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The Effectiveness of Schema Therapy on Anger Management and Rumination in Married Women with High Marital Dissatisfaction

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A B S T R A C T

Objective: The present study was conducted with the aim of examining the effectiveness of schema therapy on anger management and rumination in married women with high marital dissatisfaction.

Methods: This study employed a quasi-experimental design, utilizing a pretest-posttest control group with baseline assessment, post-intervention, and three-month follow-up measurements. A total of 30 married women with high marital dissatisfaction, who attended couples therapy clinics in the western part of Tehran between April and July 2022, were selected based on inclusion criteria and their willingness to participate in the research (with written informed consent obtained). These participants were randomly assigned to either the experimental group (schema therapy; n=15) or the control group (n=15) using random allocation. All participants completed the Anger Control Scale and Rumination Questionnaire at three stages of measurement. The therapy sessions were conducted in a group format over eight sessions, each lasting 1 to 1.5 hours, according to the schema therapy protocol. The hypotheses regarding the effectiveness of the intervention were analyzed using repeated measures analysis of variance (ANOVA).

Findings: The results of this study indicated that there was no significant difference in the mean variables of anger management and rumination between the two groups at the pretest stage, suggesting the homogeneity of the research groups at this stage. However, there were significant differences between the two groups at the posttest and follow-up stages, indicating the effectiveness of the intervention on the mentioned variables and the persistence of its effects at the follow-up stage. A comparison between the experimental and control groups also revealed significant differences in the components of anger management and rumination.

Conclusion: The results of this study suggest that the aforementioned therapy can be utilized as a psychological intervention to improve anger management and rumination in married women with high marital dissatisfaction.

Keywords: *Schema therapy, anger management, rumination, married women with high marital dissatisfaction.*

1. Introduction

Maintaining and continuing the family is of great importance. The family, as a social unit, is the center of growth and development, healing, and transformation of harm and damages. It is both the foundation for flourishing and the potential breakdown of relationships among its members (Ahmed et al., 2023). Marriage is considered the most significant contract in an individual's life. People marry for various reasons. Besides primary sexual desires, factors such as love, economic security, protection, emotional security, a sense of peace, and escaping loneliness drive the tendency to marry (Uzun et al., 2022). A successful marriage can meet many of an individual's psychological and physical needs in a safe environment (Kazemi & Motlagh, 2020).

One of the basic theoretical assumptions is that if individuals live in families with marital unity, they will be in a better state in terms of psychological health and well-being (Block et al., 2022). Numerous studies have confirmed this hypothesis for adult couples and their children (Pasaribu & Ananda, 2022). The family is introduced as an institution or social entity resulting from the marital bond between a man and a woman. Among the manifestations of human social life are healthy and constructive interactions among people and the presence of love for others, expressed through intimacy and empathy (Scarpina et al., 2022). The family is where various physical, intellectual, and emotional needs are met, and awareness of biological and psychological needs, as well as knowing how to satisfy them and being equipped with techniques to understand biological and psychological tendencies, is an undeniable necessity. A person's satisfaction with marital life is considered satisfaction with the family, and family satisfaction equates to life satisfaction, which, in turn, facilitates growth, material, and spiritual progress in society (Watkins & Roberts, 2020). Over time, some couples' lives may lead to separation, but the majority continue their shared life monotonously and tediously, resorting to alcohol, overeating, drug use, or illicit relationships to endure it (Nagy et al., 2023).

Women, as the most influential members of the family who bear the primary responsibility for managing this social unit, play a fundamental role in preserving and developing society (Heissel et al., 2023). In this context, emotions such as anger, when used inappropriately and excessively, can have significant effects, causing problems in interpersonal relationships and health. Individuals experience anger intelligently and convey it to others through speech and bodily reactions (Nolen-Hoeksema, 1991). Natural anger is essential for gaining the energy needed to achieve goals, helping to control situations, gaining the courage to assert oneself, and improving one's position within human groups. However, inappropriate expression of anger can disrupt communication with others and weaken one's position within the group (Wells & Papageorgiou).

Anger is an easy tool for blaming others, covering up mistakes, and concealing fears. The expression of anger can be disproportionately used to achieve personal benefits, control others, gain a sense of power, and attract attention (Sina et al., 2021). The increasing complexity of life and the growing variety of environmental stimuli, which, unlike in the past, are often unavoidable and unpredictable, necessitate new ways of coping with problems and adapting to life's challenges. In this regard, the need for methods to control anger to align it with the goals of civilization and the order of human society seems evident (Chen & Davis, 2021).

