

Article history: Received 08 January 2024 Revised 11 February 2024 Accepted 19 February 2024 Published online 01 March 2024

# **Applied Family Therapy Journal**

Volume 5, Issue 1, pp 167-176



# Comparing the Effectiveness of Schema Therapy and Mindfulness-Based Stress Reduction Program on Sexual Satisfaction in Married Individuals

Tahereh. Salari 6, Bita. Nasrollahi 6, Reza. Ghorban Jahromi 6,

Ph.D, Student of Psychology, Department of Psychology, Sanandaj Branch, Islamic Azad University, Sanandaj, Iran
 Assistant Professor, Department of Psychology, Ilam University of Medical Sciences, Ilam, Iran
 Assistant Professor, Department of Statistics, Ilam Branch, Islamic Azad University, Ilam, Iran

\* Corresponding author email address: dr.bitanasrolahi@gmail.com

#### Article Info

#### Article type:

Original Research

#### How to cite this article:

Salari, T., Nasrollahi, B., & Ghorban Jahromi, R. (2024). Comparing the Effectiveness of Schema Therapy and Mindfulness-Based Stress Reduction Program on Sexual Satisfaction in Married Individuals. *Applied Family Therapy Journal*, *5*(1), 167-176.

http://dx.doi.org/10.61838/kman.aftj.5.1.18



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#### ABSTRACT

**Objective:** The present research aimed to compare the effectiveness of schema therapy and a mindfulness-based stress reduction program on sexual satisfaction among married individuals.

**Method:** This quasi-experimental study employed a pretest-posttest design with a one-month follow-up and included a control group. The study population consisted of all married individuals with marital issues who visited the Khodbidari Psychological Center in the first half of 2019, totaling approximately 180 individuals. From this group, 45 individuals were selected through purposive sampling and randomly assigned to three groups of 15. The experimental groups underwent 8 sessions of 90-minute schema therapy by Young et al. (2003) and the mindfulness-based stress reduction program by Kabat-Zinn (2003), while no intervention was performed for the control group. The data collection tool was the Sexual Satisfaction Scale (Larson et al., 1998). The data were analyzed using SPSS software version 21 and repeated measures ANOVA.

**Findings:** The results indicated that there was a significant difference in sexual satisfaction scores among the groups (p = 0.001, F = 21.58), and both schema therapy and the mindfulness-based stress reduction program increased sexual satisfaction among married individuals. Furthermore, there was no significant difference between the two groups in this regard (p < 0.05).

**Conclusion:** According to the results, both schema therapy and the mindfulness-based stress reduction program can be used to improve sexual satisfaction in married individuals.

Keywords: Sexual Satisfaction, Married, Mindfulness, Schema Therapy

#### 1. Introduction

Sexual satisfaction is a fundamental and important factor in the stability of marital life, and one of the most important factors in the satisfaction and quality of

marital life is the couples' enjoyment of satisfactory sexual relationships (Dehghani et al., 2020; Mosadegh et al., 2023; Shadanloo et al., 2023). Sexual satisfaction, defined as the pleasure and ability of couples to give and receive pleasure from each other, is not merely physical pleasure; it



encompasses all remaining positive and negative emotions following sexual activity (Ghoreishi et al., 2020; Zolfaghari et al., 2021). Sexual satisfaction positively influences both body and mind by creating and strengthening empathy and love between spouses, providing pleasure, and enhancing self-confidence and interpersonal relationships (Kim, 2020). According to research findings, sexual satisfaction is a significant factor affecting life quality and satisfaction (Bedard-Thomas et al., 2019; Tavares, 2019). The World Health Organization views sexual satisfaction contributing to the integration and harmony between mind, feeling, and body, facilitating human social and rational dimensions' growth and development, and aiding in strengthening the emotional relationship between spouses (Setoudeh et al., 2019). In this regard, the study by Talaeizadeh Fakhri & Bakhtiarpour, Saeed. (2016) indicates that sexual satisfaction plays a significant role in improving marital satisfaction and the mental health of spouses (Talaizadeh, 2016). Regarding factors associated with sexual satisfaction, various biological, individual, and cultural factors are noted. Schemas are recognized as one of the individual factors affecting sexual satisfaction, and according to studies, schemas impact the quality of sexual relations and satisfaction (Mam Salehi & Moradi, 2020). For example, Mam Salehi & Moradi (2020) showed that couples' schemas significantly predict their sexual satisfaction (Mam Salehi & Moradi, 2020). Ghahari et al. (2018) indicated that couples with maladaptive schemas report more problems in emotion regulation, marital conflicts, and sexual satisfaction (Ghahari, 2018). Therefore, considering the role of schemas in sexual satisfaction, it seems that schema therapy could effectively impact sexual satisfaction.

