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Comparing the Effectiveness of Self-Compassion Therapy and Contextual Schema Therapy on Body Image Concerns in Women with Breast Cancer After Mastectomy

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A B S T R A C T

Objective: This study aimed to compare the effectiveness of self-compassion therapy and contextual schema therapy in reducing body image concerns in women with breast cancer after mastectomy.

Methods and Materials: This applied, quasi-experimental study employed a pretest–posttest design with a one-month follow-up and a control group. The statistical population comprised women with breast cancer who had undergone mastectomy and attended the Mashhad Cancer Patients Association in 2025–2026. Initially, 45 eligible women were recruited through purposive convenience sampling and randomly allocated to two experimental groups and one control group (15 participants per group). Following attrition and random exclusion of three control participants to maintain balanced group sizes, 36 participants were included in the final analysis. The experimental groups received eight weekly 90-minute sessions of self-compassion therapy or contextual schema therapy, while the control group received no intervention. Data were collected using the Body Image Concern Inventory and analyzed using repeated-measures analysis of variance and Bonferroni post hoc tests.

Findings: Significant main effects were observed for time ($F = 61.23$, $p = 0.001$, $\eta^2 = 0.25$) and group ($F = 11.92$, $p = 0.001$, $\eta^2 = 0.13$), alongside a significant time-by-group interaction ($F = 72.84$, $p = 0.001$, $\eta^2 = 0.29$). Both interventions significantly reduced body image concerns compared with the control group at posttest and follow-up ($p = 0.001$). Contextual schema therapy demonstrated significantly greater effectiveness than self-compassion therapy at posttest (MD = 4.17, $p = 0.001$) and follow-up (MD = 4.50, $p = 0.001$). Neither experimental group demonstrated significant changes between posttest and follow-up ($p > 0.05$).

Conclusion: Both therapeutic approaches effectively reduced body image concerns, with treatment gains maintained at the one-month follow-up. Contextual schema therapy demonstrated superior effectiveness, suggesting its potential as a complementary psychological intervention within comprehensive psycho-oncological rehabilitation programs for women experiencing body image concerns after mastectomy.

Keywords: *Self-compassion therapy, contextual schema therapy, body image concerns, breast cancer, mastectomy.*

1. Introduction

Breast cancer represents a major public health challenge among women, with consequences extending beyond physical health to encompass psychological functioning, interpersonal relationships, sexuality, and perceptions of personal identity. Recent advances in immunotherapy and individualized oncological treatment have expanded therapeutic opportunities for patients with breast cancer and contributed to the increasing importance of survivorship care (Emens & Loi, 2023). Furthermore, developments in adjuvant endocrine therapy and efforts to optimize radiotherapy following breast-conserving surgery reflect an increasing emphasis on balancing therapeutic efficacy with the long-term consequences of cancer treatment (Gnant et al., 2021; Jagsi et al., 2024). Nevertheless, despite these medical advances, many women continue to experience considerable psychological difficulties following diagnosis and surgical treatment. Psychological distress among patients with breast cancer is associated with multiple clinical, interpersonal, and situational factors that may complicate adaptation to illness (Chen et al., 2021). Mastectomy, in particular, constitutes a potentially distressing experience because it involves substantial changes in physical appearance, bodily integrity, and perceived femininity. Although surgical removal of breast tissue may be necessary for disease management, its psychological consequences can persist beyond physical recovery. Research examining the unmet care needs of women following breast cancer surgery has highlighted the importance of addressing emotional, informational, and psychosocial concerns within comprehensive rehabilitation services (Ke et al., 2023). Accordingly, incorporating targeted psychological interventions into breast cancer treatment programs is essential for facilitating adjustment to postoperative physical changes and improving patients' psychological well-being.

Among the psychological consequences of mastectomy, body image concerns constitute a particularly important dimension of postoperative adjustment. Body image is a multidimensional psychological construct encompassing perceptual, cognitive, affective, and behavioral representations of one's physical appearance and bodily experiences. The conceptual distinction between body image and body schema provides a framework for understanding how subjective evaluations of appearance interact with broader representations of bodily functioning and identity (Cuzzolaro, 2018). Although body schema primarily concerns the organization of bodily representations involved in perception and action, body image encompasses conscious attitudes, emotional evaluations, and beliefs regarding physical appearance (Sattin et al., 2023). Following mastectomy, discrepancies between previous bodily representations and current physical appearance may generate dissatisfaction, shame, self-consciousness, and difficulties accepting bodily changes. These concerns may become especially pronounced when physical appearance constitutes a central component of self-worth or when individuals perceive their altered bodies as inconsistent with personally or socially constructed standards of femininity. Research examining body image and life satisfaction among women following mastectomy has emphasized the relevance of appearance-related concerns to broader psychological adjustment (Phoosuwan & Lundberg, 2023). Consequently, body image concerns should not be conceptualized merely as dissatisfaction with physical appearance but as a potentially complex psychological experience involving disruptions in self-perception, emotional security, and interpersonal functioning.

The consequences of negative body image following breast cancer surgery may extend into intimate relationships and sexual functioning. Changes in breast appearance, surgical scarring, and perceived reductions in physical attractiveness may contribute to heightened vulnerability during intimate interactions and undermine confidence in one's sexual identity. Research examining sexual self-esteem among breast cancer survivors has highlighted the importance of understanding factors associated with women's evaluations of themselves within sexual and intimate contexts (Kazemzadeh et al., 2022). Women experiencing negative body image may anticipate rejection, avoid situations involving bodily exposure, or interpret ambiguous interpersonal reactions as confirmation of perceived physical inadequacy. Such responses may create a self-reinforcing cycle in which avoidance temporarily reduces emotional discomfort while maintaining negative appearance-related beliefs. The application of psychological interventions targeting sexual self-esteem among breast cancer survivors further demonstrates the clinical relevance of addressing disturbances in self-evaluation after cancer treatment (Akbari et al., 2017). Beyond intimate relationships, persistent appearance-related concerns may interfere with social participation and contribute to emotional isolation. Research investigating body image alongside loneliness, depression, suicidal ideation, and self-compassion in non-oncological populations also illustrates

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the potential complexity of associations between appearance-related evaluations and psychological vulnerability (Tran et al., 2026). Although these associations cannot be directly generalized to women following mastectomy, they emphasize the importance of understanding body image concerns within a broader framework of emotional and interpersonal functioning.

One promising psychological resource for reducing body image concerns is self-compassion, which involves responding to personal suffering, perceived inadequacies, and difficult experiences with understanding rather than harsh self-judgment. Self-compassion comprises three interrelated dimensions: self-kindness versus self-judgment, common humanity versus isolation, and mindfulness versus overidentification (Neff, 2023). Self-kindness encourages individuals to respond to personal difficulties with warmth and understanding, whereas common humanity facilitates recognition that vulnerability and suffering are universal aspects of human experience. Mindfulness involves maintaining balanced awareness of distressing thoughts and emotions without excessive identification with them. These components are particularly relevant to women following mastectomy because postoperative physical changes may activate self-critical thoughts, feelings of inadequacy, and perceptions of being fundamentally different from others. The theoretical relationship between self-compassion and body image suggests that compassionate self-responding may reduce the extent to which physical appearance determines global self-worth (Tylka & Huellemann, 2023). Research examining self-compassion, body image, and disordered eating further situates compassionate self-evaluation within the psychological processes associated with appearance-related distress (Breines et al., 2025). Rather than requiring individuals to evaluate every aspect of their appearance positively, self-compassion encourages acceptance of bodily imperfections and recognition of personal worth independently of appearance-related judgments.

