

Original Article

The Effectiveness of Integrated Mindfulness and Schema Therapy on Physical Appearance Perfectionism and Self-Objectification in Women Inclined Toward Cosmetic Surgery

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Abstract

Background and Aim: Women inclined toward cosmetic surgery often exhibit elevated physical appearance perfectionism and self-objectification, driven by societal pressures and media influences, which can lead to body dissatisfaction and psychological distress. This study investigated the effectiveness of integrated mindfulness and schema therapy in reducing these variables.

Materials and Methods: In a semi-experimental pretest–posttest design with a control and follow-up group, 30 women from Tehran (2024–2025) were purposefully selected and randomly assigned to an experimental group (15 participants) and a control group (15 participants). The experimental group received eight weekly 90-minute group sessions of combined mindfulness and schema therapy based on the protocol. Data were analyzed using repeated measures ANOVA in SPSS 26.

Results: Descriptive statistics showed more pronounced reductions in physical appearance perfectionism and self-objectification scores in the experimental group compared to controls from pretest to posttest and follow-up. Inferential analyses revealed significant between-group differences ($p < 0.05$), time effects ($p < 0.001$), and time-group interactions ($p < 0.001$). The effect sizes were medium to large ($\eta^2 = 0.151–0.509$), confirming the practical significance of the intervention.

Conclusion: This trial demonstrated that an integrative mindfulness–schema therapy protocol produced medium to large, sustained reductions in physical appearance perfectionism and self-objectification among women seeking cosmetic surgery. These effects underscore the clinical value of targeting appearance-related perfectionistic beliefs and objectifying self-schemas in pre- and post-surgical care. The pattern of findings aligns with improvements in transdiagnostic mechanisms such as emotion regulation and cognitive flexibility in body image concerns. Future research should test this brief, group-based protocol in broader cosmetic surgery and non-clinical populations to assess scalability and external validity.

Keywords: Integrated mindfulness and schema therapy; Physical appearance; Perfectionism; Self-objectification; Women; Cosmetic surgery

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Introduction

Cosmetic surgeries worldwide are predominantly performed by women, who account for a significant share in this field (1). On the other hand, research indicates that participation in social networks meaningfully contributes to body dissatisfaction among young women. For example, 40% of adolescents report that images shared in these spaces have created concerns about their body image (2), and 70% of female university students have reported feeling more negatively about their appearance after viewing idealized images in magazines (3, 4). Therefore, a nuanced examination of the psychological factors fueling these trends—including body image dissatisfaction, appearance perfectionism, and self-objectification—is essential (1-4).

Appearance perfectionism is a distinct subtype of perfectionism characterized by the pursuit of an ideal physical appearance. It encompasses two primary dimensions: concern over imperfection, which refers to maladaptive worries and anxieties about perceived bodily flaws, and hope for perfection, which reflects adaptive aspirations and positive motivations toward achieving physical ideals (5, 6). This construct has become increasingly prominent in societies shaped by pervasive media representations of beauty. Given its strong associations with heightened body dissatisfaction, disordered eating behaviors, and vulnerability to psychopathologies such as anorexia nervosa and muscle dysmorphia, appearance perfectionism is of considerable clinical and psychological significance (7).

The conceptualization of appearance perfectionism parallels broader models of perfectionism proposed by Frost *et al.* and Hewitt and Flett, both of which distinguish between adaptive and maladaptive dimensions (8, 9). According to these frameworks, negative evaluations of one's appearance may arise from early developmental experiences as well as sociocultural pressures (10). In addition, recent longitudinal evidence has identified appearance perfectionism, particularly the concern over imperfection dimension, as a predictive risk factor for depression, anxiety, and psychological distress (11). Cross-cultural studies further suggest that although

appearance perfectionism is prevalent across diverse populations, its expression and intensity are shaped by cultural beauty standards and the extent of exposure to social media (12, 13). Moreover, longitudinal research involving adolescents has shown that appearance perfectionism increases with age and independently predicts body dissatisfaction, even after controlling for body mass index. This finding underscores its role in the developmental pathways of self-concept-related disturbances (12). Collectively, these findings support cognitive-behavioral theories suggesting that perfectionistic striving in the domain of appearance may perpetuate cycles of dissatisfaction and maladaptive coping. This, in turn, highlights the growing need for targeted interventions in clinical settings (11-13).

Self-objectification is a psychological process in which individuals, particularly women, internalize an observer's perspective on their own bodies, thereby reducing their identity to an object whose value is primarily defined by appearance rather than inherent attributes or competence (14). Grounded in Objectification Theory (Fredrickson & Roberts, 1997), self-objectification is associated with a wide range of adverse psychological outcomes, including body shame (15), anxiety, diminished self-worth, disordered eating, and impaired cognitive performance (16). This construct is fostered within a sociocultural context in which media and societal norms prioritize physical attractiveness over inherent competencies. Core components of self-objectification include habitual body monitoring, the prioritization of aesthetic standards over functional competence, and the experience of negative affect—such as body shame—when one perceives a failure to meet appearance-related norms (16, 17).

