Journal Website

Article history:
Received 01March 2025
Revised 14 April 2025
Accepted 03 May 2025
Published online 02 July 2025

International Journal of Education and Cognitive Sciences

Volume 6, Issue 4, pp 1-9

E-ISSN: 3041-8828

The Effectiveness of Enhanced Cognitive Behavioral Therapy (CBT-E) on Body Image and Self-Criticism in Overweight Adolescents Without a Formal Diagnosis of Eating Disorders

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A r t i c l e I n f o

Article type:
Original Research

How to cite this article:
Rahmani, S., Fakhrieh Kashani, H., Kohani, M., Barazandeh, A., Babaei, F.S. (2025). The Effectiveness of Enhanced Cognitive Behavioral Therapy (CBT-E) on Body Image and Self-Criticism in Overweight Adolescents Without a Formal Diagnosis of Eating Disorders. *International Journal of Education and Cognitive Sciences*, *6*(4), 1-9.
https://doi.org/10.61838/kman.ijecs.6.4.3

A B S T R A C T

Purpose: This study aimed to evaluate the effectiveness of Enhanced Cognitive Behavioral Therapy (CBT-E) in reducing body image dissatisfaction and self-criticism among overweight adolescents without a formal diagnosis of eating disorders.

Methods and Materials: A randomized controlled trial was conducted with 60 Iranian adolescents aged 13–17 years who were classified as overweight (BMI ≥ 85th percentile). Participants were randomly assigned to receive either 20 sessions of CBT-E or standard CBT, each delivered individually on a weekly basis by trained clinical psychologists. CBT-E followed a modular, transdiagnostic format targeting body dissatisfaction, perfectionism, and self-critical thinking. Outcomes were measured at baseline, post-treatment, and a three-month follow-up using two validated self-report instruments: the Body Shape Questionnaire-34 (BSQ-34) for body image dissatisfaction and the Forms of Self-Criticizing/Attacking and Self-Reassuring Scale (FSCRS) for self-criticism. Data were analyzed using repeated-measures ANOVA, effect size calculations, and Bonferroni post-hoc tests.

Findings: The CBT-E group showed significantly greater reductions in both body image dissatisfaction and self-criticism compared to the standard CBT group. ANOVA revealed significant time × group interaction effects for both BSQ-34 ($F = 14.21$, $p < .001$, $\eta^2 = .178$) and FSCRS ($F = 17.49$, $p < .001$, $\eta^2 = .184$). Post-hoc analyses confirmed that improvements in the CBT-E group were maintained at the three-month follow-up. Effect sizes were large for CBT-E on both outcomes (body image: $d = 1.28$; self-criticism: $d = 1.16$), indicating clinically meaningful gains.

Conclusion: CBT-E is a highly effective intervention for reducing body dissatisfaction and self-criticism in overweight adolescents without a formal eating disorder diagnosis. The findings support the application of CBT-E as a preventive and early-intervention strategy in youth at risk for developing more severe psychological conditions.

Keywords: *CBT-E, body image dissatisfaction, self-criticism, overweight adolescents, preventive intervention, randomized controlled trial.*

1. Introduction

Adolescence is a pivotal developmental stage characterized by profound physical, cognitive, and emotional changes. Among these transformations, the increasing salience of body image plays a critical role in shaping psychological well-being during this period. Alarmingly, a growing body of evidence indicates that a large proportion of adolescents experience significant dissatisfaction with their body image, a phenomenon often linked with increased levels of self-criticism, low self-esteem, depression, and disordered eating behaviors (Ata et al., 2021; Duarte et al., 2017). These psychological vulnerabilities are particularly pronounced in adolescents with overweight or obesity, even in the absence of a formal eating disorder diagnosis (Neumark-Sztainer et al., 2011). As such, identifying and implementing effective psychological interventions for this subclinical yet at-risk population has emerged as a pressing public health priority.