Self-compassion therapy provides a structured therapeutic framework for cultivating compassionate responses to psychological suffering and reducing maladaptive patterns of self-criticism. Gilbert's compassion-focused approach conceptualizes emotional difficulties partly in terms of interactions among threat-related, motivational, and soothing emotion regulation systems (Gilbert, 2014). Individuals experiencing persistent shame and self-criticism may become excessively sensitive to perceived threats while experiencing difficulties generating internal feelings of reassurance and emotional security. Compassion-oriented interventions seek to strengthen the capacity for self-soothing through compassionate imagery, mindfulness, empathic understanding, and the development of supportive internal dialogue. Similarly, mindfulness-based conceptualizations of self-compassion emphasize acknowledging painful experiences without avoidance, suppression, or excessive identification with distressing thoughts (Germer, 2021). For women following mastectomy, these therapeutic processes may facilitate a transition from viewing postoperative bodily changes as evidence of personal inadequacy toward recognizing them as difficult experiences deserving understanding and care. Research on brief self-compassion interventions has also examined their applicability to positive and negative affect and life satisfaction, suggesting their relevance to broader emotional adjustment (Ghazanfariyan pour & Chalabianloo, 2021). Moreover, investigations distinguishing positive and negative facets of self-compassion in relation to well-being and body image concerns emphasize the importance of both cultivating compassionate attitudes and reducing uncompassionate self-responding (Takahashi et al., 2025).

Evidence from psycho-oncological research provides additional support for investigating self-compassion as a therapeutic target among women with breast cancer. A study examining the mediating role of coping styles in the relationship between self-compassion and body image disturbance among young breast cancer survivors identified coping processes as potentially important mechanisms linking compassionate self-responding with appearance-related adjustment (Zhu et al., 2023). From a clinical perspective, women who respond compassionately to physical changes may be better positioned to engage in adaptive coping rather than relying exclusively on avoidance, rumination, or self-blame. Compassion-based interventions have also been investigated in relation to self-criticism and sexual schemas among women with breast cancer (Anoushirvani et al., 2023), highlighting their relevance to cognitive and emotional processes underlying negative bodily evaluations. Other investigations have examined self-compassion therapy in relation to sexual satisfaction, sexual functioning, and lifestyle among patients with breast cancer (Heidari Kebriti et al., 2022). Compassion-focused therapy has additionally been applied to posttraumatic growth and death anxiety in this population, indicating its potential relevance to psychological challenges extending beyond appearance-related concerns (Kiarasi et al., 2022). Research evaluating compassion-based

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intervention protocols for health-related outcomes among women with breast cancer further reflects the increasing integration of compassion-oriented strategies into supportive cancer care (Sabola et al., 2023). Collectively, these investigations provide a rationale for examining whether structured self-compassion therapy can alleviate body image concerns following mastectomy.

An alternative therapeutic approach with considerable relevance to postoperative body image concerns is contextual schema therapy. This integrative therapeutic framework combines principles of schema therapy with contextual behavioral strategies derived from acceptance and commitment therapy, mindfulness-based approaches, and experiential therapeutic techniques (Roediger et al., 2018). Schema therapy conceptualizes psychological difficulties partly through early maladaptive schemas, which are enduring patterns of cognition, emotion, memory, and bodily experience associated with unmet emotional needs and adverse developmental experiences. A systematic review and meta-analysis examining schema therapy in personality disorders provides broader evidence concerning its clinical applicability to persistent psychological difficulties (Zhang et al., 2023). Contextual schema therapy extends conventional schema-oriented interventions by emphasizing the functional relationships between internal experiences, environmental contexts, and behavioral responses. Rather than concentrating exclusively on modifying the content of dysfunctional beliefs, it also seeks to change individuals' relationships with these beliefs through acceptance, cognitive defusion, mindfulness, and values-directed behavior. This integration is particularly relevant to mastectomy-related body image concerns because postoperative physical changes may activate preexisting maladaptive schemas involving defectiveness, shame, emotional deprivation, rejection, or social isolation. Consequently, therapeutic interventions addressing both schema-related vulnerability and present-moment responses to distress may facilitate more comprehensive psychological adjustment.

Within contextual schema therapy, schema modes represent momentary configurations of emotional experiences, cognitive patterns, and behavioral responses that become activated under particular circumstances. Following mastectomy, appearance-related situations may activate vulnerable emotional states characterized by shame, sadness, fear of rejection, or perceived inadequacy. Simultaneously, dysfunctional critic modes may intensify distress through harsh internal evaluations, while maladaptive coping modes may promote emotional avoidance, interpersonal withdrawal, or excessive preoccupation with appearance. Contextual schema therapy employs experiential and cognitive-behavioral techniques to identify these modes, address underlying emotional needs, and strengthen the Healthy Adult mode (Roediger et al., 2018). The applicability of this framework to socially evaluative fears has been investigated through a randomized controlled trial of an online contextual schema therapy workshop targeting social anxiety symptoms (Stefan et al., 2023). Its relevance to chronic health conditions has also been explored in research examining quality of life among individuals with migraine (Gol et al., 2024). Furthermore, schema-based acceptance and commitment therapy has been investigated in relation to sexual self-esteem and marital burnout among women undergoing dialysis, illustrating the potential applicability of integrative schema-oriented interventions to psychological and interpersonal difficulties associated with chronic medical conditions (Hajiarbabi et al., 2023). These applications provide a conceptual foundation for extending contextual schema therapy to body image concerns arising in the context of breast cancer surgery.

Research specifically addressing schema-oriented interventions and body image provides further justification for investigating contextual schema therapy following mastectomy. Studies have examined the effectiveness of schema therapy on body image and emotional difficulties among women (Gholamin Mian Gasheh, 2023), as well as its application to body image concerns and social anxiety among girls (Soheil Alvandi et al., 2022). Although these populations differ from women with breast cancer, the outcomes investigated are relevant to the maladaptive appearance-related evaluations and interpersonal vulnerabilities that may emerge following surgical treatment. More directly, schema therapy has been investigated as an intervention targeting early maladaptive schemas among women with breast cancer (Khademi et al., 2019). Recent research has also examined contextual schema therapy in relation to body image and psychosomatic symptoms among individuals experiencing perfectionism-related difficulties (Sohrabi et al., 2025). Perfectionistic standards may be particularly relevant to postoperative adjustment when women evaluate their altered appearance against rigid expectations of bodily integrity or attractiveness. By promoting cognitive flexibility, experiential acceptance, and modification of dysfunctional self-evaluative patterns, contextual schema therapy may

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reduce the psychological significance attributed to physical imperfections. Nevertheless, evidence obtained from conventional schema therapy or other clinical populations cannot establish the specific effectiveness of contextual schema therapy for women experiencing elevated body image concerns after mastectomy.