Experimental and correlational evidence suggests that even brief inductions of self-objectification can impair cognitive performance and exacerbate negative emotions, supporting a model in which persistent self-objectification amplifies deleterious psychological effects over time (16, 18). Furthermore, meta-analytic findings have demonstrated significant positive correlations between self-objectification, body dissatisfaction, and body shame across adolescent and adult populations, with age, race, and gender serving as potential moderators (18). These findings not only

extend the theoretical scope of Objectification Theory to diverse populations but also underscore critical research gaps concerning minority groups and specific high-risk contexts, such as populations considering cosmetic surgery (14, 18).

Integrated mindfulness and schema therapy has emerged as a novel therapeutic approach aimed at reducing appearance perfectionism and maladaptive striving for an idealized physical appearance (19-21). In this process, individuals may internalize an external perspective on their bodies, resulting in diminished self-esteem and increased vulnerability to social pressures (19). Mindfulness, with its emphasis on nonjudgmental awareness of the present moment, may work synergistically with schema therapy to modify maladaptive schemas rooted in early life experiences, thereby providing a comprehensive framework for fostering self-compassion and emotional regulation (20). The relevance of such interventions is particularly evident in clinical psychology, especially in the treatment of body image disturbances and the growing demand for elective cosmetic procedures. In these contexts, this integrative approach may help reduce adverse outcomes such as postsurgical regret, which is commonly reported among individuals with body dysmorphic disorder, while also enhancing long-term psychological resilience (19-26).

This emerging integrative approach combines schema therapy, which targets early maladaptive schemas and schema modes as deeply rooted cognitive, emotional, and behavioral patterns arising from unmet childhood needs, with mindfulness-based practices that emphasize nonjudgmental present-moment awareness, acceptance, and emotional regulation in order to promote adaptive coping and schema modification (26-30). Previous studies have examined the effectiveness of schema therapy in improving self-differentiation and emotional control among couples with marital maladjustment (31), as well as in reducing subclinical depression and improving cognitive emotion regulation among adolescent girls (32).

In addition, mindfulness-based interventions have been shown to reduce fear of negative evaluation and automatic thoughts in female students and to alleviate symptoms of depression and anxiety (33, 34). However, the combined application of these two

therapeutic approaches has received comparatively limited attention, despite evidence suggesting that their integration may enhance emotional flexibility, reduce maladaptive behaviors, and improve overall mental health in complex conditions such as obsessive-compulsive symptoms and chronic illnesses, including psoriasis (21, 35). For example, a randomized controlled trial involving women with obsessive-compulsive symptoms found that an integrated schema therapy-mindfulness intervention significantly increased psychological flexibility and reduced obsessive thoughts and compulsive behaviors compared with schema therapy alone or cognitive behavioral therapy alone, with mindfulness mediating improvements in emotional regulation (21). Similarly, a study involving patients with psoriasis indicated that both schema therapy and mindfulness independently improved maladaptive schemas such as dependency and insufficient self-control (35). From a theoretical perspective, this integrated protocol draws on third-wave cognitive-behavioral approaches and combines the attachment-based framework of schema therapy with the foundations of Buddhist mindfulness and acceptance-based principles, based on the assumption that mindful awareness of schemas reduces emotional reactivity and facilitates enduring psychological change (27-30).

Despite the growing body of research on interventions for body image disturbances among individuals seeking cosmetic surgery, empirical evidence regarding the effectiveness of integrated mindfulness and schema therapy (MST) in addressing appearance perfectionism and self-objectification remains limited. Existing literature has predominantly investigated schema therapy and mindfulness-based treatments in isolation. Schema therapy has been shown to reduce perfectionism, body shame, and symptoms of body dysmorphic disorder (BDD) among cosmetic surgery candidates by restructuring maladaptive schemas, such as 'defectiveness' and 'unrelenting standards' (35, 36). Conversely, mindfulness-based interventions have demonstrated efficacy in decreasing body dissatisfaction and self-objectification by fostering nonjudgmental awareness and reducing habitual body monitoring, with meta-analyses reporting moderate effects on self-compassion and emotional regulation in populations with appearance-related concerns (16, 37).

However, the potential synergistic benefits of an integrated approach—combining schema mode work with mindfulness techniques (e.g., body scans, breath awareness) to address cognitive distortions and experiential avoidance more comprehensively—remain largely unexplored (16, 21, 37). Furthermore, methodological constraints persist; a substantial portion of the extant literature relies on cross-sectional designs, which precludes causal inferences and the assessment of therapeutic efficacy over time (38). Longitudinal and experimental investigations of integrated protocols remain sparse, and few studies have directly compared these interventions against standard cognitive-behavioral therapy (CBT) or evaluated critical mediating mechanisms, such as emotional regulation, psychological flexibility, or reductions in body monitoring (21, 33, 38). Moreover, cultural and contextual factors influencing the tendency toward cosmetic surgery remain underrepresented, as most research has been conducted within Western populations (36, 39). Finally, the absence of standardized assessment protocols and clinical guidelines for integrated mindfulness–schema approaches limit their clinical utility and impedes the development of evidence-based preventive interventions for cosmetic surgery candidates (39, 40).

