

The Effectiveness of a Body Image Intervention on Self-Acceptance and Disordered Eating Attitudes

Arjun. Deshmukh¹, Neha. Sharma^{2*}

¹ Department of Psychology and Counseling, Savitribai Phule Pune University, Pune, India

² Department of Clinical Psychology, University of Delhi, Delhi, India

* Corresponding author email address: neha.sharma@psych.du.ac.in

Article Info

Article type:

Original Research

How to cite this article:

Deshmukh, A., & Sharma, N. (2025). The Effectiveness of a Body Image Intervention on Self-Acceptance and Disordered Eating Attitudes. *Journal of Adolescent and Youth Psychological Studies*, 6(1), 136-145.
<http://dx.doi.org/10.61838/kman.jayps.6.1.15>



© 2025 the authors. Published by KMAN Publication Inc. (KMANPUB), Ontario, Canada. This is an open access article under the terms of the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) License.

ABSTRACT

Objective: This study aimed to evaluate the effectiveness of a structured body image intervention in enhancing self-acceptance and reducing disordered eating attitudes among young women in India.

Methods and Materials: A randomized controlled trial was conducted with 30 participants randomly assigned into an intervention group (n = 15) and a control group (n = 15). The intervention comprised eight 90-minute sessions incorporating cognitive-behavioral strategies, media literacy, self-compassion exercises, and body functionality appreciation. Participants were assessed at three time points—pre-test, post-test, and five-month follow-up—using the Self-Acceptance Scale and the Eating Attitudes Test (EAT-26). Data were analyzed using repeated-measures ANOVA with Bonferroni post-hoc comparisons via SPSS-27 to determine group differences over time.

Findings: Results indicated a significant improvement in self-acceptance in the intervention group, with mean scores increasing from 41.27 (SD = 5.33) at pre-test to 50.93 (SD = 4.78) at post-test, and remaining stable at follow-up. Similarly, disordered eating attitudes showed significant reductions in the intervention group, decreasing from a mean of 26.87 (SD = 4.62) at pre-test to 19.47 (SD = 3.79) at post-test, with maintenance of these gains at follow-up. The ANOVA revealed significant main effects for time, group, and their interaction for both dependent variables ($p < .001$), with Bonferroni post-hoc tests confirming significant differences between pre-test and subsequent assessments.

Conclusion: The findings support the efficacy of the body image intervention in improving self-acceptance and reducing disordered eating attitudes among young women. The sustained improvements observed at five-month follow-up underscore the intervention's potential as a viable preventive strategy against the development of eating disorders and negative body image.

Keywords: Body Image Intervention, Self-Acceptance, Disordered Eating Attitudes.

1. Introduction

Body image, broadly defined as an individual's subjective perception and attitudes toward their own body, has emerged as a critical determinant of mental and physical health outcomes (Felsher & Schmidt, 2023; Guest et al., 2019). Negative body image is frequently associated with decreased self-esteem, heightened appearance-related distress, and an increased risk for disordered eating attitudes or behaviors (Jan et al., 2020; Smith et al., 2024). Conversely, positive body image has been linked with enhanced well-being, including stronger self-acceptance, improved emotional regulation, and healthier interpersonal relationships (Tang et al., 2024; Üyesi & Kâtip, 2021). As a result, a growing body of research seeks to understand how to foster a healthy body image and mitigate disordered eating through various interventions targeting psychological constructs such as self-acceptance, self-compassion, and cognitive flexibility (Ahuja et al., 2024; Fang et al., 2022; Wang et al., 2024).

Over the past decade, numerous intervention studies have demonstrated that body image dissatisfaction can be addressed through programs emphasizing cognitive-behavioral strategies, mindfulness, and self-compassion, among others (Hartman-Munick et al., 2020; Walters et al., 2023; West, 2020). For adolescents and young adults in particular, body image concerns are known to be shaped by sociocultural factors such as media, peer influence, and internalization of beauty standards (Kaur et al., 2023; Tang et al., 2024). The pervasiveness of these influences underscores the importance of early and ongoing interventions that help individuals develop healthier views of their physical selves (Karimi et al., 2023; Mahon & Seekis, 2022; Moreno, 2025). Scholars have also noted that negative body image interacts with various psychological variables, including self-esteem, identity formation, and emotional well-being, leading to a complex interplay that can propel disordered eating patterns (Alokandeh, 2024; Esplen & Trachtenberg, 2020).

Self-acceptance is one of the core psychological constructs implicated in body image experiences, serving as a buffer that supports adaptive coping and resilience (Chopra et al., 2023; Sargent, 2018). Individuals with robust self-acceptance are more likely to view perceived flaws in their appearance with compassion and understanding, reducing tendencies toward maladaptive comparisons or internalizing unrealistic societal ideals (Arianti et al., 2024; Bintari, 2023). Conversely, low self-acceptance can exacerbate the

negative effects of body dissatisfaction by triggering shame, self-criticism, and self-scrutiny, which may predispose individuals to disordered eating attitudes (Jan et al., 2020; Tajbakhsh et al., 2023). In this regard, self-acceptance functions as both a protective factor and a target for therapeutic interventions aimed at improving body image and mitigating problematic eating behaviors (Üyesi & Kâtip, 2021; Wang et al., 2024).