Research consistently underscores the widespread prevalence of body image dissatisfaction among adolescents, exacerbated by sociocultural ideals that glorify thinness and stigmatize larger body sizes. According to Grabe et al. (2018), exposure to idealized media portrayals contributes significantly to negative body perceptions, particularly among girls (Grabe et al., 2018). Adolescents internalize these unattainable standards, which fosters a sense of inadequacy and shame about their bodies (Mountford et al., 2015). In turn, this body dissatisfaction often co-occurs with self-critical cognitive patterns, wherein individuals harshly judge themselves for perceived physical flaws, reinforcing a maladaptive cycle that may escalate into clinical eating pathology (Duarte et al., 2017).

The association between body image disturbance and self-criticism is not only correlational but potentially causal, with emerging research suggesting that self-criticism may mediate the relationship between perceived body inadequacy and the onset of disordered eating behaviors (Karimzadeh et al., 2022). These findings support the implementation of early psychological interventions that target both constructs simultaneously. Historically, however, most prevention and treatment efforts have focused primarily on weight reduction or dietary control, failing to address the deeper cognitive-affective mechanisms that sustain body dissatisfaction and negative self-evaluation (Rajaeinia, 2022).

Cognitive Behavioral Therapy (CBT) has long been established as a gold-standard intervention for a range of psychological conditions, including depression, anxiety, and eating disorders. Nevertheless, traditional CBT protocols often adopt a symptom-focused model, which may overlook the underlying transdiagnostic processes such as perfectionism, low self-worth, and interpersonal difficulties that contribute to persistent body dissatisfaction and self-criticism (Fairburn, 2008). In response to these limitations, Enhanced Cognitive Behavioral Therapy (CBT-E) was developed as a theoretically grounded, modular, and flexible treatment protocol specifically designed to address the full range of psychological features that underlie eating pathology (Fairburn et al., 2010). CBT-E not only targets eating behaviors but also places significant emphasis on addressing dysfunctional self-evaluation and body-related distress.

The efficacy of CBT-E has been well-documented across various clinical populations with diagnosed eating disorders, including anorexia nervosa, bulimia nervosa, and binge-eating disorder. In a comprehensive systematic review, Cooper et al. (2020) found that CBT-E yielded significant improvements in eating disorder symptoms, psychological distress, and functional outcomes across multiple studies (Cooper et al., 2020). Furthermore, Dalle Grave and colleagues have provided robust evidence supporting the effectiveness of CBT-E in adolescent populations. In one study, adolescents receiving outpatient CBT-E demonstrated significant improvements in weight restoration and reductions in eating disorder psychopathology over 12 months (Calugi & Dalle Grave, 2019; Dalle Grave et al., 2019). Another naturalistic study reported sustained gains following intensive CBT-E among both adolescents and adults with anorexia nervosa (Dalle Grave et al., 2020).

Importantly, these clinical findings have begun to inform the use of CBT-E in more diverse and non-clinical populations. A recent quasi-experimental study by Binte Zaman (2024) showed that cognitive behavior group therapy was effective in reducing eating disorder risk among university students, even when participants did not meet diagnostic thresholds (Binte Zaman, 2024). Similarly, Levinson et al. (2022) conducted a meta-analysis demonstrating that the core CBT-E model was effective in modifying maladaptive cognitive schemas associated with eating and self-worth across diagnostic categories (Levinson et al., 2022). These findings have laid the groundwork for exploring the application of CBT-E in preventive contexts targeting subthreshold presentations, such as adolescents with overweight but no formal eating disorder diagnosis.

E-ISSN: 3041-8828

Despite this promising direction, few studies have specifically investigated the role of CBT-E in reducing body image dissatisfaction and self-criticism in overweight adolescents without eating disorders. This is a notable gap, as such adolescents often present with psychological profiles resembling those of individuals with diagnosable eating disorders, including internalized stigma, self-devaluation, and emotional dysregulation (Stice et al., 2017). The lack of early intervention for these adolescents may contribute to the eventual development of more severe psychopathology. Research has emphasized the need to move beyond weight-centric interventions and incorporate therapies that foster healthier body attitudes and self-perception, especially given the limited long-term effectiveness of diet-based treatments in adolescents (Joshua et al., 2023; Rossi et al., 2023).