Among the other factors that can affect individuals' lives is rumination. Rumination refers to thinking about something to the extent that it becomes painful and distressing for the individual. Rumination has many harmful consequences, including poor problem-solving, low motivation, inhibition of effective behaviors, and disrupted cognition (Chentsova et al., 2023). Rumination is recognized as the continuous preoccupation with a particular thought or topic, revolving around a specific and ordinary axis, without immediate environmental demands associated with it. These thoughts are repetitive, focused on the causes and consequences of symptoms, and hinder adaptive problem-solving, leading to an increase in negative thoughts. Unwanted or intrusive thoughts are a significant problem for anxious individuals because the feeling of threat and negative emotions become constant for them. Rumination is defined as behaviors and thoughts that passively focus individuals' attention on their depressive symptoms and the meanings of these symptoms (Cox, 2021).

Today, various studies have examined the effectiveness of different treatments on existing variables. Schema therapy is based on Young's theory. Schema therapy combines cognitive-behavioral therapy, object relations theory, gestalt therapy, and attachment theory into a systematic treatment model (Captari et al., 2023). In schema therapy, in addition to cognitive-behavioral methods and the use of experiential techniques at its core, experiential techniques such as imagery rescripting and chair work are employed (Campbell & Løkken, 2023). It also addresses conflicts within the family, which can be related to gender differences in rumination (Mahmoodi et al., 2016). Given the

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aforementioned issues, the main research question of the present study is whether schema therapy affects anger control and rumination in married women with high marital dissatisfaction.

2. Methods

2.1. Study Design and Participants

The present study is a quasi-experimental research study utilizing a pretest-posttest control group design. The statistical population consisted of all married women who referred to counseling centers and psychological services clinics, particularly couples therapy clinics, in the western region of Tehran between April and July 2022. From this population, 30 women were selected and randomly assigned to the experimental (15 participants) and control (15 participants) groups. The inclusion and exclusion criteria for this study were as follows: age range of 35-45 years, no history of mental illness or hospitalization in a psychiatric ward, no history of neurological or psychological disorders and hospitalization, ability to participate in group therapy sessions, willingness to cooperate, and for the experimental group, not missing more than two intervention sessions and lack of desire to continue participation.

After the proposal was approved and written consent was obtained from the Deputy of Education at the Faculty of Psychology, Islamic Azad University, Ardabil Branch, the researcher visited the municipality of the western region of Tehran and obtained written consent from the municipality in the mentioned region. By visiting the health houses in the western region of Tehran, introducing themselves, and explaining the research objectives, married women with high marital dissatisfaction who met the participation criteria (specified criteria) were identified. These women were randomly assigned in pairs to the experimental and control groups. After obtaining written and verbal consent from them, the questionnaires were provided at the beginning of the study (pretest phase) for completion. The mentioned interventions were conducted according to the introduced treatment protocols in group sessions (only for the experimental group) for eight sessions, each lasting 1 to 1.5 hours. At the final session, the posttest phase was conducted for both the experimental and control groups. Follow-up was conducted for both groups after three months. The data were analyzed to extract the results.

2.2. Measures

2.2.1. Rumination

This questionnaire was developed by Nolen-Hoeksema and Morrow in 1991 to assess rumination. It consists of 22 items, rated on a four-point Likert scale ranging from 1 to 4 (Nolen-Hoeksema, 1991). Papageorgiou and Wells reported the reliability of this scale using Cronbach's alpha between .88 and .92, and the intraclass correlation coefficient was reported at .75, indicating high reliability and validity of this scale (Wells & Papageorgiou). In a study conducted by Sina, Golshani, and colleagues (2021), the Cronbach's alpha of this scale was found to be .90 (Sina et al., 2021).

2.2.2. Anger Management

The purpose of State-Trait Anger Expression Inventory-2 (STAXI-2) is to measure state-trait anger and the expression and control of anger. It was developed by Spielberger and colleagues in 1985. This inventory is a paper-and-pencil measure designed for the age group of 16-30 years and consists of 57 items. The validity and reliability of this inventory have been satisfactory in various studies. Spielberger reported Cronbach's alpha coefficients for state anger (.93), trait anger (.87), anger feeling (.85), verbal anger expression (.87), physical anger expression (.88), angry temperament (.83), angry reaction (.70), outward anger expression (.67), inward anger expression (.80), internal anger control (.91), and external anger control (.83). High internal consistency between scales and subscales of anger and its positive correlation with other anger and hostility measures indicate its appropriate validity (Asghari et al., 2011; Waters et al., 2022).

