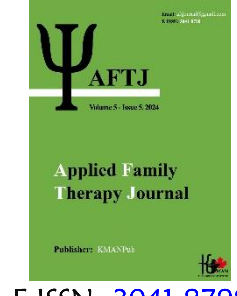
Journal Website

Article history:
Received 21 June 2024
Revised 09 September 2024
Accepted 18 September 2024
Published online 01 October 2024

Applied Family Therapy Journal

Volume 5, Issue 5, pp 135-145


E-ISSN: 3041-8798

The Effectiveness of Schema Therapy on Sexual Aversion and Sexual Self-Efficacy

Hosna. Ahmadzadeh[1], Mehrnaz. Azadyekta[2*], Fariborz. Bagheri[3]

[1] PhD Student, Department of Psychology, Science and Research Branch, Islamic Azad University, Tehran, Iran
[2] Associate Professor, Department of Psychology, Faculty of Educational Sciences and Psychology, Islamshahr Branch, Islamic Azad University, Islamshahr, Iran
[3] Associate Professor, Department of Psychology, Science and Research Branch, Islamic Azad University, Tehran, Iran

*** Corresponding author email address**: M.azadyekta@yahoo.com

A r t i c l e I n f o

Article type:
Original Research

How to cite this article:
Ahmadzadeh, H., Azadyekta, M., & Bagheri, F. (2024). The Effectiveness of Schema Therapy on Sexual Aversion and Sexual Self-Efficacy. *Applied Family Therapy Journal, 5*(5), 135-145.
http://dx.doi.org/10.61838/kman.aftj.5.5.16

© 2024 the authors. Published by KMAN Publication Inc. (KMANPUB), Ontario, Canada. This is an open access article under the terms of the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) License.

A B S T R A C T

Objective: This study aimed to evaluate the effectiveness of schema therapy on reducing sexual aversion and enhancing sexual self-efficacy.

Methods: The research utilized a semi-experimental design with pre-test, post-test, and follow-up assessments. Thirty couples experiencing sexual aversion and low sexual self-efficacy were selected from counseling centers in Karaj, Iran. Participants were randomly assigned to either a schema therapy group (n=15) or a control group (n=15). The schema therapy group received 8 to 10 sessions of intervention. Two standardized questionnaires, the Sexual Self-Efficacy Questionnaire and the Sexual Aversion Inventory, were used to measure outcomes. Data were analyzed using multivariate analysis of covariance (MANCOVA), and follow-up tests were conducted to assess the stability of the intervention effects over time.

Findings: The findings revealed that schema therapy significantly improved sexual self-efficacy and reduced sexual aversion in the experimental group compared to the control group ($p < .01$). These improvements were sustained during the follow-up phase, with no significant decline in outcomes. The post-test and follow-up results demonstrated that schema therapy had a lasting positive impact on participants' sexual health. The control group, in contrast, showed no significant changes across the measurement phases.

Conclusion: Schema therapy was found to be an effective intervention for reducing sexual aversion and increasing sexual self-efficacy. The sustained improvements suggest that schema therapy offers long-term benefits for individuals struggling with these sexual issues. This study highlights the importance of addressing early maladaptive schemas to improve sexual health and relationship satisfaction.

Keywords: *Schema therapy, sexual aversion, sexual self-efficacy, early maladaptive schemas, sexual dysfunction.*

1. Introduction

Sexual self-efficacy and sexual satisfaction are two critical dimensions of sexual health, which play a significant role in overall well-being and relationship quality. Sexual self-efficacy refers to an individual's belief in their ability to perform sexually in a manner that satisfies both themselves and their partner (Reissing et al., 2005). It encompasses confidence in one's sexual abilities, the ability to communicate sexual needs, and the capacity to engage in sexual activities without fear of judgment or rejection. Research suggests that individuals with high sexual self-efficacy are more likely to experience positive sexual outcomes, such as greater sexual satisfaction and intimacy (Rellini & Meston, 2010). In contrast, those with low sexual self-efficacy may struggle with sexual performance, experience heightened anxiety, and exhibit avoidance behaviors (Mohammadi et al., 2020).

Sexual aversion, on the other hand, is characterized by a strong, negative emotional response to sexual activity or the prospect of sexual intimacy. This condition often stems from past traumatic experiences, such as sexual abuse or neglect, and is associated with feelings of disgust, fear, and anxiety toward sex (Pulverman et al., 2018). Sexual aversion can severely disrupt intimate relationships, leading to marital dissatisfaction, emotional withdrawal, and even the dissolution of the relationship (Ammari et al., 2023). Given the complexity of these issues, schema therapy has been proposed as an effective intervention for addressing sexual aversion by targeting the underlying maladaptive schemas that contribute to the development and maintenance of this condition (Elhaei, 2020).

Schema therapy has emerged as a valuable therapeutic approach in addressing a range of psychological and emotional challenges, particularly those rooted in early maladaptive schemas (EMSs). Initially developed by Jeffrey Young, schema therapy integrates elements of cognitive-behavioral therapy (CBT), attachment theory, and psychodynamic concepts to treat complex issues such as personality disorders, depression, anxiety, and interpersonal conflicts (Lobbestael et al., 2005). A key focus of schema therapy is the identification and modification of deeply ingrained patterns of thought, emotion, and behavior—schemas—that develop during childhood and adolescence and persist into adulthood, influencing the individual's perception of themselves, others, and the world (Efrati et al., 2020).