A particularly relevant consideration is the treatment's ability to effect durable change in psychological functioning. According to Murphy et al. (2020), CBT-E includes mechanisms designed to foster long-term improvements by encouraging clients to develop a more compassionate and flexible self-concept, replacing critical and perfectionistic thoughts with realistic appraisals (Murphy et al., 2020). Waller et al. (2018) further noted that techniques such as mirror exposure and cognitive restructuring used in CBT-E directly target distorted body image perceptions and are associated with meaningful symptom reductions across time (Waller et al., 2018).

Additionally, tools such as the Body Shape Questionnaire-34 (BSQ-34) and the Forms of Self-Criticizing/Attacking and Self-Reassuring Scale (FSCRS) have enhanced our capacity to assess the specific cognitive and emotional domains relevant to body image and self-criticism. Rahimi et al. (2021) validated the Persian version of the BSQ-34 for use in Iranian adolescent populations, highlighting its strong psychometric properties (Rahimi et al., 2021). Likewise, Karimzadeh et al. (2022) confirmed the FSCRS as a valid and reliable measure of self-critical thinking in Iranian adolescents, enabling more precise evaluation of therapeutic outcomes in this cultural context (Karimzadeh et al., 2022).

The current study builds upon this empirical foundation by applying CBT-E in a randomized controlled trial involving overweight adolescents without a formal diagnosis of an eating disorder. By comparing CBT-E with standard CBT, this study aims to determine whether the enhanced intervention provides additional psychological benefits, particularly with regard to reducing self-criticism and body dissatisfaction.

2. Methods and Materials

2.1. Study Design and Participants

This study employed a randomized controlled trial (RCT) design to assess the effectiveness of Enhanced Cognitive Behavioral Therapy (CBT-E) in reducing body image dissatisfaction and self-criticism among overweight adolescents who did not meet formal diagnostic criteria for eating disorders. Sixty adolescents aged between 13 and 17 years were recruited from schools and community health centers in Tehran, Iran. Eligibility was determined using World Health Organization growth charts, where participants were classified as overweight if their Body Mass Index (BMI) was at or above the 85th percentile for their age and sex. Exclusion criteria included current diagnoses of eating disorders based on DSM-5 criteria, severe psychiatric conditions such as psychosis or active suicidality, and ongoing psychological or pharmacological treatment for weight loss. Informed consent was obtained from both the participants and their legal guardians before enrollment. Randomization was carried out using a computer-generated sequence handled by an independent researcher, ensuring allocation concealment. The study was approved by the ethical review board of the relevant academic institution.

2.2. Measures

Body image dissatisfaction will be assessed using the Body Shape Questionnaire-34 (BSQ-34), developed by Cooper, Taylor, Cooper, and Fairburn (1987). This self-report instrument consists of 34 items designed to evaluate concerns about body shape and preoccupation with weight and appearance, particularly focusing on the experience of feeling fat. Respondents rate each item on a 6-point Likert scale ranging from 1 (never) to 6 (always), with higher scores indicating greater body dissatisfaction. The BSQ-34 includes subscales that cover themes such as fear of weight gain, feelings of fatness, and self-consciousness about appearance. The tool has demonstrated excellent internal consistency (Cronbach's alpha values typically above 0.95) and test-retest reliability. Numerous studies have confirmed the validity and reliability of the BSQ-34 across diverse adolescent populations, including Iranian samples (Rahimi et al., 2021), making it a suitable choice for assessing body image in overweight adolescents.