Recent developments in integrative psychological treatment have increasingly emphasized combining schema modification with acceptance-based therapeutic processes in breast cancer care. Research examining the integration of schema therapy and acceptance and commitment therapy has directly addressed subjective well-being and body image concerns among women with breast cancer (Karami Mohajeri et al., 2026; Karami Mohajery et al., 2025). Such investigations are conceptually relevant because postoperative adjustment requires both acceptance of physical changes that may be irreversible and modification of dysfunctional interpretations attached to those changes. Comparative research examining cognitive-behavioral therapy and schema therapy in relation to sexual functioning and body image among women with breast cancer also reflects the growing importance of evaluating the relative effectiveness of different therapeutic approaches rather than considering each intervention independently (Khodaei Anzab et al., 2025). Similarly, comparisons of schema therapy and compassion therapy targeting self-criticism and stigma in patients with human immunodeficiency virus demonstrate the relevance of distinguishing therapeutic approaches when psychological distress involves negative self-evaluation within a medical context (Elmi et al., 2024). However, differences in illness characteristics, therapeutic protocols, and psychological outcomes restrict the extent to which findings from these investigations can inform treatment selection specifically for women following mastectomy.

Despite their shared emphasis on reducing maladaptive self-evaluation, self-compassion therapy and contextual schema therapy differ in their principal therapeutic focus. Self-compassion therapy primarily emphasizes cultivating kindness toward oneself, reducing shame and self-criticism, and developing emotionally supportive responses to suffering (Gilbert, 2014; Neff, 2023). Contextual schema therapy incorporates these acceptance-oriented processes within a broader framework addressing maladaptive schemas, dysfunctional coping modes, unmet emotional needs, and experiential restructuring (Roediger et al., 2018). Accordingly, self-compassion therapy may be particularly relevant when body image concerns arise from difficulties accepting physical changes and persistent appearance-related self-judgment, whereas contextual schema therapy may offer additional therapeutic opportunities when such concerns are embedded within enduring maladaptive beliefs about identity, worthiness, and interpersonal acceptance. Nevertheless, theoretical differences between the approaches do not establish the superiority of either intervention, particularly because both involve overlapping therapeutic processes and may produce meaningful improvements through different mechanisms. Within the reviewed literature, direct comparative evidence concerning these two interventions for body image concerns specifically among women following mastectomy remains limited. Addressing this research gap could contribute to evidence-informed treatment selection, facilitate the development of targeted psycho-oncological rehabilitation programs, and clarify whether improvements associated with either intervention persist beyond the immediate treatment period. Therefore, the present study aimed to compare the effectiveness of self-compassion therapy and contextual schema therapy in reducing body image concerns among women with breast cancer after mastectomy at posttest and one-month follow-up.

2. Methods and Materials

2.1. Study design and Participant

The present study was applied in terms of its purpose and employed a quasi-experimental pretest–posttest design with a one-month follow-up and a control group. The statistical population comprised all women diagnosed with breast cancer who had undergone mastectomy and attended the Mashhad Cancer Patients Association in Iran during 2025–2026. Participants were recruited using purposive convenience sampling based on predetermined eligibility criteria. Initially, following coordination with the association's management, a preliminary list of potential participants was compiled using available medical records and information concerning patients attending the association. A call for voluntary participation was subsequently issued, and interested patients were invited to complete an informed consent form. The Body Image Concern Inventory was administered to 200 women with a history of mastectomy to identify individuals experiencing elevated levels of body image concerns. Among eligible respondents, 45 women with the highest body image concern scores were selected and randomly assigned using a random-number table to the self-compassion therapy group, the

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contextual schema therapy group, or the control group, with 15 participants in each group. The initial sample size was estimated based on a repeated-measures analysis of variance involving three groups and three measurement occasions, assuming an effect size of 0.30, a significance level of 0.05, and statistical power of 0.80.

The inclusion criteria comprised a confirmed diagnosis of breast cancer, a history of mastectomy, an age range of 20–65 years, a minimum middle-school education, a score greater than 57 on the Body Image Concern Inventory, willingness to participate in the research, provision of informed consent, and absence of concurrent psychological interventions. The exclusion criteria included withdrawal of consent, participation in other psychological treatment or counseling programs during the study, absence from multiple intervention sessions, and failure to complete the research questionnaire. During the intervention period, three participants withdrew from the self-compassion therapy group because of insufficient session attendance, and three participants withdrew from the contextual schema therapy group because of personal circumstances and insufficient attendance. Although no participants withdrew from the control group, three control participants were randomly excluded to maintain equal group sizes for the statistical analysis. Consequently, the final analytical sample consisted of 36 women, with 12 participants in each group. Group comparability was examined regarding age, educational attainment, time elapsed since mastectomy, type of mastectomy (unilateral or bilateral), and socioeconomic status. Following baseline assessment, participants in the experimental groups received their respective psychological interventions, whereas the control group received no psychological intervention during the study period. All participants completed the outcome assessment immediately after the intervention and again one month later. Ethical approval was obtained from the university's Research Office under the approval code IR.IAU.TJ,REC.1403.089. Participation was voluntary, and the necessary administrative permissions were obtained from the Mashhad Cancer Patients Association before participant recruitment and data collection.

2.2. *Measures*

Body Image Concern Inventory (BICI). The Body Image Concern Inventory, developed by Littleton et al. (2005), was employed to assess the severity of body image concerns among women with breast cancer following mastectomy. This standardized self-report instrument consists of 19 items designed to evaluate dissatisfaction with physical appearance, preoccupation with perceived physical imperfections, and concerns associated with one's bodily appearance. Responses are recorded on a five-point Likert scale ranging from 1 (never) to 5 (always), yielding a total score between 19 and 95. Higher scores indicate more severe body image concerns and greater dissatisfaction with physical appearance. According to the scoring criteria adopted in the present study, scores between 19 and 38 indicate low body image concerns, scores between 38 and 57 indicate moderate body image concerns, and scores exceeding 57 indicate high body image concerns. The instrument was analyzed using its overall score rather than separate subscale scores. Littleton et al. (2005) reported satisfactory psychometric properties, including a Cronbach's alpha coefficient of 0.90, indicating high internal consistency. In the Iranian validation study conducted by Bassak Nejad and Ghaffari (2007), the instrument demonstrated satisfactory reliability, with a Cronbach's alpha coefficient of 0.89. In the present study, the inventory was initially administered as a screening instrument to identify eligible participants with elevated body image concerns and was subsequently administered at pretest, posttest, and one-month follow-up to assess changes associated with the psychological interventions.

