

The Mediating Role of Emotion Regulation in the Relationship Between Attachment Insecurity, Perceived Partner Responsiveness, and Marital Satisfaction Among Female Student-Teachers at Farhangian University

Allah Nazar, Alisofi^{1*}

¹ Assistant Professor, Department of Psychology and Counselling, Farhangian University, Tehran, Iran

* Corresponding author email address: an.alisofi@cfu.ac.ir

Article Info

Article type:

Original Article

How to cite this article:

Alisofi, A. N. (2027). The Mediating Role of Emotion Regulation in the Relationship Between Attachment Insecurity, Perceived Partner Responsiveness, and Marital Satisfaction Among Female Student-Teachers at Farhangian University. *Applied Family Therapy Journal*, 8(3), 1-18.
<http://dx.doi.org/10.61838/kman.aftj.6110>



© 2027 the authors. Published by KMAN Publication Inc. (KMANPUB), Ontario, Canada. This is an open access article under the terms of the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) License.

ABSTRACT

Objective: This study aimed to investigate the mediating role of emotion regulation in the relationships between attachment insecurity, perceived partner responsiveness, and marital satisfaction among female student-teachers at Farhangian University.

Methods and Materials: The present study employed a descriptive-correlational, cross-sectional design using structural equation modeling. The statistical population consisted of married female student-teachers enrolled at Farhangian University campuses in Tehran during the 2025–2026 academic year. A total of 320 participants were selected through a multistage convenience sampling procedure. Data were collected using the Experiences in Close Relationships-Revised Questionnaire, the Perceived Partner Responsiveness Scale, the Difficulties in Emotion Regulation Scale, and the ENRICH Marital Satisfaction Scale. Data analysis was conducted using IBM SPSS Statistics and AMOS. Pearson correlation coefficients were used to examine bivariate relationships among the study variables, and structural equation modeling was applied to assess direct and indirect effects. The significance of mediation effects was evaluated using a bootstrap procedure with 5,000 resamples and 95% confidence intervals.

Findings: Attachment insecurity had a significant positive effect on emotion regulation difficulties ($\beta = .56, p < .001$) and a significant negative effect on marital satisfaction ($\beta = -.24, p < .001$). Perceived partner responsiveness significantly predicted lower emotion regulation difficulties ($\beta = -.31, p < .001$) and higher marital satisfaction ($\beta = .39, p < .001$). Emotion regulation difficulties also significantly predicted lower marital satisfaction ($\beta = -.32, p < .001$). Bootstrap analysis showed that emotion regulation difficulties significantly mediated the relationship between attachment insecurity and marital satisfaction ($\beta = -.18, 95\% \text{ CI } [-.25, -.12]$) and the relationship between perceived partner responsiveness and marital satisfaction ($\beta = .10, 95\% \text{ CI } [.06, .15]$). The model explained 52% of the variance in emotion regulation difficulties and 63% of the variance in marital satisfaction.

Conclusion: The findings indicate that emotion regulation is a significant partial mediator linking attachment insecurity and perceived partner responsiveness with marital satisfaction, suggesting that both attachment-related vulnerability and perceived relational responsiveness influence marital adjustment partly through emotional regulatory processes.

Keywords: Attachment Insecurity, Perceived Partner Responsiveness, Emotion Regulation, Marital Satisfaction, Female Student-Teachers, Farhangian University

1. Introduction

Marital satisfaction is one of the central indicators of the quality and stability of intimate relationships and reflects the extent to which individuals evaluate their marital relationship as emotionally fulfilling, supportive, secure, and responsive to their psychological and interpersonal needs. Although marital satisfaction is influenced by a broad range of demographic, cultural, personality, and contextual variables, contemporary relationship research increasingly emphasizes interpersonal and emotion-regulatory processes that shape how partners interpret, respond to, and manage experiences within close relationships. Marriage requires individuals to navigate emotional intimacy, interpersonal dependence, conflict, vulnerability, expectations, and changing relational demands, and the quality with which couples manage these processes can substantially influence their overall satisfaction with the relationship. In particular, attachment insecurity, perceptions of partner responsiveness, and emotion regulation have emerged as interrelated psychological processes with potentially important implications for marital functioning. These variables are especially relevant among young married adults, for whom the simultaneous demands of education, occupational preparation, role transition, and early marital adjustment may place considerable pressure on emotional and relational functioning.

Attachment theory provides a valuable framework for understanding individual differences in the ways people perceive and respond to closeness, support, conflict, and emotional threat within romantic relationships. Adult attachment is generally conceptualized along the dimensions of attachment anxiety and attachment avoidance. Individuals with greater attachment anxiety tend to experience heightened concerns about rejection, abandonment, insufficient affection, and the availability of their partners, whereas individuals with greater attachment avoidance tend to experience discomfort with emotional closeness, dependence, vulnerability, and intimacy. These attachment orientations can shape cognitive appraisals, interpersonal expectations, emotional reactions, and behavioral responses in close relationships. Contemporary studies continue to demonstrate that attachment processes are closely connected with emotion regulation, interpersonal functioning, and adaptation across different relational and psychological contexts (Messina et al., 2026; Salavou et al., 2026). Attachment orientations may therefore represent relatively enduring relational tendencies through which individuals

interpret the behaviors of their spouses and regulate affective experiences arising within marriage.

