental and control groups also showed that the covariance matrix dependent variables in the groups were equal (F=0.528, BOX M=6.254, P=0.872).

Table 3: Multivariate analysis of covariance (MANCOVA)

Model	Test	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Group interaction and pre-test	**Pillai's Trace**	1.106	11.131	8.000	72.000	.000	.5530
	Wilks' Lambda	.023	48.48	8.000	70.000	.000	.8470
	Hotelling's Trace	36.257	154.09	8.000	68.000	.000	.948
	Roy's Largest Root	36.104	324.93	4.000	36.00	.000	.973

According to Table 3, all four relevant multivariate statistics (Pillai's effect, Wilkes lambda, Hotelling effect, and Roy's Largest Root test) were found to be significant. Therefore, it is concluded that there was a difference between the pre-test and post-test (P< 0.001).

Model	Variable	Sum of square	DF	Mean square	F	P
Group interaction and pre-test	**Weight Self-Efficacy**	9.573	2	19.147	94.807	0.001
	Self-criticism	9.736	2	19.473	114.289	0.001

Table4: One-Way Analysis of Covariance (ANCOVA)

As can be seen in Table 4, the result of the univariate test is significant for each of the dependent variables. Therefore, it was concluded that the independent variable affects each of the dependent variables in the post-test stage separately.

Table 5: LSD test to compare CFT and REBT intervention in terms of weight self-efficacy

			Mean difference	Standard error	P
Weight Self-efficacy	**Control**	**REBT**	-1.683	0.116	0.001
		CFT	-1.157	0.116	0.001
	REBT				

		CFT	0.527	0.116	0.001
	CFT	**Control**	1.157	0.116	0.001
		REBT	-0.527	0.116	0.001
	Control	**REBT**	1.636	0.103	0.001
		CFT	1.409	0.103	0.001
	REBT	**Control**	-1.636	0.103	0.001
Self-criticism		**CFT**	-0.227	0.103	0.033
	CFT	**Control**	-1.409	0.103	0.001
		REBT	0.227	0.103	0.033

Considering the significance level of Table 5, there is a significant difference between post-test scores of compassion-focused intervention (CFT) and rational-emotional behavioral therapy (Ellis) (REBT) groups in terms of weight self-efficacy. Thus, people in the REBT intervention group have better self-efficacy scores. Considering table 6 the significance level of the above table (0.033), it can be seen that there was a significant difference between the scores of post-test groups of compassion-focused intervention (CFT) and rational-emotional behavior therapy (Ellis) (REBT) focused on self-criticism. Thus, people in the REBT intervention group have better self-criticism scores (Table 5).

Discussion

The purpose of the study has been to consider the impact of the effectiveness of compassion-focused intervention (CFT) and rational-emotional conduct therapy intervention, Ellis (REBT) on weight self-efficacy and self-criticism amongst women on an overweight diet. This study provided necessary information about self-efficacy and its changes for the duration of weight loss intervention. Recent research by Mousavi et al(Mousavi et al., 2018), De Lorenzo et al(De Lorenzo et al., 2019), Liou & Kulik (Liou & Kulik, 2020)supports our findings, indicating that assisting individuals in developing self-assurance and self-compassionate abilities can help to mitigate the persistent effects of shame and self-criticism in a variety of physical and mental health conditions (Kirby, 2017). Based on the preceding results, used to be not found a study with greater weight loss, low self-criticism, and higher complete self-efficacy with these two methods of intervention. CFT is based on evolutionary and relational analysis of traditional social motivating processes (such as living in families, etc.) ((Mousavi et al., 2018),(De Lorenzo et al., 2019; Duarte et al., 2021; Duarte, Matos, et al., 2017; Ghannadiasl & Mahdavi, 2018; Liou & Kulik, 2020),4,7,8). Creating hierarchies and ranks, sharing with partners, and caring for relatives) as well as several adaptive emotional frameworks (such as responding to attacks, finding assistance, and feeling satisfied or secure). As a result, CFT emphasizes the importance of people's ability to (mindfully) connect, accept, and channel

association impulses and emotions. towards themselves and others, as well as fostering inner kindness as a method of organizing the human brain in a pro-social and emotionally balanced way (Gilbert, 2009). Moreover, Ellis (Ellis, 1994) developed rational emotive behavior therapy (REBT) to mediate the irrational beliefs that cause emotional and behavioral problems. The cognitive-behavioral perspective holds that individuals who place excessive value on body shape and weight could develop binge eating behavior (Allen et al., 2012). In this example, short-term REBT-based intervention with problem-oriented and directive qualities might be utilized since it converts irrational beliefs into logical beliefs, hence changing negative emotions/behavior (Yang & Han, 2020).

