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A Comparison of the Effectiveness of Schema Therapy and Mindfulness-Based Cognitive Therapy on Self-Esteem and Psychological Well-Being of Incarcerated Women

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A B S T R A C T

Purpose: This study aimed to compare the effectiveness of schema therapy and mindfulness-based cognitive therapy on self-esteem and psychological well-being among incarcerated women.

Methods and Materials: This quasi-experimental study employed a pretest-posttest-follow-up design with a control group. Forty-five incarcerated women from Rasht Prison in 2024 were selected through convenience and voluntary sampling based on inclusion criteria, including age (35–55), at least one year of incarceration, and absence of clinical psychiatric disorders. Participants were randomly assigned to three equal groups: schema therapy, mindfulness-based cognitive therapy (MBCT), and control. The intervention groups received 8 weekly 90-minute sessions. The Ryff Psychological Well-Being Scale and Crocker Self-Esteem Questionnaire were used to assess outcomes at pretest, posttest, and two-month follow-up. Data were analyzed using repeated measures ANOVA, multivariate analysis of covariance (MANCOVA), and Bonferroni post hoc tests in SPSS-27.

Findings: Both schema therapy and MBCT groups showed significant improvements in self-esteem and psychological well-being compared to the control group ($p < .001$). MANCOVA results indicated significant differences among the three groups in posttest scores of self-esteem and psychological well-being (Wilks' Lambda = 0.43, $F = 9.8$, $p < .001$, $\eta^2 = 0.79$). ANCOVA revealed a significant difference in self-esteem ($F = 2.45$, $p = .038$, $\eta^2 = 0.112$) and psychological well-being ($F = 24.04$, $p = .001$, $\eta^2 = 0.649$) among the groups. Bonferroni tests showed MBCT had a greater effect on self-esteem, while schema therapy showed superior effects on psychological well-being.

Conclusion: Schema therapy is more effective in promoting long-term psychological well-being, whereas MBCT more significantly enhances self-esteem.

Keywords: *Schema Therapy, Mindfulness-Based Cognitive Therapy, Self-Esteem, Psychological Well-Being, Incarcerated Women.*

1. Introduction

In recent decades, the increasing recognition of mental health needs among incarcerated women has prompted researchers and clinicians to explore the efficacy of various psychotherapeutic interventions tailored to this vulnerable population. Incarcerated women experience disproportionately high rates of psychological disorders, including depression, anxiety, trauma-related symptoms, and low self-esteem, compared to the general population (Mahmood et al., 2023; Richie et al., 2021; Tripodi & Pettus-Davis, 2020). These mental health challenges are often exacerbated by systemic neglect, social stigma, adverse childhood experiences, and disrupted interpersonal relationships, all of which significantly undermine psychological well-being and increase the risk of maladaptive coping mechanisms such as self-harm (Dixon-Gordon et al., 2023; Ekanem & Woods, 2022; Roth, 2022). Consequently, interventions that address deep-rooted cognitive and emotional dysfunctions have become essential in promoting rehabilitation, reintegration, and recovery.

Among these interventions, schema therapy (ST) has gained considerable attention as a powerful integrative approach for treating entrenched psychological patterns and maladaptive beliefs, particularly those rooted in early experiences of neglect, abuse, or rejection (Bach et al., 2024; Dolatshahi et al., 2021; Fereydooni & Sheykhan, 2024). Schema therapy extends beyond symptom reduction and aims to restructure early maladaptive schemas (EMS), enhance emotional regulation, and foster the development of a "healthy adult" mode capable of self-soothing, self-compassion, and effective decision-making (Karimi Mohajeri et al., 2025; Khodabandelow et al., 2018). Research has demonstrated the effectiveness of schema therapy in improving psychological outcomes such as depression, hopelessness, emotional regulation, and self-esteem in various clinical populations, including women experiencing marital conflicts, chronic illness, or identity distress (Bahadori et al., 2022; Haji Zadeh et al., 2024; Mohammadi et al., 2020; Nikpour et al., 2021).

