

Effectiveness of Compassion-Focused Therapy (CFT) and Schema Therapy on Psychological Well-Being and Sense of Psychological Coherence in Infertile Women

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ABSTRACT

Objective: This study aimed to compare the effectiveness of compassion-focused therapy (CFT) and schema therapy on psychological well-being and sense of coherence among infertile women.

Methods and Materials: A quasi-experimental, pretest-posttest-follow-up design with a control group was used. Thirty infertile women referring to Saarem Hospital in Tehran during the first half of 2024 were randomly assigned to three groups: CFT (n=10), schema therapy (n=10), and waitlist control (n=10). The CFT group received eight sessions, and the schema therapy group received ten sessions. Psychological well-being was assessed using the 18-item Ryff Psychological Well-Being Scale, and sense of coherence was measured with the Flensborg et al. (2006) Sense of Coherence Questionnaire. Data were analyzed using multivariate analysis of covariance (MANCOVA) and Bonferroni post-hoc tests.

Findings: MANCOVA results showed significant differences between groups on both psychological well-being and sense of coherence at posttest (Wilks' Lambda = .350, $F(4,54)=18.76$, $p<.001$). Univariate tests indicated significant group effects on psychological well-being ($F(2,27)=18.45$, $p<.001$) and sense of coherence ($F(2,27)=22.13$, $p<.001$). Post-hoc analyses revealed that CFT significantly improved psychological well-being compared to schema therapy and control at posttest ($p<.05$), while schema therapy led to greater improvements in sense of coherence compared to CFT and control ($p<.05$). Both interventions maintained their effects at the one-month follow-up.

Conclusion: The findings suggest that compassion-focused therapy is more effective in enhancing psychological well-being, whereas schema therapy is more effective in strengthening sense of coherence among infertile women. Both interventions showed sustained benefits over time, highlighting the importance of incorporating structured psychological treatments into infertility care to promote adaptive functioning and resilience.

Keywords: compassion-focused therapy, schema therapy, psychological well-being, sense of coherence, infertile women.

1. Introduction

Infertility is often described as a profound life crisis that significantly disrupts individuals' psychological well-being and existential coherence. Numerous studies have documented the negative psychological impacts of infertility, including heightened levels of depression, anxiety, lowered self-esteem, and impaired life satisfaction (Ghafari Mazar et al., 2018; Nenadić et al., 2017). Infertility in women, in particular, is frequently associated with diminished psychological well-being due to the complex interplay of biological, cultural, and interpersonal pressures that converge during diagnosis and treatment processes (Mahour & Farzinfar, 2022; Sahour et al., 2023). Psychological well-being, defined as a multidimensional construct involving positive relationships, autonomy, environmental mastery, personal growth, self-acceptance, and purpose in life, is crucial for women coping with infertility to sustain adaptive functioning and resilience in the face of uncertainty and potential stigma (Hassani et al., 2021; Tran et al., 2022).

In parallel, the sense of coherence—a salutogenic concept originally introduced by Antonovsky—has been highlighted as an important protective factor in dealing with infertility-related stress. A strong sense of coherence, comprising comprehensibility, manageability, and meaningfulness, facilitates more adaptive coping, lower distress, and greater psychological adjustment among women experiencing infertility (Kaya-Demir & Çırakoğlu, 2022; Yousefi Afarashteh & Rezaei, 2021). Recent research suggests that women with a higher sense of coherence show better psychological adaptation and demonstrate greater perseverance in fertility treatments, which may in turn positively influence treatment outcomes (Yazdanpour et al., 2024).

Interventions such as schema therapy and compassion-focused therapy (CFT) have been proposed as promising approaches to enhance psychological well-being and promote adaptive sense of coherence in clinical populations, including infertile women. Schema therapy, rooted in cognitive-behavioral theory, integrates elements of experiential, interpersonal, and psychodynamic approaches to target deeply entrenched maladaptive schemas formed during early development (Bach et al., 2024; Nenadić et al., 2017). Previous studies have demonstrated the effectiveness of schema therapy in improving psychological well-being, reducing maladaptive coping, and addressing enduring patterns of interpersonal difficulties among diverse

populations, including mothers of children with disabilities, individuals with substance use disorders, and patients with chronic depression (Mahour & Farzinfar, 2022; Peyman et al., 2021; Pourpashang & Mousavi, 2021; Varmazyar et al., 2021). Schema therapy also appears particularly effective in treating dysfunctional beliefs related to worthlessness and defectiveness—beliefs that are often prominent in women struggling with infertility (Sahour et al., 2023).