Considering that unmitigated appearance perfectionism and self-objectification are significant drivers of the rising rates of cosmetic surgery—with women accounting for over 80% of global procedures—and are strongly associated with post-surgical regret and compromised mental health, further empirical investigation is essential (1, 39, 40). Specifically, the development and evaluation of culturally sensitive, integrated therapeutic protocols tailored for women predisposed to cosmetic surgery could enhance clinical practice and inform policy within the field of aesthetic medicine (36, 39, 40). Accordingly, the present study seeks to address these knowledge gaps by investigating the following research question: “To what extent does an integrated mindfulness and schema therapy protocol influence physical appearance perfectionism and self-objectification among women predisposed to cosmetic surgery?”

Methods

This study employed a quasi-experimental pretest-posttest design with a control group and was conducted in Tehran during the winter of 2024 and spring of 2025. Participants were recruited from the target population based on their willingness to participate and complete the study questionnaires. In line with recommendations for experimental and quasi-experimental research and based on Cochran’s formula for large populations, a sample size of 15 participants per group was considered appropriate. Owing to practical and logistical constraints, purposive sampling was used. Participants were then randomly assigned to either the experimental group or the control group, with 15 individuals in each group.

The experimental group participated in eight weekly 90-minute group therapy sessions, whereas the control group received no intervention. Following the intervention, both groups completed the posttest assessment. At the descriptive level, means and standard deviations were calculated for all study variables. Data were analyzed using SPSS version 26 and repeated-measures analysis of variance (ANOVA). Ethical principles, including confidentiality, data protection, and respect for participants’ privacy, were observed throughout the study.

The inclusion criteria were as follows: providing informed consent to participate in the study; obtaining a score above 72 on the Cosmetic Surgery Tendency Questionnaire; obtaining a mean score above 3 on the Defectiveness/Shame subscale of the Young Schema Questionnaire-Short Form; being between 18 and 40 years of age; and having at least a high school diploma. The exclusion criteria were as follows: absence from more than two therapy sessions; diagnosis of other psychological or personality disorders; current receipt of individual counseling or pharmacotherapy; and simultaneous participation in other treatment programs. The content and structure of the therapy sessions are presented in Table 1.

The therapeutic intervention implemented in this study was a short-term group therapy protocol integrating schema therapy and mindfulness, developed by Van Vreeswijk *et al.* in 2014 (41). This intervention consisted of eight 90-minute group sessions.

Table 1. Therapy Sessions

Sessions	Session Content
Session 1	Schemas, schema modes, and mindfulness training – Introduction – Explanation of schemas and schema modes – Schema and mode journal – Body scan exercise – Homework assignment.
Session 2	Mindful awareness of surroundings – Mindful awareness of breathing – Mindful awareness of sounds – Mindful awareness of bodily sensations – Mindful awareness of thoughts – Mindful awareness of emotions – Detached awareness – Homework assignment.
Session 3	Mindful awareness of breathing – Three-minute breathing space – Mindful awareness of painful memories – Mindful awareness of walking – Homework assignment.
Session 4	Mindful coping with schemas (coping with issues) – Mindfulness trick – Mindful awareness of schemas – Familiarization with schemas – Homework assignment.
Session 5	Allowing and accepting whatever exists (responses through healthy adult and happy child modes – mindful interaction with loved ones) – Three-minute mindful awareness of schemas (being mode – becoming mode) – Mindful acceptance of self and others – Homework assignment.
Session 6	Schemas – Reality or imagination – Mindful awareness of walking – Letting schemas go – Homework assignment.
Session 7	Self-care through healthy adult and happy child modes – Mindful awareness of healthy adult and happy child modes – Preparing for the future – What do healthy adult and happy child modes need – Mindful awareness of schemas as mere thoughts – Homework assignment.
Session 8	Future – Schemas and schema modes in the future – Mindful awareness of oneself as child and adult – Mindfulness trick with schemas and modes in interpersonal interactions.
Follow-up Session	30 days after the last session – Shorter duration – Emphasis on maintaining and enhancing previously acquired skills.