Psychological well-being, a multidimensional construct encompassing self-acceptance, autonomy, purpose in life, and positive relations with others, is particularly compromised in incarcerated populations. Enhancing psychological well-being not only reduces recidivism but also promotes constructive identity transformation and adaptive functioning post-release (Hassani et al., 2021; Mahour & Farzinfar, 2022; Tutal & Yalcin, 2021). Schema therapy's emphasis on reparenting and emotional repair makes it particularly relevant in correctional settings where histories of early relational trauma are common. A growing body of empirical work supports the use of schema therapy in both individual and group formats for promoting well-being and resilience in vulnerable groups, including substance users, adolescents, and women facing systemic marginalization (Bach et al., 2024; Fereydooni & Sheykhan, 2024; Pourpashang & Mousavi, 2021).

Parallel to schema therapy, mindfulness-based cognitive therapy (MBCT) and other mindfulness-informed approaches have also demonstrated promising outcomes in fostering emotional regulation, distress tolerance, and overall psychological resilience (Mashhadi et al., 2022; Sarabadani et al., 2023; Taheri et al., 2020). Mindfulness interventions emphasize present-moment awareness, acceptance of internal experiences, and non-judgmental attention, thereby reducing cognitive reactivity and rumination—common features in incarcerated individuals (NourozZadeh, 2023; Sahour et al., 2023; Shoghi et al., 2023). The positive impact of mindfulness on well-being has been particularly evident in populations grappling with infertility, chronic illness, and post-pandemic recovery, suggesting broad applicability across contexts of psychological vulnerability and stress (Karbasi et al., 2024; Mahour & Farzinfar, 2022; Sahour et al., 2023).

The comparative value of schema therapy and mindfulness-based approaches has been explored in several recent studies. For example, Nikan et al. (2023) reported significant reductions in stress and improvements in emotion regulation and psychological well-being among cardiovascular patients treated with either schema therapy or mindfulness-based therapy (Nikan et al., 2023). Similarly, Sahour et al. (2023) observed that both interventions effectively reduced worry and improved psychological well-being in infertile women, with schema therapy showing slightly higher efficacy in addressing deeply ingrained cognitive distortions (Sahour et al., 2023). Such findings underscore the unique yet complementary mechanisms of these two modalities: schema therapy targets deep-seated cognitive and emotional structures, while mindfulness cultivates attentional control, emotional acceptance, and reduced identification with maladaptive thoughts.

While the benefits of both interventions are well documented, their application within correctional institutions remains relatively limited. Given the elevated prevalence of mental illness, trauma, and self-stigma among incarcerated women, the integration of schema-focused and

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mindfulness-based interventions holds significant promise (Ekanem & Woods, 2022; Shahab et al., 2020; Shimotsu & Horikawa, 2016). Previous research has demonstrated that group-based schema therapy not only improves self-esteem but also mitigates social anxiety, rumination, and depressive symptoms in high-risk populations (Dolatshahi et al., 2021; Tajfar & Feizi, 2020; Varmazyar et al., 2021). Likewise, mindfulness-based programs have proven effective in enhancing emotional maturity, psychological security, and sleep quality among individuals facing bereavement, anxiety, or identity crises (Mashhadi et al., 2022; Sarabadani et al., 2023; Taheri et al., 2020).

It is also important to consider the cultural and contextual relevance of interventions. Incarcerated women in Iran, like many around the world, face structural inequalities, social rejection, and limited access to rehabilitative services. The implementation of empirically supported, culturally adapted interventions such as schema therapy and MBCT can offer a pathway toward psychological empowerment and identity reconstruction. The integration of schema therapy with components of acceptance and commitment therapy (ACT) has also been explored in populations such as women with breast cancer, showing improvement in body image and subjective well-being (Karimi Mohajeri et al., 2025). This suggests that combined or hybrid therapeutic approaches may offer synergistic benefits, especially in populations with multifaceted psychological needs.