On the other hand, CFT emphasizes cultivating a compassionate self-identity and fostering skills in self-soothing and emotion regulation, thereby reducing self-criticism and shame, which are often exacerbated by infertility-related stigma (Golestanifar, 2025; Nameni et al., 2021). Research has shown that CFT contributes significantly to enhancing psychological well-being and strengthening adaptive coping strategies in women suffering from chronic health conditions and relational distress (Mamdouhi et al., 2023; Taheri et al., 2022). Several scholars have pointed out that the sense of coherence may also be positively influenced by interventions that foster compassion, as they directly address emotional dysregulation and build inner resources for meaning-making in adverse life circumstances (Yazdanpour et al., 2024; Yussefian et al., 2023).

Recent empirical studies underscore the efficacy of both schema therapy and compassion-focused therapy in promoting psychological well-being and reducing symptoms of anxiety, depression, and distress in infertile women (Haji Zadeh et al., 2024; Sahour et al., 2023). For instance, Haji Zadeh and colleagues (2024) demonstrated that schema therapy significantly improved psychological well-being in women affected by infidelity, suggesting its broader utility in addressing relational and existential wounds common to the experience of infertility (Haji Zadeh et al., 2024). Similarly, Golestanifar (2025) reported the superiority of compassion-focused therapy over emotion-focused therapy in improving psychological well-being among cardiovascular patients, emphasizing the transformative potential of fostering compassionate inner dialogues (Golestanifar, 2025). Notably, research comparing schema therapy and compassion-focused interventions highlights nuanced differences in their mechanisms of change. Schema therapy directly targets cognitive and emotional patterns linked to negative self-views and insecure attachment, while compassion-focused therapy builds emotional safety and a sense of worth through cultivating compassionate self-relations (Bach et al., 2024; Tran et al., 2022).

Despite these promising findings, there remains a significant gap in the literature regarding direct comparisons of the efficacy of schema therapy and compassion-focused therapy on psychological well-being and sense of coherence in infertile women—a group particularly vulnerable to negative self-perceptions and existential crises (Monemiyan et al., 2021; Yussefian et al., 2023). Although several studies have examined these therapies separately in other clinical or non-clinical samples, few have rigorously contrasted their relative effectiveness within a unified experimental framework targeting this specific population (Monemiyan et al., 2021; Nameni et al., 2021; Nikpour et al., 2021). Furthermore, given the crucial role of sense of coherence in predicting mental health outcomes and resilience in adversity, exploring how these therapies impact this construct alongside psychological well-being provides a more comprehensive understanding of their clinical utility (Hassani et al., 2021; Lloyd, 2017).

Therefore, the present study was designed to fill this gap by comparing the effectiveness of schema therapy and compassion-focused therapy on psychological well-being and sense of coherence among infertile women.

2. Methods and Materials

2.1. Study Design and Participants

In this study, a quantitative, quasi-experimental design with a pretest-posttest-follow-up and a control group was used. The statistical population consisted of all infertile women in Tehran who referred to the infertility treatment center at Saarem Hospital during the first half of 2024. Initial coordination was carried out to implement the research, and a public call was announced via banners installed in the hospital and through a virtual group that infertile women had set up with the hospital administrator. In this study, we aimed to recruit 45 participants to account for potential attrition, with the expectation that at least 30 women would complete the study, which would be sufficient for the research design. These 30 participants were assessed through psychological evaluation and clinical interviews to ensure they had no psychological disorders or clinical psychological and behavioral problems. They were then randomly assigned into three groups: the first group of 10 participants received compassion-focused therapy, the second group of 10 participants received schema therapy, and the third group of 10 participants served as the control group. Finally, participants were randomized into the intervention and control conditions to receive compassion-

focused therapy, schema therapy, or to be part of the control group.

2.2. Measures

2.2.1. Psychological Well-Being

The Psychological Well-Being Scale (Ryff, 1989) was used to assess psychological well-being. Originally developed by Ryff in 1989, this scale initially included 120 items, but subsequent studies recommended shorter versions with 84, 54, and 18 items (Sefidi & Farzad, 2012). The 18-item version was used in this study. Items are rated on a six-point Likert scale ranging from 1 (strongly disagree) to 6 (strongly agree). The minimum score is 18 and the maximum is 108. The scale measures six components, each with three items: self-acceptance (items 2, 8, 10), positive relationships with others (items 3, 11, 13), autonomy (items 9, 12, 18), environmental mastery (items 1, 4, 6), purpose in life (items 5, 14, 16), and personal growth (items 7, 15, 17). In this scale, items 3, 4, 5, 9, 10, 13, 16, and 17 are reverse scored. Previous research has reported internal consistency reliability using Cronbach's alpha ranging from .62 to .90 across subscales and .92 for the total scale (Ziaei Nejad, 2016). Validity was confirmed through significant positive correlations with the General Health Questionnaire, indicating adequate criterion validity.