2.3. *Intervention*

Self-Compassion Therapy. Participants assigned to the first experimental group received eight weekly 90-minute sessions of group-based self-compassion therapy based on Gilbert's (2014) compassion-focused therapeutic framework. The intervention emphasized developing compassionate attitudes toward oneself, reducing self-criticism, cultivating nonjudgmental awareness, strengthening emotional acceptance, and promoting adaptive responses to distressing experiences. The first session involved establishing therapeutic rapport, introducing group members, explaining the structure and objectives of the intervention, distinguishing compassion from self-pity, discussing emotional suffering, and introducing the conceptual foundations of self-compassion. The second session focused on mindfulness training through body-scan and breathing exercises, introducing compassion-related emotional regulation systems, developing empathic attitudes, and assigning practical exercises. During the third session, participants became familiar with the characteristics

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of compassionate individuals and practiced cultivating self-kindness, emotional warmth, sympathy, and a sense of common humanity to reduce shame and self-destructive emotional responses. The fourth session focused on reviewing previous assignments, increasing self-awareness, identifying compassionate and noncompassionate patterns of responding, practicing compassionate mind exercises, developing empathy toward oneself and others, and cultivating forgiveness. The fifth session emphasized nonjudgmental acceptance, forgiveness, distress tolerance, acceptance of personal difficulties, and developing adaptive responses to inevitable changes and challenging life circumstances. During the sixth session, participants practiced compassionate imagery and learned verbal and behavioral methods of expressing compassion toward themselves and others, with particular emphasis on applying compassionate responses in everyday interpersonal and family situations. The seventh session involved compassionate letter-writing exercises addressed to oneself and others, together with maintaining daily records of situations requiring compassionate responses and reflecting on emotional and behavioral reactions to these situations. The eighth session consolidated previously acquired therapeutic skills, reviewed practical strategies for managing difficult circumstances, addressed the continued application of self-compassion exercises in daily life, and concluded with the administration of the posttest. Throughout the intervention, between-session assignments were employed to reinforce therapeutic learning and facilitate the generalization of compassionate attitudes and behaviors beyond the treatment setting.

Contextual Schema Therapy. Participants assigned to the second experimental group received eight weekly 90-minute sessions of group-based contextual schema therapy based on the therapeutic protocol developed by Roediger et al. (2018). This intervention integrates schema therapy with contextual behavioral approaches, emphasizing the identification and modification of maladaptive schema modes, fulfillment of unmet emotional needs, cognitive defusion, experiential processing, psychological flexibility, and strengthening of the Healthy Adult mode. The first session involved initial psychological assessment, identification and formulation of participants' principal problems, case conceptualization, and psychoeducation concerning the theoretical foundations and objectives of contextual schema therapy. During the second session, participants were introduced to the descriptive schema mode diagram and learned to recognize interactions among different schema modes while adopting a dimensional rather than categorical understanding of their emotional and behavioral responses. The third session concentrated on identifying dysfunctional coping modes, examining their historical and current advantages and disadvantages, and applying chair-work techniques to recognize and bypass maladaptive coping responses to gain access to the Child and Critic modes. The fourth session focused on identifying and addressing the emotional needs associated with the Child mode, recognizing dysfunctional beliefs associated with the Critic mode, and applying cognitive defusion techniques derived from acceptance and commitment therapy. Participants also practiced mindfulness, mindful breathing, self-compassion, the 3-4-5 exercise, the ball-of-light exercise, and the eightieth-birthday exercise to strengthen the Healthy Adult mode. Mode-monitoring sheets were assigned as homework to increase awareness of dysfunctional emotional and cognitive patterns. The fifth session introduced the rationale underlying experiential therapeutic techniques and incorporated imagery exercises, imagery rescripting of significant past experiences, reparenting techniques, cognitive reframing, and chair work to overcome maladaptive coping modes. During the sixth session, participants continued identifying and addressing unmet emotional needs associated with the Child mode, developed adaptive behavioral solutions for challenging situations, and received audio recordings of imagery exercises for independent practice between sessions. The seventh session concentrated on strengthening the Healthy Adult mode through two-chair exercises and experiential dialogues between the Healthy Adult and Inner Critic modes. Participants were also trained to use schema flashcards and dialogue notebooks to document dysfunctional self-critical beliefs and develop healthier, more adaptive responses. The eighth session focused on identifying remaining behavioral difficulties, designing behavioral experiments, practicing adaptive responses through future-oriented imagery and role-play, reviewing therapeutic achievements, anticipating potential obstacles and setbacks, consolidating acquired skills, and addressing emotional reactions associated with treatment termination. The overall intervention sought to modify maladaptive cognitive and emotional patterns potentially associated with negative body image while promoting more flexible, accepting, and adaptive responses to physical changes following mastectomy.

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2.4. *Data Analysis*

Data were analyzed using descriptive and inferential statistical procedures. Descriptive statistics, including frequency, percentage, mean, and standard deviation, were calculated to summarize participants' demographic characteristics and body image concern scores across the three assessment occasions. One-way analysis of variance was employed to examine between-group differences in quantitative background characteristics, whereas chi-square tests were used to evaluate group comparability regarding categorical characteristics. Before conducting the principal inferential analyses, the statistical assumptions underlying factorial repeated-measures analysis of variance were examined. The Shapiro–Wilk test was used to assess the normality of body image concern scores within the study groups, Levene's test was employed to examine the homogeneity of variances across groups at each assessment occasion, and Mauchly's test was conducted to evaluate the assumption of sphericity. A mixed-design repeated-measures analysis of variance was subsequently performed, with assessment time (pretest, posttest, and one-month follow-up) as the within-subjects factor and treatment group (self-compassion therapy, contextual schema therapy, and control) as the between-subjects factor. The analysis examined the main effect of assessment time, the main effect of group membership, and the interaction between assessment time and group membership to determine whether changes in body image concerns differed according to the intervention received. Following significant omnibus effects, Bonferroni-adjusted post hoc pairwise comparisons were conducted to examine differences between assessment occasions within each group and differences between the experimental and control groups at posttest and follow-up. Effect sizes were reported using partial eta squared to quantify the magnitude of the observed effects. All inferential statistical analyses were conducted using the final analytical sample of 36 participants, and the statistical significance threshold was set at 0.05.

3. Findings and Results

Initially, 45 women with breast cancer who had undergone mastectomy participated in the study and were randomly allocated to the self-compassion therapy, contextual schema therapy, and control groups, with 15 participants in each group. During the intervention period, three participants withdrew from the self-compassion therapy group because of insufficient session attendance, and three participants withdrew from the contextual schema therapy group because of personal circumstances and insufficient attendance. Additionally, three participants were randomly excluded from the control group to maintain balanced group sizes. Consequently, the final analytical sample comprised 36 women, with 12 participants (33.33%) in each group. Participants were recruited from women aged 20–65 years with a minimum middle-school education. The groups were compared regarding age, educational attainment, time elapsed since mastectomy, type of mastectomy (unilateral or bilateral), and socioeconomic status. The results of one-way analysis of variance for quantitative characteristics and chi-square tests for categorical characteristics indicated no statistically significant differences among the three groups ($p > 0.05$), supporting their comparability in terms of the examined demographic and clinical characteristics.

Table 1

Descriptive Statistics of Body Image Concerns by Group and Assessment Time

Group	Pretest M	Pretest SD	Posttest M	Posttest SD	Follow-up M	Follow-up SD
Self-compassion therapy	64.92	5.31	54.92	6.12	55.75	5.96
Contextual schema therapy	65.42	5.58	50.75	6.34	51.25	6.27
Control	63.58	5.19	62.83	5.44	62.25	5.38

As presented in Table 1, the mean scores of body image concerns at pretest were relatively comparable across the self-compassion therapy, contextual schema therapy, and control groups. Following the interventions, the mean score of body image concerns in the self-compassion therapy group decreased from 64.92 (SD = 5.31) at pretest to 54.92 (SD = 6.12) at posttest and remained relatively stable at the one-month follow-up (M = 55.75, SD = 5.96). Similarly, the contextual schema therapy group demonstrated a decrease in mean body image concern scores from 65.42 (SD = 5.58) at pretest to 50.75 (SD = 6.34) at posttest, with the reduction largely maintained at follow-up (M = 51.25, SD = 6.27). In contrast, the control group exhibited relatively minor fluctuations across the pretest (M = 63.58, SD = 5.19),

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posttest (M = 62.83, SD = 5.44), and follow-up (M = 62.25, SD = 5.38) assessments. The descriptive pattern indicated that both psychological interventions were associated with reductions in body image concerns, with contextual schema therapy demonstrating a greater reduction than self-compassion therapy at both posttest and follow-up.