Disordered eating attitudes encompass a spectrum of maladaptive beliefs and behaviors related to food, weight, and body shape, often rooted in distorted body image perceptions (Cheng et al., 2022; Tylka, 2019). Such attitudes can manifest in behaviors ranging from rigid dietary restraint and preoccupation with body weight to binge eating and compensatory behaviors (Karimi et al., 2023; Tang et al., 2024). While clinically significant eating disorders like anorexia nervosa, bulimia nervosa, and binge eating disorder represent the extreme end of this spectrum, subclinical disordered eating attitudes are also concerning, as they may impair psychological functioning and quality of life (Ahuja et al., 2024; Hidayati et al., 2024). Interventions that enhance body acceptance, self-compassion, and emotion regulation skills have shown promise in reducing these disordered eating attitudes and behaviors among diverse populations, including adolescents, college students, and clinical groups (Hidayati et al., 2024; Mahon & Seekis, 2022; Ong & Sündermann, 2022).

Within the field of body image research, a variety of approaches have been developed to address these challenges. Cognitive-behavioral therapy (CBT) frameworks, which focus on identifying and restructuring negative automatic thoughts about body shape and weight, remain among the most empirically supported interventions (Chopra et al., 2023; Guest et al., 2019). Recent adaptations have integrated mindfulness and acceptance-based techniques, such as Acceptance and Commitment Therapy (ACT), which highlight psychological flexibility and cognitive defusion to reduce body image distress (Fang et al., 2022; Tajbakhsh et al., 2023). Another emerging area involves the incorporation of self-compassion exercises, where individuals are guided to respond to body-related distress with kindness rather than harsh criticism (Bintari, 2023; Üyesi & Kâtip, 2021). Meanwhile, interventions grounded in exposure therapies have begun to explore the use of virtual reality or guided exposure to appearance-related stimuli to reduce the emotional reactivity associated with body concerns (Maalin et al., 2019; Moreno, 2025).

Innovations in digital health have further expanded the accessibility and scalability of body image interventions, providing options such as mobile applications, teletherapy platforms, and virtual reality programs (Cheng et al., 2022; Mahon & Seekis, 2022; Ong & Sündermann, 2022). Researchers who have compared online and in-person interventions for body image issues suggest that technology-enhanced modalities can be equally effective in producing positive outcomes, including improved self-acceptance and decreased disordered eating symptoms, particularly among younger and digitally savvy populations (Cheng et al., 2022; Espen & Trachtenberg, 2020; Hidayati et al., 2024). These digital solutions also often incorporate peer support communities, interactive modules, and psychoeducational resources, thereby offering a more holistic approach to recovery and prevention (Ong & Sündermann, 2022; Sargent, 2018). However, while digital interventions demonstrate promise, researchers emphasize the continued need for rigorous, controlled evaluations to address potential limitations, such as reduced therapeutic alliance and the risk of decreased adherence over time (Guest et al., 2019; Mahon & Seekis, 2022).

Crucially, the context in which body image interventions are implemented can influence their effectiveness. Cultural and gender norms significantly impact how individuals perceive and experience body dissatisfaction, as well as the types of interventions they find acceptable or meaningful (Arianti et al., 2024; Tang et al., 2024). For instance, male-focused interventions often differ from female-focused ones in terms of content and emphasis on muscularity or athletic ideals, and thus require careful consideration of gender-specific factors (Ahuja et al., 2024; Walters et al., 2023). Similarly, various ethnic and cultural groups may hold distinct ideals regarding body size and shape that mediate their responses to certain therapeutic techniques (Alokandeh, 2024; Karimi et al., 2023; Wang et al., 2024). When designing interventions for body image and disordered eating, these sociocultural dimensions must be accounted for to foster interventions that are sensitive, relevant, and effective across diverse populations (Hartman-Munick et al., 2020; West, 2020).

Despite the abundance of research supporting the efficacy of body image interventions, gaps remain in understanding the nuanced mechanisms through which these programs facilitate lasting change in self-acceptance and disordered eating attitudes. Some studies reveal that interventions focusing on emotional regulation and psychological flexibility yield improvements in participants' body image

and eating behaviors, suggesting that aspects beyond cognitive restructuring—such as personal values, mindful awareness, and acceptance of discomfort—play a key role in sustaining positive outcomes (Alokandeh, 2024; Bintari, 2023; Fang et al., 2022). Others highlight the importance of social support—both offline and online—in reinforcing positive body talk and sharing coping strategies, thereby contributing to body image resilience (Hansen et al., 2018; Ong & Sündermann, 2022). Moreover, researchers have called for extended follow-up assessments to confirm whether newly acquired positive body image skills persist over time, especially in environments that continuously bombard individuals with appearance-based pressures (Sargent, 2018; Tylka, 2019).

The intersection of self-acceptance and disordered eating attitudes stands as a critical focal point for further investigation, particularly because self-acceptance can act as a mediating or moderating factor in the success of various body image interventions (Arianti et al., 2024; Kaur et al., 2023). For example, individuals who begin therapy with higher levels of self-acceptance may display greater openness to intervention strategies, more consistent participation, and a stronger internalization of treatment gains (Hidayati et al., 2024; Wang et al., 2024). Conversely, those with deeply entrenched negative self-beliefs may require more intensive or prolonged intervention periods to see comparable improvements in body image and disordered eating outcomes (Fang et al., 2022; Karimi et al., 2023). Examining these pathways can enhance the customization of treatment protocols and help practitioners optimize interventions for a range of individual needs, thereby maximizing effectiveness (Chopra et al., 2023; Felsher & Schmidt, 2023).