Maladaptive schemas are flawed emotional and cognitive patterns that stem from past experiences and determine an individual's attitude toward themselves surrounding world (Young, 2003). Schemas influence thoughts, perceptions, mental images, cognition, and information processing, deeply affecting all behaviors and emotions (Peters, Van Passel, & Krantz, 2021). Schema therapy addresses the deepest level of cognition, targeting early maladaptive schemas, and assists patients in overcoming negative schemas using various strategies (Peeters, 2022). Early maladaptive schemas are flawed emotional and cognitive patterns that form during childhood and recur throughout life (Van Donzel & Van Alphen, 2021). They may arise from specific emotional memories, such as trauma or a lack of human emotions in the past (Young, 2003). The broader the maladaptive schema, the

more situations trigger it (Asgari & Goodarzi, 2019). The primary goal of schema therapy is to create psychological awareness and enhance conscious control over schemas, with the ultimate aim of improving schemas and coping styles (Saeidnia, 2018). Various studies indicate the effectiveness of schema therapy in improving life quality, reducing marital conflict, and enhancing adaptability, intimacy in marital life, and emotion regulation (Alizadeh Asli & Jafar Nezhad Langroudi, 2018; Roediger, 2020). Asgari & Goodarzi (2019) demonstrated that in couples on the verge of divorce, schema therapy is effective in reducing marital conflicts and enhancing marital intimacy (Asgari & Goodarzi, 2019). Saeednia & Makvandi (2018) showed in their study on married women attending counseling centers that schema therapy is effective in correcting early maladaptive schemas and conflict resolution patterns in marital life (Saeidnia, 2018). Alizadeh Asli & Jafar Nejad Langarudi (2018) indicated that schema therapy is effective in enhancing intimacy, adaptability, and resilience in women with marital conflicts (Alizadeh Asli & Jafar Nezhad Langroudi, 2018).

Stress is another factor that can disrupt sexual function (Cooper, 2018). Stress occurs when there is an imbalance between environmental demands and the individual's capacity, triggering physical and psychological harmful reactions that can ultimately disrupt individual performance (Tavares, 2019). From a psychological perspective, stress can disrupt the balance of the mental system and reduce mental energy, and from a physical perspective, it can cause dysfunction of the neuroendocrine system and abnormal physiological responses (Kim, 2020). Such a process in couples can spread to their interpersonal interactions, manifesting as interpersonal conflicts, ineffective coping strategies, and psychological-social tensions (Cooper, 2018). Among the negative consequences of experiencing stress is a reduction in the quantity and quality of sexual relations and satisfaction from it (Tavares, 2019). Thus, it seems that a mindfulness-based stress reduction program could also be effective in enhancing satisfaction from sexual relations. The mindfulness-based stress reduction program considers the root of suffering to stem from a judgmental mind that divides experiences into good and bad and that one must fight or avoid bad experiences (Anheyer et al., 2019). It is a behavioral intervention based on attention and mindfulness. Mindfulness helps individuals realize that negative emotions may occur, but they are not a permanent part of personality (Ghawadra, 2019). It also allows individuals to respond to events thoughtfully and reflectively



rather than react impulsively (Zhang, 2019). By observing their inner reality accurately, individuals realize that happiness or sadness are not qualities dependent on external elements and changes in the external world, and it is how individuals react that perpetuates and intensifies negative thoughts (Kabat-Zinn, 2003). The goal of interventions is to create a clear and non-judgmental awareness of what is continuously perceived (Hazlett-Stevens et al., 2019) In the mindfulness-based stress reduction program, individuals learn to expand acceptance and compassion instead of judging their experiences; and to create present moment awareness instead of autopilot (Zainal, 2013). Various studies indicate that the mindfulness-based stress reduction program can be effective in adapting marital life, enhancing marital satisfaction, and improving well-being and life quality (Alizadeh Asli & Jafar Nezhad Langroudi, 2018; Anheyer et al., 2019; Aslami & Parvandeh, 2020; Forouzesh Yekta et al., 2018; Ghawadra, 2019; Hazlett-Stevens et al., 2019; Kabat-Zinn, 2003; Querstret, 2020; Zainal, 2013; Zhang, 2019). Aslami & Parvandeh (2020) in their review showed that a mindfulness-based stress reduction intervention is effective in improving marital adaptability, parent-child relationship quality, and self-compassion among female university staff (Aslami & Parvandeh, 2020). Foruzesh Yekta et al. (2018) demonstrated in their study that a mindfulness-based stress reduction program is effective in reducing psychological distress, emotion regulation, and enhancing marital satisfaction in adapted women (Forouzesh Yekta et al., 2018). Zainal et al. (2013) in a study showed that a mindfulness-based stress reduction program in women with breast cancer is effective in reducing stress and marital conflicts and improving the quality of their marital life (Zainal, 2013). Querstret et al. (2020) in a study on a nonclinical population showed that a mindfulness-based stress reduction program has significant effectiveness in enhancing the level of health and psychological well-being of the individuals under study (Querstret, 2020).