2.3. Intervention

2.3.1. Schema Therapy

The schema therapy intervention consists of eight sessions designed to help participants understand and address maladaptive schemas that contribute to their psychological distress. Each session introduces specific schemas, explores their impact on participants' lives, and equips them with tools and strategies to manage and modify these schemas effectively. The sessions are structured to provide education, self-reflection, and practical exercises, with a focus on gradual progress and reinforcement of concepts over time (Askari et al., 2017).

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Session 1: Introduction and Understanding of Maladaptive Schemas

In the first session, participants are introduced to each other and invited to discuss their expectations for the therapy sessions. The session begins with an explanation of Body Dysmorphic Disorder (BDD), its prevalence among students, and the related treatment options. Participants are then introduced to the concept of maladaptive schemas, particularly the early maladaptive schemas and their associated domains. The session concludes with the distribution of the first week's handouts and meditation CDs, along with the assignment for the upcoming week.

Session 2: Exploration of Disconnection and Rejection Schemas

The second session starts with a review of the previous week's assignment. Participants are then introduced to schemas related to disconnection and rejection, including abandonment/instability, mistrust/abuse, emotional deprivation, defectiveness/shame, and social isolation/alienation. The session includes discussions on how these schemas manifest in their lives and the associated cognitive, emotional, and behavioral patterns. Participants receive the second session's handouts and a body scan recording as part of their homework.

Session 3: Examination of Impaired Autonomy and Performance Schemas

In the third session, participants delve into schemas related to impaired autonomy and performance, such as dependence/incompetence, vulnerability to harm or illness, and enmeshment/undeveloped self. The discussion focuses on the expectations individuals have of themselves and their environment, comparing these with their actual abilities to function independently and succeed. The session ends with the distribution of the third session's handouts and the assignment for the following week.

Session 4: Focus on Impaired Limits and Other Schemas

The fourth session introduces participants to the schemas of impaired limits, including entitlement/grandiosity, insufficient self-control/self-discipline, and subjugation. The session examines how these schemas can lead to interpersonal difficulties and internal conflicts. Participants are encouraged to reflect on how these schemas influence their daily lives and relationships. The session concludes with the distribution of the handouts for the week.

Session 5: Examination of Other-Directedness and Over-Vigilance/Inhibition Schemas

In the fifth session, participants learn about schemas related to other-directedness, such as self-sacrifice, approval-seeking/recognition-seeking, and subjugation of emotions. The discussion also covers over-vigilance and inhibition schemas, including emotional inhibition and negativity/pessimism. The session explores how these schemas lead to self-neglect, over-conformity, and suppression of emotions, especially anger. Participants receive handouts for further exploration.

Session 6: Understanding Over-Vigilance and Emotional Inhibition

The sixth session focuses on the emotional inhibition schema, exploring areas where inhibition is applied, such as the suppression of anger, positive impulses (e.g., happiness, affection, sexual excitement), and vulnerability. Participants also discuss the excessive emphasis on rationality and the neglect of emotions. The session includes practical exercises for expressing and managing emotions in a healthy way. Handouts for the next session are distributed.

Session 7: Review of Over-Vigilance and Criticism Schemas

In the seventh session, participants review the over-vigilance schemas, particularly the unrelenting standards/hypercriticalness schema. The session includes a comprehensive review of all the schemas discussed throughout the therapy, allowing participants to reflect on their progress and challenges. The focus is on recognizing patterns of excessive self-criticism and perfectionism and developing strategies to mitigate their effects.

Session 8: Program Review and Future Planning

The final session is dedicated to reviewing the entire therapy program. Participants are encouraged to discuss their experiences, insights, and progress. The session includes a final examination of the schemas, with a focus on future planning and strategies to maintain the gains made during the therapy. Participants are given the opportunity to ask questions and share their plans for continued self-improvement beyond the therapy sessions.

2.4. Data Analysis

The hypotheses regarding the effectiveness of the intervention were analyzed using repeated measures analysis of variance (ANOVA) via SPSS 25 software.