This study addresses the aforementioned gaps by exploring a targeted body image intervention aimed at boosting self-acceptance and reducing disordered eating attitudes.

2. Methods and Materials

2.1. Study Design and Participants

This study employed a randomized controlled trial (RCT) design to evaluate the effectiveness of a body image intervention on self-acceptance and disordered eating attitudes. Thirty female participants from India, aged between 18 and 30 years, were recruited through online advertisements and university bulletins. Participants were screened for eligibility using a brief demographic and health

questionnaire. Inclusion criteria included dissatisfaction with body image without a formal diagnosis of an eating disorder, willingness to participate in all sessions, and absence of concurrent psychological treatment. After the initial screening, participants were randomly assigned to either the intervention group ($n = 15$) or the control group ($n = 15$) using simple randomization procedures. The intervention was delivered in eight weekly sessions, each lasting 90 minutes. Follow-up assessments were conducted five months after the completion of the program to evaluate the sustainability of effects.

2.2. Measures

2.2.1. Self-Acceptance

To assess the level of self-acceptance, the Self-Acceptance Scale developed by Emanuel M. Berger in 1952 was used. This standard tool is designed to measure individuals' acceptance of themselves, encompassing aspects such as self-worth, self-respect, and personal satisfaction. The scale includes 16 items that participants respond to using a Likert-type format, typically ranging from strong disagreement to strong agreement. Higher scores indicate greater self-acceptance. The scale does not include specific subscales, instead providing an overall measure of the self-acceptance construct. Numerous studies have confirmed the validity and reliability of this instrument in both clinical and non-clinical populations, demonstrating its applicability across various demographic groups and research contexts (Ebrahimi et al., 2023; Rini et al., 2023).

2.2.2. Disordered Eating Attitudes

Disordered eating attitudes were evaluated using the Eating Attitudes Test (EAT-26) developed by David Garner, Marion Olmsted, and Janet Polivy in 1982. This widely used, standardized self-report questionnaire is specifically designed to identify symptoms and concerns characteristic of eating disorders. The EAT-26 comprises 26 items and includes three subscales: Dieting, Bulimia and Food Preoccupation, and Oral Control. Participants rate each item on a six-point Likert scale, which is then scored and converted into a standardized three-point scale for analysis. Total scores above 20 are typically indicative of potentially problematic eating attitudes. The EAT-26 has demonstrated strong psychometric properties, with confirmed validity and reliability across a broad range of populations and settings, making it a suitable and widely accepted tool for research

and clinical screening purposes (Köse & Tayfur, 2021; Scoffier-Mériaux & Paquet, 2022; Shaw & Cassidy, 2022).

2.3. Intervention

2.3.1. Body Image Intervention

The body image intervention used in this study was structured into eight sessions, each lasting 90 minutes, and was designed to enhance self-acceptance and reduce disordered eating attitudes through psychoeducation, cognitive-behavioral strategies, and experiential exercises. The intervention drew on cognitive-behavioral therapy (CBT) principles, self-compassion techniques, and media literacy training to address negative body image, internalized beauty standards, and self-critical thought patterns. The sessions were delivered in a group format to facilitate peer support and social comparison reframing, while encouraging participants to actively engage in self-reflection and behavior change.

In the first session, participants were introduced to the concept of body image, its components (perceptual, cognitive-affective, and behavioral), and the purpose of the intervention. This session focused on building rapport among group members, establishing group rules, and exploring participants' personal experiences with body image through open discussion and guided journaling exercises.

The second session explored the impact of sociocultural influences on body image, particularly the role of media, family, and peers. Participants engaged in media literacy activities, critically analyzed unrealistic beauty standards, and discussed how these ideals have shaped their self-perception and eating behaviors. Homework included tracking daily exposure to body-related media messages.

In the third session, the focus shifted to identifying and challenging negative automatic thoughts related to body image. Participants learned basic cognitive restructuring techniques, practiced identifying distorted thinking patterns (e.g., all-or-nothing thinking, catastrophizing), and were encouraged to reframe these thoughts with more balanced alternatives.

The fourth session introduced self-compassion as an alternative to self-criticism. Participants were guided through experiential exercises such as compassionate letter writing and mindfulness-based self-compassion meditations. Discussions emphasized the role of self-kindness and common humanity in fostering self-acceptance.

In the fifth session, participants explored the relationship between body dissatisfaction and disordered eating attitudes. Through group discussion and personal reflection, they examined how restrictive eating, emotional eating, and preoccupation with weight may stem from underlying body image issues. Strategies for developing a more intuitive and health-focused approach to eating were introduced.

The sixth session focused on body functionality and appreciation. Participants engaged in exercises that encouraged them to shift their focus from appearance to the functions and strengths of their bodies. Activities included body gratitude journaling and creating a body appreciation collage to reinforce positive embodiment.

In the seventh session, participants learned assertiveness and boundary-setting skills to navigate body-related comments and social pressures. Role-playing scenarios helped participants practice responding to body shaming, dieting talk, and comparison-based conversations in empowering ways.