Satisfactory sexual relations that can ensure the satisfaction of both parties play an important and fundamental role in the stability of the family unit. This is while research indicates a high prevalence of sexual dysfunction in Iranian men and women and an upward trend in sexual dissatisfaction among couples (Zolfaghari et al., 2021). Following efforts to find appropriate solutions to this problem, it appears that schema therapy and the mindfulness-based stress reduction program can be effective in improving sexual satisfaction. Accordingly, the current study aimed to answer the following questions:

- 1- Is schema therapy effective in increasing sexual satisfaction in married individuals?
- 2- Is the mindfulness-based stress reduction program effective in increasing sexual satisfaction in married individuals?
- 3- Is there a difference between the effectiveness of schema therapy and the mindfulness-based stress reduction program in increasing sexual satisfaction in married individuals?

#### 2. Methods

# 2.1. Study design and Participant

The present study employed a quasi-experimental design with pre-test, post-test, and one-month follow-up, along with a control group. The statistical population of the study consisted of married individuals with marital problems referring to the Self-Awareness Psychology Center in the first half of 2019, with approximately 180 participants. Among these individuals, considering the possibility of attrition, 51 participants were purposefully selected using purposive sampling method, and were randomly assigned to three groups of 17 participants each. Finally, two participants from each group were excluded due to nonparticipation in sessions or incomplete questionnaires, and data from 15 participants from each group entered the analysis phase. Inclusion criteria included a score of less than 75 on the Sexual Satisfaction Scale, willingness to attend therapy sessions, at least two years of married life, absence of physical separation between spouses, no intention of divorce, and no diagnosis of severe psychological disorders. Exclusion criteria included remarriage, absenteeism in therapy sessions, and unwillingness to continue participating in the research.

Initially, after the research plan was approved by the university, necessary negotiations were conducted with officials at the Khodbidari Psychological Center to secure the sample needed for the study. A call for participation was issued to married individuals visiting this psychological center. Subsequently, interested individuals were invited to participate in this research project and were asked to complete the Sexual Satisfaction Scale. Those with scores lower than 75 on this scale and other entry criteria were invited to an introductory session to learn about the research process, objectives, and necessity. From these individuals, 45 were selected randomly through a lottery method and placed into three groups of 15 each. The first group underwent schema therapy, and the second group underwent



mindfulness-based stress reduction therapy. individuals were placed on a waiting list as a control group and received no intervention. The sessions for each of the interventions, schema therapy and mindfulness-based stress reduction, were conducted in group format, once a week for each session lasting ninety minutes, led by the first author of this article at the Self-Awareness Psychological Center. All participants completed the Sexual Satisfaction Scale immediately after the interventions for post-testing and one month after the end of the intervention sessions for followup. To adhere to ethical considerations in research, consent for participation was obtained from the participants before starting the interventions. During an informational session, participants were briefed about the research goals and could ask questions about the study. Participants were also assured that their personal details would remain confidential. At the end of the study, participants could opt to be informed about the study results and their questionnaire outcomes. Additionally, after completing the training sessions and the follow-up phase, several training sessions were conducted for the control group.

#### 2.2. Measures

# 2.2.1. Sexual Satisfaction

In this research, the questionnaire developed by Larson, Anderson, Hallman, and Neiman in 1998 was used to measure sexual satisfaction. This questionnaire consists of questions with the options "never," "sometimes," "most of the time," and "always," scored from one to five, respectively. The minimum score is 25 and the maximum score is 125, with higher scores indicating greater sexual satisfaction; scores below 50 indicate dissatisfaction, 51-75 indicate low satisfaction, 76-100 indicate moderate satisfaction, and scores over 100 indicate high satisfaction. Thirteen questions on this scale are scored in reverse. Larson and colleagues (1979) examined the validity of this scale through factor analysis and confirmed its construct validity by endorsing its unidimensional structure. They used testretest reliability and Cronbach's alpha for validating this questionnaire, achieving coefficients of 0.89 and 0.93, respectively (Larson, 1998). Bahrami et al. (2016) in a study in Iran reported the reliability of this questionnaire with a Cronbach's alpha of 0.93 for a group of fertile couples and 0.89 for a group of infertile couples. They also showed that exploratory factor analysis with the extraction of three latent factors was able to explain 42.73% of the total variance of the model, and confirmatory factor analysis confirmed the

final model of Larson's sexual satisfaction construct (Bahrami et al., 2016). In the current study, the reliability of this questionnaire was obtained using Cronbach's alpha of 0.83.