Prior to conducting the mixed-design repeated-measures analysis of variance, the underlying statistical assumptions were examined. The results of the Shapiro–Wilk test indicated that the distribution of body image concern scores did not significantly deviate from normality across the study groups and assessment occasions ($p > 0.05$), supporting the normality assumption. Furthermore, the results of Levene's test were nonsignificant across the assessment occasions ($p > 0.05$), indicating that the assumption of homogeneity of variances was satisfied. The results of Mauchly's test of sphericity were also reported as nonsignificant ($p > 0.05$), suggesting that the variances of the differences between repeated measurements were sufficiently homogeneous. According to these preliminary analyses, the reported statistical assumptions supported the application of mixed-design repeated-measures analysis of variance to examine the main effects of assessment time and group membership, as well as their interaction.

Table 2

Mixed-Design Repeated-Measures Analysis of Variance for Body Image Concerns

Source of variation	Sum of squares	df	Mean square	F	p	Partial η^2
Time	1380.52	1.076	1283.01	61.23	0.001	0.25
Group	689.34	2	344.67	11.92	0.001	0.13
Time × Group	1047.91	2.152	486.93	72.84	0.001	0.29

As shown in Table 2, the results of mixed-design repeated-measures analysis of variance revealed a statistically significant main effect of assessment time on body image concerns ($F = 61.23$, $p = 0.001$, partial $\eta^2 = 0.25$), indicating that body image concern scores differed significantly across the three assessment occasions when averaged across groups. The main effect of group membership was also statistically significant ($F = 11.92$, $p = 0.001$, partial $\eta^2 = 0.13$), demonstrating significant differences in overall body image concern scores among the self-compassion therapy, contextual schema therapy, and control groups. More importantly, the interaction between assessment time and group membership was statistically significant ($F = 72.84$, $p = 0.001$, partial $\eta^2 = 0.29$), indicating that the trajectories of changes in body image concerns across the assessment occasions differed significantly according to group membership. The reported partial eta squared values indicated substantial effects for assessment time and the time-by-group interaction, whereas the effect of group membership was comparatively smaller. The significant interaction provided statistical justification for conducting Bonferroni-adjusted pairwise comparisons to determine the specific differences between assessment occasions within each group and between the treatment groups.

Table 3

Bonferroni-Adjusted Pairwise Comparisons of Body Image Concerns Within and Between Groups

Comparison type	Group or assessment	Pairwise comparison	Mean difference	p
Within-group	Self-compassion therapy	Pretest – Posttest	10.00	0.001
Within-group	Self-compassion therapy	Pretest – Follow-up	9.17	0.001
Within-group	Self-compassion therapy	Posttest – Follow-up	−0.83	0.780
Within-group	Contextual schema therapy	Pretest – Posttest	14.67	0.001
Within-group	Contextual schema therapy	Pretest – Follow-up	14.17	0.001
Within-group	Contextual schema therapy	Posttest – Follow-up	−0.50	0.890
Within-group	Control	Pretest – Posttest	0.75	0.920
Within-group	Control	Pretest – Follow-up	1.33	0.740
Within-group	Control	Posttest – Follow-up	0.58	0.860
Between-group	Posttest	SCT – CST	4.17	0.001
Between-group	Posttest	SCT – Control	−7.91	0.001
Between-group	Posttest	CST – Control	−12.08	0.001
Between-group	Follow-up	SCT – CST	4.50	0.001
Between-group	Follow-up	SCT – Control	−6.50	0.001
Between-group	Follow-up	CST – Control	−11.00	0.001

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The results of the Bonferroni-adjusted post hoc comparisons presented in Table 3 indicated that body image concerns decreased significantly in the self-compassion therapy group from pretest to posttest (MD = 10.00, p = 0.001) and from pretest to follow-up (MD = 9.17, p = 0.001), whereas the difference between posttest and follow-up was not statistically significant (MD = −0.83, p = 0.780). Similarly, the contextual schema therapy group demonstrated significant reductions in body image concerns from pretest to posttest (MD = 14.67, p = 0.001) and from pretest to follow-up (MD = 14.17, p = 0.001), with no statistically significant difference between posttest and follow-up (MD = −0.50, p = 0.890). In contrast, none of the pairwise comparisons across assessment occasions reached statistical significance in the control group (p > 0.05). Between-group comparisons at posttest revealed significantly lower body image concern scores in both the self-compassion therapy group (MD = −7.91, p = 0.001) and the contextual schema therapy group (MD = −12.08, p = 0.001) compared with the control group. These differences remained statistically significant at follow-up for self-compassion therapy (MD = −6.50, p = 0.001) and contextual schema therapy (MD = −11.00, p = 0.001). Furthermore, contextual schema therapy resulted in significantly lower body image concern scores than self-compassion therapy at both posttest (MD = 4.17, p = 0.001) and follow-up (MD = 4.50, p = 0.001). Collectively, these findings indicate that both interventions were effective in reducing body image concerns among women with breast cancer after mastectomy, with no statistically significant deterioration in treatment outcomes during the one-month follow-up. However, contextual schema therapy demonstrated significantly greater effectiveness than self-compassion therapy at both post-intervention assessment occasions.

4. Discussion

The present study aimed to compare the effectiveness of self-compassion therapy and contextual schema therapy in reducing body image concerns among women with breast cancer after mastectomy. The findings revealed significant main effects of assessment time and group membership, accompanied by a significant interaction between assessment time and group membership, indicating that changes in body image concerns differed significantly across the study groups. Both self-compassion therapy and contextual schema therapy significantly reduced body image concerns from pretest to posttest and from pretest to the one-month follow-up, whereas no significant changes were observed in the control group. Furthermore, the absence of significant differences between posttest and follow-up in both experimental groups suggested that the therapeutic improvements were maintained during the follow-up period. Comparative analyses also demonstrated that contextual schema therapy was significantly more effective than self-compassion therapy in reducing body image concerns at both posttest and follow-up. These findings are consistent with the growing emphasis on addressing psychological vulnerabilities and appearance-related difficulties within comprehensive breast cancer rehabilitation programs (Ke et al., 2023; Phoosuwan & Lundberg, 2023). More specifically, the results support the clinical relevance of interventions targeting maladaptive self-evaluation, emotional distress, and dysfunctional responses to physical changes following mastectomy.