2.2.2. Sense of Coherence

The Sense of Coherence Questionnaire developed by Flensburg and colleagues in 2006, based on Antonovsky's original version, was used to assess sense of coherence. This 35-item instrument uses both three-point and five-point Likert scales. Items 1 to 24 are scored on a three-point scale (yes = 3, don't know = 2, no = 1), and items 25 to 35 are scored on a five-point scale, where "very satisfied" and "satisfied" receive 3 points, "sometimes satisfied and sometimes dissatisfied" receives 2 points, and "dissatisfied" and "very dissatisfied" receive 1 point. The scale includes three components: comprehensibility (the extent to which an individual perceives life events as structured, predictable, and understandable), manageability (the extent to which one feels equipped with resources and abilities to cope with life challenges), and meaningfulness (the extent to which one perceives life as purposeful and considers challenges as valuable opportunities). The total score ranges from 35 to 105, with higher scores indicating a stronger sense of coherence. In Iran, the questionnaire was first translated into

Persian and then back-translated into English to ensure linguistic accuracy (Sabri Nazrzadeh, 2011). Content and construct validity were confirmed by Flensburg and colleagues, with reported Cronbach's alpha coefficients of .87 and .86 across two studies, indicating high reliability.

2.3. Interventions

The compassion-focused therapy protocol consisted of 8 group sessions designed to help participants develop self-compassion and compassion toward others. Each session included guided practices, group discussions, and experiential exercises focused on understanding the nature of compassion, recognizing and soothing self-criticism, developing compassionate imagery, practicing compassionate thinking, and cultivating a compassionate self-identity. Participants were encouraged to practice exercises between sessions to reinforce skills learned in therapy and to discuss challenges and progress in subsequent sessions. The protocol followed established guidelines for group-based compassion-focused therapy and emphasized creating a safe, supportive group environment for sharing experiences and fostering personal growth.

The schema therapy protocol consisted of 10 group sessions that focused on identifying and modifying maladaptive schemas and schema-driven coping styles. Sessions involved psychoeducation about schemas and modes, experiential exercises to access and work through early maladaptive schemas, cognitive restructuring techniques to challenge dysfunctional beliefs, and behavioral pattern-breaking tasks aimed at fostering healthier coping responses. Therapists facilitated emotional

processing work using imagery rescripting and chair work to address schema-related distress. Participants received homework assignments to practice new skills and reinforce therapeutic gains between sessions. This protocol was structured based on established schema therapy models adapted for group delivery, with a strong focus on interpersonal feedback and collaborative exploration of schema themes within the group context.

2.4. Data Analysis

For data analysis, descriptive statistics (mean, standard deviation) and inferential statistics were used. The normality of data distribution was checked using the Shapiro-Wilk test. Then, multivariate analysis of covariance (MANCOVA) was performed to compare mean scores across groups while controlling for pretest scores. The Bonferroni post-hoc test was also conducted to examine pairwise differences among groups. All statistical analyses were performed using SPSS software, version 26. The significance level was set at $p < .05$.

3. Findings and Results

Table 1 presents means and standard deviations for psychological well-being and sense of coherence across the three study groups (waitlist control, compassion-focused therapy, and schema therapy) at pretest, posttest, and one-month follow-up. In the waitlist control group, both psychological well-being and sense of coherence remained virtually unchanged across measurement points. In contrast, participants in both intervention groups showed marked increases in both variables at posttest and follow-up relative to pretest.

