Structural Equation Modeling of Marital Satisfaction Based on Early Maladaptive Schemas with the Mediating Role of Self-Compassion

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Article Info	ABSTRACT
	Objective: The present study aimed to develop and test a structural equation model (SEM) of marital satisfaction based on early maladaptive schemas, with self-compassion serving as a mediating variable. **Methods**: This applied study employed a descriptive–correlational design, specifically structural equation modeling. Data were collected using three standardized instruments: the ENRICH Marital Satisfaction Questionnaire (Enrich, 1987), the Young Schema Questionnaire (Young, 1998), and the Self-Compassion Scale (2023). Inferential statistical analyses were conducted using AMOS software to evaluate the proposed structural model. **Results**: The findings indicated that the structural model of marital satisfaction based on early maladaptive schemas, mediated by self-compassion, demonstrated acceptable goodness-of-fit indices. The results support the mediating role of self-compassion in the relationship between early maladaptive schemas and marital satisfaction. **Conclusions**: Overall, the proposed model showed satisfactory fit, suggesting that self-compassion meaningfully mediates the impact of early maladaptive schemas on marital satisfaction. These findings highlight the importance of addressing maladaptive schemas and cultivating self-compassion in therapeutic and educational interventions designed to enhance marital well-being.

Introduction

Marriage, long regarded as a key social institution in shaping the family, is one of the most influential experiences in an individual's life. However, the reasons for marriage and couples' expectations have changed considerably in recent years (Ornović et al., 2020). Some studies have attempted to address the question of how an individual's early childhood experiences may influence them in adulthood. Schema therapy theory emphasizes early relationships within the family environment and considers them influential on later relationships. Research based on developmental psychopathology also highlights the association between early negative educational and familial experiences and adults' difficulties in performing developmental tasks, psychological problems, and dysfunctional marital patterns (Göbel et al., 2019).

According to schema therapy theory, one of the major factors associated with marital dissatisfaction is early maladaptive schemas. Early maladaptive schemas refer to incorrect feelings, beliefs, and assumptions that influence people's interpretations, perceptions, and behaviors (Arntz et al., 2022). Farrell et al. (2012) state that maladaptive schemas develop as a result of unmet basic emotional needs in childhood and are associated with mental health. Schemas operate at the deepest cognitive levels, often outside conscious awareness, and make individuals psychologically vulnerable to disturbances such as anxiety, depression, dysfunctional communication, addiction, and psychosomatic disorders (Farrell & Shaw, 2022). In a study, Koruk and Ozabacı (2014) found that in marital relationships, early maladaptive schemas lead to negative life events, and the presence of such events creates excessive psychological pressure and dissatisfaction with life.

It is likely that certain psychological variables may buffer the negative effects of early maladaptive schemas and moderate communication patterns. Among these variables is self-compassion, which involves being open to and present with one's own suffering, experiencing care and kindness toward oneself, adopting a non-judgmental and understanding attitude toward one's inadequacies and failures, and recognizing one's personal experiences as part of the broader human experience. Self-compassion is considered a relatively new construct linked to cognitive-behavioral therapeutic approaches (Neff et al., 2019).

A substantial body of research has examined the impact of self-compassion on marital satisfaction. For instance, Lassri et al. (2023) demonstrated that self-compassion, by enhancing self-acceptance,

helps couples adopt a more realistic perspective on their conflicts. This realistic outlook significantly reduces verbal and physical tension between partners, increases intimacy, and even mitigates the effects of traumatic childhood experiences. Despite these findings, many clients and couples who seek counseling still experience marital dissatisfaction or even emotional divorce. They search for solutions or, out of frustration, consider separation. Counseling sessions often reveal that several factors contribute to their situation, particularly childhood experiences and the absence of appropriate communication patterns.

Although some studies have explored the effects of these factors on marital satisfaction, few have examined the role of self-compassion as a mediating or corrective link within established communication frameworks. Moreover, given the substantial cultural and social changes in society regarding marriage, family, mental health, and relationship patterns among Iranian couples, this study aims to address the following question: Does the proposed model for predicting marital satisfaction based on early maladaptive schemas, mediated by self-compassion, demonstrate acceptable fit?

Material and Methods

The present study, in terms of nature and objective, falls within the category of applied research. From a methodological standpoint, it is a descriptive–correlational study and, more specifically, employs a structural equation modeling (SEM) approach. For the inferential analysis of the data, AMOS software was used to conduct the structural equation modeling procedures.