3. Findings and Results

In this study, the effectiveness of schema therapy on components of anger management and rumination was examined in 30 couples (15 couples in the control group and 15 couples in the experimental group). The mean and

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standard deviation of the age of female participants in the control group were 35.03 ± 4.59 years, and in the schema therapy experimental group, it was 35.03 ± 4.59 years. A comparison of means using analysis of variance indicated no significant difference in the mean age between the two groups.

Table 1

Descriptive Statistics for Mean and Standard Deviation of Rumination and Anger Management Variables of Participants in the Study

Group	Variable	Pretest M (SD)	Posttest M (SD)	Follow-up M (SD)
Experimental	Rumination	14.30 (1.97)	8.15 (1.26)	8.55 (1.43)
Control	Rumination	13.85 (2.07)	13.95 (1.76)	13.95 (1.90)
Experimental	Anger Management	14.30 (2.05)	7.55 (1.70)	8.20 (1.60)
Control	Anger Management	13.30 (1.97)	12.90 (1.99)	13.40 (2.08)

As shown in Table 1, the mean and standard deviation of the rumination variable for participants in the experimental group (schema therapy) decreased from 14.30 ± 1.97 in the pretest to 8.15 ± 1.26 in the posttest and further to 8.55 ± 1.43 in the follow-up stage. In the control group, the rumination variable remained relatively stable, with 13.85 ± 2.07 in the pretest, 13.95 ± 1.76 in the posttest, and 13.95 ± 1.90 in the follow-up. The mean and standard deviation of the anger management variable for participants in the experimental group (schema therapy) decreased from 14.30 ± 2.05 in the pretest to 7.55 ± 1.70 in the posttest and further to 8.20 ± 1.60 in the follow-up stage. In the control group, the anger management variable remained relatively stable, with 13.30 ± 1.97 in the pretest, 12.90 ± 1.99 in the posttest, and 13.40 ± 2.08 in the follow-up.

The results of the Shapiro-Wilk test indicated that the assumption of normality for the data regarding anger management and rumination in the pretest, posttest, and follow-up stages was met ($p > .05$). In addition to examining differences across the three measurement stages, the research hypotheses also considered differences between the control and experimental groups. Therefore, repeated measures analysis of variance was used. The assumptions of repeated measures ANOVA were first examined.

Schema therapy was found to be effective in managing anger and rumination in married women with high marital dissatisfaction.

Table 2

Multivariate Analysis of Variance (MANOVA) Results for Posttest Scores on Anger Management and Rumination

Test Name	Value	F	df	Error df	Significance Level	Partial Eta Squared	Power
Pillai's Trace	.948	16.815	6	112	.001	.474	.95
Wilks' Lambda	.134	31.823	6	110	.001	.643	.95
Hotelling's Trace	5.875	52.878	6	108	.001	.746	.95
Roy's Largest Root	5.770	107.701	6	56	.001	.852	.95

As shown in Table 2, the significance levels for all tests ($p < .001$) indicate significant differences in the components of anger management and rumination between the schema therapy group and the control group. Based on the partial eta squared, 47% to 85% of the observed differences among individuals can be attributed to the influence of the independent variable, i.e., the schema therapy intervention. Additionally, with a statistical power of .95, which is above .80, the sample size used for the study is considered acceptable. The results of the significant differences for each dependent variable are provided below.

Table 3

Multivariate Analysis of Variance (MANOVA) Results for Rumination Variable in the Posttest Stage

Variable	Sum of Squares	df	Mean Square	F	Significance Level	Partial Eta Squared
Rumination	2289.700	2	1144.850	63.808	.001	.691
Trait Anger	1423.333	2	711.667	30.436	.001	.517
Angry Temperament	830.833	2	415.417	55.311	.001	.660
External Anger Control	334.933	2	166.467	46.159	.001	.618

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Internal Anger Control	574.713	2	415.417	39.311	.001	.450
Overall Anger Expression Index	870.987	2	348.200	60.009	.001	.538

Based on Table 3, since the significance level for rumination is less than .01, the differences between the two groups in this component are confirmed. Therefore, it can be said that schema therapy has a significant impact on changing the rumination component in married women with high marital dissatisfaction. Similarly, the significance level for the components of trait anger, angry temperament, and external anger control is less than .01, confirming the differences between the two groups in these components. Thus, it can be concluded that schema therapy has a significant effect on changing these components of anger control in married women with high marital dissatisfaction.