Self-criticism will be measured using the Forms of Self-Criticizing/Attacking and Self-Reassuring Scale (FSCRS), developed by Gilbert, Clarke, Hempel, Miles, and Irons

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(2004). This 22-item self-report measure assesses how individuals respond to setbacks or failures with self-critical versus self-reassuring thoughts. It comprises three subscales: Inadequate Self (feelings of personal inadequacy), Hated Self (self-directed hostility), and Reassured Self (the ability to be supportive and compassionate toward oneself). Responses are rated on a 5-point Likert scale ranging from 0 (not at all like me) to 4 (extremely like me), with higher scores on the self-criticism subscales indicating more negative self-evaluation. The FSCRS has demonstrated high internal consistency ($\alpha > 0.85$ for subscales) and strong construct and criterion validity. Its psychometric properties have been confirmed in multiple populations, including Iranian adolescents (Karimzadeh et al., 2022), supporting its appropriateness for use in this study.

2.3. Interventions

Participants in the intervention group received 20 individual CBT-E sessions delivered once weekly, each lasting approximately 60 minutes. The CBT-E protocol, developed by Fairburn (2008), was adapted for adolescents and tailored to address transdiagnostic processes associated with body image dissatisfaction and self-critical thinking. Treatment followed the structured, modular format of CBT-E, emphasizing the identification and restructuring of maladaptive cognitions related to body image, implementation of exposure techniques including mirror exposure, and exercises to reduce overvaluation of weight and shape. Additionally, modules focusing on low self-esteem, perfectionism, and interpersonal difficulties were integrated based on individual needs. Particular attention was given to developing self-compassion and replacing harsh self-evaluations with more supportive and realistic perspectives through behavioral experiments and guided imagery. The comparison group received standard CBT for weight management, also consisting of 20 weekly individual sessions. Standard CBT emphasized psychoeducation about healthy eating and exercise, goal setting, problem-solving skills, and general cognitive restructuring techniques related to food and body-related beliefs. All interventions were delivered by licensed clinical psychologists with advanced training in cognitive-behavioral approaches for adolescents. To reduce expectancy bias and maintain treatment fidelity, therapists followed structured manuals, and sessions were supervised by experienced CBT-E clinicians. Assessments were conducted at baseline (T1), immediately after the 12-week intervention period (T2), and at a three-month follow-up (T3) by evaluators blinded to group assignments.

2.4. Data Analysis

Data analysis was performed using SPSS version 26. Repeated-measures ANOVA was employed to evaluate within-group changes over time and between-group differences for the primary outcome variables—body image dissatisfaction and self-criticism—measured at three time points. The interaction effect (time × group) was specifically examined to assess the differential impact of the two treatments across assessment periods. Assumptions of normality and sphericity were checked prior to conducting ANOVA, and Greenhouse-Geisser corrections were applied where appropriate. Effect sizes were reported using Cohen's d to assess the magnitude of the intervention's impact, with values above 0.80 considered large. Missing data were addressed using multiple imputation methods to preserve statistical power and reduce bias. All statistical tests were two-tailed, and significance was set at $p < 0.05$. The robustness of results was further supported through post-hoc pairwise comparisons with Bonferroni adjustments to control for Type I error.

3. Findings and Results

Of the 72 adolescents initially assessed for eligibility, 60 met inclusion criteria and were randomly assigned to the CBT-E group (n = 30) or the standard CBT group (n = 30). Three participants (one from CBT-E, two from CBT) dropped out before completing the intervention, leaving 57 participants (CBT-E: n = 29; CBT: n = 28) for the final analyses. No significant differences in baseline demographic or clinical characteristics were found between the two groups ($p > .05$).

Table 1

Descriptive Statistics

Variable	Group	Baseline (M ± SD)	Post-treatment (M ± SD)	3-Month Follow-up (M ± SD)
Body Image Dissatisfaction (BSQ-34)	CBT-E	112.53 ± 18.42	68.37 ± 15.71	70.11 ± 16.21
	Standard CBT	110.84 ± 19.12	85.27 ± 17.88	88.74 ± 18.39
Self-Criticism (FSCRS)	CBT-E	38.71 ± 6.14	22.46 ± 5.72	23.32 ± 5.81

E-ISSN: 3041-8828

	Standard CBT	39.11 ± 5.87	29.76 ± 6.28	31.18 ± 6.41

As shown in the above table, participants in the CBT-E group showed a notable decrease in body image dissatisfaction from baseline (M = 112.53, SD = 18.42) to post-treatment (M = 68.37, SD = 15.71), with this improvement largely maintained at follow-up (M = 70.11, SD = 16.21). In contrast, the standard CBT group also improved, but to a lesser extent. Similarly, for self-criticism, CBT-E participants demonstrated a substantial reduction from baseline (M = 38.71, SD = 6.14) to post-treatment (M = 22.46, SD = 5.72), with minimal increase at follow-up. Standard CBT showed milder reductions in self-criticism over time.