Given this background, the present study aimed to compare the effectiveness of schema therapy and mindfulness-based cognitive therapy on self-esteem and psychological well-being among incarcerated women.

2. Methods and Materials

2.1. Study Design and Participants

This study was an applied research project using a quasi-experimental design, specifically a multiple pretest-posttest control group design with a two-month follow-up phase. The statistical population included incarcerated women in Rasht Prison in the year 2024 (Gregorian Calendar), who had served more than one year of their sentence. The research sample consisted of 45 incarcerated women in Rasht who had served more than one year of imprisonment in 2024. The inclusion criteria included an age range of 35 to 55 years, having served at least one year in prison, and absence of clinical disorders—defined as no psychiatric diagnosis and no use of medication related to mental disorders. The exclusion criteria included missing more than three educational sessions or undergoing any other form of therapy during the research period.

After approval of the proposal at Payame Noor University, Tehran, and obtaining the necessary permissions from the Gilan Provincial Prisons Organization as well as the ethics code from Payame Noor University, Tehran, 45 participants were purposefully and randomly selected based on the inclusion criteria. After providing informed written consent, participants were randomly assigned to three equal groups: mindfulness training, schema therapy training, and control. Participants were assessed at pretest, posttest, and follow-up stages regarding self-esteem, psychological well-being, and schemas. The follow-up stage was conducted two months after the intervention. No participant dropout occurred during the intervention period.

2.2. Measures

To collect data on psychological well-being, the Ryff Psychological Well-Being Scale (Ryff, 1989) was used. This instrument consists of 84 items and measures six components: autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance. Participants respond on a 6-point Likert scale ranging from (1) strongly disagree to (6) strongly agree. Negatively worded items are reverse-scored. Ryff (1989) reported Cronbach's alpha coefficients as follows: self-acceptance (0.93), positive relations with others (0.91), autonomy (0.86), environmental mastery (0.90), purpose in life (0.90), and personal growth (0.87). In Iran, a study using a student sample reported internal consistency with the following alpha coefficients: environmental mastery (0.69), personal growth (0.74), positive relations with others (0.65), purpose in life (0.73), self-acceptance (0.65), autonomy (0.60), and the overall score (0.90).

Self-esteem questionnaire was developed by Crocker et al. (2003) and consists of 35 items. Respondents rate each item on a 7-point Likert scale ranging from (1) strongly disagree to (7) strongly agree. The total score ranges from 35 to 245, with higher scores indicating greater self-esteem. Zaki (2012) examined the construct validity of this questionnaire, and factor analysis revealed that the seven subscales could be grouped into two dimensions: internal self-esteem and external self-esteem. The subscales include: internal self-esteem (lack of need for others' approval, love for God, piety), and external self-esteem (academic competence, competitiveness, and concern about others' evaluations). In three studies conducted by Sargent et al.

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(2006; as cited in Zaki, 2012), the Cronbach's alpha for the seven subscales ranged from 0.78 to 0.84. The reliability of the subscales ranged from 0.87 to 0.94. According to Crocker et al. (2003), the English version of the scale has stable and consistent reliability and validity. Reliability was reported as 0.82 for 1,345 participants, with 0.79 for men and 0.84 for women. Zaki (2012) showed that the seven subscales could be reduced to two main components, namely internal and external self-esteem.