4. Discussion and Conclusion

Based on the research hypotheses, schema therapy is effective in improving the variables of anger management and rumination in married women with high marital dissatisfaction.

The results of the present study indicated that there was no significant difference between the mean variables of anger management and rumination in the pretest stage between the two groups. However, significant differences were observed between the experimental and control groups in the posttest and follow-up stages, suggesting the effectiveness of schema therapy on the variables. Given these findings, there is no evidence to reject the hypotheses, and they are confirmed. Schema therapy was effective in improving anger management and rumination, with effects that persisted over time compared to the control group.

In explaining the findings of the present study, it can be said that cognitive techniques in schema therapy helped participants realize that their beliefs, independent of physiological issues, particularly during periods of disorder, are the reasons for their feelings of anger, reduced flexibility, increased anxiety and depression, and decreased social functioning. In the first phase, these beliefs were identified using cognitive techniques, and in subsequent phases, they were challenged. Schemas are considered cognitive structures and organizations through which individuals can determine, interpret, categorize, and evaluate their experiences. This structured organization is often adaptive and significant to the extent that it facilitates information processing and requires fewer controlled cognitive resources. These schemas broadly reflect an individual's absolute negative views of themselves (Ammari et al., 2023; Rada et al., 2022; Raftar Aliabadi et al., 2020).

On the other hand, these schemas align with beliefs such as loss, worthlessness, incompetence, unlovability, and self-defeat, which are factors contributing to high marital dissatisfaction among married women. The results showed that participants in the experimental group were able to use cognitive techniques to test their schemas. These techniques help patients question their schemas, develop a healthy voice in their minds, and thus empower their healthy mindset regarding their body image.

This therapeutic approach helps patients evaluate the validity of their schemas. Individuals view their schemas as external truths and can fight against them using objective (derived from cognitive techniques) and experiential (results of experiential techniques) evidence. This involves first recognizing their dysfunctional core beliefs, then identifying the key words of the beliefs and their meanings, the percentage of belief in the dysfunctional beliefs, finding the developmental roots of the core belief, identifying the pros and cons of the belief, and finally summarizing all these techniques in a training card to further recognize their maladaptive schemas and identify their connection to current life issues and problems. This approach posits that specific schemas are active in every type of psychological distress (Ammari et al., 2023; Raftar Aliabadi et al., 2020).

Another explanation for the findings is that cognitive techniques help clients distance themselves from their schemas. Additionally, they help clients view schemas not as absolute truths about themselves, but as intrusive entities. Therefore, reducing the activity of maladaptive schemas can play an important role in reducing rumination in individuals. Experiential techniques, by altering painful childhood memories, change mental images, bodily sensations, and emotional experiences, preventing the harmful impact of recalling past painful memories. Given that experiential techniques are focused on emotions, it seems these techniques help individuals become aware of and accept their emotions, reorganize them, and with new learning, facilitate interpersonal emotional regulation and self-soothing, paving the way for improving schemas.

Experiential techniques such as imagery rescripting help individuals recognize their core schemas, understand their developmental roots, and connect their memories to their current life. Additionally, these techniques enhance the

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patient's understanding and help them move from rational cognition to emotional experience, transitioning from cold to hot cognition. One of the major experiential techniques is imagery and rescripting. Essentially, any intervention that attempts to activate and modify schemas related to threat or trauma necessarily involves confronting the situations the client avoids. In the technique of imaginary dialogue, expressing core emotions like anger prepares the ground for emotional catharsis, distancing from the schemas, and ultimately fosters compassion towards the person who caused the harm in that memory and finally towards the wounded child (Mohammadi et al., 2019; Nikoogoftar & Sangani, 2020; Rezaei et al., 2015).

Another advantage of schema therapy, especially with experiential techniques, is its specificity, such as recreating the roles of significant individuals for each person based on the unmet needs in that memory. Typically, individuals with high marital dissatisfaction need to be understood, empathized with, and loved. These needs were unmet during childhood by significant figures in their lives. With the help of experiential techniques, their painful childhood memories are reconstructed in such a way that the child's needs in that mental image are met with the therapist's help. The individual learns how to meet these needs in their current life. Also, using techniques like letter writing, individuals with body dysmorphic disorder find an opportunity to express their rights, recognize their feelings, and address their unmet needs. When these emotional needs are partially met during the therapeutic process, the foundation is laid for improving schemas because maladaptive schemas are essentially formed due to unmet emotional needs, which is why schema therapy techniques impact individuals' rumination (Abedi Shargh et al., 2017; Ghadampour et al., 2018; Ghadiani, 2020).