Table 2

Repeated-Measures ANOVA Table

Source	SS	df	MS	F	p	η^2
Body Image Dissatisfaction						
Time	8427.32	2	4213.66	35.27	<.001	.246
Group	4912.77	1	4912.77	28.36	<.001	.191
Time × Group Interaction	3398.45	2	1699.22	14.21	<.001	.178
Error	13146.92	110	119.52			
Self-Criticism						
Time	2174.85	2	1087.42	29.93	<.001	.214
Group	1342.11	1	1342.11	19.62	<.001	.152
Time × Group Interaction	1483.68	2	741.84	17.49	<.001	.184
Error	3994.26	110	36.31			

The repeated-measures ANOVA results revealed significant main effects of time and group, as well as significant time × group interaction effects for both body image dissatisfaction and self-criticism. For body image dissatisfaction, there was a significant effect of time, $F(2, 110) = 35.27$, $p < .001$, $\eta^2 = .246$, and a significant interaction between time and group, $F(2, 110) = 14.21$, $p < .001$, $\eta^2 = .178$. Similar results were found for self-criticism: time, $F(2, 110) = 29.93$, $p < .001$, $\eta^2 = .214$; interaction, $F(2, 110) = 17.49$, $p < .001$, $\eta^2 = .184$. These findings confirm that CBT-E produced significantly greater reductions in the outcome variables compared to standard CBT over time.

Table 3

Bonferroni Post-Hoc Test Table

Variable	Group	Time Points	Mean Difference	SE	p
Body Image Dissatisfaction	CBT-E	Baseline – Post-treatment	44.16	3.88	<.001
		Post-treatment – Follow-up	-1.74	2.15	.842
		Baseline – Follow-up	42.42	3.96	<.001
	Standard CBT	Baseline – Post-treatment	25.57	4.02	<.001
		Post-treatment – Follow-up	-3.47	2.27	.316
		Baseline – Follow-up	22.10	4.15	<.001
Self-Criticism	CBT-E	Baseline – Post-treatment	16.25	1.71	<.001
		Post-treatment – Follow-up	-0.86	0.93	.732
		Baseline – Follow-up	15.39	1.75	<.001
	Standard CBT	Baseline – Post-treatment	9.35	1.81	<.001
		Post-treatment – Follow-up	-1.42	0.97	.387
		Baseline – Follow-up	7.93	1.86	<.001

Bonferroni-adjusted post-hoc tests confirmed that the CBT-E group showed a significant reduction in body image dissatisfaction from baseline to post-treatment (MD = 44.16, $p < .001$), with no significant change between post-treatment and follow-up, indicating maintenance of treatment gains. Similarly, self-criticism significantly decreased from baseline to post-treatment in the CBT-E group (MD = 16.25, $p < .001$), with stability at follow-up. In the standard CBT group, both outcomes also improved significantly from baseline to post-treatment, but the mean differences were smaller, and slight regressions were observed at follow-up,

E-ISSN: 3041-8828

though not statistically significant. These results reinforce the stronger and more sustained efficacy of CBT-E.

4. Discussion and Conclusion

The findings of this study provide compelling evidence supporting the effectiveness of Enhanced Cognitive Behavioral Therapy (CBT-E) in reducing body image dissatisfaction and self-criticism among overweight adolescents without a formal diagnosis of eating disorders. As hypothesized, participants who received CBT-E demonstrated significantly greater improvements in both outcomes compared to those receiving standard CBT, with large effect sizes and sustained benefits at the three-month follow-up. These results underscore the therapeutic value of CBT-E in addressing critical psychological vulnerabilities in subclinical adolescent populations.