Results

The statistical population of this research consisted of women with an inclination toward cosmetic surgery residing in Tehran. From the target population, 30 individuals were selected based on the study's inclusion and exclusion criteria and were randomly assigned to either an experimental group (15 individuals) or a control group (15 individuals). The age range of the participants was between 18 and 40 years, with a mean age of 27.16 and a standard deviation of 3.97. All participants were female and residents of Tehran. The average education level in both groups was at the bachelor's degree level. Specifically, in the experimental group, 2 individuals (13.3%) had a diploma, 9 individuals (60%) had a bachelor's degree, and 4 individuals (26.7%) had a master's degree. In the control group, 3 individuals (20%) had a diploma, 8 individuals (53.3%) had a bachelor's degree, and 4 individuals (26.7%) had a master's degree. The descriptive findings of the research variables are presented in Table 2.

As shown in Table 2, the mean scores of the research variables in the intervention group (mindfulness and integrative schema therapy) decreased more in the

posttest and follow-up stages compared to the pretest, relative to the control group. The use of parametric repeated measures tests requires meeting several initial assumptions, including normality of the scores, equality of variances, and equality of the covariance matrix.

The purpose of testing the normality assumption is to examine whether the distribution of scores in the sample matches that of the population. This assumption states that the observed difference between the sample score distribution and the normal distribution in the population equals zero. For this purpose, the Shapiro–Wilk test was used. The results obtained for the research variable scores indicated that the null hypothesis of normal distribution remained valid across all three stages—pretest, posttest, and follow-up—for both groups (all significance levels were greater than 0.05). To test the assumption of equality of variances, the Levene's test was applied. The results showed that for the physical appearance perfectionism variable in the pretest ($F = 1.97$, $P\text{-Value} = 0.171$), posttest ($F = 2.65$, $P\text{-Value} = 0.115$), and follow-up ($F = 3.66$, $P\text{-Value} = 0.06$), and for self-objectification in the pretest ($F = 2.4$, $P\text{-Value} = 0.102$), posttest ($F = 3.11$, $P\text{-Value} = 0.075$), and follow-up ($F = 1.83$, $P\text{-Value} = 0.172$), the assumption of equal variances was confirmed for all

research variables across the three stages. The Mauchly's test results for testing the Sphericity of covariance matrices across groups indicated that for physical appearance perfectionism (Mauchly's $W = 0.337$, $\chi^2 = 29.39$, $P\text{-Value} = 0.001$) and self-objectification (Mauchly's $W = 0.524$, $\chi^2 = 17.47$, $P\text{-Value} = 0.001$), the assumption of Sphericity was not confirmed. Therefore, in the within-subject analyses of repeated measures ANOVA, a conservative correction such as the Greenhouse–Geisser adjustment was used. The results of between-subject and within-subject comparisons for the research variables are presented in Table 3. Based on the findings presented in Table 3, the between-subjects analysis showed a significant difference in the mean scores of the variables physical appearance perfectionism ($F = 4.98$, $\eta^2 = 0.151$, $P\text{-Value} < 0.05$) and self-objectification ($F = 24.38$, $\eta^2 = 0.475$,

$P\text{-Value} < 0.001$) between the experimental group (mindfulness and integrative schema therapy) and the control group. According to the within-subject analysis, the main effect of time was also significant, indicating a significant overall difference in the mean scores of physical appearance perfectionism ($F = 29.01$, $\eta^2 = 0.509$, $P\text{-Value} < 0.001$) and self-objectification ($F = 28.73$, $\eta^2 = 0.506$, $P\text{-Value} < 0.001$) across the research stages. The results also showed that the interaction effect of time and group membership was significant for physical appearance perfectionism ($F = 21.03$, $\eta^2 = 0.429$, $P\text{-Value} < 0.001$) and self-objectification ($F = 20.18$, $\eta^2 = 0.419$, $P\text{-Value} < 0.001$), indicating that the changes across pretest, posttest, and follow-up stages were statistically significant within each group. The results of the Bonferroni post hoc test comparing the experimental and control groups at different research stages for the study variables are presented in Table 4.

Table 2. Descriptive indices of the research variables by two groups and three research stages

Variable	Group	Pre-test Mean	Pre-test SD	Post-test Mean	Post-test SD	Follow-up Mean	Follow-up SD
Physical appearance perfectionism	Experimental	32.53	5.26	27.80	3.85	29.20	3.74
	Control	35.13	8.06	34.66	7.78	35.13	7.92
Self-objectification	Experimental	10.20	4.26	7.60	4.82	7.53	4.80
	Control	9.60	2.29	9.33	2.09	9.40	2.38

Table 3. Results of between-subject and within-subject effects for research variables

Variable	Effect	Source	Sum of Squares	df	Mean Square	F	Sig.	Effect Size	Power
Physical appearance perfectionism	Between-subjects	Group	592.9	1	592.9	4.98	0.03	0.151	0.702
	Within-subjects	Time effect	104.08	1.202	86.57	29.01	0.001	0.509	1.000
		Time $\times$ Group effect	57.46	1.202	62.76	21.03	0.001	0.429	0.998
Self-objectification	Between-subjects	Group	83.67	1	86.67	24.38	0.001	0.475	0.997
	Within-subjects	Time effect	41.08	1.35	30.33	28.73	0.001	0.506	1.000
		Time $\times$ Group effect	28.86	1.35	21.31	20.18	0.001	0.419	0.991