Early maladaptive schemas are pervasive themes or patterns that emerge in childhood or adolescence due to unmet emotional needs. These schemas are often triggered by adverse childhood experiences, such as abuse, neglect, or inconsistent parenting, which foster a distorted worldview (Atmaca & Gençöz, 2016). Numerous studies have highlighted the link between childhood trauma, EMSs, and a range of psychological and relational problems in adulthood, including sexual dysfunction, marital dissatisfaction, and emotional dysregulation (Damiris & Allen, 2023; Estévez, 2019; Pilkington et al., 2021). Specifically, schema therapy has demonstrated efficacy in improving sexual self-concept and satisfaction, enhancing emotional maturity, and promoting healthier interpersonal patterns (Aghili, 2022; Amani, 2011).

Several empirical studies have explored the effectiveness of schema therapy in addressing sexual dysfunction and related issues. A study by Ismaeilzadeh and Akbari (2021) found that schema therapy significantly improved sexual self-efficacy and marital satisfaction in couples experiencing marital conflicts. Similarly, schema therapy has been shown to reduce sexual dissatisfaction in women with a history of sexual trauma or abuse (Aghili, 2022; Efrati et al., 2020). These findings are consistent with the broader literature, which suggests that schema therapy, by addressing core maladaptive schemas, helps individuals reframe their negative beliefs about themselves and their relationships, leading to improvements in sexual functioning and overall relationship quality (Ghahari, 2018; Navaei & Mohammadi Arya, 2016).

Moreover, schema therapy has demonstrated effectiveness in treating individuals with sexual compulsivity and avoidance behaviors, particularly those with a history of childhood sexual abuse (Reissing et al., 2005; Zheng et al., 2022). In a clinical experiment comparing the effects of imagery rescripting and cognitive interventions in schema couples therapy, Roediger et al. (2020) found that schema therapy techniques, especially those involving imagery work, were particularly effective in reducing sexual avoidance behaviors and fostering emotional intimacy between partners. These results highlight the therapeutic potential of schema therapy in not only improving sexual self-efficacy but also addressing deeper emotional and psychological issues that may contribute to sexual dysfunction (Roediger, 2020).

The relationship between early maladaptive schemas and sexual health is further illustrated in the context of marital infidelity and emotional dysregulation. Studies have shown

AFTJ Applied Family Therapy Journal
E-ISSN: 3041-8798

that EMSs can increase the vulnerability to extramarital relationships by impairing sexual satisfaction and emotional connection within the primary relationship (Soltani et al., 2021). Individuals who carry schemas of abandonment, defectiveness, or emotional deprivation may seek external validation through extramarital affairs, further complicating their emotional and sexual health (Rezakhaniha & Ashkan, 2022). Schema therapy has been shown to be effective in reducing the impact of these schemas on sexual function and marital satisfaction, thereby decreasing the likelihood of infidelity (Amani, 2011; Ismaeilzadeh, 2021).

The present study aims to build upon this growing body of literature by investigating the effectiveness of schema therapy on two key dimensions of sexual health: sexual aversion and sexual self-efficacy. Specifically, it seeks to determine whether schema therapy can significantly reduce sexual aversion and enhance sexual self-efficacy in individuals experiencing these issues. The study also explores whether the effects of schema therapy are sustained over time, as measured in both post-treatment and follow-up assessments. By addressing the underlying schemas that contribute to sexual dysfunction, this study hopes to provide further evidence of the utility of schema therapy in promoting healthier, more satisfying sexual relationships.

2. Methods

2.1. Study Design and Participants

This study employed a semi-experimental design with pre-test and post-test assessments to investigate the effectiveness of schema therapy on sexual aversion and sexual self-efficacy. The target population consisted of couples experiencing sexual issues, with participants selected from clients visiting counseling centers in Karaj in 2023. Given the nature of semi-experimental research, sample size determination was based on statistical criteria and practical constraints. To ensure sufficient statistical power and meaningful results, the sample included 30 couples, with 15 couples in each of the experimental and control groups. All participants were selected through initial screening based on a standardized questionnaire and diagnostic interview with a psychologist or psychiatrist.

Inclusion criteria for participants were as follows: they had to be between 22 and 45 years old, married for 2 to 15 years, with no history of substance abuse, diagnosed with sexual issues as confirmed by psychological screening, and possess at least a high school diploma. They also needed to be able to speak and understand Persian fluently. Exclusion criteria included the presence of psychotic disorders, use of psychological or psychiatric services for mental health disorders, and the use of psychotropic medications within the three months prior to the first therapy session. Participants signed informed consent forms before starting the study and were informed that their identities would remain confidential, regardless of whether they completed the therapy sessions or withdrew.

2.2. Measures

2.2.1. Sexual Self-Efficacy

The Sexual Self-Efficacy Questionnaire was developed by Vaziri and Lotfi in 2013, based on the General Self-Efficacy Scale by Schwarzer. It consists of 10 items scored on a 4-point Likert scale ranging from "Not at all true" (0) to "Completely true" (3) (Ismaeilzadeh, 2021; Samakoush, 2023). The questionnaire has demonstrated acceptable reliability, with a Cronbach's alpha coefficient of 0.86 in the original study and 0.79 in the present study.

