Women. Health. Bull. 2026; 13(1)

Published online 2026 January.

Original Article

The Effectiveness of Emotion-Focused Therapy on Body Image Avoidance and Self-Regulation in Women with Obesity

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Received: June 23, 2025; **Revised:** July 19, 2025; **Accepted:** September 11, 2025

Abstract

Background: Obesity constitutes a major global health concern, often accompanied by substantial psychological burdens, including adverse body image and diminished self-regulation. The present study investigated the potential of Emotion-Focused Therapy (EFT) to alleviate body image avoidance and improve self-regulation in women with obesity.

Methods: This was a quasi-experimental study with pre-test post-test design, two-month follow-up, and a control group. The target population included women with obesity attending nutrition centers and psychological clinics in Ahvaz, Iran, from 2023 to 2024. Forty eligible participants were selected through convenience sampling method and randomly assigned to either an experimental group (n=20) receiving EFT or a control group (n=20). The experimental group underwent 10 weekly 90-minute EFT sessions. For data collection, Body Image Avoidance Questionnaire (BIAQ) and Self-Regulation Questionnaire (SRQ) were used. Data were analyzed using repeated measures ANOVA.

Results: The experimental group (mean age: 37.5±5.8 years; mean BMI: 36.2±3.1 kg/m²) and control group (mean age: 36.9±6.1 years; mean BMI: 35.8±3.5 kg/m²) were comparable in demographic characteristics. Repeated measures ANOVA revealed significant within-group reductions in body image avoidance for the experimental group from pre-test (mean: 67.00±12.66) to post-test (mean: 44.07±14.59, P=0.001, η^2=0.45, 95% CI [18.32, 27.54]) and sustained at follow-up (mean: 44.07±8.88, P=0.001, 95% CI [18.32, 27.54]), with no significant changes in the control group (P=0.847). Self-regulation scores in the experimental group significantly improved from pre-test (mean: 13.80±3.84) to post-test (mean: 17.13±2.67, P=0.001, η^2=0.29, 95% CI [-4.76, -1.90]) and further at follow-up (mean: 17.80±2.24, P=0.001, 95% CI [-5.43, -2.57]), while the control group showed no significant change (P=0.437). Between-group comparisons indicated significant differences at post-test and follow-up for body image avoidance (P=0.001, η^2=0.37, 95% CI [12.61, 30.85]) and self-regulation (P=0.001, η^2=0.34, 95% CI [-5.93, -2.47]).

Conclusions: These findings suggested that EFT holds promise as a targeted psychological intervention for addressing body image avoidance and self-regulation difficulties in women with obesity.

Keywords: Obesity, Emotion-focused Therapy, Body Image, Self-control, Women's Health

How to Cite: Ansari Asl M, Dasht Bozorgi Z, Asgari P, Safarzadeh S. The Effectiveness of Emotion-Focused Therapy on Body Image Avoidance and Self-Regulation in Women with Obesity. Women. Health. Bull. 2026;13(1):55-64. doi: 10.30476/whb.2026.107563.1359.

1. Introduction

Obesity is a rapidly escalating global health concern, with far-reaching consequences beyond physical well-being. It is increasingly associated with significant psychological distress (1). Among diverse populations, women living with obesity often encounter unique challenges that can profoundly impact their quality of life. These challenges encompass a combination of societal pressures, weight-related stigma, and internal difficulties in emotional and behavioral regulation (2). Such experiences can lead to deep dissatisfaction with their bodies, feelings of shame, and social isolation. Furthermore, an inability to manage emotions and stress responses, which frequently intensifies in unfavorable social contexts, can fuel disordered eating patterns and reduced physical activity, consequently leading to a vicious cycle of weight gain and psychological distress (3). Therefore, a comprehensive understanding of the psychological dimensions of obesity in this demographic is of paramount importance for promoting overall health and well-being in women with obesity.

Body image avoidance encompasses cognitive and behavioral strategies used to evade negative self-evaluation concerning one's physical appearance (4). Such behaviors include mirror avoidance, wearing loose-fitting attire, or social withdrawal to prevent perceived judgment. For women with obesity, this often serves as a maladaptive coping mechanism, failing to alleviate distress and perpetuating cycles of shame. Consequently, it can impede engagement

in vital activities like exercise or seeking medical care, negatively affecting both physical and mental well-being (5). Studies consistently link elevated body image avoidance to increased psychological distress and diminished quality of life (6, 7).

Self-regulation involves the ability to control thoughts, emotions, and actions to attain goals (8). Among individuals with obesity, it is vital for upholding nutritious eating patterns, consistent exercise, and effective stress coping. A deficit in self-regulation can lead to emotional overeating, non-adherence to dietary plans, and difficulty coping with daily challenges, all of which contribute to weight gain and psychological impairments (9). Women with obesity may struggle to regulate their responses towards healthy behavioral patterns when faced with stress or negative emotions. This weakness in self-regulation not only affects lifestyle choices but can also impact interpersonal relationships and their overall functioning in life (10). Strengthening self-regulation abilities can empower individuals to gain greater control over their lives and achieve their health-oriented goals.