Table 4. Results of the Bonferroni post hoc test comparing experimental and control groups across research stages

Variable	Posttest Mean Difference	Sig.	Effect Size	Follow-up Mean Difference	Sig.	Effect Size
Physical appearance perfectionism	-6.86	0.005	0.250	-5.93	0.010	0.197
Self-objectification	-1.73	0.001	0.405	-1.86	0.001	0.398

As shown in Table 4, the mean differences between the experimental group (mindfulness and integrative schema therapy) and the control group in both posttest and follow-up stages were statistically significant for the variables of physical appearance perfectionism and self-objectification ($p < 0.05$).

In general, it can be concluded that mindfulness and integrative schema therapy had a significant effect in reducing physical appearance perfectionism and self-objectification, and the therapeutic effects were maintained during the follow-up stage.

Discussion

This study aimed to examine the effectiveness of mindfulness and integrative schema therapy on physical appearance perfectionism and self-objectification among women with a tendency toward cosmetic surgery. The findings demonstrated that the combined intervention significantly reduced both physical appearance perfectionism and self-objectification in this population.

Regarding the effectiveness of the integrative mindfulness and schema therapy approach on physical appearance perfectionism, the results indicated that the mean scores of this variable in the experimental group showed greater decreases in the post-test and follow-up stages compared to the control group. These results align with aspects of previous research by Mashkouri *et al.*, Khajeh-Hasani, and Gopan *et al.* (19, 20, 36). The present study extends prior findings by demonstrating synergistic effects within a combined protocol, addressing identified gaps in the literature. As suggested by Ahanian Moghaddam *et al.* (21), such integration appears more effective than separate approaches, as it enhances emotional regulation and schema restructuring, offering a more comprehensive framework for confronting culturally influenced appearance ideals.

Conceptually, this integrated approach targets maladaptive schema patterns while fostering nonjudgmental awareness, thereby reducing the psychological vulnerabilities that drive individuals toward cosmetic surgery. Since physical appearance perfectionism represents a maladaptive cognitive–emotional pattern in which individuals impose unrealistic and rigid standards upon their

appearance—often leading to chronic dissatisfaction and aesthetic intervention seeking—the combined mindfulness and schema therapy approach can effectively mitigate it. Mindfulness (through moment-to-moment awareness and nonjudgmental acceptance) and schema therapy (through modifying deep-rooted maladaptive schemas such as “unrelenting standards” and “defectiveness/shame”) jointly reduce the underlying mechanisms of perfectionism.

Schema therapy helps identify and reconstruct maladaptive schemas like “hypercriticalness,” often central to perfectionistic tendencies. Through cognitive-behavioral and experiential techniques (e.g., imagery rescripting of childhood experiences), clients learn to challenge unrealistic standards and enhance self-acceptance. Simultaneously, mindfulness reduces rumination and body monitoring, encouraging acceptance of one’s present appearance—directly undermining perfectionistic thought patterns. The integration of both approaches provides complementary benefits: mindfulness offers in-the-moment strategies for managing perfectionistic thoughts, while schema therapy addresses the structural depth of those patterns. This combination yields more sustainable reductions in perfectionism, as mindful awareness facilitates early detection and reconstruction of activated schemas.

Research supports that the combined approach of schema therapy and mindfulness is more effective in reducing physical appearance perfectionism than single-method treatments. For instance, comparative studies indicate that this combination enhances psychological flexibility and decreases perfectionism more than schema therapy or cognitive-behavioral therapy alone. Moreover, schema therapy reduces the cognitive foundations of perfectionism and improves emotion regulation, which mindfulness further strengthens (25). In the context of body image, the integration reduces psychosomatic symptoms and body-related concerns directly tied to appearance perfectionism. Empirical studies also confirm the effectiveness of mindfulness in reducing perfectionism and thought–action fusion among women (21). Ultimately, by addressing both deep roots and daily management, this integrated therapy sustainably reduces physical appearance perfectionism and may lessen the inclination toward cosmetic surgery.

Concerning the effectiveness of the combined

mindfulness and schema therapy intervention on self-objectification among women with cosmetic surgery tendencies, results showed greater reductions in self-objectification in the experimental group compared to the control group in the post-test and follow-up phases. These findings are generally consistent with those of Kahalon *et al.*, Saunders *et al.*, and Stynes *et al.* (16, 18, 42). Self-objectification involves perceiving oneself as an object for evaluation, often shaped by social and media pressures, resulting in constant body surveillance and diminished internal self-worth. The integrative mindfulness and schema therapy approach can reduce this phenomenon by enhancing inner acceptance and modifying maladaptive schemas. Schema therapy targets schemas such as “defectiveness/shame” or “emotional deprivation,” which contribute to self-objectification. Through experiential techniques, individuals reconstruct childhood experiences, strengthen intrinsic self-worth, and reduce dependence on external appearance. Concurrently, mindfulness, by increasing present-moment awareness and reducing judgment, decreases body monitoring and encourages focus on internal experiences (such as emotions and needs) rather than external appearance.