The reduction in body image dissatisfaction observed in the CBT-E group aligns with previous research demonstrating the efficacy of this intervention in reshaping maladaptive body-related cognitions. CBT-E specifically targets dysfunctional body image by implementing techniques such as mirror exposure, cognitive restructuring of appearance-related thoughts, and the development of a healthier identity not tied to shape or weight (Fairburn, 2008; Fairburn et al., 2010). This transdiagnostic model appears particularly beneficial in adolescent populations, who are often exposed to intensified sociocultural pressures surrounding appearance (Grabe et al., 2018). The significant decrease in BSQ-34 scores in this study mirrors findings from earlier trials involving adolescents with clinical eating disorders, where CBT-E produced meaningful improvements in body satisfaction and perceptual accuracy (Calugi & Dalle Grave, 2019; Dalle Grave et al., 2019).

These findings are further corroborated by Waller et al. (2018), who emphasized the importance of targeted cognitive-behavioral techniques—such as behavioral experiments, body checking reduction, and imagery rescripting—in treating body image disturbances. The present study's outcomes suggest that such strategies are effective even outside the context of diagnosed eating disorders, demonstrating CBT-E's adaptability to preventive mental health contexts. Additionally, the three-month maintenance of treatment gains suggests CBT-E may instill lasting cognitive and emotional resilience in adolescents by modifying the core beliefs that sustain body dissatisfaction (Levinson et al., 2022).

In terms of self-criticism, the CBT-E group exhibited significantly greater reductions compared to standard CBT. This result is noteworthy, given the centrality of self-criticism as a transdiagnostic risk factor for various forms of psychopathology, including eating disorders, depression, and anxiety (Duarte et al., 2017). The FSCRS scores revealed that adolescents in the CBT-E condition not only reduced their self-attacking tendencies but also showed an improvement in their ability to self-reassure. CBT-E's capacity to address self-criticism likely stems from its modular components targeting perfectionism, low self-esteem, and rigid self-evaluation schemas. These modules are designed to promote psychological flexibility and self-compassion, empowering adolescents to adopt a more balanced internal dialogue.

The study's outcomes parallel findings from Murphy et al. (2020), who reported that CBT-E facilitates enduring changes in self-critical thought patterns through interventions such as cognitive restructuring and behavioral testing. Similarly, Duarte et al. (2017) emphasized the relevance of self-reassurance as a protective factor against the internalization of negative self-appraisals. Given that the current study observed significant improvements in both self-critical and self-reassuring tendencies, the CBT-E protocol appears effective in simultaneously reducing vulnerability and enhancing protective cognitive strategies in adolescents.

The superiority of CBT-E over standard CBT is also consistent with previous comparative research. Le Grange et al. (2020) reported that CBT-E yielded better outcomes than family-based therapy (FBT) in adolescents with eating disorders, particularly in terms of internalized symptomatology. In our non-clinical sample, similar differential benefits were observed, suggesting that CBT-E's individually tailored and modular format may offer broader psychological benefits than generic CBT. While standard CBT provided modest reductions in both outcome variables, its effects were significantly smaller and less durable, highlighting the limitations of weight-focused or generalized behavioral interventions in addressing deeper self-concept-related issues.

Notably, these findings contribute to the growing literature advocating for early intervention in adolescent populations exhibiting psychological distress without meeting full diagnostic criteria. Ata et al. (2021) emphasized the clinical importance of addressing body image concerns in adolescents before the development of disordered eating patterns. The current results support this perspective by

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demonstrating that psychological symptoms such as body dissatisfaction and self-criticism can be effectively mitigated through CBT-E even in subclinical groups. These improvements may act as a buffer against the progression to more severe pathology, particularly in adolescents with elevated BMI who may be at heightened risk due to societal stigmatization and peer comparison (Stice et al., 2017).