The most important aspect that can be highlighted in the therapeutic process compared to conventional treatments is the compassionate and humanistic nature of this therapy. Schema therapy, rather than viewing psychological disorders as abnormal, normalizes them and seeks to change and modify their dysfunctional and maladaptive aspects, playing a significant role in reducing insecure attachment and, in general, improving the quality of life.

Another explanation of the study's findings is that behavioral techniques help clients replace schema-driven behavioral patterns with healthier coping styles. Imagery rescripting, aimed at behavioral pattern-breaking, helps distance individuals from avoidant, overcompensatory, and submissive coping styles. In this phase, the therapist and patient compile a list of new behaviors and discuss the advantages and disadvantages of each. Then, they summarize how to replace problematic behaviors with healthy ones and determine the order of behavioral therapy goals. The main reason for the formation of maladaptive schemas is unmet emotional needs, which are partially addressed in group therapy during interactions with the therapist and other group members, teaching the individual how to meet these needs in their personal life and relationships with significant others. Therapeutic alliance is an essential factor in creating therapeutic change. A positive therapeutic alliance with the therapist provides a corrective emotional experience for patients, which may be one reason for the therapy's effectiveness. A positive therapeutic alliance creates a comfortable and safe environment where the patient feels secure enough to approach their frightening emotions. The safe environment resulting from the therapeutic alliance can allow the patient to be less defensive and become aware of fears they typically avoid. This environment not only allows the patient to become aware of painful emotions but also supports them in engaging in new behaviors. In this environment, the patient's emotional needs are generally met with the help of the therapist and other group members, leading to a re-education of the individual's experiences.

5. Suggestions and Limitations

This study had several limitations that should be noted. The sample size was relatively small, which may limit the generalizability of the findings to a broader population. Additionally, the study was conducted within a specific cultural context in Tehran, which may affect the applicability of the results to other cultural settings. The reliance on self-reported measures for assessing variables such as anger management and rumination could also introduce bias, as participants might underreport or overreport their behaviors due to social desirability or recall bias. Lastly, the study's design did not include a long-term follow-up beyond three months, which limits the understanding of the long-term effectiveness of the schema therapy intervention.

Future research should consider expanding the sample size and including participants from diverse cultural backgrounds to enhance the generalizability of the findings. Longitudinal studies with extended follow-up periods would provide valuable insights into the long-term effects of schema therapy on anger management and rumination.

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Additionally, incorporating a mixed-methods approach that includes qualitative interviews could offer a deeper understanding of the participants' experiences and the mechanisms underlying the changes observed. Future studies might also explore the comparative effectiveness of schema therapy against other therapeutic modalities in treating anger and rumination in different populations.

The findings of this study suggest that schema therapy can be an effective intervention for improving anger management and reducing rumination in married women with high marital dissatisfaction. Mental health practitioners should consider incorporating schema therapy techniques into their practice, particularly when working with clients experiencing similar issues. Training programs for therapists could emphasize the use of schema therapy as a structured approach to address deeply ingrained cognitive patterns. Furthermore, the insights gained from this study could inform the development of targeted interventions for couples therapy, focusing on modifying maladaptive schemas that contribute to marital dissatisfaction and related emotional difficulties.

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.

References

Abedi Shargh, N., Ahovan, M., Doostian, Y., Aazami, Y., & Hoosaini, S. (2017). The Effectiveness of Emotional Schema Therapy on Clinical Symptom and Emotional Schemas in Patients with Obsessive-Compulsive Disorder. *Clinical Psychology Studies*, *7*(26), 149-163. https://doi.org/10.22054/jcps.2017.7396

Ahmed, Z., Hussain, A. H., Ahmed, M. N., Al Aziz Lalin, S., Endut, N., & Sultana, S. (2023). Do perceived working conditions increase life satisfaction? Case of SME workers in Bangladesh. *Sn Social Sciences*, *3*(1), 1-24. https://doi.org/10.1007/s43545-022-00597-0