In combination, mindfulness functions as an awareness tool to recognize self-objectifying thought patterns, while schema therapy identifies and modifies their underlying roots. This integration promotes reduced self-focus and greater self-compassion. Mindfulness-based schema therapy decreases egocentric self-preoccupation and enhances emotional regulation. Additionally, this combined approach has been effective in reducing self-stigma and shame associated with self-objectification (42). Ultimately, by fostering intrinsic self-worth and reducing external dependency, integrative mindfulness and schema therapy effectively decrease self-objectification and enhance psychological well-being among women inclined toward cosmetic surgery.

The significance of these findings lies in their potential to provide a preventive psychological strategy in clinical contexts where women frequently experience severe body dissatisfaction under social pressures. This integrated approach contributes to developing a healthier self-image and reduces the risk of regret or post-surgical psychological distress.

Despite these promising results, the study has certain limitations, including a relatively small sample size composed primarily of urban Iranian women, restricting generalizability to culturally or socioeconomically diverse groups. Additionally, reliance on self-report measures may introduce response biases, and the absence of a follow-up beyond three months limits conclusions regarding the long-term durability of effects. Future studies should include larger, multicultural samples in randomized controlled trials, employ objective behavioral assessments, and compare this combined intervention with other approaches (e.g., cognitive-behavioral therapy) to clarify mechanisms of change. Investigating moderating factors such as age, media exposure, or baseline schema intensity could further enhance the preventive mental health applications of this integrative model for individuals seeking cosmetic surgery.

In summary, the results of this study suggest that integrating mindfulness and schema therapy can serve as an effective psychological intervention for reducing appearance-related maladaptive patterns among women with a tendency toward cosmetic surgery. From an applied perspective, this integrative approach provides valuable guidance for clinicians and counselors in preventive and therapeutic contexts. Mental health professionals can use the combined model to modify perfectionistic appearance standards, enhance emotional regulation, and foster body acceptance. Incorporating mindfulness practices within schema-focused interventions enables clients to detect and interrupt self-critical and objectifying thought patterns before they intensify body dissatisfaction. Furthermore, brief mindfulness–schema training modules could be implemented in community-based psychoeducational programs to strengthen resilience against socio-cultural appearance pressures. Overall, the findings highlight how integrating mindfulness and schema therapy can contribute to healthier self-perception, reduce unnecessary cosmetic interventions, and support women’s psychological well-being in culturally appearance-oriented contexts.

Conclusion

The present study provides compelling evidence for the efficacy of integrated mindfulness and schema therapy

in mitigating physical appearance perfectionism and self-objectification among women inclined toward cosmetic surgery. Through a semi-experimental pretest–posttest design with a control group and follow-up assessment, the intervention—delivered in eight weekly 90-minute group sessions based on Van Vreeswijk *et al.*'s (2014) protocol—yielded significant reductions in both target variables in the experimental group compared to controls. Repeated measures ANOVA revealed notable between-group differences ($p < 0.05$), time effects ($p < 0.001$), and time-by-group interactions ($p < 0.001$), with medium to large effect sizes (η^2 ranging from 0.151 to 0.509). These gains were sustained at the three-month follow-up, underscoring the durability of the therapeutic effects. Theoretically, this integrated approach synergistically addresses maladaptive schemas (e.g., defectiveness/shame and unrelenting standards) via schema therapy's restructuring techniques, while mindfulness fosters nonjudgmental awareness, self-compassion, and reduced body surveillance. By disrupting cycles of perfectionistic striving and external self-evaluation rooted in societal and media pressures, the intervention promotes intrinsic self-worth and emotional regulation, thereby diminishing the psychological drivers of cosmetic surgery pursuit. Clinically, these findings position integrated mindfulness and schema therapy as a valuable preventive tool in aesthetic psychology, potentially lowering risks of body dissatisfaction, post-surgical regret, and associated comorbidities like anxiety or eating disorders. Its group format enhances accessibility and cost-effectiveness, making it feasible for implementation in counseling centers or pre-surgical screening programs.

Nevertheless, limitations such as the modest sample size ($n=30$), urban Iranian focus, reliance on self-report measures, and short-term follow-up warrant caution in generalization. Future research should employ larger, multicultural randomized controlled trials, incorporate objective metrics (e.g., behavioral observations), extend follow-up periods, and explore mediators (e.g., emotional flexibility) or moderators (e.g., media exposure). Comparative studies with standalone therapies or alternatives like CBT could further delineate mechanisms and optimize protocols. In summary, integrated mindfulness and schema

therapy offers a promising, evidence-based avenue for enhancing body image resilience and psychological well-being in this vulnerable population, with broader implications for preventive mental health strategies in the era of pervasive beauty ideals.