Emotion-Focused Therapy (EFT) is an experiential psychotherapy approach that emphasizes the centrality of emotions in psychological change (11). This approach helps clients identify, experience, process, and regulate their emotions. The primary goal of EFT is not to suppress emotions, but rather to understand and constructively use them as a source of information and guidance (12). EFT is predicated on the belief that many maladaptive thought and behavioral patterns stem from unexperienced or improperly processed emotions. In EFT, the therapist assists clients in accessing the "emotional core" of their experiences and expressing and processing them in a safe and supportive manner (13). The therapeutic relationship is central in this approach, focusing on empathy, acceptance, and genuineness.

Research on EFT highlights its effectiveness for diverse psychological issues. Multiple investigations have validated its benefits in addressing depression, anxiety, trauma, and eating disorders (14, 15). For example, findings indicated that EFT enhances emotion regulation, curbs rumination, and fosters self-compassion (16). Regarding eating disorders and obesity, evidence remains limited relative to other areas, yet preliminary outcomes are encouraging. Such work posits that EFT enables clients to tackle challenging feelings about food and body, resulting in decreased high-risk actions and better body image (17, 18). By targeting the emotional underpinnings of dysfunctional behaviors, EFT emerges as a promising approach for obesity-related therapy.

Given the escalating prevalence of obesity and its substantial psychological ramifications, particularly in women, as well as the complexities associated with body image avoidance and impaired self-regulation, the need for effective and comprehensive therapeutic interventions is more pressing than ever (4). Previous studies indicated that a sole focus on weight loss without addressing psychological dimensions often does not lead to sustainable outcomes (19, 20). Therefore, this study addressed a gap in the literature by evaluating the impact of emotion-focused therapy on women with obesity. It specifically assessed whether EFT significantly diminishes body image avoidance and bolsters self-regulation. By furnishing additional evidence of role of EFT in advancing mental health for obese women, the results of this study could guide the development of more integrated and efficacious interventions moving forward.

2. Methods

2.1. Design

This study employed a quasi-experimental design with a two-month follow-up period to examine the effectiveness of EFT.

2.2. Selection and Description of Participants

The study population consisted of women with obesity seeking weight management services at nutrition centers and psychological clinics in Ahvaz, Iran, during the 2023-2024 period. A G*Power analysis, assuming a 0.05 significance level, a statistical power of 0.80 (probability of type II error, β=0.20), and based on prior research estimating post-test self-regulation mean values of 11.93±3.85 (control) and 17.13±2.67 (experimental), determined the sample size (21). A convenience sample of 40 women was selected based on specific inclusion criteria: a Body Mass Index (BMI) of ≥30 kg/m2, 18 to 50 years of age, expressed willingness to participate, and no current diagnosis of severe psychiatric disorders (e.g., psychosis, bipolar disorder) or other eating

disorders (e.g., anorexia nervosa, bulimia nervosa). Participants were excluded from the study if they presented with any significant medical conditions contraindicating psychological intervention, had a history of substance abuse, or were concurrently engaged in other psychological therapies. After initial screening and informed consent, participants were randomly assigned to an experimental group (n=20) for EFT or a control group (n=20) under routine care alone. Randomization employed a table of random numbers, where unique participant IDs were paired with generated values to ensure equitable group distribution (Figure 1). Routine care for both groups encompassed ongoing weight management guidance, such as dietary advice and physical activity promotion, from the nutrition centers and clinics. All participants were advised of their right to withdraw at any time without consequences.

2.3. Data Collection and Measurements

Body Image Avoidance Questionnaire (BIAQ): This 19-item self-report tool measures the frequency of avoidance behaviors toward physical appearance (22). Respondents score items using a 5-point Likert scale (1="never" to 5="always"), yielding higher totals for increased avoidance. The Persian adaptation, validated by Mohammadpour and colleagues (23), exhibited strong psychometrics: CVI=0.92, CVR=0.85, internal consistency (Cronbach's α=0.90), and test-retest reliability (23). In the present study, the Persian version of BIAQ showed solid internal consistency (Cronbach's α=0.89).

Self-Regulation of Eating Behaviour Questionnaire (SREBQ): Developed by Kliemann and co-workers (24), SREBQ is a 5-item self-report measure assessing perceived ability to self-regulate eating behaviors, including control over food intake and adherence to healthy eating habits. Items are rated on a 5-point Likert scale (1="never" to 5="always"), with higher scores indicating stronger self-regulation. The Persian version of SREBQ, validated by Ghabashi (25), showed high internal consistency (Cronbach's α=0.89), with a CVI of 0.90 and CVR of 0.82. In this study, the Persian SREBQ demonstrated acceptable internal consistency (Cronbach's α=0.86).