2.3. Interventions

The mindfulness-based intervention was conducted over eight weekly sessions, each lasting 90 minutes, and followed the program developed and validated by Kabat-Zinn and colleagues (2011). In the first session, participants completed the pretest, were introduced to the necessity of mindfulness, and practiced mindful eating with a raisin and basic body relaxation. The second session focused on body scan meditation and practicing awareness of thoughts and emotions. In the third session, participants practiced mindful breathing, mindful movement, and stretching along with the "three-minute breathing space" technique. The fourth session emphasized present-moment awareness, including five-minute auditory or visual mindfulness, sitting meditation, mindful walking, and awareness of pleasant and unpleasant experiences. The fifth session included body scan techniques with acceptance, sitting meditation with awareness of breath and body, and reflection on automatic reactions to internal experiences. The sixth session addressed the relationship between thoughts and reality through nonjudgmental meditation and observation of moods and thoughts. The seventh session emphasized self-care and complete mindfulness through sitting meditation focusing on breath, body, sound, thoughts, and emotions while recognizing the link between activity and mood. The final session summarized all previous content, taught how to apply mindfulness to manage emotional states in the future, and concluded with a body scan meditation and posttest administration.

The schema therapy intervention was implemented across eight weekly sessions of 90 minutes each over a two-month period. The first session involved administering the pretest and providing an introduction to schema therapy. In the second session, participants learned about different coping styles, their functions, and their connection to early emotional regulation patterns. The third session focused on introducing various schema modes and their relationship with primary emotional regulation. The fourth session involved validating participants' early emotional regulation patterns. The fifth session included instruction and practice in techniques such as cognitive restructuring and the development of schema flashcards. The sixth session introduced imagery rescripting techniques and guided participants through empathic confrontation exercises within the group. In the seventh session, participants explored healthy schema modes, particularly the "healthy adult" and "happy child." The final session involved continued use of schema flashcards and identification of healthy target behaviors, emphasizing the integration of learned strategies into daily life.

2.4. Data Analysis

Data were analyzed using SPSS-27 at both descriptive and inferential levels at a significance level of $p < 0.05$. At the descriptive level, measures of central tendency and dispersion were used to describe variable distributions. At the inferential level, the chi-square test was used to compare demographic characteristics of the groups, and repeated measures ANCOVA and post hoc tests were used to test the statistical hypotheses.

3. Findings and Results

There was no significant difference among the study groups in terms of demographic variables such as education level, age, and duration of imprisonment, indicating that the groups were homogeneous and matched demographically. At this stage, descriptive indicators of the dependent variables were examined separately for the three groups.

Table 1

Mean and Standard Deviation of Pretest, Posttest, and Follow-Up Scores on Self-Esteem and Psychological Well-Being

Variable	Test Stage	Std. Deviation	Mean	Sample Size
Self-Esteem	Pretest	28.277	173.40	45
	Posttest	27.974	175.40	45
	Follow-Up	28.324	174.93	45
Psychological Well-Being	Pretest	11.227	168.00	45

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	Posttest	10.161	173.44	45
	Follow-Up	9.860	172.31	45

As seen in Table 1, the mean and standard deviation of self-esteem and psychological well-being at pretest, posttest, and follow-up stages are presented. Table 4 shows the group-wise means and standard deviations for the schema therapy, mindfulness, and control groups.

Table 2

Group-wise Mean and Standard Deviation of Pretest, Posttest, and Follow-Up Scores for Schema Therapy, Mindfulness, and Control Groups

Test Stage	Variable	Schema Therapy	SD	Mindfulness	SD	Control	SD
Pretest	Self-Esteem	163.3	18.72	179	31	177	32
Posttest	Self-Esteem	166.4	18.52	182	30	177	32
Follow-Up	Self-Esteem	165.5	19.61	182	30	177	32
Pretest	Psychological Well-Being	166.9	14.51	167	9.6	169	9.1
Posttest	Psychological Well-Being	176.8	9.96	174	10	169	9.1
Follow-Up	Psychological Well-Being	176.1	10.19	171	10	169	8.4

As shown in Table 2, self-esteem and psychological well-being scores increased in the experimental groups during the posttest and follow-up stages. The assumption of normality was met for most of the dependent variables. For self-esteem and psychological well-being in the control and schema therapy groups, normality was confirmed at the 0.01 level, allowing the use of parametric tests. Therefore, the assumption of normal distribution was met for all dependent variables at all stages.