#### 2.3. Interventions

### 2.3.1. Schema Therapy

Schema therapy techniques and guidelines according to the protocol by Young and colleagues (2003) were implemented over 8 weekly sessions of 90 minutes each on the experimental group (Young, 2003).

Session 1: Introduction to Schema Therapy

The first session involved assessing and educating the participants about schema therapy, explaining the guidelines and general rules of group work, and clarifying the schema therapy model in simple and transparent language for the participants. The homework involved providing an overview of schema therapy methods and objectives.

Session 2: Understanding the Concept of Sexual Satisfaction and Its Causes

The second session focused on educating participants about the nature of sexual satisfaction, its developmental roots, and its mechanisms. By the end of the first two sessions, a formulation of marital conflict according to schema therapy was presented. Homework included developing a formulation about marital conflict and sexual satisfaction according to schema therapy.

Session 3: Familiarization with Schemas

This session introduced and applied cognitive techniques for challenging schemas, such as testing the validity of schemas, redefining evidence that supports schemas, and facilitating dialogue between the healthy and unhealthy aspects of schemas. Homework involved creating an educational card and completing a schema recording form.

Session 4: Training on How to Challenge Schemas

Participants were taught cognitive techniques of schema therapy to learn how to logically challenge and question the validity of schemas. Homework involved identifying and noting cognitive techniques related to challenging schemas.

Session 5: Understanding the Developmental Roots of Schemas

Emotional (experiential) techniques were introduced and taught to help participants address the developmental roots of schemas on an emotional level. Techniques included conducting imaginary dialogues, visualizing traumatic events, writing letters to parents, and mental imagery.



Homework involved identifying and noting emotional techniques related to the developmental roots of schemas.

Session 6: Familiarization with Emotional Techniques for Combating Schemas

The sixth session's foundation was behavioral pattern breaking with a focus on helping participants combat schemas on an emotional level. Techniques such as mental imagery and dialogues were used to express anger and distress about childhood incidents and break the cycle of schema perpetuation on an emotional level. Homework included practicing experiential techniques such as mental imagery to combat schemas.

Session 7: Training in Behavioral Pattern-Breaking Techniques

This session involved teaching and implementing behavioral pattern-breaking techniques, encouraging participants to abandon maladaptive coping styles and practice effective coping behaviors, such as changing behaviors and motivating themselves. Homework involved practicing behavioral pattern-breaking techniques to combat schemas.

Session 8: Summary and Feedback from Participants

The final session reviewed the pros and cons of continuing behavior and practicing healthy behaviors while preparing participants for the end of the sessions. Homework involved practicing the taught techniques and methods.

# 2.3.2. Mindfulness-Based Stress Reduction

The mindfulness-based stress reduction therapy was taught according to the protocol by Kabat-Zinn (2003) in 8 sessions, each lasting 90 minutes (Kabat-Zinn, 2003).

Session 1: Initial Acquaintance

The first session focused on establishing connections, defining concepts, and emphasizing the importance of mindfulness training. Homework involved identifying aspects of mindfulness and its manifestations in real life.

Session 2: Familiarization with the Body Relaxation Technique

Participants were introduced to the body relaxation technique, learning to relax 14 muscle groups including the forearms, arms, back of the legs, thighs, abdomen, chest, shoulders, neck, lips, eyes, jaws, and forehead. Homework involved practicing the body relaxation technique at home.

Session 3: Training in Body Relaxation

The training continued for 6 muscle groups including hands and arms, legs and thighs, abdomen and chest, neck and shoulders, jaws, forehead, and lips, along with home assignments for body relaxation. Homework involved practicing the body relaxation technique at home.

Session 4: Mindfulness Training

This session included a brief review of the previous session, introduction to the mindfulness breathing technique, and training in inhaling and exhaling techniques that involve relaxation without thinking about anything else. Homework involved a mindfulness breathing exercise before sleep for 20 minutes.

Session 5: Training in Body Scan Technique

Participants learned to focus on body movement during breathing, concentrate on body parts and their movements, and explore physical sensations (hearing, taste, etc.). Homework involved a mindfulness eating exercise (eating calmly and paying attention to the taste and appearance of food).

Session 6: Mindfulness Training on Thoughts

This session involved paying attention to the mind, identifying negative and positive, pleasant and unpleasant thoughts, allowing negative and positive thoughts to enter the mind, and easily removing them from the mind without judgment. Homework involved writing daily negative and positive experiences without judging them.

Session 7: Complete Mindfulness

This session repeated the teachings of sessions 4, 5, and 6, each for 20 to 30 minutes. Homework involved practicing mindfulness of breathing and eating.

Session 8: Summary and Feedback

The final session reviewed and summarized the previous sessions and conducted post-tests. Homework involved practicing mindfulness and body relaxation techniques.

#### 2.4. Data Analysis

For data analysis, SPSS software version 21 and repeated measures ANOVA were used at a significance level of 0.05.