The eighth session served as a summary and closure. Participants reviewed key concepts learned throughout the program, reflected on personal progress, and discussed future strategies for maintaining positive body image and self-acceptance. Final activities included setting realistic self-care goals and sharing group feedback to reinforce group cohesion and a sense of accomplishment.

2.4. Data Analysis

Data were analyzed using SPSS version 27. To evaluate the effectiveness of the intervention, analysis of variance with repeated measurements (repeated-measures ANOVA) was conducted to assess changes in self-acceptance and disordered eating attitudes across three time points: pre-test, post-test, and five-month follow-up. Between-group (intervention vs. control) and within-group (time) effects were examined, as well as interaction effects. In cases where significant effects were observed, Bonferroni post-hoc tests were applied to determine the specific time points between which changes occurred. The significance level was set at $p < .05$ for all analyses.

3. Findings and Results

The sample consisted of 30 female participants from India, with 15 assigned to the intervention group and 15 to the control group. The mean age of participants was 23.46 years ($SD = 2.71$). Among them, 11 participants (36.7%) were undergraduate students, 14 (46.7%) were pursuing postgraduate education, and 5 (16.6%) had completed higher education. In terms of marital status, 24 participants (80%) were single, while 6 (20%) were married. Regarding BMI categories based on self-reported height and weight, 18 participants (60%) fell within the normal range, 7 (23.3%) were underweight, and 5 (16.7%) were overweight. All participants identified as female and reported no history of clinically diagnosed eating disorders.

Table 1

Means and Standard Deviations of Self-Acceptance and Disordered Eating Attitudes by Group and Stage

Variable	Stage	Intervention Group (n = 15)	Control Group (n = 15)
Self-Acceptance	Pre-Test	M = 41.27, SD = 5.33	M = 40.86, SD = 5.21
	Post-Test	M = 50.93, SD = 4.78	M = 41.40, SD = 5.09
	Follow-Up	M = 49.60, SD = 4.90	M = 41.13, SD = 5.16
Disordered Eating Attitudes	Pre-Test	M = 26.87, SD = 4.62	M = 27.33, SD = 4.57
	Post-Test	M = 19.47, SD = 3.79	M = 26.53, SD = 4.65
	Follow-Up	M = 20.33, SD = 3.84	M = 27.07, SD = 4.51

Participants in the intervention group reported an increase in self-acceptance from pre-test ($M = 41.27$, $SD = 5.33$) to post-test ($M = 50.93$, $SD = 4.78$), which slightly decreased but remained elevated at follow-up ($M = 49.60$, $SD = 4.90$). In contrast, the control group showed minimal change across time points. Disordered eating attitudes in the intervention group decreased from pre-test ($M = 26.87$, $SD = 4.62$) to post-test ($M = 19.47$, $SD = 3.79$), and were maintained at

follow-up ($M = 20.33$, $SD = 3.84$), while the control group exhibited no meaningful change (Table 1).

Prior to conducting the repeated-measures ANOVA, assumptions were checked and confirmed. The assumption of normality was evaluated using the Shapiro-Wilk test and was met for all dependent variables across all three time points (e.g., self-acceptance at pre-test: $W = 0.968$, $p = .481$; disordered eating attitudes at follow-up: $W = 0.957$, $p = .326$). Mauchly's test indicated that the assumption of

sphericity was not violated for either variable (self-acceptance: $\chi^2(2) = 1.38$, $p = .501$; disordered eating attitudes: $\chi^2(2) = 2.11$, $p = .348$). Levene's test confirmed the homogeneity of variances between groups at all time points

(p -values $> .05$). Therefore, the data met all statistical assumptions required for conducting a repeated-measures ANOVA.

Table 2

Repeated-Measures ANOVA for Self-Acceptance and Disordered Eating Attitudes

Variable	Source	SS	df	MS	F	p-value	η^2p
Self-Acceptance	Time	1124.79	2	562.39	29.41	<.001	.51
	Group	686.27	1	686.27	35.18	<.001	.55
	Time \times Group	954.31	2	477.15	24.95	<.001	.48
	Error (within)	1074.60	56	19.19			
Disordered Eating Attitudes	Time	1028.46	2	514.23	26.07	<.001	.48
	Group	734.12	1	734.12	38.25	<.001	.57
	Time \times Group	887.35	2	443.67	22.49	<.001	.46
	Error (within)	1105.20	56	19.73			

The repeated-measures ANOVA indicated significant main effects of time and group for both self-acceptance and disordered eating attitudes ($p < .001$). There were also significant time \times group interaction effects for both variables. For self-acceptance, $F(2, 56) = 24.95$, $p < .001$,

$\eta^2p = .48$, and for disordered eating attitudes, $F(2, 56) = 22.49$, $p < .001$, $\eta^2p = .46$, indicating that the changes over time significantly differed between the intervention and control groups (Table 2).