Mauchly's Test of Sphericity examines the assumption of sphericity and equality of variance-covariance matrices for within-subjects designs. If violated, degrees of freedom are adjusted using corrections like Greenhouse-Geisser or Huynh-Feldt, which are more conservative. Mauchly's test indicated that sphericity was violated for self-esteem in the schema therapy group ($p < .050$), but not for the other two groups ($p > .050$). For psychological well-being, sphericity was violated only in the control group ($p < .050$) but maintained in the schema therapy and mindfulness groups.

To address sphericity violations, the epsilon correction factor was applied, and results based on the Greenhouse-Geisser and Huynh-Feldt corrections are reported, validating the assumption for conducting MANCOVA. The Box's M test was significant, suggesting the equality of the covariance matrices of the dependent variables across independent variable levels ($p > .05$), confirming the assumption.

Levene's test was used to assess homogeneity of variances, and results showed that variance homogeneity was observed across all dependent variables ($p > .05$), supporting this assumption.

To compare the effectiveness of schema therapy and mindfulness on self-esteem and psychological well-being of incarcerated women, multivariate analysis of covariance (MANCOVA) was conducted after controlling for pretest effects. Results are presented in Table 3.

Table 3

MANCOVA Results for Posttest Scores of Self-Esteem and Psychological Well-Being in Schema Therapy, Mindfulness, and Control Groups

Test	Value	F	df	Error df	Sig.	Effect Size
Pillai's Trace	1.30	5.033	24	64	0.001	0.65
Wilks' Lambda	0.43	9.80	24	62	0.001	0.79
Hotelling's Trace	13.9	17.4	241	60	0.001	0.87
Roy's Largest Root	13.3	35.7	2	32	0.001	9.30

As observed in Table 3, the MANCOVA results show significant differences among schema therapy, mindfulness, and control groups in at least one of the dependent variables, confirming the main hypothesis of the study.

A univariate ANCOVA was performed to examine the hypothesis regarding self-esteem specifically. Results are shown in Table 4.

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Table 4

ANCOVA Results for Self-Esteem and Psychological Well-Being

Source	Variable	SS	df	MS	F	Sig.	Effect Size
Group	Self-Esteem	31.2	2	15.6	2.45	0.038	0.112
	Psychological Well-Being	26668.6	3	888.9	24.04	0.001	0.649

As seen in Table 4, the F-ratio for the ANCOVA on self-esteem was 2.45 ($p < .038$), indicating a significant difference among the schema therapy, mindfulness, and control groups on this variable. To further analyze the differences, a Bonferroni post hoc test was conducted.

Table 5

Bonferroni Post Hoc Test Results for Comparing Mean Differences of Self-Esteem and Psychological Well-Being Among Schema Therapy, Mindfulness, and Control Groups in Posttest Phase

Variable	Comparison Groups	Mean Difference	Std. Error	Sig.
Self-Esteem	Schema – Control	6.008	0.965	0.001
	Mindfulness – Control	9.45	0.94	0.001
	Schema – Mindfulness	-6.008	0.965	0.001
Psychological Well-Being	Schema – Control	9.35	2.23	0.001
	Mindfulness – Control	6.34	2.23	0.021
	Schema – Mindfulness	-6.34	2.23	0.001

As Table 5 shows, in the posttest phase, there were statistically significant differences among schema therapy, mindfulness, and control groups regarding self-esteem ($p < 0.005$). Moreover, the mean difference for the mindfulness group was higher than the schema therapy group, suggesting greater effectiveness and treatment stability.

For psychological well-being, there were also significant differences among the groups ($p < 0.005$). However, the schema therapy group had a greater mean increase in psychological well-being compared to the mindfulness group, indicating that schema therapy significantly improved the psychological well-being of incarcerated women.