The statistical population consisted of married men and women who visited the Shaayesteh Parvar, Rasta, Rokan, and Ravanrah psychology clinics in Tehran during the fiscal years 2023–2024 (1402–1403 in the Iranian calendar). Considering the number of variables in the present study and based on general SEM guidelines, the desired sample size was estimated to be approximately 350 participants to ensure adequate statistical power for testing the structural model. However, due to practical constraints and reliance on voluntary participation, a final sample of 200 married men and women was randomly selected from among the clients of the aforementioned clinics, and they completed the study questionnaires. The sampling method used in this study was convenience sampling.

Instruments

Enrich Marital Satisfaction Questionnaire (EMSQ): The Enrich Marital Satisfaction Questionnaire was developed by Olson, Fournier, and Druckman in 1987. The instrument consists of 47 items and is used to assess potential problem areas or identify strengths within marital relationships. Items are rated on a 5-point Likert scale. Construct validity has been supported through its correlation with the Marital Adjustment Questionnaire (r = 0.65, p < .01). The correlation of Enrich scores with components of family satisfaction ranges from 0.41 to 0.60, and with components of life satisfaction from 0.32 to 0.41, demonstrating satisfactory construct validity. A test–retest reliability coefficient of 0.88 was reported (Ahadi, Hooman, Kooshki, & Shah-Nazari, 2012).

Young Schema Questionnaire (YSQ): The Early Maladaptive Schema Questionnaire, developed by Young in 1998, consists of five schema domains: (1) Disconnection and Rejection, (2) Impaired Autonomy and Performance, (3) Other-Directedness, (4) Overvigilance and Inhibition, and (5) Impaired Limits. The questionnaire contains 90 items assessing 18 early maladaptive schemas, including: emotional deprivation, abandonment/instability, mistrust/abuse, social isolation, defectiveness/shame, failure, dependence/incompetence, vulnerability to harm or illness, undeveloped self, subjugation, self-sacrifice, emotional inhibition, unrelenting standards, entitlement/grandiosity, insufficient self-control/self-discipline, approval-seeking, pessimism/worry, and self-punishment (Dezfouli, Rezaei, & Sadeghi, 2016). This self-report instrument uses a 6-point Likert scale. Results from the first comprehensive psychometric evaluation by Schmidt, Joiner, Young, and Telch (1995) showed internal consistency coefficients ranging from .83 (for Undeveloped Self) to .96 (for Defectiveness/Shame). Test–retest reliability in a non-clinical sample ranged from .59 to .82 (Young et al., translated by Hamidpour, 2007).

Self-Compassion Scale (SCS): The Self-Compassion Scale was developed by Neff and consists of 26 items rated on a Likert scale. Although the components of this scale—self-kindness, common humanity, and mindfulness—are conceptually distinct, they are theoretically interrelated. Factor analyses revealed six subscales that reflect the positive and negative poles of these components: self-kindness, self-judgment, common humanity, isolation, mindfulness, and over-identification (Neff, 2023). In the study conducted by Khosravi et al. (2013), Cronbach's alpha for the total scale was reported as 0.76. Alpha coefficients for the subscales were as follows: self-kindness (0.81), self-judgment (0.79), common humanity (0.84), isolation (0.85), mindfulness (0.80), and over-identification (0.83). The instrument has demonstrated acceptable validity in previous research.

Results

Table 1 presents the fit indices obtained from the confirmatory factor analysis (CFA) conducted on the measurement model.

Table 1. Fit Indices for the Confirmatory Factor Analysis of the Measurement Model

Index	Acceptable Range	Good Fit	Excellent Fit	Observed Value	Fit Evaluation
χ^2	—	—	—	453.73	—
df	—	—	—	125	—
p	$< .05$	$< .01$	$< .001$	.001	Excellent
χ^2/df	2–3	3–4	4–5	3.62	Good
RMSEA	$< .10$	$< .08$	$< .05$	.072	Good
SRMR	$< .10$	$< .08$	$< .05$	.049	Excellent
CFI	$< .80$	$> .90$	$> .95$	.96	Excellent
NFI	$< .80$	$> .90$	$> .95$	.93	Good
NNFI	$< .80$	$> .90$	$> .95$	.94	Good
GFI	$< .80$	$> .90$	$> .95$	.93	Good
AGFI	$< .80$	$> .90$	$> .95$	.90	Good

As shown in Table 1, all model fit indices fall within the good to excellent range, indicating that the measurement model adequately represents the data. The excellent values obtained for indices such as SRMR and CFI, along with the good values for RMSEA, NFI, and GFI, collectively confirm that the empirical data support the conceptual model proposed in this study.