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Ethics Approval

For this study, ethical approval was issued by the Secretariat of the Academic Committee of Ethics in Biomedical Research at Islamic Azad University, Isfahan (Khorasgan) Branch, and was approved with license number IR.IAU.KHUISF.REC.1403.375.

Conflict of Interest

The authors declare that they have no conflict of interest.

References

- 1- Tajvar M, Atashbahar O, Pourfarokh P, Jaafariipooyan E, Sajadi HS. Profile of Cosmetic Surgery in Iran: A Descriptive Study. *J Sch Public Health Inst Public Health Res.* 2024;22(1):1-4.
- 2- Popat A, Tarrant C. Exploring adolescents' perspectives on social media and mental health and well-being—A qualitative literature review. *Clin Child Psychol Psychiatry.* 2023;28(1):323-37.
- 3- Cabral MC, Coelho GM, Oliveira N, Canella DS, Brasil RL, Campos TA, Faerstein E, Bezerra FF. Association of body image perception and (dis) satisfaction with adiposity in adults: The Pró-Saúde study. *PLoS One.* 2024;19(6):e0304987.
- 4- Krzymowski J. The Link Between Social Media and Body Image Issues Among Youth in the United States. *Ballard Brief.* 2024;2024(1):11.
- 5- Yang H, Stoeber J. The physical appearance perfectionism scale: Development and preliminary validation. *JPBA.* 2012;34(1):69-83.
- 6- Soghraei Khadar Z, Bakhtiari M, Afkhami Poostchi M, Alidoosti F. Psychometric Properties of the Physical Appearance Perfectionism Scale (PAPS). *RIP.* 2024;1(1):29-39.
- 7- Rica R, Solar M, Moreno-Encinas A, Foguet S, Compte EJ, Sepúlveda AR. Physical appearance perfectionism: psychometric properties and factor structure of an assessment instrument in a representative sample of males. *Front Psychol.* 2022;13:806460.
- 8- Frost RO, Marten P, Lahart C, Rosenblate R. The dimensions of perfectionism. *Cogn Ther Res.* 1990;14(5):449-68.
- 9- Frost RO, Heimberg RG, Holt CS, Mattia JI, Neubauer AL. A comparison of two measures of perfectionism. *Pers Individ Dif.* 1993;14(1):119-26.