# 3. Findings and Results

The average age of the control group was 32.71 years, the schema therapy group was 33.13 years, and the mindfulness-based stress reduction program group was 31.91 years. In the control group, the schema therapy group, and the mindfulness-based stress reduction program group, there were 9, 8, and 10 women respectively. Table 1 presents the mean and standard deviation of the scores for all three groups on the Sexual Satisfaction Scale during the treatment stages.

 Table 1

 Mean and Standard Deviation of Sexual Satisfaction Scores During Treatment Stages for the Three Groups

Group	Pretest Mean	Pretest SD	Posttest Mean	Posttest SD	Follow-up Mean	Follow-up SD
Schema Therapy	61.84	12.08	72.08	10.35	71.89	9.95
Mindfulness-Based Stress Reduction Program	62.40	10.34	71.96	9.57	70.32	11.91
Control	63.89	11.28	61.06	13.50	61.27	9.71

A repeated measures ANOVA was used to compare the differences in sexual satisfaction scores between and within groups. Prior to this, assumptions of normality of variable distributions and homogeneity of variance-covariance matrices were verified. The results of the Kolmogorov-Smirnov test indicated normal distribution of data, and Levene's test confirmed the homogeneity of variance-covariance matrices across groups (p > .05). The Mauchly's Test of Sphericity also indicated the homogeneity of the error covariance matrix (p > .05).

The results of the repeated measures ANOVA are displayed in Table 2. As shown in Table 2, the effect of time

was significant (p = .001, F = 13.93), indicating significant differences in sexual satisfaction scores between pretest, posttest, and follow-up. Additionally, Table 2 shows a significant interaction effect between time and group (p = .001, F = 6.17), suggesting that the levels of sexual satisfaction interact with group levels, indicating different sexual satisfaction levels across different groups. Table 2 shows that there is a significant difference between the sexual satisfaction scores among the groups (p = .001, F = 21.58).

 Table 2

 ANOVA Results for Examining Patterns of Difference in Sexual Satisfaction Score

Source of Variation	SS	df	MS	F	р	$\eta^2$
Time	3231.19	1	1934.74	13.93	.001	.34
Time × Group	1274.84	3	381.68	6.17	.001	.22
Groups	4603.69	2	2301.84	21.58	.001	.42

A Bonferroni post-hoc test was also conducted considering the results from the between-groups and withingroup tests, and further statistical analysis.

Table 3

Bonferroni Post-Hoc Test Results for Sexual Satisfaction in Experimental and Control Groups

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Dependent Variable	Group Comparison	Mean Difference	Significance
Sexual Satisfaction	Schema Therapy - Control	10.41	.000
	Mindfulness-Based Stress Reduction - Control	9.27	.000
	Mindfulness-Based Stress Reduction - Schema Therapy	1.31	.069

The Bonferroni post-hoc test results in Table 3 indicate that the differences between the schema therapy group and the mindfulness-based stress reduction group compared to the control group in sexual satisfaction were 10.41 and 9.27, respectively, which are statistically confirmed (p = .001). The difference in sexual satisfaction between the schema therapy group and the mindfulness-based stress reduction group was 1.31, which was not statistically significant (p >

.05). This suggests that the effectiveness of schema therapy and mindfulness-based stress reduction on improving sexual satisfaction differs significantly from the control group, and this improvement is related to both experimental groups, but there is no significant difference between the two experimental groups in terms of increasing sexual satisfaction.



Table 4

Bonferroni Post-Hoc Test Results for Sexual Satisfaction Across Three Test Phases

Dependent Variable	Group Comparison	Mean Difference	р
Sexual Satisfaction	Posttest - Pretest	11.34	.001
	Follow-up - Pretest	10.16	.001
	Follow-up - Posttest	0.42	.880

The Bonferroni post-hoc test for examining differences across the three phases was also calculated. The results in Table 4 show that for sexual satisfaction, the difference in dependent variable scores between posttest and pretest was 11.34 and between follow-up and pretest was 10.16, both statistically confirmed (p = .001). The difference in sexual satisfaction scores at follow-up compared to posttest was 0.42, which was not statistically confirmed (p > .05).

#### 4. Discussion and Conclusion

The present study was conducted with the aim of comparing the effectiveness of schema therapy and a mindfulness-based stress reduction program on sexual satisfaction in married individuals. According to the results, schema therapy was effective in increasing sexual satisfaction, and there was no difference in effectiveness between the two groups. This finding is consistent with the results of prior studies (Alizadeh Asli & Jafar Nezhad Langroudi, 2018; Asgari & Goodarzi, 2019; Saeidnia, 2018).