Table 1

Descriptive Statistics for Psychological Well-Being and Sense of Coherence

Stage	Variable	Waitlist Control M (SD)	Compassion-Focused Therapy M (SD)	Schema Therapy M (SD)
Pretest	Psychological Well-Being	40.06 (9.42)	41.13 (11.23)	41.93 (8.89)
	Sense of Coherence	67.66 (15.81)	65.60 (17.84)	64.66 (15.07)
Posttest	Psychological Well-Being	40.80 (10.19)	51.86 (13.30)	48.73 (9.73)
	Sense of Coherence	66.60 (17.42)	71.86 (18.01)	75.46 (14.44)
Follow-up	Psychological Well-Being	39.86 (10.29)	49.93 (12.23)	46.86 (8.98)
	Sense of Coherence	67.53 (17.19)	71.26 (17.68)	73.93 (14.61)

A multivariate analysis of covariance (MANCOVA) was conducted to examine the effect of treatment group on posttest scores of psychological well-being and sense of coherence, controlling for pretest scores. The multivariate test (Wilks' Lambda = .350, $F(4, 54) = 18.76$, $p < .001$,

partial $\eta^2 = .581$) indicated a significant overall group effect. Univariate ANCOVAs revealed that, after controlling for pretest, group membership significantly predicted posttest psychological well-being, $F(2, 27) = 18.45$, $p < .001$, partial

$\eta^2 = .578$, and sense of coherence, $F(2, 27) = 22.13$, $p < .001$, partial $\eta^2 = .621$ (Table 2).

Table 2

MANCOVA and Univariate ANCOVA Results for Posttest Outcomes

Effect	Wilks' Λ	F (df1, df2)	p	Partial η^2
Multivariate Test				
Group	.350	18.76 (4, 54)	< .001	.581
Univariate Tests				
Psychological Well-Being	—	18.45 (2, 27)	< .001	.578
Sense of Coherence	—	22.13 (2, 27)	< .001	.621

Table 3 displays within-group pairwise comparisons for psychological well-being across the three measurement occasions. In the compassion-focused therapy group, psychological well-being increased significantly from pretest to posttest (mean difference = 10.73**, $p < .05$) and from pretest to follow-up (mean difference = 8.80**, $p < .05$), with no significant change between posttest and follow-up. The schema therapy group showed similarly significant gains from pretest to posttest (6.80**, $p < .05$) and from pretest to follow-up (4.93**, $p < .05$), with no significant posttest-to-follow-up difference. The control group exhibited no significant changes across any intervals.

.05), with no significant change between posttest and follow-up. The schema therapy group showed similarly significant gains from pretest to posttest (6.80**, $p < .05$) and from pretest to follow-up (4.93**, $p < .05$), with no significant posttest-to-follow-up difference. The control group exhibited no significant changes across any intervals.

Table 3

Within-Group Pairwise Comparisons for Psychological Well-Being

Group	Comparison	Mean Difference	Std. Error	p
Compassion-Focused Therapy	Pretest vs Posttest	10.73	8.80	< .05
	Pretest vs Follow-up	8.80	10.93	< .05
	Posttest vs Follow-up	-1.39	9.93	.154
Schema Therapy	Pretest vs Posttest	6.80	4.93	< .05
	Pretest vs Follow-up	4.93	1.90	< .05
	Posttest vs Follow-up	-1.90	2.53	.117
Waitlist Control	Pretest vs Posttest	0.74	1.20	.546
	Pretest vs Follow-up	-0.20	1.12	.853
	Posttest vs Follow-up	-0.94	0.94	.322

Table 4 presents adjusted mean differences between groups for psychological well-being at posttest and follow-up, controlling for pretest scores. Compared to the waitlist control, compassion-focused therapy yielded an adjusted increase of 9.85 points at posttest ($SE = 1.374$, $p = .001$) and 8.94 points at follow-up ($SE = 1.434$, $p = .001$). Schema

therapy produced increases of 6.16 points at posttest ($SE = 1.384$, $p = .001$) and 5.42 points at follow-up ($SE = 1.444$, $p = .002$). The difference between compassion-focused therapy and schema therapy was significant at posttest (3.68, $SE = 1.370$, $p = .032$) but not at follow-up (3.52, $SE = 1.429$, $p = .055$).

Table 4

Adjusted Mean Differences for Psychological Well-Being Between Groups

Comparison	Mean Difference	Std. Error	p
CFT vs Waitlist (Posttest vs Pretest)	9.85	1.374	.001
Schema vs Waitlist (Posttest vs Pretest)	6.16	1.384	.001
CFT vs Schema (Posttest vs Pretest)	3.68	1.370	.032
CFT vs Waitlist (Follow-up vs Pretest)	8.94	1.434	.001
Schema vs Waitlist (Follow-up vs Pretest)	5.42	1.444	.002
CFT vs Schema (Follow-up vs Pretest)	3.52	1.429	.055

Within-group pairwise comparisons for sense of coherence are detailed in Table 5. In the compassion-focused therapy group, sense of coherence increased significantly from pretest to posttest (mean difference = 6.26**, $p < .05$) and from pretest to follow-up (mean difference = 5.66**, $p < .05$), with no significant change between posttest and

follow-up. The schema therapy group demonstrated larger gains from pretest to posttest (10.80**, $p < .05$) and pretest to follow-up (9.27**, $p < .05$), with no significant posttest-to-follow-up difference. The control group showed no significant changes over time.