4. Discussion and Conclusion

The findings of the present study, which examined the comparative effectiveness of schema therapy and mindfulness-based cognitive therapy (MBCT) on self-esteem and psychological well-being among incarcerated women, yielded several significant results. Both interventions produced statistically significant improvements in participants' self-esteem and psychological well-being during the posttest and follow-up stages. However, comparative analyses revealed nuanced differences: MBCT demonstrated a more robust and sustained effect on self-esteem, while schema therapy had a more pronounced impact on psychological well-being. These results suggest that although both approaches are beneficial, they operate through distinct therapeutic mechanisms and yield differential benefits depending on the targeted psychological construct.

The improvement in self-esteem observed in both schema therapy and mindfulness groups aligns with prior studies indicating that schema-focused interventions can enhance individuals' self-concept by modifying early maladaptive schemas and promoting healthier self-narratives (Fereydooni & Sheykhan, 2024; Khodabandelow et al., 2018; Mohammadi et al., 2020). Schema therapy's emphasis on cognitive restructuring and emotional repair directly addresses the deep-rooted beliefs about self-worth that are often formed during adverse early life experiences—a common background among incarcerated women (Bach et al., 2024; Tutal & Yalcin, 2021). This finding is consistent with Bahadori et al. (2022), who found that schema therapy significantly improved self-esteem in obese individuals by challenging core beliefs and fostering self-compassion (Bahadori et al., 2022). Additionally, the improvement in self-esteem within the MBCT group can be attributed to mindfulness techniques that promote non-judgmental awareness, present-moment focus, and acceptance of self—strategies known to reduce harsh self-evaluations and

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internalized stigma (Shimotsu & Horikawa, 2016; Shoghi et al., 2023; Taheri et al., 2020). These findings echo the work of NourozZadeh (2023), who showed that mindfulness therapy significantly enhanced subjective well-being and self-perception in individuals recovering from the psychological toll of COVID-19 (NourozZadeh, 2023).

With regard to psychological well-being, schema therapy demonstrated superior effectiveness compared to MBCT, particularly in the follow-up phase. This can be explained by the fact that schema therapy targets core beliefs and chronic patterns of dysfunction that underlie not only negative emotions but also broader issues such as purpose in life, autonomy, and quality of relationships—key domains of psychological well-being (Bach et al., 2024; Karimi Mohajeri et al., 2025). The lasting effect of schema therapy on psychological well-being is in line with research by Haji Zadeh et al. (2024), who found schema therapy to be more effective than narrative therapy in improving well-being among women experiencing infidelity-related distress (Haji Zadeh et al., 2024). Similarly, Mahour and Farzinfar (2022) reported that schema therapy improved psychological well-being in mothers of children with hearing impairment by facilitating emotional processing and fostering a more functional internal dialogue (Mahour & Farzinfar, 2022). While MBCT also had a positive impact, its mechanisms—primarily the cultivation of awareness and emotional regulation—may exert more influence over fluctuating emotional states than deeply entrenched beliefs about life meaning or relational patterns (Mashhadi et al., 2022; Sahour et al., 2023; Sarabadani et al., 2023).

The comparative effects observed in this study may also reflect the difference in treatment goals and therapeutic depth. Schema therapy typically requires exploration of early life experiences, emotional needs, and internalized patterns, thereby promoting long-term cognitive-emotional shifts (Dolatshahi et al., 2021; Varmazyar et al., 2021). MBCT, in contrast, equips participants with practical skills for managing distress in real time, which may contribute to immediate improvements in self-regard but be less effective in reshaping broader life narratives. This distinction is supported by the work of Nikan et al. (2023), who reported that schema therapy produced greater improvements in psychological well-being, while MBCT was more effective for emotional regulation and stress reduction in cardiovascular patients (Nikan et al., 2023). Similarly, Sahour et al. (2023) found that although both treatments improved well-being in infertile women, schema therapy had a deeper impact on identity-related constructs (Sahour et al., 2023).