- 10- Stoeber J, Yang H. Physical appearance perfectionism explains variance in eating disorder symptoms above general perfectionism. *Pers Individ Dif.* 2015;86:303-7.
- 11- Czepiel D, Koopman HM. Does physical appearance perfectionism predict disordered dieting? *Curr Psychol.* 2023;42(1):24-34.
- 12- Yang H, Yang Y, Xu L, Wu Q, Xu J, Weng E, Wang K, Cai S. The relation of physical appearance perfectionism with body dissatisfaction among school students 9–18 years of age. *Pers Individ Dif.* 2017;116:399-404.
- 13- Boucher JD, Bourgin J, Lassiaz J, Propice K, Metral M. The impact of weight and negative body image on the body schema in undergraduate women. *Exp Brain Res.* 2024;242(6):1373-85.
- 14- Fredrickson BL, Roberts TA. Objectification theory: Toward understanding women's lived experiences and mental health risks. *Psychol Women Q.* 1997;21(2):173-206.
- 15- Pratiwi W, Kurniawati S, Nurlestari K, Mujtahidah B, Merlinda R, Hidayatullah T. Merits and Demerits of Incorporating Learning Style into EFL Classroom Instruction: A Literature Review. *J Lang Lang Teach.* 2024;12(3):1418-30.
- 16- Kahalon R, Shnabel N, Becker JC. Experimental studies on state self-objectification: A review and an integrative process model. *Front Psychol.* 2018;9:1268.
- 17- Kahalon R, Klein V. Self-Objectification and Sexuality: A Systematic Scoping Review. *J Sex Res.* 2025;1-22.
- 18- Saunders JF, Nutter S, Waugh R, Hayden KA. Testing body-related components of objectification theory: A meta-analysis of the relations between body shame, self-objectification, and body dissatisfaction. *Body Image.* 2024;50:101738.
- 19- Mashkouri M, Bagherzadeh Gholmakani Z, Mansouri A, Khodabakhsh M. The efficacy of schema therapy on perfectionism, body shame and symptoms of body dysmorphic disorder in women seeking cosmetic surgery. *J Psychol Sci.* 2025;23(143):197-216.
- 20- Gopan H, Rajkumar E, Gopi A, Romate J. Mindfulness-based interventions for body image dissatisfaction among clinical population: A systematic review and meta-analysis. *Br J Health Psychol.* 2024;29(2):488-509.
- 21- Ahanian Moghaddam P, Atashpour SH, Golparvar M. Comparing the Effectiveness of Combined Schema Therapy and Mindfulness With Schema Therapy and CBT on Psychological Flexibility. *Pract Clin Psychol.* 2025;13(1):33-46. Available from: <https://doi.org/10.32598/jpcp.13.1.950.1>.
- 22- Asl MA, Bozorgi ZD, Asgari P, Safarzadeh S. The Effectiveness of Emotion-Focused Therapy and Schema Therapy on Physical Appearance Perfectionism in Women with Obesity. *JHRT.* 2025;11(11):e166154.
- 23- Abbasi A, Farokhzadian J, Torkaman M, Miri S. Schema therapy in partially sighted individuals with a focus on social isolation and self-esteem: an interventional study. *BMC Psychiatry.* 2025;25(1):289.
- 24- Cook-Cottone CP. Incorporating positive body image into the treatment of eating disorders: A model for attunement and mindful self-care. *Body Image.* 2015;14:158-67.
- 25- Sohrabi M, Bakhtiarpour S, Sohrabi F, Eftekhar Saadi Z, Asgari P. Effect of Contextual Schema Therapy on Body Image and Psychosomatic Symptoms in Individuals with Perfectionism Disorder. *HEHP.* 2023;11(4):621-6.
- 26- Zareei MB, Bahrainian SA, Ali Q, Mansouri A. Comparison of the effectiveness of cognitive therapy based on mindfulness and schema therapy on emotion regulation and distress intolerance of women with obsessivecompulsive symptoms. *J Res Psychol Health.* 2024;17(4):82-105.
- 27- Young JE, Klosko JS, Weishaar ME. Schema therapy: A practitioner's guide. Guilford Press; 2006.
- 28- Kabat-Zinn J. Full catastrophe living, revised edition: how to cope with stress, pain and illness using mindfulness meditation. Hachette UK; 2013.
- 29- Teasdale JD, Segal Z, Williams JM. How does cognitive therapy prevent depressive relapse and why should attentional control (mindfulness) training help? *Behav Res Ther.* 1995;33(1):25-39.
- 30- Hayes SC, Strosahl KD, Wilson KG. Acceptance and commitment therapy: an experiential approach to behavior change. Guilford; 1999.
- 31- Pourshahabadi F, Einipour J. The Effectiveness of Schema Therapy on Differentiation of Self and Emotional Control among Couples with Marital Maladjustment. *Int J Appl Behav Sci.* 2020;7(2):18-29.
- 32- Masjedi MA, Sasani SS, Heidari S, Moghadasi MS. Evaluating the Efficacy of Schema Therapy for Subclinical Depression in Adolescent Girls: A Focus on Cognitive Emotion Regulation and Avoidance. *Int J Appl Behav Sci.* 2024;11(4):25-33.
- 33- Sohrabi Z, Dortaj F. The Effectiveness of Mindfulness Training on the Fear of Negative Evaluation and Automatic Thoughts in Female Students. *Int J Appl Behav Sci.* 2020;7(1):11-23.
- 34- Mokhtare M, Oraki M, Asadpour A. The Effectiveness of Mindfulness-Based Stress Reduction (MBSR) on Depression, Anxiety and Stress in women with Gastroesophageal Reflux Disease. *Int J Appl Behav Sci.* 2020;7(4):11-23.
- 35- Gojani PJ, Masjedi M, Khaleghipour S, Behzadi E. Effects of the schema therapy and mindfulness on the maladaptive schemas hold by the psoriasis patients with the psychopathology symptoms. *Adv Biomed Res.* 2017;6:4.
- 36- Khajeh-Hasani-Rabari F, Hosseini ES, Hemmati E, Mirzai F, Abdollahi-Chirani E. The Effectiveness of Schema Therapy on Self-Compassion, Body Shame, and Uncertainty Intolerance in Women Applying for Cosmetic Surgery. *Int J Body Mind Cult.* 2024;11(3).
- 37- Beccia AL, Ruf A, Druker S, Ludwig VU, Brewer JA. Women's experiences with a mindful eating program for binge and emotional eating: A qualitative investigation into the process of change. *J Altern Complement Med.* 2020;26(10):937-44.
- 38- 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.* 2024;12(14):1396.
- 39- Sarwer DB, Crerand CE. Body dysmorphic disorder and appearance enhancing medical treatments. *Body Image.* 2008;5(1):50-8.
- 40- Mironica A, Popescu CA, George D, Tegzeşiu AM, Gherman CD. Social media influence on body image and cosmetic surgery considerations: a systematic review. *Cureus.* 2024;16(7).
- 41- Van Vreeswijk M, Broersen J, Schurink G. Mindfulness and schema therapy: A practical guide. John Wiley & Sons; 2014.
- 42- Stynes G, Leao CS, McHugh L. Exploring the effectiveness of mindfulness-based and third wave interventions in addressing self-stigma, shame and their impacts on psychosocial functioning: A systematic review. *J Contextual Behav Sci.* 2022;23:174-89.

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