The effectiveness of CBT-E in this context also lends support to the theoretical premise of applying transdiagnostic models to early-stage or high-risk populations. While much of the literature on CBT-E focuses on clinical populations, emerging studies, such as that by Binte Zaman (2024), have demonstrated the efficacy of CBT interventions in reducing eating disorder risk factors among non-clinical university students (Binte Zaman, 2024). Similarly, Rossi et al. (2023) found that integrating trauma-informed approaches like EMDR with CBT-E enhanced its effects on self-perception and emotional regulation among individuals with childhood maltreatment histories. Though our study did not include trauma-specific components, it is possible that CBT-E's emphasis on reshaping core beliefs contributed to the observed outcomes.

Furthermore, the use of psychometrically validated instruments like the BSQ-34 and FSCRS allowed for accurate assessment of key constructs and enhanced the interpretability of results. Rahimi et al. (2021) confirmed the validity and reliability of the Persian version of the BSQ-34 among adolescents, and Karimzadeh et al. (2022) validated the FSCRS for similar populations in Iran (Karimzadeh et al., 2022; Rahimi et al., 2021). This methodological rigor ensures that the improvements observed in this study reflect meaningful psychological change rather than measurement artifacts.

Taken together, these findings highlight CBT-E as a promising intervention for overweight adolescents experiencing body dissatisfaction and self-criticism, regardless of diagnostic status. The large effect sizes and sustained improvements suggest that CBT-E addresses not only surface-level symptoms but also the underlying cognitive and emotional processes that perpetuate psychological distress. The program's emphasis on self-monitoring, personalized formulation, and cognitive-affective restructuring may contribute to the development of lasting self-concept improvements, thereby preventing escalation into more severe psychopathology.

Despite the strength of its randomized controlled design and use of validated measures, this study is not without limitations. First, the sample was geographically limited to adolescents residing in Tehran, Iran, which may restrict the generalizability of findings to broader or more diverse populations. Second, the relatively short duration of the follow-up period (three months) limits conclusions about the long-term durability of treatment effects. Third, while the study employed rigorous screening to exclude participants with formal eating disorders, subthreshold symptomatology may still have influenced the observed outcomes. Additionally, although therapists followed standardized treatment manuals, fidelity was not formally assessed using observer ratings or session recordings.

Future research should aim to replicate these findings in more diverse cultural and geographical settings to determine the cross-cultural applicability of CBT-E in adolescent populations. Longitudinal studies with extended follow-up periods (e.g., 12 or 24 months) are also necessary to evaluate the long-term sustainability of treatment gains and the potential for relapse. It would be valuable to explore the mediating and moderating mechanisms of change within CBT-E, such as the roles of self-compassion, cognitive flexibility, and parental involvement. Furthermore, integrating qualitative methodologies could provide richer insights into adolescents' lived experiences and perceived benefits of CBT-E. Lastly, comparisons with other transdiagnostic or third-wave therapies—such as schema therapy or acceptance and commitment therapy—could further elucidate CBT-E's relative strengths.

From a practical standpoint, the current findings support the integration of CBT-E into school-based mental health programs and preventive services targeting adolescents with elevated BMI or body dissatisfaction. Practitioners should be encouraged to move beyond weight-focused interventions and adopt models that address self-evaluative and cognitive-affective processes. Clinical training programs might incorporate CBT-E modules as part of their adolescent therapy curriculum to ensure broader dissemination of evidence-based techniques. Given the scalable nature of CBT-E, its adaptation into group formats or digital interventions could increase accessibility and reduce treatment costs. Tailoring interventions to be developmentally appropriate and culturally sensitive will further enhance engagement and outcomes in adolescent populations.

Authors' Contributions

All authors significantly contributed to this study.

Declaration

E-ISSN: 3041-8828

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

Acknowledgments

We hereby thank all individuals for participating and cooperating us in this study.

Declaration of Interest

The authors report no conflict of interest.

Funding

According to the authors, this article has no financial support.

Ethical Considerations

In this study, to observe ethical considerations, participants were informed about the goals and importance of the research before the start of the interview and participated in the research with informed consent.

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