2.2.2. Sexual Aversion

The Sexual Desire Inventory, developed by Ait and Halbert in 1992, consists of 25 items that measure the respondent's sexual desire on a 5-point Likert scale ranging from "Always" (0) to "Never" (4). Higher scores reflect greater sexual desire, while lower scores indicate diminished sexual interest. The internal consistency of the inventory, as measured by Cronbach's alpha, was 0.86 in this study, which aligns with previous research findings (Shalchi et al., 2017).

2.3. Intervention

2.3.1. Schema Therapy

The experimental group received schema therapy intervention through 8 to 10 sessions, with each session lasting 120 minutes. In contrast, the control group received no intervention. Throughout the therapy sessions, the experimental group was exposed to various schema therapy techniques designed to address underlying cognitive patterns contributing to sexual aversion and reduced sexual self-efficacy (Darini et al., 2013; Eisazadeh et al., 2020; Elhaei, 2020; Hasani et al., 2022; Ismaeilzadeh, 2021; Vos et al., 2023).

Session 1: Introduction and Assessment

The first session focused on building rapport between the researcher and the participants. The session started with an

AFTJ Applied Family Therapy Journal
E-ISSN: 3041-8798

introduction of the group members, outlining the framework of the therapy, and obtaining commitments from all participants to actively engage in the sessions. Participants were asked to provide a detailed report on their relationships with their spouses, identifying specific sexual issues they were facing. This exercise helped set a baseline understanding of their current challenges. The group members were given the task of reflecting on their relationships and sharing any initial thoughts on their sexual difficulties.

Session 2: Overview of Schemas

In this session, the focus was on familiarizing participants with early maladaptive schemas. The researcher introduced the concept of schemas, explaining their types and how they can influence current behavior and emotional states. Participants were asked to review informational sheets about different schemas and reflect on how these might relate to their own sexual issues. They were encouraged to identify which schema seemed most relevant to their situation, preparing them for a deeper exploration in subsequent sessions.

Session 3: Cognitive Techniques

The third session introduced cognitive techniques aimed at challenging and modifying maladaptive schemas. Participants were guided through exercises that helped them transition from one mental image to another, with a focus on testing the validity of their schemas. The empathic confrontation technique was also introduced, encouraging participants to view their schemas from a new perspective. As a homework assignment, participants were instructed to monitor their behavior throughout the week, identify which schema they considered their core schema, and report on evidence that either supported or contradicted its influence on their relationships.

Session 4: Further Cognitive Techniques

This session built on the cognitive work from the previous session, with a focus on evaluating the advantages and disadvantages of schema-related responses. The group discussed the characteristics of their schemas and identified the healthier aspects of their thinking. Using techniques like the "devil's advocate" and empty chair dialogue, participants were encouraged to challenge their schemas more actively. For homework, they were instructed to engage in a discussion with their spouse, applying the empty chair technique, and record their thoughts on how well their schema aligned with the reality of their relationship.

Session 5: Experiential Strategies

The fifth session introduced experiential techniques, particularly guided imagery. The purpose of this session was to help participants link past traumatic experiences with their current emotional and behavioral patterns. Through imagery exercises, they explored how past events shaped their maladaptive schemas. Participants were asked to write a letter to someone from their childhood who had caused them harm, but were instructed not to send the letter. Instead, they were asked to bring the letter to the next session for discussion.

Session 6: Behavioral Pattern-Breaking

In this session, participants were introduced to behavioral techniques aimed at breaking unhealthy patterns. They were provided with a clear rationale for these techniques and instructed on how to create a comprehensive list of specific behaviors they wanted to change. The session emphasized prioritizing the most problematic behaviors and identifying healthier alternatives. Participants were tasked with reflecting on several recent instances of problematic behavior in their lives, documenting the thoughts and feelings that accompanied these behaviors, and noting what healthier behaviors they could adopt as replacements.

Session 7: Behavioral Techniques

This session focused on enhancing participants' motivation to change their behavior through role-playing and visualization exercises. Participants were asked to imagine how they would act if they did not have their schema and to identify potential obstacles to behavioral change. They were encouraged to think critically about the pros and cons of changing versus maintaining their current behavior patterns. For homework, participants were instructed to choose one behavior they had not yet changed and contemplate how they would act without the influence of their schema, recording their reflections on the potential benefits and drawbacks of change.

Session 8: Summary and Conclusion

The final session was a review of the entire intervention process. The group discussed the progress they had made and any difficulties they encountered with their homework assignments. The researcher helped clarify any remaining uncertainties and provided a final summary of the key concepts covered in previous sessions. Participants completed a post-intervention assessment, and the session concluded with a group discussion reflecting on the therapy experience. The session ended with a formal thank you and farewell to all participants.

2.4. Data Analysis

Data analysis was conducted using SPSS version 24. Descriptive statistics, including mean and standard deviation, were calculated to summarize participant characteristics and the outcomes of the pre-test and post-test assessments. To evaluate the effectiveness of schema therapy on sexual aversion and sexual self-efficacy, multivariate analysis of covariance (MANCOVA) was employed, controlling for baseline differences between the experimental and control groups. Prior to conducting the MANCOVA, assumptions such as normality (assessed via the Shapiro-Wilk test) and homogeneity of covariances (assessed using Levene's test) were tested. The analysis also employed repeated measures and Greenhouse-Geisser correction for any violations of sphericity.