2.4. Procedure

Data collection was systematically conducted across three distinct phases: a pre-intervention phase, a post-intervention phase immediately following the conclusion of the intervention, and a two-month follow-up phase designed to assess

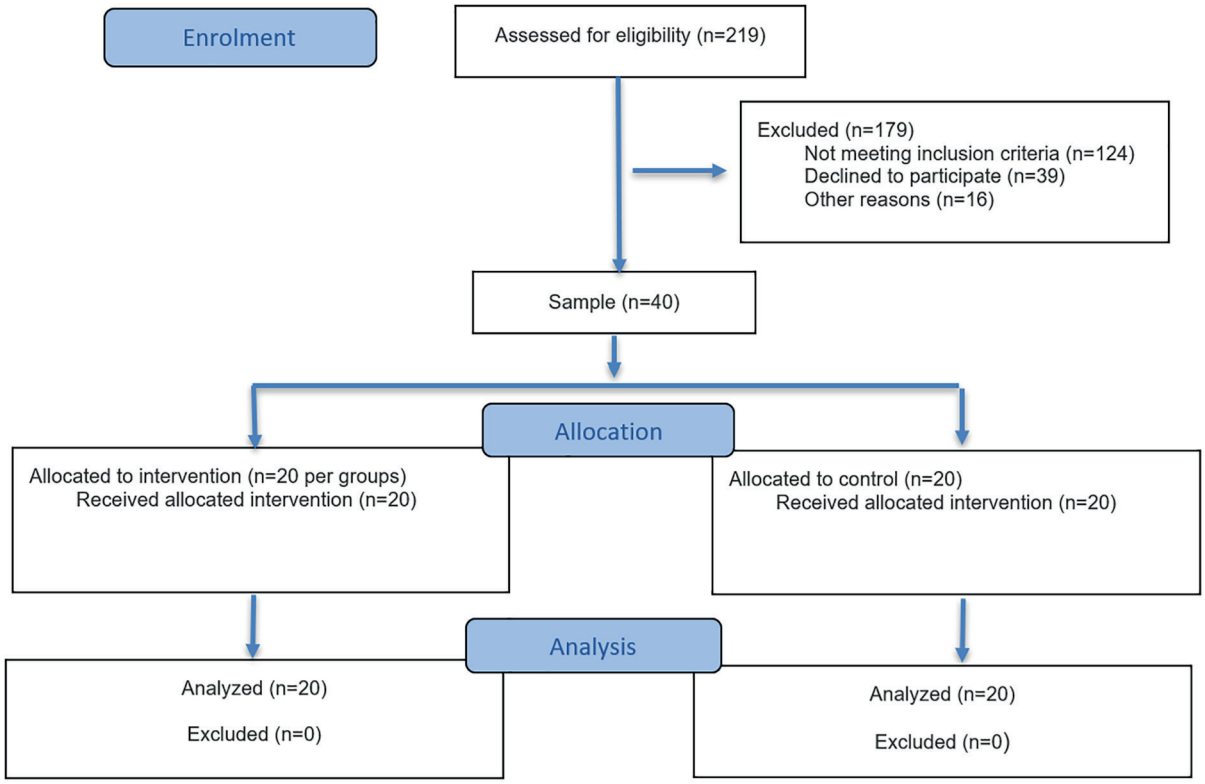

Figure 1: The figure shows the CONSORT flow diagram of the study.

the long-term effects of the intervention. The study participants in both the experimental and control groups completed self-report questionnaires at all three time points. Following the pre- intervention phase, the experimental group commenced a structured EFT program. Throughout the study, all participants, including the control group, continued to receive their standard medical care for obesity, which typically included: ongoing consultations with physicians and nutritionists, focusing on dietary recommendations, physical activity guidelines, and general health monitoring related to weight management. This ensured that the control group still received appropriate general support. To minimize participant attrition, researchers maintained regular contact with individuals in both groups through scheduled phone calls and occasional check-in emails, offering reminders for questionnaire completion and providing opportunities to address any questions or concerns that arose. Data collection was carried out in a private and confidential setting to encourage honest and candid responses.

2.5. Intervention Program

The experimental group participated in a structured EFT program comprising 10 weekly 90-minute sessions. These sessions took place in a private, designated therapy room at the psychological Mehr and Mah Clinic in Ahvaz, Iran, providing a consistent and confidential environment for all participants. To accommodate participants' schedules, sessions were typically held in late afternoons, between 4:00 PM and 5:30 PM, on a consistent day each week. A qualified and experienced psychotherapist, specifically trained in EFT, delivered the intervention, ensuring strict adherence to a standardized treatment manual for fidelity to the model. The core components of the EFT intervention aimed to enhance participants' emotional awareness, facilitate emotional expression, transform maladaptive emotional schemas, and foster adaptive emotional processing. A detailed summary of the intervention sessions is presented in Table 1.