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

Asghari, M. M., Moghaddasin, M., & Dibajnia, P. (2011). The Reliability and Criterion Validity of a Farsi Version of the State-Trait Anger Expression Inventory-2 (STAXI-2) in a Clinical Sample. *Clinical Psychology and Personality*, *9*(2), 75-94. https://www.sid.ir/paper/208687/en

Askari, M., Naderi, F., Ehteshamzadeh, P., Asgari, P., & Heidari, A. (2017). The Effectiveness of Combination Intervention of Schema Therapy and Attachment-Based Therapy on Parent - child Relationships [Applicable]. *Iranian Journal of Pediatric Nursing*, *4*(1), 7-15. https://doi.org/10.21859/jpen-04012

Block, C. J., Gupta, A., & Li, A. (2022). Can a relationship buffer women leaders against the negative consequences of anger expression? *Journal of Vocational Behavior*, *133*, 103665. https://doi.org/10.1016/j.jvb.2021.103665

Campbell, J. A., & Løkken, I. M. (2023). Inside Out: A Scoping Review on Optimism, Growth Mindsets, and Positive Psychology for Child Well-Being in ECEC. *Education Sciences*, *13*(1), 29. https://doi.org/10.3390/educsci13010029

Captari, L. E., Sandage, S. J., Vandiver, R. A., Jankowski, P. J., & Hook, J. N. (2023). Integrating positive psychology, religion/spirituality, and a virtue focus within culturally responsive mental healthcare. In *Handbook of Positive Psychology, Religion, and Spirituality* (pp. 413-428). https://doi.org/10.1007/978-3-03174-182274-5_26

Chen, Z. J., & Davis, D. E. (2021). Religious Homogamy Affects the Connections of Personality and Marriage Qualities to Unforgiving Motives: Implications for Couple Therapy. *Religions*, *12*(11), 917. https://doi.org/10.3390/rel12110917

Chentsova, V. O., Bravo, A. J., Mezquita, L., Pilatti, A., Hogarth, L., & Cross-Cultural Addictions Study, T. (2023). Internalizing symptoms, rumination, and problematic social networking site use: A cross national examination among young adults in seven countries. *Addictive behaviors*, *136*, 107464. https://doi.org/10.1016/j.addbeh.2022.107464

Cox, S. J. (2021). *Gender Differences in Reporting Anger and Social Desirability Bias* The University of Texas at San Antonio]. https://search.proquest.com/openview/1140f0a8a1b5730fe3213b841222ee1c/1?pq-origsite=gscholar&cbl=18750&diss=y

Ghadampour, E., Hosseini Ramaghani, N., Moradi, S., Moradiyani Gizeh Rod, G., & Alipour, K. (2018). Effectiveness of Emotional Schema Therapy on Decrease of Post-Event Rumination and Cognitive Avoidance in People With Clinical Symptoms of Social Anxiety. *Internal Medicine Today*, *24*(2), 111-118. https://www.magiran.com/paper/1832903

Ghadiani, M., Nejad Hosseini, Saeideh. (2020). Comparing the effectiveness of schema therapy and therapy based on emotional efficiency on rumination and emotional expression of divorced women in Tehran. *Applied Family Therapy Journal (AFTJ)*, *1*(3), 188-203. https://journals.kmanpub.com/index.php/aftj/article/view/260

Heissel, A., Pietrek, A., Kangas, M., der Kaap-Deeder, V., & Rapp, M. A. (2023). The Mediating Role of Rumination in the Relation between Basic Psychological Need Frustration and Depressive Symptoms. *Journal of clinical medicine*, *12*(2), 395. https://doi.org/10.3390/jcm12020395

Kazemi, M., & Motlagh, F. Z. (2020). Prediction of Marital Dissatisfaction Based on the Resilience, Marital Commitment and Rumination. *International Journal of Applied Behavioral Sciences*, *7*(4), 1-0. https://journals.sbmu.ac.ir/ijabs/article/view/27289

Mahmoodi, T., Bassak Nejad, S., & Mehrabizadeh Honarmand, M. (2016). The effectiveness of anger management based on positive psychology on cognitive emotion regulation and aggression rumination in female students. *Psychological Achievements*, *23*(2), 137-156. https://doi.org/10.22055/psy.2017.12584