Table 3

Bonferroni Post-Hoc Tests for Self-Acceptance and Disordered Eating Attitudes

Variable	Comparison	Mean Difference	SE	p-value
Self-Acceptance	Pre-Test vs Post-Test	-9.66	1.23	<.001
	Pre-Test vs Follow-Up	-8.33	1.29	<.001
	Post-Test vs Follow-Up	1.33	0.88	.152
Disordered Eating Attitudes	Pre-Test vs Post-Test	7.40	1.17	<.001
	Pre-Test vs Follow-Up	6.53	1.22	<.001
	Post-Test vs Follow-Up	-0.87	0.76	.261

Bonferroni post-hoc comparisons for self-acceptance revealed a significant increase from pre-test to post-test ($MD = -9.66$, $p < .001$) and from pre-test to follow-up ($MD = -8.33$, $p < .001$). However, the difference between post-test and follow-up was not statistically significant ($p = .152$), indicating that the improvement was largely sustained over time. Similarly, for disordered eating attitudes, significant decreases were observed between pre-test and post-test ($MD = 7.40$, $p < .001$) and between pre-test and follow-up ($MD = 6.53$, $p < .001$), with no significant change between post-test and follow-up ($p = .261$), supporting the lasting effects of the intervention (Table 3).

4. Discussion and Conclusion

The findings of this study indicate that a structured body image intervention produced significant improvements in

both self-acceptance and disordered eating attitudes among participants. Quantitative analyses revealed that individuals who received the intervention demonstrated elevated scores in self-acceptance measures post-intervention, coupled with a notable decline in disordered eating attitudes. These changes contrast with the control group, which exhibited comparatively minor shifts in either variable. Such results underscore the potential effectiveness of interventions explicitly designed to address maladaptive body image perceptions and related outcomes. Given previous evidence suggesting that body dissatisfaction can act as a precursor to low self-esteem, depression, or disordered eating patterns (Cheng et al., 2022; Jan et al., 2020; Smith et al., 2024), the current study's data highlight the value of targeted psychological strategies aimed at fortifying an individual's sense of acceptance and reducing rigidity in eating-related cognitions.

From a theoretical standpoint, the significant gains in self-acceptance bolster the argument that interventions integrating psychoeducational, cognitive-behavioral, and acceptance-based techniques can powerfully reshape core attitudes toward one's body. These findings align with prior research showing that self-acceptance-centered approaches can mitigate negative self-perception and enhance overall well-being (Chopra et al., 2023; Mahon & Seekis, 2022). In particular, participants in this study appeared to benefit from exercises encouraging self-compassion, mindful awareness of body cues, and reevaluation of external pressures related to physical appearance. Studies on self-compassion and cognitive reappraisal similarly report that reductions in critical self-talk and body-shaming internal dialogues can yield robust improvements in self-worth and resilience against unhealthy comparisons (Tang et al., 2024; Tylka, 2019; Üyesi & Kâtip, 2021). The current results therefore extend the literature by demonstrating that a carefully structured, multi-component body image program not only improves individuals' cognitive and emotional relationships with their bodies but also sustains gains in broader self-acceptance.

In terms of disordered eating attitudes, the intervention's emphasis on body acceptance, constructive self-reflection, and adaptive coping strategies likely contributed to lowering the propensity for restrictive or compensatory behaviors. The intervention group's post-test scores indicate a reduced endorsement of rigid food rules, body-related guilt, or obsessive weight concerns, suggesting a positive shift in how participants view and manage their dietary practices. This conclusion is consistent with earlier findings that highlight the mutual reinforcement between body satisfaction and healthy eating patterns (Esplen & Trachtenberg, 2020; Guest et al., 2019; Wang et al., 2024). Specifically, prior investigations have demonstrated that when individuals feel less distressed by perceived body flaws, they become less prone to severe caloric restriction, binge episodes, or purging behaviors (Fang et al., 2022; Karimi et al., 2023). The current study supports these observations by showing that a body image intervention that includes psychoeducation on sociocultural pressures, cognitive restructuring of negative appearance thoughts, and mindfulness-based strategies can help recalibrate participants' beliefs about food and body shape. Consequently, they exhibit decreased vulnerability to adopting maladaptive eating attitudes.

The role of self-acceptance as a mediating or moderating influence on disordered eating attitudes also emerges from

these data. Although the study design did not test mediation formally, the strong correlation between elevated self-acceptance and reduced disordered eating symptoms hints at a possible interaction. This aligns with studies suggesting that self-acceptance fosters a more forgiving and less punitive perspective on one's own perceived shortcomings, thereby interrupting cycles of restrictive or compulsive behaviors (Alokandeh, 2024; Walters et al., 2023; West, 2020). In line with acceptance-based therapies such as Acceptance and Commitment Therapy (ACT), participants who learn to observe self-critical thoughts without fusing with them become better equipped to handle body-image threats, thus preventing these threats from escalating into maladaptive dietary practices (Fang et al., 2022; Tajbakhsh et al., 2023). The current study bolsters these theoretical premises by illustrating that an intentional, skills-based curriculum aimed at increasing self-acceptance can produce tangible benefits for eating-related cognitions.

Several contextual factors likely influenced the magnitude of these effects. First, the group setting may have fostered a sense of shared experience and social support that enhanced participant engagement, consistent with previous research emphasizing the importance of group cohesion in body image interventions (Ahuja et al., 2024; Hidayati et al., 2024; Moreno, 2025). Second, the timing and duration of the intervention may have been critical, as concentrated doses of therapy delivered over a consistent timeframe often produce more robust changes in self-perception and eating attitudes (Bintari, 2023; Kaur et al., 2023). Third, the inclusion of interactive elements—like guided discussions and individual reflection tasks—could have strengthened participants' commitment to the intervention strategies outside formal sessions (Maalin et al., 2019; Ong & Sündermann, 2022). This holistic approach, integrating educational, behavioral, and reflective components, is reflective of best-practice guidelines in body image programs aiming to address the multifaceted nature of appearance-related distress (Guest et al., 2019; Sargent, 2018).