Figure 1 illustrates the estimated parameters of the structural model, including factor loadings, significance levels, and both standardized and unstandardized direct path coefficients.
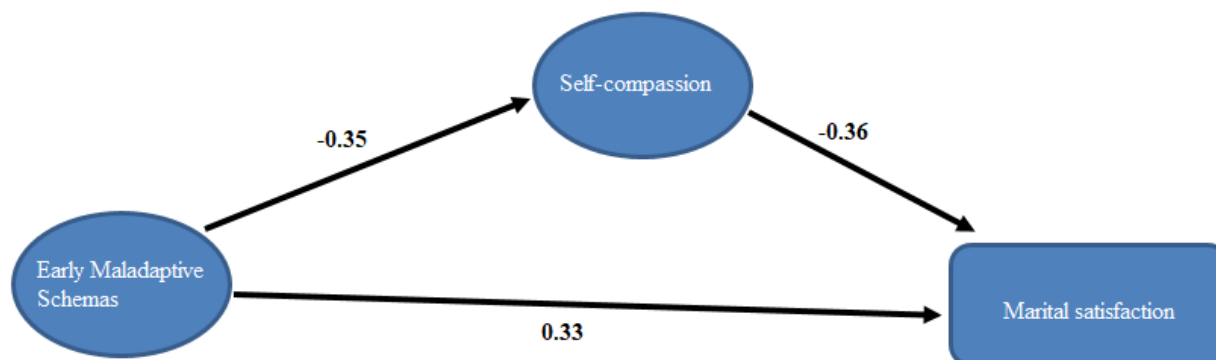
Figure 1. The estimated parameters of the structural model

The results demonstrated that all factor loadings were statistically significant and fell within acceptable ranges. Likewise, all direct path coefficients were found to be statistically significant, indicating strong support for the measurement and structural components of the model.

Additionally, the coefficient of determination values was calculated. The model yielded an $R = 0.64$ and $R^2 = 40.96\%$, indicating that the independent variables collectively explained approximately 41% of the variance in marital satisfaction. This proportion of explained variance is substantial and highlights the meaningful predictive role of early maladaptive schemas and self-compassion in determining marital satisfaction. These findings confirm that the proposed structural model demonstrates a strong and acceptable level of fit and provides significant explanatory power regarding the factors influencing marital satisfaction.

Discussion

The findings of the present study, indicating that destructive and avoidant communication styles and early maladaptive schemas decrease marital satisfaction—while constructive communication styles increase it—are consistent with a substantial body of domestic and international research. A review of recent studies demonstrates that the negative relationship between early maladaptive schemas and marital satisfaction is a recurring and relatively stable finding in the literature. Studies by Rostami and Ebrahimi (2023), Aboei et al. (2022), Ahmadi et al. (2020), Eftekhari et al. (2018), and Saboonchi et al. (2020) have all reported a significant negative association between these constructs. This pattern is also strongly evident in international studies. For example, Smith and

Carter (2024), Kim and Lee (2024), Li and Zhang (2023), Gonzalez and Rivera (2023), and Rami and Hussein (2023) likewise emphasize that higher levels of early maladaptive schemas are associated with lower marital satisfaction, and in some cases, this relationship is further intensified by moderators such as emotion regulation or attachment style. Thus, the current findings align closely with both domestic and international research highlighting the detrimental role of early maladaptive schemas in marital satisfaction.

The role of self-compassion as a moderator that buffers the negative effects of early maladaptive schemas and dysfunctional communication styles has gained significant attention in recent years. According to Neff's three-component model, self-compassion includes self-kindness, recognition of common humanity, and mindful awareness of painful experiences. Individuals with higher levels of self-compassion are more likely to respond to failures, conflicts, or schema activation with acceptance, kindness, and a realistic understanding rather than harsh self-criticism or blame directed toward themselves or their partners. This attitude reduces the intensity of negative emotions, enhances emotional resilience, improves self-regulation, and ultimately promotes healthier interactions with one's spouse.

Research evidence indicates that self-compassion—both directly and indirectly through improved emotion regulation—can enhance marital satisfaction and mitigate the negative effects of early maladaptive schemas and dysfunctional communication patterns. This has been clearly reported in studies by Ghazalsaflou et al. (2020), Amani and Khosroushahi (2020), Alvarez and Lee (2025), Kim and Johnson (2024), Li and Zhang (2023), and Fahim et al. (2020).

From a psychological mechanism perspective, self-compassion reduces self-criticism, increases acceptance, enhances emotional resilience, and improves emotion regulation. These processes prevent defensive, avoidant, or aggressive reactions and allow individuals to respond to marital conflict with greater calmness, acceptance, and mindfulness. Consequently, conflicts are more likely to be transformed into opportunities for growth, learning, and increased intimacy, thereby enhancing marital satisfaction.