2.6. Data Analysis

Statistical analyses were performed in SPSS version 26.0. Mean and standard deviation values were computed for demographic and outcome variables (BIAQ and SREBQ) across pre-test, post-test, and two-month follow-up. Baseline equivalence between experimental and control groups was verified using independent t-tests on demographics and outcomes. Repeated measures ANOVA assessed the impact of EFT by examining time-based within- and between-group changes. ANCOVA evaluated post-test and follow-up differences, covarying for pretest scores to account for initial disparities. Assumptions were tested via Shapiro-Wilk (normality), Levene's (variance homogeneity), and Mauchly's (sphericity) tests, applying Greenhouse-Geisser corrections for sphericity violations. Significant interactions were probed with Bonferroni post-hoc tests. A significance threshold of $P<0.05$ was adopted.

Table 1: A summary of the Emotion-Focused Therapy (EFT) sessions

Session	Content
1	Introducing EFT, building therapeutic alliance, psychoeducation on emotions, identifying presenting problems related to body image and self-regulation
2	Focusing on primary emotions related to body shame and self-criticism, beginning to access underlying painful feelings
3	Working with self-critical parts of the self (two-chair work), promoting self-compassion and acceptance
4	Exploring unmet needs and core painful emotions (e.g., sadness, fear, loneliness) related to past experiences and their impact on present behaviors
5	Processing feelings of helplessness and frustration associated with weight management challenges and perceived lack of control
6	Engaging with "unfinished business" related to significant others through empty-chair dialogue, exploring how relational patterns impact emotion regulation and body image
7	Addressing maladaptive coping strategies (e.g., emotional eating, avoidance) and their underlying emotional functions
8	Consolidating emotional processing skills, rehearsing and generalizing adaptive emotional regulation strategies from in-session practice to real-life contexts
9	Integrating new emotional experiences and self-perceptions, developing a more compassionate and accepting relationship with the body
10	Planning relapse prevention, reinforcing learned skills, envisioning a future with enhanced self-regulation and positive body image

EFT: Emotion-Focused Therapy

3. Results

The two groups were comparable in terms of demographic characteristics, with the experimental group averaging 37.5±5.8 years and the control group averaging 36.9±6.1 years. Body Mass Index (BMI) values were also comparable (experimental: 36.2±3.1 kg/m^2; control: 35.8±3.5 kg/m^2), confirming obesity status. Table 2 summarizes mean and standard deviation values for body image avoidance and self-regulation at pre-test, post-test, and two-month follow-up. The experimental group exhibited marked declines in body image avoidance, from 67.00±12.66 at pre-test to 44.07±14.59 at post-test (P=0.001, η^2=0.45, 95% CI [18.32, 27.54]), maintained at follow-up (44.07±8.88, P=0.001, η^2=0.45, 95% CI [18.32, 27.54]). Self-regulation scores significantly increased from 13.80±3.84 pre-test to 17.13±2.67 post-test (P=0.001, η^2=0.29, 95% CI [-4.76, -1.90]), advancing further to 17.80±2.24 at follow-up (P=0.001, η^2=0.29, 95% CI [-5.43, -2.57]). Conversely, the control group displayed nonsignificant shifts in body image avoidance (pre-test: 65.20±10.84; post-test: 65.80±8.54; follow-up: 65.47±9.48, P=0.847) and self-regulation (pre-test: 12.67±1.72; post-test: 11.93±3.85; follow-up: 13.13±3.42, P=0.437) over time.

Adherence to key statistical assumptions was confirmed. Shapiro-Wilk tests confirmed near-normal data distributions within each group across all time points. Levene's test supported variance homogeneity between groups. Mauchly's test assessed sphericity, with Greenhouse-Geisser corrections applied to degrees of freedom as needed when assumptions were breached.

A repeated measures ANOVA was performed to evaluate the effects of EFT on both body image avoidance and self-regulation across the measurement periods. For body image avoidance, the results revealed a significant main effect of time (P=0.001), indicating a notable change in scores over time for both groups. Additionally, a significant main effect of group was identified (P=0.001), suggesting a substantial overall difference between the experimental and control groups. Crucially, a significant time by group interaction effect emerged (P=0.001), unequivocally demonstrating that the trajectory of change in body image avoidance over time significantly differed between the experimental and control conditions.

For self-regulation, analyses showed significant main effects of time (P=0.001) and group (P=0.001). As with body image avoidance, a notable time × group interaction emerged (P=0.002), reflecting distinct trajectories of change between groups throughout the study.