Table 5

Within-Group Pairwise Comparisons for Sense of Coherence

Group	Comparison	Mean Difference	Std. Error	p
Compassion-Focused Therapy	Pretest vs Posttest	6.26	3.66	< .05
	Pretest vs Follow-up	5.66	5.68	< .05
	Posttest vs Follow-up	-0.60	0.80	.421
Schema Therapy	Pretest vs Posttest	10.80	4.27	< .05
	Pretest vs Follow-up	9.27	3.90	< .05
	Posttest vs Follow-up	-1.35	1.53	.162
Waitlist Control	Pretest vs Posttest	-1.06	1.13	.356
	Pretest vs Follow-up	-0.13	0.92	.885
	Posttest vs Follow-up	0.92	0.79	.250

Table below displays adjusted mean differences between groups for sense of coherence at posttest and follow-up, controlling for pretest. Compared to waitlist, compassion-focused therapy produced an adjusted increase of 7.24 points at posttest ($SE = 1.739$, $p = .004$) and 5.60 points at follow-up ($SE = 2.170$, $p = .042$). Schema therapy yielded larger increases of 11.85 points at posttest ($SE = 1.751$, $p = .001$)

and 9.38 points at follow-up ($SE = 2.190$, $p = .001$). The difference between the two therapies was significant at posttest (-4.61 , $SE = 1.733$, $p = .032$), indicating schema therapy's greater impact on sense of coherence immediately after intervention, but not at follow-up (-3.77 , $SE = 2.160$, $p = .270$).

Table 6

Adjusted Mean Differences for Sense of Coherence Between Groups

Comparison	Mean Difference	Std. Error	p
CFT vs Waitlist (Posttest vs Pretest)	7.24	1.739	.004
Schema vs Waitlist (Posttest vs Pretest)	11.85	1.751	.001
CFT vs Schema (Posttest vs Pretest)	-4.61	1.733	.032
CFT vs Waitlist (Follow-up vs Pretest)	5.60	2.170	.042
Schema vs Waitlist (Follow-up vs Pretest)	9.38	2.190	.001
CFT vs Schema (Follow-up vs Pretest)	-3.77	2.160	.270

4. Discussion and Conclusion

The present study examined the comparative effectiveness of compassion-focused therapy (CFT) and schema therapy on psychological well-being and sense of coherence among infertile women. The results revealed that both interventions significantly improved psychological well-being and sense of coherence from pretest to posttest and maintained their effects at the one-month follow-up. Specifically, CFT demonstrated a greater impact on enhancing psychological well-being compared to schema therapy, while schema therapy was more effective in

increasing the sense of coherence among participants. These findings are consistent with previous research emphasizing the potential of both therapeutic approaches in improving mental health outcomes among clinical and vulnerable populations.

The finding that CFT led to greater improvements in psychological well-being aligns with existing studies highlighting the role of self-compassion in buffering against distress, fostering positive self-evaluation, and promoting emotional resilience in the face of adversity (Mamdouhi et al., 2023; Tran et al., 2022). Compassion-focused interventions have been shown to reduce self-criticism and

enhance self-acceptance, which are key components of psychological well-being (Golestanifar, 2025). Moreover, CFT addresses core emotional processes by building a compassionate inner voice that supports adaptive emotion regulation and reduces internalized shame (Taheri et al., 2022). These mechanisms likely contributed to the significant improvements observed in this study. The results are also consistent with findings by Monemiyani et al. (2021), who demonstrated that CFT outperformed cognitive-existential therapy in enhancing psychological well-being among divorced women heads of household (Monemiyani et al., 2021).

On the other hand, schema therapy showed a more pronounced effect in improving the sense of coherence compared to CFT. This finding resonates with research suggesting that schema therapy is particularly effective in restructuring deep-seated maladaptive beliefs and cognitive frameworks, which are integral to forming a stable and predictable perception of life events—a key aspect of sense of coherence (Haji Zadeh et al., 2024; Kaya-Demir & Çirakoğlu, 2022). Through experiential and cognitive techniques, schema therapy empowers individuals to challenge dysfunctional schemas and replace them with adaptive, flexible beliefs about themselves and their world (Bach et al., 2024; Peyman et al., 2021). This cognitive restructuring process likely strengthens participants' comprehensibility and manageability dimensions of sense of coherence, providing them with a coherent framework to interpret and navigate stressful experiences such as infertility (Yazdanpour et al., 2024).