The mediating role of self-compassion in the relationship between early maladaptive schemas and marital satisfaction, as well as between communication styles and marital satisfaction, underscores the importance of regulatory and self-acceptance mechanisms in the health of marital relationships. By creating a psychologically supportive and accepting internal environment, self-compassion

enables individuals to manage negative thoughts and emotions triggered by maladaptive schemas or ineffective communication patterns in a more adaptive manner and prevents them from falling into maladaptive behavioral and emotional cycles. These findings are consistent with foundational theories of schema therapy, emotion regulation, and self-compassion, emphasizing the importance of internal regulatory factors in explaining the quality and stability of marital relationships.

It should be noted that the present study had some limitations. The data were based on self-report measures, which may be susceptible to response bias and social desirability effects.

In conclusion, the findings of this study indicate that self-compassion plays a mediating role in the relationship between early maladaptive schemas and marital satisfaction. Accordingly, future research is encouraged to examine other emotion-related constructs associated with self-regulation—such as self-forgiveness, empathy, or emotional flexibility—as potential mediators or complementary mechanisms. Such investigations may help identify more precise psychological pathways through which schemas influence marital satisfaction.

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Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

Ethics statement

The studies involving human participants were reviewed and approved by ethics committee of Islamic Azad University.

Author contributions

All authors contributed to the study conception and design, material preparation, data collection and analysis. All authors contributed to the article and approved the submitted version.

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Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

References

Abri, F., & Sharifirad, G. (2024). Effectiveness of paradoxical therapy on rejection sensitivity and interpersonal emotion self-regulation in individuals with obsessive-compulsive disorder. *Proceedings of the 3rd International Congress on Management, Economics, Humanities, and Business Development*, Tehran, Iran.

Besharat, M. A. (2017a). Assessing the effectiveness of paradoxical therapy on obsessive-compulsive disorder: A case study. *Quarterly Journal of Psychological Studies*, 14(4), 7–36.

Besharat, M. A. (2017b). Difficulties in emotion regulation scale. *Andisheh va Raftar in Clinical Psychology*, 13(47), 89–92.

Besharat, M. A. (2017c). *Paradox + timing program = therapy: A complete model for treating psychological disorders – A practical guide*. Tehran, Iran: Roshd Publications.

Besharat, M. A. (2021). Assessing the effectiveness of paradoxical couples therapy on couples' problems: A case study. *Biannual Journal of Family Psychology*, 7(1), 1–18.

Bibi, A. Khalid, M. A. Mehmood, A. & Shafique, N. (2020). Dysfunctional attitudes and automatic thoughts among university students of Pakistan. Open Access J. Complementary Altern. Med, 2, 263-269.

Chitgarzadeh, M. J., Asayesh, M. H., Besharat, M. A., & Hakak, F. (2023). Effectiveness of paradoxical couples therapy (PTC) on marital conflicts and emotion regulation in incompatible couples. *Ruyesh Psychology*, 12(2), 39–50.

Gratz, K. L. & Roemer, L. (2004). Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure, and initial validation of the difficulties in emotion regulation scale. Journal of psychopathology and behavioral assessment, 26, 41-54.

Hashemizadeh, F. S., Atashpour, H., & Farhadi, H. (2024). Comparing the effectiveness of paradoxical therapy with timing program (PTC) and emotion-focused therapy (EFT) on family adaptability and emotional self-regulation in women with marital conflict. *Razi Journal of Medical Sciences*, 31(1), 1–17.

Horwood, S. & Anglim, J. (2021). Emotion regulation difficulties, personality, and problematic smartphone use. Cyberpsychology, Behavior, and Social Networking, 24(4), 275-281.

Khosravi, Z., & Nekoukar, N. (2024). Structural modeling of the relationship between perceived stress and striving for excellence with the mediating role of hope in Konkur students. *Innovative Ideas in Psychology Quarterly*, 22(26), 1–14.

Lotfizadeh, T., Safari, M. Sh., Zare, H., Pooshneh, K., & Asayesh, M. H. (2024). Effectiveness of paradoxical therapy program on behavioral functions, emotion regulation, and brain functions using F. Neirs in the treatment of fear of flying. *Social Cognition*, 13(26), 1–18.

Miller, A. E. & Racine, S. E. (2022). Emotion regulation difficulties as common and unique predictors of impulsive behaviors in university students. Journal of American College Health, 70(5), 1387-1395.

Stellern, J. Xiao, K. B. Grennell, E. Sanches, M. Gowin, J. L. & Sloan, M. E. (2023). Emotion regulation in substance use disorders: A systematic review and meta-analysis. Addiction, 118(1), 30-47.

White VanBoxel, J. M. Miller, D. L. Morgan, P. Iqbal, N. Edwards, C. & Wittenborn, A. K. (2024). Exploring associations among baseline emotion regulation and change in relationship satisfaction among couples in a randomized controlled trial of emotionally focused therapy compared to usual care. Family process, 63(3), 1637-1654.