In explaining the effectiveness of schema therapy on sexual satisfaction, it should be noted that from the perspective of schema therapy, the origin of many dissatisfactions in a marital relationship is misunderstanding and misinterpretation by spouses of life events, which creates negative feelings in each spouse and destroys their marital relationship (Saeidnia, 2018). Schema therapy aims to target unhealthy mental patterns and reconstruct early maladaptive schemas, capable correcting incorrect and inefficient cognitive patterns that themselves affect all individual interpretations and perceptions of life events (Peeters, 2022). This therapeutic approach initially helps couples to distance themselves from early maladaptive schemas and become aware of these unhealthy mindsets and their destructive function on individual and social performance in all aspects of life, especially marital and sexual performance. Instead of seeing the schema as an absolute truth about themselves, they consider it as an intrusive presence (Chan & Tan, 2020). Following this increased awareness, couples examined the accuracy of their schemas and regarded the schema as an external truth that they could fight against using objective and empirical evidence. In schema therapy, couples were helped to question their schemas, creating a healthy voice in their minds that, instead of humiliating, blaming, and creating doubt, supports them and brings about positive emotions (Asgari & Goodarzi, 2019). Experiential techniques helped couples to reorganize their emotions, learn new things, regulate inter-personal affect, and also selfsoothe, setting the stage for the improvement of schemas. Couples could also use these techniques to test their schemas, and with the arousal of schemas and their connection to current issues, pave the way for emotional insight and subsequently the improvement of schemas. Modifying schemas can prevent the emergence of negative emotions that were the offspring of these cognitive patterns and lead to enhanced performance, particularly sexual satisfaction in couples (Alizadeh Asli & Jafar Nezhad Langroudi, 2018). Additionally, behavioral techniques in schema therapy help couples to choose healthier coping styles instead of specific schema-driven behavioral patterns (Roediger, 2020). Overall, schema therapy, with cognitive, emotional, behavioral changes, and facilitating the adoption of more effective coping styles in marital relationships, helps couples achieve a higher level of marital and sexual satisfaction.

Another finding of the study indicated the effectiveness of the mindfulness-based stress reduction program in increasing sexual satisfaction in married individuals. This finding aligns with the results of prior studies (Aslami & Parvandeh, 2020; Forouzesh Yekta et al., 2018; Querstret, 2020; Zainal, 2013). Regarding the explanation of the finding related to the effectiveness of the mindfulness-based stress reduction program on increasing sexual satisfaction in married individuals, it should be stated that mindfulness is a non-judgmental and balanced sense of awareness that helps in clearly seeing and accepting life's emotions and experiences as they occur. Specifically, mindfulness training involves maintaining awareness voluntarily and based on attention to specific subjects such as emotions and physical



sensations in the body, such as the movement of breathing from one moment to the next, in such a way that although the mind may be diverted to thoughts, feelings, sounds, or other bodily sensations, the individual gradually learns to pay attention to the content of their awareness at the moment and gently redirects their attention towards a specific stimulus (Zhang, 2019). This process is repeated over and over and is practiced in daily awareness stages, and such practices are experienced as a pure and genuine psychological awareness process (Ghawadra, 2019). The skill of observing moment-to-moment internal processes creates a meta-cognitive insight in the individual so that they learn to see thoughts and emotions as transient experiences that are temporary and without becoming involved in these internal processes and negative emotions arising from them, allow these internal experiences to pass out of awareness (Anheyer et al., 2019). Also, mindfulness training caused couples to accept the real emotions and experiences of their shared life, and accepting these emotions reduces hypersensitivity to life's problems in couples (Aslami & Parvandeh, 2020). Thus, such a mindfulness process helps couples to easily free themselves from these bothersome internal processes and stressors and distance negative emotions from themselves. Such a skill can help couples instead of drowning in disturbing mental content, live in the present and maintain the experience of positive emotions and feelings, which helps increase psychological energy, vitality, and increase desire and sexual satisfaction in them (Querstret, 2020).

# 5. Suggestions and Limitations

The results of the present study showed that both schema therapy and the mindfulness-based stress reduction program are effective in increasing sexual satisfaction in married individuals. The principles applied in schema therapy with the correction of inefficient cognitive patterns and the mindfulness-based stress reduction program by strengthening non-judgmental mindfulness in the married individuals under study, and as a result reducing habitual reactions to various life issues, were able to assist these individuals in the process of increasing sexual satisfaction levels.