The effectiveness of self-compassion therapy in reducing body image concerns is consistent with previous research identifying self-compassion as an important psychological resource for managing appearance-related distress. Zhu et al. (Zhu et al., 2023) examined the relationship between self-compassion and body image disturbance among young breast cancer survivors, highlighting the potential explanatory role of coping styles. Similarly, the findings of the present study are consistent with research investigating the relationship between self-compassion, psychological well-being, and body image concerns among young women (Takahashi et al., 2025). The association between compassionate self-responding and more adaptive evaluations of physical appearance has also received theoretical and empirical attention in the broader body image literature (Breines et al., 2025; Tylka & Huellemann, 2023). Furthermore, the present findings correspond with research examining the effectiveness of compassion-based interventions on self-criticism and sexual schemas among women with breast cancer (Anoushirvani et al., 2023). Together, these studies suggest that cultivating compassionate attitudes toward oneself may represent an important therapeutic pathway for reducing psychological distress associated with bodily changes. For women following mastectomy, developing such attitudes may be particularly beneficial because postoperative appearance-related concerns frequently involve negative judgments about physical attractiveness, femininity, personal adequacy, and perceived acceptance by others.

The effectiveness of self-compassion therapy can be explained through its emphasis on modifying the emotional

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and cognitive processes underlying maladaptive self-evaluation. According to the theoretical framework of self-compassion, responding to suffering with kindness, recognizing the shared nature of human vulnerability, and maintaining mindful awareness can reduce excessive self-judgment and emotional overidentification (Neff, 2023). Women following mastectomy may experience recurrent self-critical thoughts in which changes in breast appearance are interpreted as evidence of diminished attractiveness or personal worth. Compassion-oriented therapeutic exercises encourage individuals to recognize such thoughts without accepting them as definitive evaluations of their identities. Gilbert's theoretical model further suggests that persistent self-criticism and shame may reflect heightened activation of threat-related emotional regulation processes and insufficient access to internal experiences of reassurance and safety (Gilbert, 2014). Through compassionate imagery, supportive internal dialogue, and empathic self-understanding, self-compassion therapy may strengthen emotional soothing and reduce perceived threats associated with postoperative physical appearance. Moreover, mindfulness-based compassionate responding enables individuals to acknowledge painful bodily experiences without suppressing or becoming excessively identified with them (Germer, 2021). Consequently, participants may develop greater acceptance of postoperative physical changes while reducing the emotional intensity of appearance-related judgments, thereby contributing to reductions in body image concerns.

Another explanation for the effectiveness of self-compassion therapy concerns its potential influence on coping strategies, interpersonal adjustment, and psychological adaptation to illness. Breast cancer and its treatment may expose women to persistent emotional challenges that require adaptive coping beyond the immediate management of physical symptoms. The relationship between self-compassion, coping styles, and body image disturbance suggests that compassionate self-responding may facilitate more constructive engagement with illness-related challenges (Zhu et al., 2023). Instead of relying on avoidance, rumination, social withdrawal, or self-blame, individuals may become increasingly capable of acknowledging their emotional needs and engaging in supportive interpersonal relationships. Research concerning self-compassion interventions and emotional well-being provides additional support for the relevance of these processes to psychological adjustment (Ghazanfariyan pour & Chalabianloo, 2021). Moreover, previous investigations of compassion-oriented interventions among women with breast cancer have addressed sexual satisfaction, sexual functioning, posttraumatic growth, death anxiety, and broader health-related outcomes (Heidari Kebriti et al., 2022; Kiarasi et al., 2022; Sabola et al., 2023). Although these outcomes differ from the primary variable examined in the present study, they illustrate the broader clinical applicability of compassion-based approaches within psycho-oncology. Accordingly, the observed reduction in body image concerns may reflect improvements in how participants emotionally and cognitively responded to bodily changes rather than changes in physical appearance itself.

The second major finding indicated that contextual schema therapy significantly reduced body image concerns among women following mastectomy. This finding aligns with previous research examining schema-oriented interventions for appearance-related and emotional difficulties. Studies investigating schema therapy in relation to body image and emotional problems among women and body image concerns and social anxiety among girls provide relevant empirical precedents (Gholamin Mian Gasheh, 2023; Soheil Alvandi et al., 2022). More directly, previous research has examined schema therapy as an intervention targeting early maladaptive schemas among women with breast cancer (Khademi et al., 2019). The present findings also correspond with investigations of contextual schema therapy for body image concerns and psychosomatic symptoms among individuals experiencing perfectionism-related difficulties (Sohrabi et al., 2025). Research integrating schema therapy with acceptance and commitment therapy among women with breast cancer provides further support for examining schema-oriented contextual interventions in relation to subjective well-being and body image concerns (Karami Mohajeri et al., 2026; Karami Mohajery et al., 2025). Similarly, comparative research concerning cognitive-behavioral therapy and schema therapy for sexual functioning and body image among women with breast cancer reinforces the relevance of schema-oriented approaches within this clinical population (Khodaei Anzab et al., 2025).

The effectiveness of contextual schema therapy can be interpreted through the role of early maladaptive schemas and dysfunctional schema modes in shaping individuals' interpretations of bodily experiences. Contextual schema therapy conceptualizes psychological difficulties through interactions among enduring maladaptive schemas, unmet emotional needs, situationally activated modes, and dysfunctional coping responses (Roediger et al., 2018).

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Mastectomy may activate preexisting schemas involving defectiveness, shame, emotional deprivation, abandonment, and social isolation. When activated, these schemas may lead women to interpret physical changes as confirmation of deeply rooted beliefs concerning personal inadequacy or unworthiness of affection. The distinction between physical bodily characteristics and subjective representations of the body is particularly relevant to understanding these processes (Cuzzolaro, 2018; Sattin et al., 2023). Contextual schema therapy may interrupt maladaptive interpretations through experiential techniques such as imagery rescripting, chair work, cognitive defusion, and identification of unmet emotional needs. These techniques encourage participants to distinguish schema-driven interpretations from present circumstances while developing more adaptive cognitive and emotional responses. Strengthening the Healthy Adult mode may further enable individuals to respond constructively to vulnerability and challenge punitive internal evaluations. Evidence concerning schema therapy across clinical populations supports the broader applicability of interventions targeting persistent maladaptive psychological patterns (Zhang et al., 2023), although the specific mechanisms underlying improvement were not directly assessed in the present study.

The greater effectiveness of contextual schema therapy compared with self-compassion therapy constitutes the principal comparative finding of this investigation. Previous research comparing schema therapy and compassion therapy in relation to self-criticism and stigma among patients with human immunodeficiency virus provides a relevant precedent for examining differences between these therapeutic approaches within medical populations (Elmi et al., 2024). The relative advantage observed in the present study may be explained by contextual schema therapy's integration of acceptance-based processes with experiential restructuring and modification of dysfunctional schema modes. Although self-compassion therapy directly addresses shame, harsh self-judgment, and difficulties accepting personal suffering (Neff, 2023), contextual schema therapy additionally examines the developmental and interpersonal contexts in which these patterns emerge (Roediger et al., 2018). Importantly, the contextual schema therapy protocol employed in this study also incorporated mindfulness, acceptance, cognitive defusion, and self-compassion exercises. Its broader combination of therapeutic components may therefore have contributed to the observed comparative advantage. Research examining contextual schema therapy for social anxiety and quality of life among individuals with chronic health difficulties illustrates the potential relevance of this integrative framework to socially evaluative fears and illness-related adjustment (Gol et al., 2024; Stefan et al., 2023). Furthermore, investigations of schema-based acceptance and commitment therapy among women undergoing dialysis suggest its applicability to difficulties involving sexual self-esteem and interpersonal functioning (Hajiarbabi et al., 2023). Nevertheless, the present findings establish comparative differences in treatment outcomes rather than demonstrating that any particular therapeutic mechanism was responsible for those differences.