Post-hoc Bonferroni comparisons (Table 3) clarified these interactions. In the experimental

Table 2: Means (±SD) of body image avoidance and self-regulation by group and time point

Variable	Group	Pretest Mean±SD	Posttest Mean±SD	Follow-up Mean±SD	P (within group)
Body Image Avoidance	Control group	65.20±10.84	65.80±8.54	65.47±9.48	0.847
	Experimental group	67.00±12.66	44.07±14.59	44.07±8.88	0.001
	P (between group)	0.632	0.001	0.001	-
Self-Regulation	Control group	12.67±1.72	11.93±3.85	13.13±3.42	0.437
	Experimental group	13.80±3.84	17.13±2.67	17.80±2.24	0.001
	P (between group)	0.237	0.001	0.001	-

SD: Standard Deviation

Table 3: Bonferroni post-hoc comparisons for body image avoidance and self-regulation

Variables	Phases		Experimental Group			Control Group		
			Mean Difference	SE	P	Mean Difference	SE	P
Body Image Avoidance	Pretest	Posttest	22.93	2.29	0.001	-0.60	1.98	0.999
	Pretest	Follow-up	22.93	2.29	0.001	-0.27	2.12	0.999
	Posttest	Follow-up	0.52	1.45	0.999	0.33	1.67	0.999
Self-Regulation	Pretest	Posttest	-3.33	0.62	0.001	0.74	0.74	0.999
	Pretest	Follow-up	-4.00	0.67	0.001	-0.46	069	0.999
	Posttest	Follow-up	0.74	0.49	0.999	-1.20	0.58	0.999

SE: Standard Error

group, body image avoidance markedly declined from pre-test to post-test, sustaining this drop at two-month follow-up (P=0.001), with no difference between post-test and follow-up. Self-regulation scores rose substantially from pre-test to post-test and continued to advance to follow-up, remaining stable thereafter (P=0.001). The control group, however, displayed no significant difference in either measure across time points.

Moreover, direct comparisons between the groups revealed significant differences at the post-test assessment. The experimental group significantly showed lower body image avoidance scores and significantly higher self-regulation scores when compared with the control group (P=0.001). These substantial inter-group differences remained significant at the two-month follow-up for both body image avoidance and self-regulation, underscoring the sustained impact of the intervention (P=0.001).

4. Discussion

The present study investigated the impact of EFT on lowering body image avoidance and strengthening self-regulation in obese women. The study results confirmed the efficacy of EFT, revealing marked gains in the experimental group compared with controls for both measures. Notably, these improvements were largely maintained at the two-month follow-up. These results highlighted the crucial role of emotional processes in the psychological well-being of individuals with obesity and underscored the significant potential of emotion-focused interventions in addressing their complex challenges.

The observed significant reduction in body image avoidance within the experimental group represents a particularly compelling finding. Body image avoidance is recognized as a prevalent maladaptive coping strategy employed by individuals experiencing appearance dissatisfaction, and it is especially common in populations with obesity who frequently encounter significant societal stigma (26). Such avoidance can manifest in various ways, including sidestepping mirrors, withdrawing from social situations, or suppressing internal thoughts and feelings related to one's body. EFT, by emphasizing the compassionate exploration, processing, and transformation of core painful emotions, offers a direct mechanism for confronting this avoidance. Rather than promoting the suppression of distressing body-related feelings such as shame, disgust, or anxiety, EFT systematically guides clients to approach and work through these emotions within a safe, empathic therapeutic environment (11). By fostering emotional acceptance and enhancing emotional regulation skills, EFT empowers individuals to cultivate a healthier, more compassionate relationship with their bodies. This outcome resonates with the existing literature indicating a strong association between difficulties in emotional regulation and heightened body image dissatisfaction alongside disordered eating behaviors (14, 27). These findings extend the understanding by specifically demonstrating the capacity of EFT to alleviate avoidance behaviors, thus offering a targeted therapeutic pathway for this pervasive issue in women afflicted by obesity.

Furthermore, our study revealed a significant improvement in self-regulation abilities within the EFT group. Self-regulation, defined as the capacity to effectively manage thoughts, emotions, and behaviors in the pursuit of long-term objectives, is an indispensable component of overall well-being. It holds particular relevance in the context of obesity management, where consistent adherence to healthy eating patterns and regular physical activity are paramount (24). The core focus of EFT on identifying and transforming maladaptive emotional schemas provides a robust foundation for enhanced self-regulation (28). When individuals gain a deeper understanding and improved capacity to process their emotional experiences, they are less inclined to depend on external or maladaptive coping mechanisms, such as emotional eating. Instead, they become more adept at making conscious, value-congruent choices (29). For women with obesity, improved self-regulation can translate into heightened control over eating impulses, more effective stress management, and greater adherence to lifestyle modifications, all of which are frequently impeded by emotional dysregulation (30). This finding unequivocally supports the broader conceptualization that emotional competence is integral to effective self-governance and directly contributes to the behavioral changes necessary for achieving sustainable health outcomes.