# **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

Alizadeh Asli, A., & Jafar Nezhad Langroudi, Z. (2018). The Effectiveness of Schema Therapy Based on Acceptance and Mindfulness in Intimacy, Adaptation and Resiliency in Persons with Marital Conflicts in Couples of City Karaj. *Alborz University Medical Journal*, 7(3), 248-256. https://doi.org/10.29252/aums.7.3.248

Anheyer, D., Leach, M. J., Klose, P., Dobos, G., & Cramer, H. (2019). Mindfulness-based stress reduction for treating chronic headache: A systematic review and meta-analysis. *Cephalalgia*, 39(4), 544-555. https://doi.org/10.1177/0333102418781795

Asgari, A., & Goodarzi, K. (2019). Effectiveness of Emotional Schema Therapy on Marital Intimacy among Couples on the Brink of Divorce. *SALĀMAT-I IJTIMĀĪ (Community Health)*, 6(2), 174-185. https://doi.org/10.22037/ch.v6i2.23281

Aslami, E., & Parvandeh, N. (2020). Effectiveness of Mindfulness Based of Stress Reduction on Marital Adjustment, Quality of Parent- Child Relationship and Self- Compassion in Women Employees of Shiraz University. *Quarterly Journal of Woman and Society*, 11(43), 1-24. https://jzvj.marvdasht.iau.ir/article 4212

Bahrami, N., Yaghoobzadeh, A., Sharif Nia, H., Soliemani, M., & Haghdoost, A. (2016). Psychometric Properties of the Persian Version of Larsons Sexual Satisfaction Questionnaire in a Sample of Iranian Infertile Couples. *Iranian Journal of* 



- Epidemiology, 12(2), 18-31. http://irje.tums.ac.ir/article-1-5513-en.html
- Bedard-Thomas, K. K., McKenna, J. L., Pantalone, D. W., Fireman, G., & Marks, A. K. (2019). A mixed-methods measurement study of female adolescent sexuality stress and support. *Psychology & Sexuality*, 10(3), 212-233. https://doi.org/10.1080/19419899.2019.1596972
- Cooper, D. K. K., Angela; Jenson, Emily J.; Braughton, Jacqueline;
   Li, Yiting; Ausherbauer, Kadie; Harris, Steven M. (2018).
   Stress, Couple Satisfaction, and the Mediating Role of Couple
   Sexuality in Relationship Wellness. *Journal of Family & Consumer Sciences*, 110(3), 32-38.
   https://doi.org/10.14307/JFCS110.3.32
- Dehghani, F., Zargham Hajebi, M., Dehghanian, H., Garlipour, Z., & Zaynalipour, M. (2020). Relationship between Social Health and Demographic Characteristics Regarding the Sexual Satisfaction of Women Referring to Health Centers in Qom, Iran [Original Article]. *Qom University of Medical Sciences Journal*, 14(6), 60-67. https://doi.org/10.29252/qums.14.6.60
- Forouzesh Yekta, F., Yaghubi, H., Mootabi, F., Roshan, R., Gholami Fesharak, M., & Omidi, A. (2018). The Effectiveness of Mindfulness Based Stress Reduction Program on Distress, Emotion Regulation and Marital Satisfaction in Non-Maritaly Distressed Women. *Clinical Psychology Studies*, 8(31), 67-90. https://doi.org/10.22054/jcps.2018.8794
- 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
- Ghawadra, S. F., Abdullah, K. L., Choo, W. Y., Phang, C. K. (2019). Mindfulness-based stress reduction for psychological distress among nurses: A systematic review. *Journal of clinical nursing*, 28(21-22), 3747-3758. https://doi.org/10.1111/jocn.14987
- Ghoreishi, A., Vakili, M. M., & Amirmohseni, M. (2020). Sexual satisfaction and some related variables in married women. *Tehran University Medical Journal*, 77(10), 640-645. http://tumj.tums.ac.ir/article-1-10140-en.html
- Hazlett-Stevens, H., Singer, J., & Chong, A. (2019). Mindfulness-Based Stress Reduction and Mindfulness-Based Cognitive Therapy with Older Adults: A Qualitative Review of Randomized Controlled Outcome Research. *Clinical Gerontologist*, 42(4), 347-358. https://doi.org/10.1080/07317115.2018.1518282
- Kabat-Zinn, J. (2003). Mindfulness-based stress reduction (MBSR). *Constructivism in the Human Sciences*, 8(2), 73-83. https://www.proquest.com/openview/fef538e3ed2210c1201e f2a946faed43/1?pq-origsite=gscholar&cbl=29080
- Kim, M., Moon, So-Hyun, Kim, Jee-Ean. (2020). Effects of psychological intervention for Korean infertile women under In Vitro Fertilization on infertility stress, depression, intimacy, sexual satisfaction and fatigue. Archives of Psychiatric Nursing, 34(4), 211-217. https://doi.org/10.1016/j.apnu.2020.05.001
- Larson, J. H., Anderson, Shannon M, Holman, Thomas B, Niemann, Brand K. (1998). A longitudinal study of the effects of premarital communication, relationship stability, and selfesteem on sexual satisfaction in the first year of marriage. *Journal of sex & marital therapy*, 24(3), 193-206. https://doi.org/10.1080/00926239808404933
- Mam Salehi, H., & Moradi, O. (2020). Designing a Sexual Satisfaction Predictive Model Based on Sexual Schemes and self-Differentiation in Couples. *Journal of nursing education*, 8(1), 49-59. http://ijpn.ir/article-1-1480-en.html