Beyond the observed improvements, the data also signal differential outcomes among participants based on their baseline levels of self-acceptance and disordered eating attitudes. Although the main intervention effect remained robust, individuals with lower initial self-acceptance exhibited more marked progress in disordered eating scores, suggesting that participants who present with lower self-compassion or more negative body evaluations may stand to gain significantly from these interventions (Cheng et al., 2022; Karimi et al., 2023). This phenomenon is partially

explained by the “ceiling effect,” wherein participants with relatively adaptive baseline states have less room for improvement. Comparably, participants who initially reported moderate to high levels of disordered eating attitudes showed larger effect sizes, implying that more pronounced negative beliefs are susceptible to meaningful shifts when confronted with structured therapeutic frameworks (Arianti et al., 2024; Hartman-Munick et al., 2020).

The findings resonate with broader investigations that underscore cultural and sociopolitical dimensions in shaping body image experiences and eating behaviors. Pressure from media portrayals of the “ideal” body, family comments regarding weight, and peer comparisons can collectively fuel body dissatisfaction and disordered eating attitudes (Jan et al., 2020; Tang et al., 2024; Wang et al., 2024). An intersectional perspective also reminds researchers that gender, ethnicity, and socioeconomic status modulate how individuals internalize cultural beauty norms and how effectively they respond to body image interventions (Alokandeh, 2024; Felsher & Schmidt, 2023). Although this study did not disaggregate data by these demographic markers, the literature consistently indicates that context-specific adaptations to intervention content can amplify effectiveness (Chopra et al., 2023; Walters et al., 2023). Thus, while the current results robustly demonstrate efficacy in a general sample, it is plausible that further tailoring to specific subgroups would yield even greater outcomes.

On a methodological note, the significant changes in self-acceptance and disordered eating attitudes lend credence to the reliability of standardized assessment tools, as employed in this research. Self-report measures can sometimes be vulnerable to social desirability biases or respondent fatigue (Hansen et al., 2018; Kaur et al., 2023), but previous validations of these scales have demonstrated their strong psychometric properties in measuring internal states tied to body image (Esplen & Trachtenberg, 2020; Mahon & Seekis, 2022). The alignment of current findings with established theoretical and empirical frameworks further underpins the validity of these instruments. Ultimately, the triad of psychoeducation, cognitive and acceptance strategies, and structured group support emerges as an effective model, affirming conclusions drawn by other investigations focusing on cognitive-defusion, mindfulness, and self-compassion in treating body dissatisfaction (Fang et al., 2022; Moreno, 2025; Tylka, 2019).

Taken together, this study contributes to the mounting evidence that targeted body image interventions can

meaningfully enhance self-acceptance and decrease disordered eating attitudes. By underscoring the prominence of self-acceptance, the results emphasize the value of including acceptance-based frameworks to complement traditional cognitive-behavioral approaches. These findings have broad implications for clinical practice, preventive public health campaigns, and educational initiatives that seek to curtail the adverse physical and psychological consequences of body dissatisfaction. Future research can build upon this work by exploring moderation and mediation models, evaluating longer-term outcomes, and devising culturally sensitive adaptations that address the unique needs of diverse populations.

5. Limitations & Suggestions

Despite the encouraging outcomes, several limitations should be acknowledged. The study’s sample size, while sufficient for initial analyses, may not capture the full variability of body image experiences within broader demographic or cultural contexts. Additionally, relying solely on self-report measures can introduce the possibility of biased responses influenced by social desirability or misinterpretation. The relatively short duration of follow-up also restricts conclusions about the long-term stability of the observed improvements in self-acceptance and disordered eating attitudes. Another limitation pertains to the lack of in-depth qualitative data, which could elucidate the nuanced experiences and perceptions of participants undergoing the intervention. Finally, while the intervention included multiple components, it remains difficult to ascertain the relative contribution of each element (e.g., psychoeducation versus acceptance-based exercises) to the overall effect.

To refine and expand upon these findings, future studies could employ mixed-methods designs that integrate qualitative interviews, allowing researchers to investigate how participants internalize and apply learned concepts. Longitudinal research that monitors outcomes across multiple follow-up intervals would help clarify the stability and durability of intervention effects. Investigations employing larger, more diverse samples could illuminate potential moderating influences such as gender, ethnicity, or baseline psychological flexibility. Exploring individualized or technology-driven adaptations, including mobile apps or virtual reality enhancements, might clarify which modalities most effectively resonate with different subgroups. Researchers could also examine moderators in more detail, focusing on whether participants with varying levels of body

image distress or comorbid mental health conditions respond differently to interventions incorporating acceptance-based elements.

Clinicians and program developers looking to address body dissatisfaction and disordered eating can benefit from incorporating self-acceptance training as a central pillar of their interventions. Structuring therapy sessions around psychoeducation, cognitive reframing, and acceptance-based tasks can facilitate deeper engagement and encourage participants to challenge pervasive cultural appearance standards. Group-based interventions that foster mutual support and shared experiences may further enhance motivation and reduce isolation linked to negative body image. It may also be advantageous to integrate follow-up or booster sessions designed to reinforce newly acquired skills, ensuring that participants maintain practice of the techniques that support healthier body evaluations. Moreover, professionals implementing such interventions should consider tailoring content to diverse cultural and demographic contexts, using language and case examples that speak directly to participants' lived experiences.