Mohammadi, H., Sepehri Shamlou, Z., & Asghari Ebrahim Abad, M. J. (2019). The Effectiveness of Group Emotional Schema Therapy on Decreasing Loneliness and Rumination in Divorced Women. *Journal of Woman and Family Studies*, *7*(2), 115-136. https://doi.org/10.22051/jwfs.2020.19718.1708

Nagy, L. M., Shanahan, M. L., & Seaford, S. P. (2023). Nonsuicidal self-injury and rumination: A meta-analysis. *Journal of Clinical Psychology*, *79*(1), 7-27. https://doi.org/10.1002/jclp.23394

Nikoogoftar, M., & Sangani, A. (2020). The Effectiveness of schema therapy on rumination, loneliness and general health of divorced women. *Knowledge & Research in Applied Psychology*, *21*(2), 1-12. https://doi.org/10.30486/jsrp.2019.570365.1385

Nolen-Hoeksema, S. (1991). Responses to Rumination and their effects on the duration of depressive episodes. *Journal of abnormal psychology*, *100*(4), 569-582. https://doi.org/10.1037/0021-843X.100.4.569

Pasaribu, R. E., & Ananda, M. W. (2022). Revenge Through Haunting: Expression of Women's Anger in the Movies, Tookaidoo Yotsuya Kaidan and Sundel Bolong. *Humaniora*, *34*(1), 10-22. https://doi.org/10.22146/jh.68223

Rada, C., Gheonea, D., Țieranu, C. G., & Popa, D. E. (2022). Diagnosis and Psychotherapeutic Needs by Early Maladaptive Schemas in Patients With Inflammatory Bowel Disease [Original Research]. *Frontiers in psychology*, *12*. https://doi.org/10.3389/fpsyg.2021.807107

Raftar Aliabadi, M. R., Shareh, H., & Toozandehjani, H. (2020). Comparison of the Effectiveness of Schema Therapy with Mindfulness and Forgiveness Therapy on Clinical Symptoms, Emotional Responses in Women Affected by Wife Betrayal. *nkums-journal*, *11*(4), 50-61. https://doi.org/10.52547/nkums.11.4.52

Rezaei, M., Ghadampur, E., Rezaei, M., & Kazemi, R. (2015). Effectiveness of Emotional Schema Therapy on Rumination and Severity of Depression in Patients with Major Depressive Disorder. *Journal of Clinical Psychology*, *7*(4), 45-58. https://doi.org/10.22075/jcp.2017.2217

Scarpina, F., Ghiggia, A., Vaioli, G., Varallo, G., Capodaglio, P., Arreghini, M., Castelnuovo, G., Mauro, A., & Castelli, L. (2022). Altered recognition of fearful and angry facial expressions in women with fibromyalgia syndrome: an experimental case-control study. *Scientific reports*, *12*(1), 1-4. https://doi.org/10.1038/s41598-022-25824-9

Sina, O., Golshani, F., & Badiee, M. M. (2021). The mediating role of emotion regulation strategies in the relationship between rumination and aggression in bipolar patients. *Journal of Clinical Psychology*, *13*(1), 1-12. https://doi.org/10.31838/ijpr/2021.13.01.761

Uzun, B., LeBlanc, S., Guclu, I. O., Ferrari, J. R., & Aydemir, A. (2022). Mediation effect of family environment on academic procrastination and life satisfaction: Assessing emerging adults. *Current Psychology*, *41*(2), 1124-1130. https://doi.org/10.1007/s12144-021-02652-0

Waters, L., Algoe, S. B., Dutton, J., Emmons, R., Fredrickson, B. L., Heaphy, E., Moskowitz, J. T., Neff, K., Niemiec, R., Pury, C., & Steger, M. (2022). Positive psychology in a pandemic: Buffering, bolstering, and building mental health. *The Journal of Positive Psychology*, *17*(3), 303-323. https://doi.org/10.1080/17439760.2021.1871945

Watkins, E. R., & Roberts, H. (2020). Reflecting on rumination: Consequences, causes, mechanisms and treatment of rumination. *Behaviour Research and Therapy*, *127*, 103573. https://doi.org/10.1016/j.brat.2020.103573

Wells, A., & Papageorgiou, C. Relationships between Rumination, obsessive-compulsive symptoms, and meta-cognitive beliefs. *Behaviour Research and Therapy*, *3*, 899-913. https://doi.org/10.1016/S0005-7967(98)00070-9

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