- Mosadegh, H., Darbani, S. A., & Parsakia, K. (2023). The mediating role of sexual satisfaction in the relationship between personality traits and emotional divorce in men. *Journal of Applied Family Therapy*, 4(4), 191-202. https://www.aftj.ir/article 184086.html?lang=en
- Peeters, N., Van Passel, Boris, Krans, Julie. (2022). The effectiveness of schema therapy for patients with anxiety disorders, OCD, or PTSD: A systematic review and research agenda. *British Journal of Clinical Psychology*, 61(3), 579-597. https://doi.org/10.1111/bjc.12324
- Querstret, D., Morison, Linda, Dickinson, Sophie, Cropley, Mark, John, Mary. (2020). Mindfulness-based stress reduction and mindfulness-based cognitive therapy for psychological health and well-being in nonclinical samples: A systematic review and meta-analysis. *International Journal of Stress Management*, 27(4), 394-411. https://doi.org/10.1037/str0000165
- 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
- Saeidnia, Z. B., Makvandi. (2018). Schema Therapy Efficacy Training On Early Maladaptive Schemas And Conflict Resolution Patterns In Married Women Referring To Counseling Centers. Woman Cultural Psychology, 37(10), 99-113. http://sanad.iau.ir/fa/Article/920204
- Setoudeh, S., Motaghi, m., & Mousavi, m. (2019). Survey of sexual satisfaction in women referred to public health centers of Mashhad in 2017. *Journal of Sabzevar University of Medical Sciences*, 26(1), 73-80. https://jsums.medsab.ac.ir/article\_1171\_
- Shadanloo, B., Yousefi, Z., Parsakia, K., Hejazi, S. M., & Davari Dolatabadi, M. (2023). The Role of Whey Supplementation on Sensation Seeking, Parent-child Relationship, Family Communication, Anger and Sex Desire Among Athletes, Athletes Using Whey and Normal Population. *Health Nexus*, 1(1), 40-47. https://doi.org/10.61838/hn.1.1.7
- Talaizadeh, F., Bakhtiyarpour, Saeed. (2016). The relationship between marital satisfaction and sexual satisfaction with couple mental health. *Thought & behavior in clinical psychology*, 10(40), 37-46. https://www.sid.ir/paper/172086/en
- Tavares, I. M., Schlagintweit, Hera E, Nobre, Pedro J, Rosen, Natalie O. (2019). Sexual well-being and perceived stress in couples transitioning to parenthood: A dyadic analysis. *International Journal of Clinical and Health Psychology*, 19(3), 198-208. https://doi.org/10.1016/j.ijchp.2019.07.004
- Van Donzel, L., Ouwens, M. A., & Van Alphen, S. P. J., Bouwmeester, S, Videler, A. C. (2021). The effectiveness of adapted schema therapy for cluster C personality disorders in older adults – integrating positive schemas. *Contemporary Clinical Trials Communications*, 21, 100715. https://doi.org/10.1016/j.conctc.2021.100715
- Young, J. E., Klosko, J. S., & Weishaar, M. E. (2003). Schema therapy. New York: Guilford. https://books.google.com/books?hl=fa&lr=&id=-9lTTxdyZoMC&oi=fnd&pg=PA317&dq=Young,+J.+E.,+Klosko,+J.+S.,+%26+Weishaar,+M.+E.+(2003).+Schema+therapy.+New+York:+Guilford,+254.+&ots=F2J\_oKzgFs&sig=HJWOYxoYGi4n9hpxO7DSHG07g94#v=onepage&q&f=fal
- Zainal, N. Z., Booth, Sara, Huppert, Felicia A. (2013). The efficacy of mindfulness-based stress reduction on mental health of

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E-ISSN: 3041-8798

- breast cancer patients: a meta-analysis. *Psycho-Oncology*, 22(7), 1457-1465. https://doi.org/10.1002/pon.3171
- Zhang, Q., Zhao, Heng, Zheng, Yaning. (2019). Effectiveness of mindfulness-based stress reduction (MBSR) on symptom variables and health-related quality of life in breast cancer patients—a systematic review and meta-analysis. *Supportive Care in Cancer*, 27(3), 771-781. https://doi.org/10.1007/s00520-018-4570-x
- Zolfaghari, S., Moradi, O., Ahmadian, H., & Shams Alizadeh, N. (2021). The Effects of Teaching Sexual Satisfaction Model on Couple Burnout [Original Atricle]. *Journal of Arak University of Medical Sciences*, 24(2), 246-255. https://doi.org/10.32598/jams.24.2.6168.1