3. Findings and Results

The results from Table 1 that schema therapy had a noticeable positive impact on both sexual self-efficacy and sexual aversion in comparison to the control group across three phases of measurement (pre-test, post-test, and follow-up). For sexual self-efficacy, the control group's mean scores showed a slight increase from 8.20 in the pre-test to 8.65 in the follow-up, while the schema therapy group demonstrated a substantial improvement, with the mean rising from 8.58 in the pre-test to 11.80 in the post-test, and slightly decreasing to 11.44 during the follow-up. This indicates that the schema therapy significantly improved sexual self-efficacy, and the effect persisted during the follow-up phase.

Regarding sexual aversion, the control group remained relatively stable, with the mean score increasing marginally from 51.13 in the pre-test to 51.60 in the follow-up. In contrast, the schema therapy group exhibited a marked reduction in sexual aversion, with the mean decreasing from 50.53 in the pre-test to 45.07 in the post-test and remaining low at 45.30 in the follow-up. This suggests that schema therapy was effective in reducing sexual aversion over time, with the effects remaining stable in the follow-up period.

Table 1

Descriptive Statistics of Sexual Self-Efficacy and Sexual Aversion Scores in Three Measurement Phases by Group

Variable	Group	Phase	Mean	Standard Deviation
Sexual Self-Efficacy	Control	Pre-test	8.20	2.483
		Post-test	8.40	1.993
		Follow-up	8.65	2.271
	Schema Therapy	Pre-test	8.58	2.025
		Post-test	11.80	2.235
		Follow-up	11.44	2.000
Sexual Aversion	Control	Pre-test	51.13	2.460
		Post-test	51.20	2.605
		Follow-up	51.60	2.799
	Schema Therapy	Pre-test	50.53	2.161
		Post-test	45.07	2.864
		Follow-up	45.30	3.365

Before conducting the primary analysis, assumptions of normality and homogeneity of variances were tested. Normality of the data was assessed using the Shapiro-Wilk test, which indicated that the distribution of scores for both sexual aversion and sexual self-efficacy was normal in both the control and schema therapy groups across all measurement stages ($p > .05$). Homogeneity of variances was evaluated using Levene's test, which showed no significant violations for either sexual aversion ($F = 1.24$, $p = .292$) or sexual self-efficacy ($F = 1.10$, $p = .338$), suggesting that the variances between the groups were equal. Additionally, sphericity was examined using Mauchly's test, which indicated that the assumption of sphericity was violated for both sexual aversion and sexual self-efficacy ($p < .05$). As a result, the Greenhouse-Geisser correction was applied to adjust the degrees of freedom in the subsequent analyses.

E-ISSN: 3041-8798

Table 2

Results of the Univariate Within-Subjects Test for Comparison of Sexual Aversion and Sexual Self-Efficacy Between Control and Schema Therapy Groups

Variable	Source	Correction	Sum of Squares	df	Mean Square	F	p-value	Effect Size
Sexual Aversion	Repetition	Assumed	261.411	2	130.706	64.911	0.001	0.528
		Greenhouse-Geisser	261.411	1.545	169.213	64.911	0.001	0.528
		Huynh-Feldt	261.411	1.606	162.727	64.911	0.001	0.528
		Lower Bound	261.411	1	261.411	64.911	0.001	0.528
	Repetition * Group	Assumed	315.678	2	157.839	78.386	0.001	0.575
		Greenhouse-Geisser	315.678	1.545	204.341	78.386	0.001	0.575
		Huynh-Feldt	315.678	1.606	196.508	78.386	0.001	0.575
		Lower Bound	315.678	1	315.678	78.386	0.001	0.575
	Error	Assumed	233.578	116	2.014			
		Greenhouse-Geisser	233.578	89.602	2.607			
		Huynh-Feldt	233.578	93.173	2.507			
		Lower Bound	233.578	58	4.027			
Sexual Self-Efficacy	Repetition	Assumed	113.323	2	56.662	75.295	0.001	0.565
		Greenhouse-Geisser	113.323	1.919	59.039	75.295	0.001	0.565
		Huynh-Feldt	113.323	2	56.662	75.295	0.001	0.565
		Lower Bound	113.323	1	113.323	75.295	0.001	0.565
	Repetition * Group	Assumed	76.623	2	38.312	50.911	0.001	0.467
		Greenhouse-Geisser	76.623	1.919	39.919	50.911	0.001	0.467
		Huynh-Feldt	76.623	2	38.312	50.911	0.001	0.467
		Lower Bound	76.623	1	76.623	50.911	0.001	0.467
	Error	Assumed	87.294	116	0.753			
		Greenhouse-Geisser	87.294	111.328	0.784			
		Huynh-Feldt	87.294	116	0.753			
		Lower Bound	87.294	58	1.505			

In Table 2, the results of the univariate within-subjects test are presented to compare sexual aversion and sexual self-efficacy between the control and schema therapy groups. According to the results, the F-values for the interaction effects between the groups and repetition (i.e., the presence of differences between the groups across the measurement stages) for both sexual aversion and sexual self-efficacy variables are significant at the 0.01 alpha level ($p < .01$). The significance of the interaction effects indicates the presence of differences in the trends of change for sexual aversion and sexual self-efficacy scores between the control and schema therapy groups across the measurement stages.