The intricate interconnectedness between body image avoidance and self-regulation represents a

crucial aspect brought to light by these results. It is plausible that by alleviating the burden of body image avoidance and its associated emotional distress, EFT liberates psychological resources that can subsequently be channeled towards bolstering self-regulation capacities (14). When individuals are less preoccupied with avoiding their bodies or confronting distressing feelings about them, they may possess a greater capacity to attend to internal cues, strategically plan healthier behaviors, and cope more adaptively with challenges inherent in weight management. Conversely, improved self-regulation can empower individuals to engage in more constructive coping strategies when faced with body image distress, thereby establishing a virtuous cycle (16). This synergistic effect underscores the holistic nature of EFT, which directly addresses core emotional processes that underpin a multitude of psychological and behavioral challenges.

A significant strength of this study lied in its specific application of EFT, an empirically supported and humanistic approach that is uniquely designed to target emotional processing. Unlike interventions solely rooted in cognitive-behavioral principles, EFT delves more profoundly into the affective experience, which often serves as the root of chronic issues such as obesity and body image concerns (28). The inclusion of a two-month follow-up period also provides valuable insights into the durability of treatment gains, indicating that the benefits derived from EFT are not merely transient but contribute to more enduring and meaningful changes.

4.1. Limitations

Despite its notable strengths, the present study had certain limitations. The quasi-experimental design of the study, though practical for the research context, inherently precludes complete control over all potential confounding variables. Yet, future randomized controlled trials could optimally address this limitation. Although the sample size was sufficient for detecting significant effects, expanding the sample in future research would undoubtedly enhance the generalizability of the findings. Furthermore, the exclusive focus of the study on women with obesity residing in a specific geographical area (Ahvaz) inherently limits the broader applicability of the findings to other populations, including men or individuals from diverse cultural backgrounds. Finally, while standard practice in psychological research, reliance on self-report measures invariably carries the potential for reporting biases. Future studies would benefit from incorporating objective measures of behavioral change or relevant physiological markers to complement self-reported data.

For future research endeavors, it would be highly valuable to explore the specific mechanisms of change operating within EFT for this particular population. Further refinement of treatment protocols is possible through investigating particular emotional processes or therapeutic tasks within EFT that contribute most substantially to the observed improvements in body image avoidance and self-regulation. Comparative studies involving other evidence-based interventions for obesity or body image issues (e.g., schema therapy, as originally conceived) would also provide crucial insights into the differential effectiveness of various therapeutic approaches. Moreover, extending the duration of follow-up periods and including more diverse demographic groups would significantly strengthen the overall evidence base for the application of EFT in obesity management.

5. Conclusions

Our study provided robust evidence for the effectiveness of EFT in significantly reducing body image avoidance and enhancing self-regulation in women with obesity. These results emphatically underscored the importance of integrating emotion-focused approaches into comprehensive obesity treatment programs, offering a highly promising pathway to address the complex psychological dimensions inextricably linked to this global health challenge. By fostering deeper emotional processing and promoting adaptive self-regulation, EFT holds substantial potential not only to improve mental well-being but also to support more sustainable behavioral changes, which are unequivocally crucial for achieving long-term health in this vulnerable population.

Acknowledgement

This article was extracted from a part of the PhD dissertation of Mr. Mohammad Ansari Asl in the Department of Psychology, Ahvaz Branch, Islamic Azad University, Ahvaz, Iran. Also, the

authors would like to appreciate the collaboration of all participants in the present study.

Authors' Contribution

Mohammad Ansari Asl: Made substantial contributions to the conception and design of the study, the acquisition, analysis, and interpretation of data; drafted the initial manuscript and reviewed it critically for important intellectual content. Zahra Dasht Bozorgi: Made substantial contributions to the conception and design of the study, and the interpretation of data; reviewed the manuscript critically for important intellectual content. Parviz Asgari: Made substantial contributions to the design of the study and the analysis and interpretation of data; reviewed the manuscript critically for important intellectual content. Sahar Safarzadeh: Made substantial contributions to the acquisition of data and its interpretation; reviewed the manuscript critically for important intellectual content. All authors approved the final version of the manuscript and agree to be accountable for all aspects of the work, ensuring that any questions related to the accuracy or integrity of any part of the study are appropriately investigated and resolved.

Conflict of interests: None declared.

Funding: None.

Ethical Approval

The Ethics Committee of Islamic Azad University, Ahvaz Branch, Iran approved the present study with the code of IR.IAU.AHVAZ.REC.1403.385. Also, written informed consent was obtained from the participants.