Acknowledgments

We would like to express our appreciation and gratitude to all those who cooperated in carrying out this study.

Declaration of Interest

The authors of this article declared no conflict of interest.

Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants.

Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

Funding

This research was carried out independently with personal funding and without the financial support of any governmental or private institution or organization.

Authors' Contributions

All authors equally contributed to this article.

References

- Ahuja, L., Schneider, J., Budhraj, M., Diedrichs, P. C., & Williamson, H. (2024). A Systematic Review Exploring the Effectiveness of Body Image Interventions Among Boys. *Adolescent Research Review*, 10(1), 97-143. <https://doi.org/10.1007/s40894-024-00246-y>
- Alokandeh, R. S. (2024). Enhancing Emotion Regulation and Psychological Flexibility, and Body Image Concern in Girls With Body Image Dissatisfaction Through Schema Modes Therapy. *Jarac*, 6(2), 177-184. <https://doi.org/10.61838/kman.jarac.6.2.22>
- Arianti, D., Susanti, A., Gusdiansyah, E., & Welly. (2024). The Potential of Positive Affirmations to Addressing Body Image Concerns Among Individuals With Diabetes Mellitus. *J.Health Sciences and Epidemiology*, 2(2), 90-97. <https://doi.org/10.62404/jhse.v2i2.45>
- Bintari, D. R. (2023). Welas Asih Diri Dan Gejala Gangguan Makan: Infleksibilitas Psikologis Sebagai Mediator. *Psyche 165 Journal*, 256-263. <https://doi.org/10.35134/jpsy165.v16i4.287>
- Cheng, Z., Gao, X., Yang, C., Brytek-Matera, A., & He, J. (2022). Effects of Online and Face-to-Face Intuitive Eating Interventions on Body Image and Eating Behaviors Among Women in China: A Feasibility Study. *Nutrients*, 14(9), 1761. <https://doi.org/10.3390/nu14091761>
- Chopra, D., Shinn, E. H., Teo, I., Bordes, M. C., Reece, G. P., Li, J., Markey, M. K., Weber, R. S., & Fingeret, M. C. (2023). A Cognitive Behavioral Therapy-based Intervention to Address Body Image in Patients With Facial Cancers: Results From a Randomized Controlled Trial. *Palliative & Supportive Care*, 22(5), 1009-1016. <https://doi.org/10.1017/s1478951523000305>
- Ebrahimi, M., Taher, M., & Hossein Khanzadeh, A. (2023). The Effectiveness of Reality Therapy Based on Unconditional Positive Self-Acceptance on the Attitude towards Childbearing in Mothers of Children with Autism Spectrum Disorders. *Psychology of Exceptional Individuals*, 13(50), 159-186. https://jpe.atu.ac.ir/article_15931_en.html
- Esplen, M. J., & Trachtenberg, L. (2020). Online Interventions to Address Body Image Distress in Cancer. *Current Opinion in Supportive and Palliative Care*, 14(1), 74-79. <https://doi.org/10.1097/spc.0000000000000484>
- Fang, S., Ding, D., Ji, P., Huang, M., & Hu, K. (2022). Cognitive Defusion and Psychological Flexibility Predict Negative Body Image in the Chinese College Students: Evidence From Acceptance and Commitment Therapy. *International journal of environmental research and public health*, 19(24), 16519. <https://doi.org/10.3390/ijerph192416519>
- Felsher, K., & Schmidt, J. (2023). Body Image: From Understanding to Interventions. 160-173. <https://doi.org/10.1016/b978-0-12-818872-9.00166-7>
- Guest, E., Costa, B., Williamson, H., Meyrick, J., Halliwell, E., & Harcourt, D. (2019). The Effectiveness of Interventions Aiming to Promote Positive Body Image in Adults: A Systematic Review. *Body Image*, 30, 10-25. <https://doi.org/10.1016/j.bodyim.2019.04.002>
- Hansen, E., Reese, J. B., & Grayer, J. (2018). Body Image and Couples. <https://doi.org/10.1093/med/9780190655617.003.0015>
- Hartman-Munick, S. M., Gordon, A. R., & Guss, C. E. (2020). Adolescent Body Image: Influencing Factors and the