Table 3

Bonferroni Post Hoc Test for Within-Group Effects

Variable	Group	Phase 1	Phase 2	Mean Difference	Standard Error	p-value
Sexual Aversion	Control	Pre-test	Post-test	-0.067	0.388	1
			Follow-up	-0.467	0.433	0.858
		Post-test	Follow-up	-0.400	0.254	0.364
	Schema Therapy	Pre-test	Post-test	5.467	0.388	0.001
			Follow-up	5.233	0.433	0.001
		Post-test	Follow-up	-0.233	0.254	1
Sexual Self-Efficacy	Control	Pre-test	Post-test	-0.200	0.221	1
			Follow-up	-0.447	0.205	0.100
		Post-test	Follow-up	-0.247	0.244	0.950
	Schema Therapy	Pre-test	Post-test	-3.220	0.221	0.001
			Follow-up	-2.863	0.205	0.001
		Post-test	Follow-up	0.357	0.244	0.449

In Table 3, the paired comparisons to examine the differences between sexual aversion and sexual self-efficacy scores across the treatment stages for both control and schema therapy groups are shown. Based on the results, in the schema therapy group, the difference between the mean scores of the pre-test and both the post-test and follow-up stages is significant ($p < .01$). When comparing the mean scores across the three stages, it can be observed that the mean scores of sexual aversion and sexual self-efficacy significantly decreased in the post-test and follow-up stages compared to the pre-test. However, the difference between the post-test and follow-up stages is not significant ($p > .05$), indicating the stability of the therapeutic effects over time. In the control group, there is no significant difference between the scores at any stage, including pre-test, post-test, and follow-up ($p > .05$).

Table 4

Results of the Between-Subjects Test for Comparison of Mean Scores of Sexual Aversion and Sexual Self-Efficacy Between Groups

Variable	Source	Sum of Squares	df	Mean Square	F	p-value
Sexual Aversion	Group	849.339	1	849.339	46.146	0.001
	Error	1067.522	58	18.406		
Sexual Self-Efficacy	Group	216.263	1	216.263	17.044	0.001
	Error	735.943	58	12.689		

In Table 4, the results of the between-subjects test for examining the mean scores of sexual aversion and sexual self-efficacy between the control and schema therapy groups are presented. According to the results, the F-value for sexual aversion is significant ($p < .01$), indicating a significant difference between the groups.

Table 5

Bonferroni Post Hoc Test for Between-Group Effects

Dependent Variable	Group 1	Group 2	Mean Difference	Standard Error	p-value
Sexual Aversion	Control	Schema Therapy	4.344	0.640	0.001
Sexual Self-Efficacy	Control	Schema Therapy	-2.192	0.531	0.001

In Table 5, paired comparisons to examine the mean scores of sexual aversion and sexual self-efficacy between the control and schema therapy groups are presented. Based on the results, the mean scores for sexual aversion and sexual self-efficacy in the schema therapy group are significantly lower than those in the control group ($p < .01$).

4. Discussion and Conclusion

The present study aimed to evaluate the effectiveness of schema therapy on reducing sexual aversion and enhancing sexual self-efficacy among participants. The findings revealed that schema therapy significantly improved sexual self-efficacy while reducing sexual aversion, with these changes being maintained during the follow-up period. These results align with previous research emphasizing the role of early maladaptive schemas (EMSs) in shaping sexual behavior and satisfaction (Efrati et al., 2020; Ismaeilzadeh, 2021). The significant improvement in sexual self-efficacy observed in the schema therapy group suggests that addressing core maladaptive schemas can help individuals develop a more positive view of their sexual capabilities, thereby fostering healthier sexual behaviors and experiences.

The results indicated that schema therapy led to a significant reduction in sexual aversion, as demonstrated by the decreased mean scores in the post-test and follow-up stages. These findings support the idea that EMSs related to abandonment, defectiveness, and mistrust may contribute to sexual aversion, and that schema therapy can effectively address these deep-rooted cognitive patterns (Pulverman et al., 2018; Efrati et al., 2020). Specifically, schema therapy's emphasis on identifying and modifying maladaptive schemas seems to play a crucial role in reshaping participants' negative beliefs and emotions surrounding sexual activity. This outcome echoes previous studies demonstrating the effectiveness of schema therapy in improving sexual satisfaction and reducing avoidance behaviors in individuals with a history of trauma or sexual dysfunction (Rezakhaniha & Ashkan, 2022; Roediger, 2020).

AFTJ Applied Family Therapy Journal
E-ISSN: 3041-8798

One of the most striking results was the sustained improvement in both sexual self-efficacy and aversion during the follow-up phase. This finding suggests that the benefits of schema therapy are not only immediate but also long-lasting, providing support for its efficacy in fostering enduring changes in sexual behavior and attitudes (Aghili, 2022; Hasani et al., 2022). Participants who underwent schema therapy continued to experience higher levels of sexual self-efficacy and lower levels of sexual aversion even after the conclusion of the therapy sessions. This sustained improvement is likely due to schema therapy's focus on altering fundamental cognitive structures rather than merely addressing surface-level behaviors (Elhaei, 2020).