References

1. Koliaki C, Dalamaga M, Liatis S. Update on the Obesity Epidemic: After the Sudden Rise, Is the Upward Trajectory Beginning to Flatten? Curr Obes Rep. 2023;12(4):514–527. doi: 10.1007/s13679-023-00527-y. PubMed PMID: 37779155; PubMed Central PMCID: PMC10748771.
2. Westbury S, Oyebode O, van Rens T, Barber TM. Obesity Stigma: Causes, Consequences, and Potential Solutions. Curr Obes Rep. 2023;12(1):10–23. doi: 10.1007/s13679-023-00495-3. PubMed PMID: 36781624; PubMed Central PMCID: PMC9985585.
3. Timkova V, Mikula P, Nagyova I. Psychosocial distress in people with overweight and obesity: the role of weight stigma and social support. Front Psychol. 2024;15:1474844. doi: 10.3389/fpsyg.2024.1474844. PubMed PMID: 39845561; PubMed Central PMCID: PMC11753229.
4. Merino M, Tornero-Aguilera JF, Rubio-Zarapuz A, Villanueva-Tobaldo CV, Martín-Rodríguez A, Clemente-Suárez VJ. Body Perceptions and Psychological Well-Being: A Review of the Impact of Social Media and Physical Measurements on Self-Esteem and Mental Health with a Focus on Body Image Satisfaction and Its Relationship with Cultural and Gender Factors. Healthcare (Basel). 2024;12(14):1396. doi: 10.3390/healthcare12141396. PubMed PMID: 39057539; PubMed Central PMCID: PMC11276240.
5. Mancuso SG. Body image inflexibility mediates the relationship between body image evaluation and maladaptive body image coping strategies. Body Image. 2016;16:28–31. doi: 10.1016/j.bodyim.2015.10.003. PubMed PMID: 26595857.
6. Muñoz D, Jodar M, Valls L, Fornieles-Deu A, Castellanos E, Blanco I. The association of body image with quality of life, psychological assistance and social support in neurofibromatosis type 1 patients: a cross-sectional study. Orphanet J Rare Dis. 2025;20(1):284. doi: 10.1186/s13023-025-03729-w. PubMed PMID: 40481533; PubMed Central PMCID: PMC12143036.
7. Yao H, Xiong M, Cheng Y, Zhang Q, Luo Y, Ding X, et al. The relationship among body image, psychological distress, and quality of life in young breast cancer patients: a cross-sectional study. Front Psychol. 2024;15:1411647. doi: 10.3389/fpsyg.2024.1411647. PubMed PMID: 39233880; PubMed Central PMCID: PMC11372716.
8. McCormack D, O'Keeffe DF, Seery C, Eccles DF. The association between body image and psychological outcomes in multiple sclerosis. A systematic review. Multiple Sclerosis and Related Disorders. 2025;93:106226. doi: 10.1016/j.msard.2024.106226.
9. Billore S, Anisimova T, Vrontis D. Self-regulation and goal-directed behavior: A systematic literature review, public policy recommendations, and research agenda.