Our results showed that rational-emotional behavior therapy intervention, Ellis (REBT) on weight self-efficacy and self-criticism among women on an overweight diet was more effective than compassion-focused intervention (CFT). The previous research confirms the self-efficacy assessment of obese people who are seeking weight loss care (Vickers, 2017). Histories of regular dieting could undermine the confidence of women in the effective management of their food (Ghannadiasl & Mahdavi, 2018). The findings suggest that in weight reduction therapies, compassion-focused intervention (CFT) can assist participants in better regulating binge-eating symptomatology and self-evaluation (Duarte et al., 2021). In addition, feelings of inadequacy and unfavorable social associations, partly mediated by weight-related adverse effects, were associated with greater disinhibition and vulnerability to hunger. The level of weight loss during program participation before the survey was negatively correlated with these factors, while self-reassurance and positive social comparisons were positively associated with the extent of weight loss before the survey (Duarte, Matos, et al., 2017). However, individuals focused on previous conduct just half the time in a qualitative study analyzing normal self-regulation after self-weighing, and the preparation of weight loss actions was unusual (Frie et al., 2020). Compassion, self-assurance, and decreases in guilt and self-criticism (i.e., the compassion intervention's basic targets) all had a major impact on impact on the control of eating. Furthermore, a significant possible advantage of the sympathy intervention was that it was linked to a 10% reduction in service dropout. This may be critical for people who deal with lapses and relapses, particularly because dropping out of evidence-based behavior modification programs is linked to weight gain (Duarte, Matos, et al., 2017; Duarte, Stubbs, et al., 2017).

In explaining these findings, intervention in rational-emotional behavior therapy aims to cultivate a self-reassuring and supportive attitude towards one's imperfections and weaknesses (e.g. physical appearance) against the omnipresent detrimental effects of guilt, negative social comparisons, and disappointment with body image. To align emotion control to support self-regulation, self-critical versus self-reassuring reactions to difficult circumstances during weight management attempts may be necessary (Duarte et al., 2021). In addition, behavioral interventions of the third generation aim to help people improve their relationship to challenging feelings, emotions, or body experiences, instead of attempting to change or regulate them, while participating in adaptive behaviors

towards successful and sustained behavioral change and well-being. In particular, through the development of self-reassuring and compassion skills, CFT seeks to help individuals deal with negative self-assessments, guilt, and self-criticism. To enhance well-being, CFT promotes the production of motivation for compassion and dedication to adaptive behaviors. The process of stigmatization of body shapes means that the way individuals feel can be influenced by physical appearance. Weight stigma may be associated with inferiority, guilt, and self-criticism feelings (Bennett et al., 2018; Duarte, Stubbs, et al., 2017). The 13th General Programme of Work (GPW13), which will direct WHO's work from 2019 to 2023, was endorsed by the World Health Assembly in May 2018. In GPW13, WHO prioritizes reducing salt/sodium consumption and eliminating industrially processed trans-fats from the food chain to meet the goals of maintaining safe lives and promoting well-being for all people of all ages. to have assistance. WHO has created a roadmap for countries (the REPLACE action package) to assist the Member States in taking the appropriate steps to eradicate industrially manufactured trans-fats (Organization, 2019)

Related to other studies, the current study has certain drawbacks. The lack of follow-up was one of the study's most significant flaws. for a variety of causes, including sample loss and participants' unwillingness to cooperate during the follow-up process. Furthermore, the sample size was limited, reducing the findings' generalizability. It is suggested that researchers adopt this new treatment for various disorders and use it in future studies. additional variables as intermediate variables in programs with greater sample sizes. In addition, we explored gender disparities, which could and should be addressed in future research. This could help people appreciate the importance of Compassion-Focused Therapy in their lives. This may help to clarify the importance of compassion-focused Therapy in overweight people.

Conclusion

Based on the results, the rational-emotional behavior therapy intervention positively affected weight self-efficacy and self-criticism than intervention (CFT) among women on an overweight diet. The findings of this also study showed that rational-emotional behavior therapy intervention was significantly more effective in increasing the frequency of post-test self-efficacy. In addition, rational-emotional behavior therapy intervention was able to improve the self-criticism rates. These changes might reduce the likelihood of further mental health issues. Therefore, this intervention program is recommended for preventing self-criticism and increasing weight self-efficacy among women on an overweight diet.

Disclosure Statement

In this research, all of the authors actively participated in the same manner. This research is part of a thesis written by Paricher Sadr Nafisi in the Psychology Department of Ahvaz

Islamic Azad University. It should be mentioned that all authors contributed equally to this work. The Research Ethics Committee of Ahvaz Islamic Azad University approved all research processes. Written informed consent forms were obtained from all participants. Funding: This study received no grant from any university. Conflicts of interest: None to declare.

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