These results also align with previous research showing that EMSs, especially those related to emotional deprivation, abandonment, and mistrust, are significantly correlated with sexual dysfunction and dissatisfaction (Atmaca & Gençöz, 2016; Mertens et al., 2020). By targeting these schemas, schema therapy helps individuals reframe their negative experiences and develop healthier perspectives on their sexual relationships. For instance, a study by Navaei and Mohammadi Arya (2016) demonstrated that addressing maladaptive schemas in therapy led to a marked improvement in sexual satisfaction and reduced extramarital tendencies, which supports the current study's findings on the reduction of sexual aversion and enhancement of self-efficacy (Navaei & Mohammadi Arya, 2016).

Another key finding was the significant difference between the schema therapy group and the control group in terms of sexual self-efficacy. Participants in the schema therapy group reported higher self-efficacy scores in the post-test and follow-up stages compared to those in the control group. This is consistent with the work of Reissing et al. (2005), who emphasized the importance of sexual self-efficacy in fostering positive sexual experiences and overcoming sexual difficulties (Reissing et al., 2005). Schema therapy appears to have helped participants in the current study gain confidence in their sexual capabilities, leading to a more positive outlook on their sexual lives.

The reduction in sexual aversion observed in the schema therapy group can also be understood within the context of earlier studies on trauma and sexual dysfunction. Previous research has highlighted the link between childhood sexual abuse, maladaptive schemas, and later sexual aversion (Estévez, 2019; Pulverman et al., 2018). The participants in the schema therapy group likely benefited from the intervention's focus on addressing past traumatic experiences and the negative schemas that developed as a result. By working through these early experiences and reframing their cognitive responses, participants were able to reduce their aversion to sexual activity and develop a healthier relationship with intimacy (Roediger, 2020).

The findings of this study are further supported by research on the role of EMSs in shaping sexual behavior and satisfaction. For example, Aghili et al. (2022) demonstrated that schema therapy was effective in improving sexual self-concept and emotional maturity among women with chronic pain, which parallels the improvements in sexual self-efficacy observed in the current study (Aghili, 2022). Similarly, the reduction in sexual aversion aligns with the findings of Efrati et al. (2020), who reported that schema therapy could significantly reduce compulsive sexual behaviors by addressing underlying maladaptive schemas (Efrati et al., 2020).

The effectiveness of schema therapy in reducing sexual aversion and increasing sexual self-efficacy may be attributed to its ability to foster emotional awareness and enhance interpersonal functioning. Schema therapy's focus on cognitive restructuring and emotional processing helps individuals identify and challenge their distorted beliefs about themselves and their relationships, which in turn leads to improved sexual functioning (Aghili, 2022; Damiris & Allen, 2023). This process of cognitive and emotional change is crucial for individuals struggling with sexual dysfunction, as it enables them to develop healthier, more adaptive patterns of thinking and behavior (Mertens et al., 2020).

Moreover, schema therapy's long-term effectiveness is likely due to its comprehensive approach, which addresses both cognitive and emotional factors contributing to sexual dysfunction (Roediger, 2020). By targeting EMSs, schema therapy helps individuals reprocess painful memories and experiences, leading to a more positive view of themselves and their relationships. This holistic approach may explain why the improvements observed in the schema therapy group were sustained over time, even after the intervention had concluded (Akrami, 2022; Elhaei, 2020).

5. Suggestions and Limitations

While the findings of this study contribute to the growing body of literature on the effectiveness of schema therapy for sexual dysfunction, several limitations should be acknowledged. First, the sample size was relatively small, which may limit the generalizability of the results. Future studies with larger and more diverse samples would provide

AFTJ Applied Family Therapy Journal
E-ISSN: 3041-8798

a more comprehensive understanding of schema therapy's impact on sexual aversion and self-efficacy. Second, the study relied on self-reported measures, which can be subject to social desirability bias. Participants may have been inclined to report improvements due to the nature of the intervention, even if actual changes in behavior or cognition were not as significant. Third, while the study included a follow-up period, the duration of this follow-up was limited. A longer follow-up period would provide more insights into the long-term sustainability of schema therapy's effects. Finally, the study did not control for other therapeutic interventions or life events that may have occurred concurrently with the schema therapy sessions, which could have influenced the results.

Future research should address the limitations of the current study by including larger and more diverse samples to ensure greater generalizability. Additionally, studies that incorporate longer follow-up periods will help determine whether the benefits of schema therapy are sustained over the long term. Researchers could also explore the effects of schema therapy on specific subgroups, such as individuals with a history of trauma or abuse, to examine whether schema therapy is equally effective across different populations. Another avenue for future research would be to compare schema therapy with other therapeutic approaches, such as cognitive-behavioral therapy (CBT) or acceptance and commitment therapy (ACT), to assess the relative efficacy of these interventions in addressing sexual aversion and self-efficacy. Finally, incorporating qualitative methods, such as interviews or focus groups, could provide deeper insights into participants' experiences with schema therapy and the specific mechanisms underlying its effectiveness.

For clinicians working with individuals experiencing sexual aversion and low sexual self-efficacy, schema therapy offers a valuable tool for addressing the underlying cognitive and emotional patterns that contribute to these issues. Practitioners should consider integrating schema therapy into their treatment plans for clients who present with deeply ingrained maladaptive schemas that negatively impact their sexual health and relationships. Schema therapy's focus on cognitive restructuring, emotional processing, and the development of healthier interpersonal patterns makes it particularly effective for clients with complex sexual and relational difficulties. Additionally, clinicians should provide ongoing support to clients during the follow-up period to ensure that the gains made during therapy are maintained over time. Finally, given the importance of addressing past traumatic experiences in the treatment of sexual dysfunction, practitioners should be trained in trauma-informed care to provide the most effective interventions for clients with a history of abuse or neglect.