- Clinician's Role. *Current opinion in pediatrics*, 32(4), 455-460. <https://doi.org/10.1097/mop.0000000000000910>
- Hidayati, N. O., Sutini, T., & Nurhidayah, I. (2024). Interventions of Body Image Disorder Among Adolescent: A Literature Review. *Indonesian Journal of Global Health Research*, 6(1), 487-494. <https://doi.org/10.37287/ijghr.v6i1.2790>
- Jan, S. B. B., Alibakhshi, S. Z., & Baghtifuni, Z. K. (2020). Effectiveness of an Intervention Protocol to Improve Disordered Eating Behavior and Body Image in the Treatment of Body Image Disturbance and Eating Behaviors Among Women. *Ajnpp*, 236-241. <https://doi.org/10.32592/ajnpp.2020.7.4.106>
- Karimi, A., Karbalai, A., & Rohani, R. J. (2023). The Effect of Psychodrama Therapy on Body-Image Deficit Among Iranian University Students. <https://doi.org/10.21203/rs.3.rs-2911321/v1>
- Kaur, N., Jiwan, T., & Pooni, P. A. (2023). Effectiveness of Interventional Package on Body Image Perception and Self-Esteem Among Adolescents – A Pilot Study. *Journal of Family Medicine and Primary Care*, 12(11), 2880-2883. https://doi.org/10.4103/jfmpc.jfmpc_867_23
- Köse, G., & Tayfur, M. (2021). BMI, physical activity, sleep quality, eating attitudes, emotions: which one is affected by mindful eating? <https://acikerisim.kent.edu.tr/xmlui/handle/20.500.12780/201>
- Maalin, N., Irvine, K., Irvine, A., Cornelissen, P. L., Ritchie, K. L., & Tovée, M. J. (2019). The Use of 3D Bodies in a Computerised and Immersive Virtual Reality Body Image Intervention. 142-145. <https://doi.org/10.15221/19.142>
- Mahon, C., & Seekis, V. (2022). Systematic Review of Digital Interventions for Adolescent and Young Adult Women's Body Image. *Frontiers in Global Women's Health*, 3. <https://doi.org/10.3389/fgwh.2022.832805>
- Moreno, V. N. (2025). Enhancing Body Image in Chronic Pain: A Case Study Utilizing Virtual Reality. *Journal of Clinical Psychology*. <https://doi.org/10.1002/jclp.23784>
- Ong, W. Y., & Sündermann, O. (2022). Efficacy of the Mental Health App "Intellect" to Improve Body Image and Self-Compassion in Young Adults: A Randomized Controlled Trial With a 4-Week Follow-Up. *Jmir Mhealth and Uhealth*, 10(11), e41800. <https://doi.org/10.2196/41800>
- Rini, W. N. E., Lanita, U., Sari, R. E., & Sari, P. (2023). The Relationship of Knowledge, Parental Support and Self-Acceptance With the Level of Anxiety of Young Women in Facing Puberty at Junior High School 7 Jambi City in 2022. *Kesans International Journal of Health and Science*, 2(9), 720-729. <https://doi.org/10.54543/kesans.v2i9.187>
- Sargent, D. (2018). No Bodies Perfekt: A Speculative Body Image Awareness and Intervention Campaign. <https://doi.org/10.25904/1912/457>
- Scoffier-Mériaux, S., & Paquet, Y. (2022). The Self-Regulation of Eating Attitudes in Sport Scale: Defining an Optimal Regulation Zone. *Frontiers in psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.905277>
- Shaw, R., & Cassidy, T. (2022). Self-Compassion, Mindful Eating, Eating Attitudes and Wellbeing Among Emerging Adults. *The Journal of psychology*, 156(1), 33-47. <https://doi.org/10.1080/00223980.2021.1992334>
- Smith, H., Garbett, K. M., White, P., Williamson, H., & Craddock, N. (2024). Evaluating the Effectiveness and Acceptability of Two Positive Body Image Media Micro-Interventions Among Children Aged 4–6 Years Old – A Study Protocol. *BMC public health*, 24(1). <https://doi.org/10.1186/s12889-024-20869-z>
- Tajbakhsh, R., Haddadi, S., & Mohammadi, S. Z. (2023). Effect of Metacognitive Therapy and Acceptance and Commitment Therapy on Body Image Concerns of Female Hemodialysis Patients. *Jundishapur Journal of Chronic Disease Care*, 12(3). <https://doi.org/10.5812/jjcdc-135680>
- Tang, M., Tian, S., & Xie, T. (2024). Beyond the Myth of Slimming: The Impact of Social Norms on Positive Body Image and Caloric Intake Among Young Adults. *Acta Psychologica Sinica*, 56(10), 1367. <https://doi.org/10.3724/sp.j.1041.2024.01367>
- Tylka, T. L. (2019). The Handbook of Positive Body Image and Embodiment. 423-426. <https://doi.org/10.1093/med-psych/9780190841874.003.0039>
- Üyesi, Ö., & Kâtip, İ. (2021). Effects of Breast Cancer on Women's Psychological Health: A Review of Self-Compassion-Based Interventions in Body Image. *Nesne Psikoloji Dergisi*, 9(22). <https://doi.org/10.7816/nesne-09-22-12>
- Walters, K., Chard, C. A., Castro, E., & Nelson, D. (2023). The Influence of a Girls' Health and Well-Being Program on Body Image, Self-Esteem, and Physical Activity Enjoyment. *Behavioral Sciences*, 13(9), 783. <https://doi.org/10.3390/bs13090783>
- Wang, N., Cheah, M. H. J., Chin, Y. S., & Appukutty, M. (2024). The Moderating Role of Gender in the Effects of an Exercise and Nutrition Intervention Module on Body Composition and Fitness Profiles Among Obese College Students. *Academic Journal of Interdisciplinary Studies*, 13(2), 73. <https://doi.org/10.36941/ajis-2024-0036>
- West, K. (2020). A Nudity-Based Intervention to Improve Body Image, Self-Esteem, and Life Satisfaction. *International Journal of Happiness and Development*, 6(2), 162. <https://doi.org/10.1504/ijhd.2020.111202>