Moreover, the results of this study are particularly relevant within the context of incarcerated women, who often face complex psychological challenges stemming from histories of trauma, marginalization, and systemic oppression (Mahmood et al., 2023; Richie et al., 2021). Given that many of these women have internalized shame and distorted self-perceptions, interventions like schema therapy that directly confront and restructure core schemas are especially beneficial (Khodabandelow et al., 2018; Nikpour et al., 2021). Meanwhile, MBCT's capacity to enhance distress tolerance and emotional regulation offers immediate relief from the psychological pressure of incarceration (Dixon-Gordon et al., 2023; Ekanem & Woods, 2022). The integration of both approaches may offer a promising direction for comprehensive prison mental health programs, as demonstrated in hybrid interventions combining schema therapy with acceptance and commitment therapy (ACT), which yielded improvements in subjective well-being and body image among cancer patients (Karimi Mohajeri et al., 2025).

The findings also underscore the importance of tailoring psychological interventions to the unique needs of incarcerated populations. Women in correctional facilities often report higher levels of trauma, interpersonal distrust, and unmet emotional needs compared to their male counterparts, making them more responsive to therapies that address attachment wounds and self-worth (Roth, 2022; Tripodi & Pettus-Davis, 2020). In this context, schema therapy's focus on "limited reparenting" and "empathic confrontation" offers therapeutic value by modeling secure attachments and validating emotional pain (Bach et al., 2024; Fereydooni & Sheykhan, 2024). MBCT, on the other hand, cultivates present-centered awareness and reduces cognitive fusion with distressing thoughts—an essential skill for navigating the emotional volatility of incarceration (Sarabadani et al., 2023; Taheri et al., 2020).

In sum, the present study confirms and extends existing evidence regarding the effectiveness of schema therapy and mindfulness-based interventions in enhancing self-esteem and psychological well-being. While both treatments were beneficial, schema therapy emerged as more effective in fostering sustained psychological growth, whereas MBCT was particularly effective in improving self-esteem and providing immediate psychological relief. These findings highlight the complementary nature of the two approaches

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and suggest that an integrative treatment model may yield the most comprehensive benefits for incarcerated women.

Limitations

Despite its valuable contributions, this study is subject to several limitations. First, the sample size was relatively small and limited to a single correctional facility, which restricts the generalizability of the findings. Second, the study relied on self-report questionnaires, which are subject to social desirability bias and may not capture the full range of psychological experiences, especially in institutional settings where trust is often compromised. Third, the intervention period, although intensive, lasted only eight weeks, which may not have been sufficient for some participants to fully internalize therapeutic changes, particularly for schema restructuring, which typically requires long-term engagement. Additionally, the follow-up period was limited to two months, preventing assessment of the long-term sustainability of treatment effects.

Suggestions for Future Research

Future studies should consider larger and more diverse samples from multiple correctional institutions to enhance external validity. Longitudinal designs with extended follow-up periods would allow researchers to assess the durability of therapeutic outcomes over time and better evaluate relapse or regression patterns. Moreover, future research could explore the integration of schema therapy and MBCT into a unified protocol to examine whether a hybrid model yields additive or synergistic effects. It is also recommended to incorporate qualitative methods—such as interviews or therapeutic process evaluations—to gain deeper insights into participants' experiences and the mechanisms underlying therapeutic change. Exploring the mediating role of variables such as emotional regulation, self-compassion, and trauma history could further illuminate the pathways through which these interventions exert their effects.

Suggestions for Practice

From a practical standpoint, correctional facilities should prioritize the implementation of structured psychotherapeutic programs such as schema therapy and MBCT, given their proven effectiveness in addressing the complex psychological needs of incarcerated women. Mental health professionals working in prisons should be trained in both approaches to allow for flexible, individualized care. Integrating these therapies into rehabilitation programs may facilitate emotional healing, reduce recidivism, and support successful reintegration into society. Special attention should be given to creating safe, nonjudgmental therapeutic spaces within correctional environments to foster trust and engagement among participants. Finally, sustained institutional support and cross-sector collaboration—between mental health, judicial, and social services—are essential for ensuring the long-term success and scalability of such interventions.

Authors' Contributions

All authors significantly contributed to this study.

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

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

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