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.

Acknowledgments

We would like to express our gratitude to all individuals helped us to do the project.

Declaration of Interest

The authors report no conflict of interest.

Funding

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

Ethical Considerations

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

References

Aghili, M., Hasan Nezhad, Zahar, Asghari, Arezou. (2022). The Effectiveness of Emotional Schema Therapy Group Training on Sexual Self-Concept, Emotional Maturity and Interactive Patterns of Women with Chronic Pain. *The Women and Families Cultural-Educational*, *17*(61), 199-219. https://cwfs.ihu.ac.ir/article_207728.html?lang=en

Akrami, S. (2022). Evaluation of the Effectiveness of Acceptance and Commitment-based Education on Emotional Self-disclosure and Marital Commitment of Women Referring to Gonbad Kavous Clinics. *International Journal of Education and Cognitive Sciences*, *3*(2), 23-29. https://doi.org/10.22034/injoeas.2022.160610

Amani, A. (2011). Efficiency and Effectiveness of Schema Therapy and Examination of Dominant Schemas in Treating a Case with Marital Infidelity Issues (Extramarital Affairs). Proceedings of the Fifth Congress on Family and Sexual Health, Tehran.

Ammari, S., Deyreh, E., Keykhosrovani, M., & Ganji, K. (2023). The Effectiveness of Couple Therapy on Depressive Symptoms and Sexual Function in Women Affected by Infidelity. *Razi Journal of Medical Sciences*, *29*(7), 54-63. https://www.magiran.com/paper/2520730

Atmaca, S., & Gençöz, T. (2016). Exploring revictimization process among Turkish women: The role of early maladaptive schemas on the link between child abuse and partner violence. *Child abuse & neglect*, *52*, 85-93. https://www.sciencedirect.com/science/article/pii/S0145213416000065

Damiris, I. K., & Allen, A. (2023). Exploring the Relationship between Early Adaptive Schemas and Sexual Satisfaction. *International Journal of Sexual Health*, *35*(1), 13-29. https://doi.org/10.1080/19317611.2022.2155897

Darini, M., Shafiabadi, A., Navabinejad, S., & Delavar, A. (2013). The effectiveness of schema therapy on increase of women's sexual satisfaction. https://www.sid.ir/paper/95902/en

Efrati, Y., Shukron, O., & Epstein, R. (2020). Early Maladaptive Schemas Are Highly Indicative of Compulsive Sexual Behavior. *Evaluation & the Health Professions*, *44*(2), 142-151. https://doi.org/10.1177/0163278720983428

Eisazadeh, F., Heydari, S., Aghajan Begloo, S., & Safarinia, M. (2020). Examining the effectiveness of schema therapy on improving social adjustment and psychological capital in individuals with gender identity disorder (transsexual). *Journal of Social Psychological Research*, *10*(37), 13-28. https://www.socialpsychology.ir/article_109694.html?lang=en

Elhaei, H., Kazemianmoghadam, Kobra, Haroon Rashidi, Homayoon. (2020). The effect of schema therapy on sexual function and relationship attributions among women damaged by marital infidelity. *Journal of Psychological Studies*, *16*(2), 125-140. https://doi.org/10.22051/psy.2020.30676.2179

Estévez, A., Ozerinjauregi, Nagore, Herrero-Fernández, David, Jauregui, Paula. (2019). The Mediator Role of Early Maladaptive Schemas Between Childhood Sexual Abuse and Impulsive Symptoms in Female Survivors of CSA. *Journal of interpersonal violence*, *34*(4), 763-784. https://doi.org/10.1177/0886260516645815

Ghahari, S., Davoodi, R, Yekehfallah, M, Mazloumi Rad, M. (2018). Marital Conflict, Cognitive Emotion Regulation, Maladaptive Schema and Sexual Satisfaction in spouse abused and non- abused women in Iran: A comparative study. *Asian J Psychiatr*, *35*, 1-2. https://doi.org/10.1016/j.ajp.2018.04.012

Hasani, F., Rezazadeh, M., Ganbari Panah, A., & Khoshkabar, A. (2022). Effectiveness of Schema Therapy on Sexual Satisfaction, Emotional Regulation, and Resilience in Nurses with Marital Boredom Symptoms. *Community Health Journal*, *16*(2), 71-81. https://doi.org/10.22123/chj.2022.237680.1530

Ismaeilzadeh, N., Akbari, Bahman. (2021). The effectiveness of schema therapy on sexual self-efficacy, marital satisfaction and early maladaptive schemas in couples with marital conflicts. *medical journal of mashhad university of medical sciences*, *64*(1), 2286-2296. https://doi.org/10.22038/mjms.2021.18525

Mertens, Y., Yılmaz, M., & Lobbestael, J. (2020). Schema modes mediate the effect of emotional abuse in childhood on the differential expression of personality disorders. *Child abuse & neglect*, *104*, 104445. https://www.sciencedirect.com/science/article/pii/S0145213420301009