Journal of Business Research. 2023;156:113435. doi: 10.1016/j.jbusres.2022.113435.
10. Bouwman EP, Reinders MJ, Galama J, Verain MCD. Context matters: Self-regulation of healthy eating at different eating occasions. Appl Psychol Health Well Being. 2022;14(1):140-157. doi: 10.1111/aphw.12295. PubMed PMID: 34313378; PubMed Central PMCID: PMC9291911.
11. Plummer A, Walker I. Can self-regulation explain why not everyone is overweight or obese? Australian Journal of Psychology. 2021;73(3):326–37. doi: 10.1080/00049530.2021.1883999.
12. Timulak L, Dailey J, Lunn J, McKnight J. Transdiagnostic Emotion-Focused Therapy for Couples with Co-Morbid Relational and Mood, Anxiety and Related Difficulties. Journal of Contemporary Psychotherapy. 2025;55(1):1–10. doi: 10.1007/s10879-024-09645-7.
13. Timulak L, Keogh D, McElvaney J, Schmitt S, Hession N, Timulakova K, et al. Emotion-focused therapy as a transdiagnostic treatment for depression, anxiety and related disorders: Protocol for an initial feasibility randomised control trial. HRB Open Res. 2020;3:7. doi: 10.12688/hrbopenres.12993.1. PubMed PMID: 32296754; PubMed Central PMCID: PMC7140776.
14. Caspar F, Berger T, Holtforth MG, Babl A, Heer S, Lin M, et al. The impact of integrating emotion focused components into psychological therapy: A randomized controlled trial. J Clin Psychol. 2023;79(2):296–315. doi: 10.1002/jclp.23421. PubMed PMID: 35988120; PubMed Central PMCID: PMC10087375.
15. Glisenti K, Strodl E, King R, Greenberg L. The feasibility of emotion-focused therapy for binge-eating disorder: a pilot randomised wait-list control trial. J Eat Disord. 2021;9(1):2. doi: 10.1186/s40337-020-00358-5. PubMed PMID: 33407948; PubMed Central PMCID: PMC7789500.
16. Kaviyani F, Bakhshani N, Nasri M, Hojjat S K. Emotion-Focused Therapy on Mental Health Outcomes in Children and Adolescents: A Scoping Review. Iran J Psychiatry Behav Sci. 2025;19 (2):e159514. doi: 10.5812/ijpbs-159514.
17. Rafiepoor A, Darvish G, Parivar M, Rostami H, Kordmirza Nikoozadeh E. The Effectiveness of Emotion-Focused Therapy on Self-Conscious Affect, Illness Perception, and Mental Rumination in Breast Cancer Patients. International Journal of Body, Mind and Culture. 2025;12(1):99–106. doi: 10.61838/ijbmc.v12i1.731.
18. Corno G, Paquette A, Monthuy-Blanc J, Ouellet M, Bouchard S. The Relationship Between Women's Negative Body Image and Disordered Eating Behaviors During the COVID-19 Pandemic: A Cross-Sectional Study. Front Psychol. 2022;13:856933. doi: 10.3389/fpsyg.2022.856933. PubMed PMID: 35401386; PubMed Central PMCID: PMC8987766.
19. Osoro A, Villalobos D, Tamayo JA. Efficacy of emotion-focused therapy in the treatment of eating disorders: A systematic review. Clin Psychol Psychother. 2022;29(3):815–836. doi: 10.1002/cpp.2690. PubMed PMID: 34779059.
20. Zhu B, Gostoli S, Benasi G, Patierno C, Petroni ML, Nuccitelli C, et al. The Role of Psychological Well-Being in Weight Loss: New Insights from a Comprehensive Lifestyle Intervention. Int J Clin Health Psychol. 2022;22(1):100279. doi: 10.1016/j.ijchp.2021.100279. PubMed PMID: 34868322; PubMed Central PMCID: PMC8606336.
21. Mousavi S, Heidari A, Safarzadeh S, Asgari P, Talebzadeh Shoushtari M. The Effectiveness of Emotional Schema Therapy on Self-Regulation and Frustration Tolerance in Female Students with Exam Anxiety. Women Health Bull. 2024;11(3):145–152. doi: 10.30476/whb.2024.101975.1275.
22. Lydecker JA. Body Image Avoidance Questionnaire (BIAQ). In Wade T, editor. Encyclopedia of Feeding and Eating Disorders. Singapore: Springer Singapore; 2015. p. 1–6.
23. Mohammadpour S, Goodarzi MA, Hadianfard H, Taghavi MR. Effects of Transdiagnostic Treatment on Body Image Avoidance and Alexithymia in Body Dysmorphic Disorder. MEJDS. 2021;11:64. doi: 10.29252/mejds.0.0.121. Persian.
24. Kliemann N, Beeken RJ, Wardle J, Johnson F. Development and validation of the Self-Regulation of Eating Behaviour Questionnaire for adults. Int J Behav Nutr Phys Act. 2016;13:87. doi: 10.1186/s12966-016-0414-6. PubMed PMID: 27484457; PubMed Central PMCID: PMC4969721.
25. Ghabashi MA. Increased self-regulation of eating behavior is associated with reduced generalized anxiety disorder in Saudi Arabia.

Front Psychol. 2024;15:1480812. doi: 10.3389/fpsyg.2024.1480812. PubMed PMID: 39450131; PubMed Central PMCID: PMC11499205.
26. Kramer R, Drury CR, Forsberg S, Bruett LD, Reilly EE, Gorrell S, et al. Weight Stigma in the Development, Maintenance, and Treatment of Eating Disorders: A Case Series Informing Implications for Research and Practice. Res Child Adolesc Psychopathol. 2025;53(5):747–760. doi: 10.1007/s10802-024-01260-3. PubMed PMID: 39485638; PubMed Central PMCID: PMC12043962.
27. Khodabakhsh MR, Kiani F. Effects of Emotional Eating on Eating Behaviors Disorder in Students: The Effects of Anxious Mood and Emotion Expression. Journal of Pediatric Perspectives. 2014;2(4.1):295–303. doi: 10.22038/ijp.2014.3200.
28. Warwar S. The use of homework in emotion-focused therapy for depression. J Clin Psychol. 2024;80(4):744–761. doi: 10.1002/jclp.23618. PubMed PMID: 38111154.
29. Gautam S, Jain A, Chaudhary J, Gautam M, Gaur M, Grover S. Concept of mental health and mental well-being, it's determinants and coping strategies. Indian J Psychiatry. 2024;66(Suppl 2):S231–s244. doi: 10.4103/indianjpsychiatry.indianjpsychiatry_707_23. PubMed PMID: 38445271; PubMed Central PMCID: PMC10911315.
30. Aparicio E, Canals J, Arija V, De Henauw S, Michels N. The role of emotion regulation in childhood obesity: implications for prevention and treatment. Nutr Res Rev. 2016;29(1):17–29. doi: 10.1017/S0954422415000153. PubMed PMID: 27045966.