5. Conclusion

The maintenance of therapeutic improvements during the one-month follow-up also carries important clinical implications. Body image concerns following mastectomy may persist because patients repeatedly encounter situations that reactivate appearance-related distress, particularly within social and intimate relationships. Previous research concerning sexual self-esteem among breast cancer survivors highlights the relevance of these broader interpersonal dimensions of postoperative adjustment (Akbari et al., 2017; Kazemzadeh et al., 2022). The practical exercises incorporated into both interventions may have enabled participants to continue applying adaptive psychological strategies after treatment termination. Self-compassion exercises may facilitate continued emotional reassurance, whereas schema-monitoring and experiential techniques may help participants recognize dysfunctional modes and respond more flexibly to subsequent appearance-related challenges. However, the absence of significant posttest-to-follow-up differences should be interpreted as preliminary evidence of short-term maintenance rather than definitive evidence of long-term therapeutic stability. Overall, the findings support the inclusion of both interventions within psycho-oncological rehabilitation, with contextual schema therapy demonstrating a greater reduction in body image concerns under the conditions examined in this study.

6. Limitations and Suggestions

The present study had several limitations. Participants were recruited exclusively from the Mashhad Cancer Patients Association using purposive convenience sampling, limiting the generalizability of the findings. The relatively small final sample and participant attrition may have reduced

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the precision of the estimated treatment effects. Additionally, the random exclusion of three control participants to achieve balanced group sizes resulted in unnecessary loss of available observations. Reliance on a self-report instrument introduced potential response and social desirability biases. The absence of an active control condition prevented differentiation between intervention-specific effects and nonspecific therapeutic factors, including therapist attention, group support, and treatment expectations. Furthermore, the one-month follow-up was insufficient to establish long-term effectiveness, and potential therapeutic mechanisms, including changes in self-compassion, maladaptive schemas, and psychological flexibility, were not directly measured.

Future research should employ larger, multicenter randomized controlled trials with active comparison conditions and intention-to-treat analyses to improve methodological rigor and generalizability. Follow-up assessments extending to six and twelve months are recommended to determine the long-term maintenance of therapeutic improvements. Researchers should also investigate the mediating roles of self-compassion, early maladaptive schemas, shame, psychological flexibility, and emotion regulation in explaining treatment-related reductions in body image concerns. Examining potential moderators, including age, type of mastectomy, reconstructive surgery, cancer stage, and baseline schema severity, could facilitate individualized treatment selection. Additionally, dismantling studies examining the specific contributions of compassion-based, contextual behavioral, and experiential schema therapy components could clarify which therapeutic processes account for the comparative advantage of contextual schema therapy.

From a practical perspective, oncology centers, cancer rehabilitation services, and psychological counseling clinics should incorporate systematic screening for body image concerns into routine postoperative care for women undergoing mastectomy. Both self-compassion therapy and contextual schema therapy may be considered complementary psychological interventions, with contextual schema therapy representing a promising option for patients presenting with persistent appearance-related distress and maladaptive self-evaluative patterns. Mental health professionals working within oncology settings should receive specialized training in delivering these interventions and adapting therapeutic exercises to patients' physical limitations, emotional needs, and cultural circumstances. Establishing multidisciplinary collaboration among oncologists, psychologists, nurses, and rehabilitation specialists may further facilitate comprehensive postoperative care. Treatment selection should nevertheless remain individualized, considering patients' clinical characteristics, preferences, psychological readiness, and access to specialized therapeutic services.

Authors' Contributions

Authors equally contributed to this article.

Declaration

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.

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Declaration of Interest

The authors report no conflict of interest.

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Ethical Considerations

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

References

Akbari, M., Lotfi Kashani, F., & Vaziri, S. (2017). The efficacy of four-factor psychotherapy on increasing sexual self-esteem in breast cancer survivors. *Iranian Journal of Breast Diseases*, *10*(1), 48-60. http://ijbd.ir/article-1-605-fa.html

Anoushirvani, E., Razeghi, N., Nouhi, S., & Aghae, H. (2023). Effectiveness of compassion-based therapy on self-criticism and sexual schemas in women with breast cancer. *Journal of Applied Family Therapy*, *3*(2), 433-448. https://doi.org/10.61838/kman.afj.3.2.22

Breines, J., Toole, A., Tu, C., & Chen, S. (2025). Self-compassion, body image, and self-reported disordered eating. *Self and*

PWJ Psychology of Woman Journal
E-ISSN: 3041-8615

identity, *13*, 432-448. https://doi.org/10.1080/15298868.2013.838992

Chen, X., Wang, L., Liu, L., Jiang, M., & Wang, W. (2021). Factors associated with psychological distress among patients with breast cancer during the COVID-19 pandemic: a cross-sectional study in Wuhan, China. *Supportive Care in Cancer*, *29*, 1-10. https://doi.org/10.1007/s00520-020-05879-y

Cuzzolaro, M. (2018). Body schema and body image: history and controversies. In M. Cuzzolaro & S. Fassino (Eds.), *Body image, eating, and weight: a guide to assessment, treatment, and prevention* (pp. 1-24). Springer. https://doi.org/10.1007/978-3-319-90817-5_1

Elmi, Z., Soudagar, S., Hosseinzadeh Taghvaei, M., Salahian, A., & Hosseini Shokouh, S. J. (2024). Comparison of the effectiveness of schema therapy and compassion therapy on self-criticism and stigma in patients with human immunodeficiency virus. *Journal of Mashhad University of Medical Sciences*, *4*(67), 14-38. https://doi.org/10.22038/mjms.2024.79876.4603

Emens, L. A., & Loi, S. (2023). Immunotherapy approaches for breast cancer patients in 2023. *Cold Spring Harbor Perspectives in Medicine*, *13*(4), a041332. https://doi.org/10.1101/cshperspect.a041332

Germer, C. (2021). *Self-compassion from the path of mindfulness* (M. Sarafraz & H. Abdolshahi, Trans.). Arjmand Publications.

Ghazanfariyan pour, S., & Chalabianloo, G. (2021). The effectiveness of a short time self-compassion intervention program on positive and negative affect and life satisfaction. *Rooyesh*, *10*(3), 121-134. http://frooyesh.ir/article-1-2539-en.html

Gholamin Mian Gasheh, H. (2023). The effectiveness of schema therapy on body image and emotional difficulties in women. 5th Annual Congress of the Iranian Scientific Association of Psychotherapy: The Place of Relationship in Psychotherapy, Tehran, Iran.