The present results also align with studies reporting significant improvements in psychological well-being following schema therapy interventions among diverse clinical samples, including mothers of children with disabilities (Mahour & Farzinfar, 2022), patients with substance dependence (Pourpashang & Mousavi, 2021), and individuals struggling with maladaptive coping patterns (Varmazyar et al., 2021). Similarly, Haji Zadeh et al. (2024) observed schema therapy to be effective in improving psychological well-being among women affected by infidelity, suggesting its utility in addressing relational wounds and existential insecurities similar to those experienced by infertile women (Haji Zadeh et al., 2024). Yet, as also found in the current study, schema therapy appears to exert stronger effects on cognitive dimensions of adjustment—such as sense of coherence—than on emotional acceptance and warmth, which are the core targets of CFT (Nikpour et al., 2021).

The persistence of intervention effects at follow-up in both groups further underscores the utility of structured psychological treatments in producing sustainable gains in well-being and resilience among infertile women. This finding supports the proposition by Sahour et al. (2023) that schema therapy and other integrative cognitive-behavioral approaches can lead to durable improvements in psychological well-being and reductions in worry among infertile women (Sahour et al., 2023). Likewise, the sustained impact of CFT in the current study echoes the results of Golestanifar (2025), who demonstrated the long-term benefits of compassion-focused approaches on relational aggression and psychological well-being among cardiovascular patients (Golestanifar, 2025).

Interestingly, while both interventions proved effective, the nuanced differences in their impact profiles speak to distinct mechanisms of change. As noted by Bach et al. (2024), schema therapy primarily operates through restructuring maladaptive schemas and building new cognitive frameworks, which may be particularly relevant for reinforcing life coherence and predictability in the face of chronic stressors (Bach et al., 2024). In contrast, compassion-focused therapy enhances warmth, connectedness, and acceptance, which are critical in mitigating internalized shame and self-critical tendencies often exacerbated by infertility (Taheri et al., 2022; Tran et al., 2022). These distinct therapeutic pathways offer practitioners guidance in selecting and tailoring interventions based on the dominant needs and psychological profiles of their clients.

Additionally, the significant differences observed between the interventions and the control group highlight the inadequacy of passive waiting or unstructured support in fostering psychological well-being and sense of coherence among infertile women. These findings further reinforce the necessity of evidence-based interventions to counter the profound existential and relational disruptions associated with infertility, as emphasized in earlier studies on related populations (Ghafari Mazar et al., 2018; Hassani et al., 2021). The current results underscore the importance of integrating structured psychological treatments into infertility care programs to enhance patients' resilience and adaptive functioning.

5. Suggestions and Limitations

Despite its contributions, this study has several limitations. The sample size was relatively small, which may

limit the generalizability of the findings. The study only included infertile women from a single geographical location and treatment center, potentially introducing cultural or contextual biases. Additionally, the follow-up period was limited to one month, which may not fully capture the long-term sustainability of intervention effects. Finally, the study relied solely on self-report measures, which may be subject to social desirability bias and retrospective recall inaccuracies.

Future research should expand the sample size and include participants from diverse geographical, cultural, and socioeconomic backgrounds to enhance the external validity of findings. Longitudinal studies with extended follow-up periods are recommended to assess the durability of intervention effects over time. Moreover, incorporating mixed-methods approaches, including qualitative interviews, could provide deeper insights into participants' subjective experiences and mechanisms of change. Future studies might also compare the effectiveness of these therapies against other modalities such as mindfulness-based interventions or acceptance and commitment therapy to determine relative efficacy in infertile populations.

Clinicians working with infertile women should consider integrating compassion-focused therapy and schema therapy into treatment plans based on the client's presenting needs and psychological profile. Given the nuanced differences in their mechanisms, tailoring interventions to target emotional processing deficits or maladaptive cognitive patterns may yield optimal outcomes. Infertility clinics and support programs should include routine screening for psychological distress and offer referrals to structured psychological interventions. Finally, training healthcare professionals in the delivery of evidence-based psychological therapies can enhance comprehensive care and support for women navigating the multifaceted challenges of infertility.

Authors' Contributions

All authors have contributed significantly to the research process and the development of the manuscript.

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.

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