Mohammadi, S., Hafezi, F., Ehteshamzadeh, P., Eftekhar Saadi, Z., & Bakhtiarpour, S. (2020). The effect of schema therapy on sexual self-esteem in the women involved in marital conflicts. *Women's Health Bulletin*, *7*(2), 49-55. https://womenshealthbulletin.sums.ac.ir/article_46717.html

Navaei, J., & Mohammadi Arya, A. (2016). Association between the early Maladaptive Schemes and Extra Marital Relationship among Married People [Research]. *Journal of nursing education*, *3*(4), 18-27. http://ijpn.ir/article-1-682-en.html

Pilkington, P. D., Bishop, A., & Younan, R. (2021). Adverse childhood experiences and early maladaptive schemas in adulthood: A systematic review and meta-analysis. *Clinical Psychology & Psychotherapy*, *28*(3), 569-584. https://doi.org/10.1002/cpp.2533

Pulverman, C. S., Kilimnik, C. D., & Meston, C. M. (2018). The Impact of Childhood Sexual Abuse on Women's Sexual Health: A Comprehensive Review. *Sexual Medicine Reviews*, *6*(2), 188-200. https://doi.org/10.1016/j.sxmr.2017.12.002

Reissing, E. D., Laliberté, G. M., & Davis, H. J. (2005). Young women's sexual adjustment: The role of sexual self-schema, sexual self-efficacy, sexual aversion and body attitudes. *Canadian Journal of Human Sexuality*, *14*(3-4), 77-85. https://www.bing.com/ck/a?!&&p=69df567fc58cb2d8JmltdHM9MTcxNDQzNTIwMCZpZ3VpZD0xYjFmNzQwMC1jZjA1LTZjNGMtMWVhMy02NDgxY2U2ZTZkYjUmaW5zaWQ9NTE2Mw&ptn=3&ver=2&hsh=3&fclid=1b1f7400-cf05-6c4c-1ea3-6481ce6e6db5&psq=3.+Elke+R.+Lalibert%c3%a9+D.+Genevi%c3%a8ve+M.+Davis.+YOUNG+WOMAN%27S+SEXUAL+ADJUSTMENT%3a+THE+ROLE+OF+SEXUAL+SELF-SCHEMA%2c+SEXUAL+SELF-EFFICACY%2c+SEXUAL+AVERSION+AND+BODY+ATTITUDES.+CJHS+%2c2005%3b+14+(3)%3a+77-85&u=a1aHR0cHM6Ly9wc3ljbmV0LmFwYS5vcmcvcmVjb3JkLzIwMDYtMDUxMDQtMDAz&ntb=1

Rellini, A. H., & Meston, C. M. (2010). Sexual Self-Schemas, Sexual Dysfunction, and the Sexual Responses of Women With a History of Childhood Sexual Abuse. *Archives of Sexual Behavior*, *40*(2), 351-362. https://doi.org/10.1007/s10508-010-9694-0

Rezakhaniha, G., & Ashkan, S. (2022). Prediction of tendency to extramarital relationships based on early maladaptive schemas and social support in women [Research]. *Advances in Cognitive Sciences*, *24*(1), 133-146. https://doi.org/10.30514/icss.24.1.133

Roediger, E., Zarbock, Gerhard, Frank-Noyon, Eva, Hinrichs, Julia, Arntz, Arnoud. (2020). The effectiveness of imagery work in schema therapy with couples: a clinical experiment comparing the effects of imagery rescripting and cognitive interventions in brief schema couples therapy. *Sexual and Relationship Therapy*, *35*(3), 320-337. https://doi.org/10.1080/14681994.2018.1529411

Samakoush, A. N. (2023). Effectiveness of Schema Therapy on Marital Exhaustion, Sexual Self-Efficacy and Women's Feeling of Loneliness in the Family. *PWJ*, *4*(3), 19-27. https://doi.org/10.61838/kman.pwj.4.3.3

Shalchi, B., Vahidnia, B., Dadkhah, M., Alipouri Niaz, M., & Moghimifam, P. (2017). Comparation of Affective - Behavioral Disorders and Social Skills among Normal Adolescents and institutional children of Social Welfare Bureau. *Yektaweb_Journals*, *17*(67), 173-201. http://refahj.uswr.ac.ir/article-1-3094-en.html

AFTJ Applied Family Therapy Journal
E-ISSN: 3041-8798

Soltani, S., Khademi, A., Bakhshipour, A., & Alivandi Vafa, M. (2021). Causal modeling of vulnerability of extramarital relationships based on emotional schemas mediated by sexual function. *Women and Family Studies*, *14*(52), 125-156. 0.30495/jwsf.2020.1912668.1510

Vos, M. K.-d., Giesbers, G., & Hülsken, J. (2023). Relationships Between Early Maladaptive Schemas and Emotional States in Individuals With Sexual Convictions. *Sexual Abuse*, *36*(2), 233-250. https://doi.org/10.1177/10790632231153635

Zheng, S., Stewart, J. G., Bagby, R. M., & Harkness, K. L. (2022). Specific early maladaptive schemas differentially mediate the relations of emotional and sexual maltreatment to recent life events in youth with depression. *Clinical Psychology & Psychotherapy*, *29*(3), 1020-1033. https://doi.org/10.1002/cpp.2681