Gilbert, P. (2014). The origins and nature of compassion focused therapy. *British Journal of Clinical Psychology*, *53*(1), 6-41. https://doi.org/10.1111/bjc.12043

Gnant, M., Fitzal, F., Rinnerthaler, G., Steger, G. G., & Greil-Ressler, S. (2021). Duration of adjuvant aromatase-inhibitor therapy in postmenopausal breast cancer. *New England Journal of Medicine*, *385*(5), 395-405. https://doi.org/10.1056/NEJMoa2104162

Gol, A., Aghamohammadian Sharbaf, H., Bigdeli, I., & Farid Hosseini, F. (2024). Gender comparison of the effectiveness of contextual schema therapy on improving quality of life in patients with migraine. *Journal of Sabzevar University of Medical Sciences*, *31*(5), 681-692. https://doi.org/10.30468/jsums.2024.7683.2996

Hajiarbabi, F., Shareh, H., & Pourfarahani, M. (2023). The effect of group acceptance and commitment therapy based on schema therapy on sexual self-esteem and marital burnout in women undergoing dialysis. *Journal of Fundamentals of Mental Health*, *7*(25), 123-131. https://doi.org/10.22038/jfmh.2023.22283

Heidari Kebriti, M., Khadem, N., Dowlatkhah, F., Ahmadi Zadeh Rayeni, A., & Sabouei, F. (2022). The effectiveness of self-compassion therapy on Islamic lifestyle, sexual satisfaction, and sexual function in patients with breast cancer. *Islamic Lifestyle Journal*, *5*(3), 412-420. https://www.islamiilife.com/article_186653.html

Jagsi, R., Griffith, K. A., Harris, E. E., Wright, J. L., Recht, A., & Taghian, A. G. (2024). Omission of radiotherapy after breast-conserving surgery for women with breast cancer with low clinical and genomic risk: 5-year outcomes of IDEA. *Journal of Clinical Oncology*, *42*(4), 390-398. https://doi.org/10.1200/JCO.23.01197

Karami Mohajeri, Z., Karbalaei Harafteh, F., Khalatbari, J., & Fardin, M. (2026). The Effectiveness of Integrating Schema Therapy and Acceptance and Commitment Therapy on Subjective Well-Being and Body Image Concern in Women with Breast Cancer. *Journal of Psychological Science*, *24*(145), 197-220.

Karami Mohajery, Z., Karbalaei Herofteh, F. S., Khalatbari, J., & Fardin, M. (2025). The Effectiveness of Integrating Schema Therapy and Acceptance and Commitment Therapy on Subjective Well-Being and Concern about Body Image among Women with Breast Cancer. *Journal of Psychological Science*, *24*(145), 197-220.

Kazemzadeh, J., Rabeipour, S., & Rajabzadeh, H. (2022). Investigating the status of sexual self-esteem and its related factors in breast cancer survivors. *Nursing and Midwifery Journal*, *20*(1), 85-93. https://doi.org/10.52547/unmf.20.1.85

Ke, Q., Timmins, F., Furlong, E., & Stokes, D. (2023). Unmet care needs of women who have undergone breast cancer surgery: a scoping review. *Journal of Advanced Nursing*, *79*(8), 2894-2910. https://doi.org/10.1111/jan.15634

Khademi, M., Talebian Sharif, J., & Azadi, M. (2019). The effectiveness of schema therapy on early maladaptive schemas in women with breast cancer. 3rd International Conference on Research in Psychology, Counseling and Educational Sciences, Iran.

Khodaei Anzab, S., Jahangiri, A., & Shakiba, A. (2025). Comparison of the Effectiveness of Cognitive-Behavioral Therapy and Schema Therapy on Sexual Function and Body Image in Women with Breast Cancer. *Psychology of Motivation, Behavior and Health*, *3*(1), 1-13.

Kiarasi, Z., Emadian, S. O., & Hassanzadeh, R. (2022). Effectiveness of compassion-focused therapy on posttraumatic growth and death anxiety in women with breast cancer. *Middle Eastern Journal of Disability Studies*---, *12*, 108. http://jdisabilstud.org/article-1-2520-en.html

Neff, K. D. (2023). Self-compassion: theory, method, research, and intervention. *Annual review of psychology*, *74*, 193-218. https://doi.org/10.1146/annurev-psych-032420-031047

Phoosuwan, N., & Lundberg, P. C. (2023). Life satisfaction, body image and associated factors among women with breast cancer after mastectomy. *Psycho-Oncology*, *32*(4), 610-618. https://doi.org/10.1002/pon.6113

Roediger, E., Stevens, B. A., & Brockman, R. (2018). *Contextual schema therapy: an integrative approach to personality disorders, emotional dysregulation, and interpersonal functioning*. New Harbinger Publications.

Sabola, N. E., Shattla, S. I., Sweelam, R. K., Shahin, M. A., & Shehata, H. S. (2023). Compassion-based intervention protocol effectiveness on health-related outcomes of women with breast cancer. *HIV Nursing*, *23*(3), 923-934.

Sattin, D., Parma, C., Lunetta, C., Zulueta, A., Lanzone, J., & Giani, L. (2023). An overview of the body schema and body image: theoretical models, methodological settings and pitfalls for rehabilitation of persons with neurological disorders. *Brain Sciences*, *13*(10), 1410. https://doi.org/10.3390/brainsci13101410

Soheil Alvandi, S., Karimi, A., & Bahraminia, F. (2022). Investigating the effect of schema therapy on body image concern and social anxiety in girls. 7th International Conference on Management, Psychology and Humanities with a Sustainable Development Approach, Tehran, Iran.

Sohrabi, M., Bakhtiarpour, S., Sohrabi, F., Eftekhar Saadi, Z., & Asgari, P. (2025). Effect of contextual schema therapy on body image and psychosomatic symptoms in individuals with

PWJ Psychology of Woman Journal
E-ISSN: 3041-8615

perfectionism disorder. *Health Education and Health Promotion*, *11*(4), 621-626.

Stefan, S., Stroian, P., Fodor, L., Matu, S., Nechita, D., & Boldea, I. (2023). An online contextual schema therapy workshop for social anxiety symptoms: a randomized control trial. *Journal of Contextual Behavioral Science*, *28*, 123-131. https://doi.org/10.1016/j.jcbs.2023.10.001

Takahashi, E., Fukuda, R., Takahashi, T., & Katsuragawa, T. (2025). Self-Compassion, Well-Being, and Body Image Concern in Young Japanese Women: The Role of Positive and Negative Facets of Self-Compassion. *PLoS One*, *20*(11), e0334753. https://doi.org/10.1371/journal.pone.0334753

Tran, M. A. Q., Lin, C.-Y., Nguyen, N. D. T., Pham, M. V., Pham, T. V., & Mai, D. L. (2026). Body Image, Narcissism, Envy, and Suicidal Ideation Among Vietnamese University Students: The Mediating and Moderating Roles of Loneliness, Depression, and Self-Compassion. *Emerging Adulthood*. https://doi.org/10.1177/21676968261423231

Tylka, T. L., & Huellemann, K. L. (2023). Self-compassion and body image. In A. Finlay-Jones, K. Bluth, & K. D. Neff (Eds.), *Handbook of self-compassion* (pp. 183-200). Springer. https://doi.org/10.1007/978-3-031-22348-8_11

Zhang, K., Hu, X., Ma, L., Xie, Q., Wang, Z., & Fan, C. (2023). The efficacy of schema therapy for personality disorders: a systematic review and meta-analysis. *Nordic journal of psychiatry*, *77*(7), 641-650. https://doi.org/10.1080/08039488.2023.2202684

Zhu, F., Liu, C., Zhang, W., Qiang, W., Yin, X., & Lu, Q. (2023). The mediating effect of coping styles between self-compassion and body image disturbance in young breast cancer survivors: a cross-sectional study. *BMC Nursing*, *22*(1), 178. https://doi.org/10.1186/s12912-023-01344-3

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