One of the principal mechanisms linking attachment insecurity to relationship outcomes is the regulation of emotion. Secure attachment experiences are generally associated with the development of effective strategies for recognizing, tolerating, communicating, and modulating emotional states, whereas insecure attachment may be associated with hyperactivation, suppression, avoidance, or ineffective management of emotional experiences. Evidence from the attachment and emotion-regulation literature suggests that attachment-related expectations influence how individuals respond to emotional activation and how they seek or avoid interpersonal support under conditions of distress (Tiller et al., 2025; Walker & Kunst, 2025). Similarly, research examining developmental adversity indicates that attachment functioning and emotional regulation are closely intertwined, with disruptions in secure relational experiences potentially contributing to subsequent difficulties in managing emotional states (Araujo et al., 2026). Emotion regulation and attachment have also been identified as important protective or vulnerability-related mechanisms in the context of adverse life experiences, further demonstrating that regulatory capacities are embedded within broader interpersonal and relational processes (Trevethan & Francis, 2025).

Within marriage, these processes may become particularly salient because intimate relationships repeatedly activate needs for security, reassurance, emotional availability, and interpersonal responsiveness. Attachment insecurity may intensify perceptions of relational threat and contribute to emotional reactions that are difficult to manage effectively. An anxiously attached individual may interpret ambiguous partner behaviors as signs of rejection or declining interest, thereby experiencing greater emotional reactivity, reassurance seeking, jealousy, or distress. In contrast, an avoidantly attached individual may disengage from emotionally demanding interactions, suppress emotional expression, or distance from the spouse when closeness is needed. These regulatory patterns can disrupt constructive communication and reduce mutual understanding. Thus, attachment insecurity may affect marital satisfaction directly through relational expectations and behavioral responses and indirectly through the emotional processes through which relationship experiences are interpreted and managed.

Research in marital and couple contexts has increasingly supported the relevance of attachment orientations to

relationship quality. For example, attachment styles have been linked to marital satisfaction in dyadic investigations, with perceived partner responsiveness identified as an important intervening relational process (Lu et al., 2024). Similar findings have been reported in cultural contexts characterized by distinctive marital traditions, where partner responsiveness has been shown to connect attachment styles with the formation of a shared couple identity (Kumar & Singh, 2024). Research among Saudi Arabian women has likewise demonstrated meaningful associations among attachment insecurity, perceived partner responsiveness, and relational experiences, indicating that these processes may be relevant across diverse social and cultural environments (Attaky et al., 2020). These findings suggest that attachment insecurity cannot be understood solely as an intrapersonal characteristic, because its consequences are also expressed through the individual's perceptions of how available, understanding, and responsive the romantic partner is.

Perceived partner responsiveness is a central construct in contemporary theories of intimacy and refers to the degree to which individuals perceive their partners as understanding, validating, caring for, and responding sensitively to their needs, feelings, and experiences. A responsive partner is perceived as someone who recognizes important aspects of the self, appreciates and validates personal experiences, and demonstrates genuine concern for the individual's welfare. Such perceptions are fundamental to intimacy because disclosure and emotional vulnerability are more likely to strengthen a relationship when individuals believe that their partners understand and value what they communicate. Perceived responsiveness is therefore not simply a behavioral characteristic of the spouse; it is a subjective relational appraisal formed through repeated interpersonal interactions. Research on family relationships has shown that perceived responsiveness emerges from multiple interactional sources and contributes importantly to how individuals evaluate relationship quality (Cook et al., 2018).

The importance of perceived partner responsiveness extends across emotional, relational, physiological, and sexual domains of intimate functioning. Studies have shown that partner responsiveness is associated with sexual well-being and relational adaptation, including in couples facing significant physical and sexual difficulties (Bergeron et al., 2021). Daily-diary research with newlywed couples has further indicated that perceived partner responsiveness mediates associations between sexual and marital satisfaction, highlighting its role as a proximal interpersonal

mechanism through which positive relational experiences may influence broader evaluations of marriage (Polack et al., 2015). Among individuals characterized by attachment anxiety, perceptions of a sexually responsive partner may buffer some of the relational vulnerabilities associated with insecure attachment and contribute to improved relationship and sexual quality (Raposo & Muise, 2021). Consequently, perceived responsiveness may function as an interpersonal resource that reduces uncertainty, enhances emotional security, and promotes more positive marital evaluations.

Perceptions of responsiveness may also influence the expression and regulation of emotion within close relationships. Individuals are more willing to express vulnerable emotional experiences when they perceive their partners as responsive, suggesting that responsiveness creates a relational environment in which emotional communication feels safer and more acceptable (Ruan et al., 2020). This process may be particularly important for individuals who are prone to insecurity, rejection concerns, or difficulties in emotional expression. When partners are perceived as supportive and validating, individuals may experience less need to suppress, amplify, or defensively manage emotional states. Conversely, low perceived responsiveness may increase uncertainty regarding whether emotional needs will be acknowledged, which may contribute to greater dysregulation, defensive behavior, and dissatisfaction. Research on rejection sensitivity further indicates that heightened sensitivity to relational rejection may shape how individuals perceive their partners' responsiveness, potentially creating negative interpretive patterns that undermine intimacy (Richter & Schoebi, 2023).

Perceived partner responsiveness is not necessarily stable across time, and fluctuations in responsiveness may themselves carry relational significance. Recent evidence suggests that changes in how responsive a partner is perceived to be can predict ambivalence within romantic relationships, indicating that inconsistency in perceived support and validation may produce uncertainty about the relationship and the partner's commitment (Zoppolat et al., 2025). The broader implications of responsiveness are also supported by psychophysiological research showing complex associations between social support, perceived partner responsiveness, and cortisol among married couples (Fivecoat et al., 2024). Such findings reinforce the view that perceived responsiveness is not merely a subjective indicator of relationship satisfaction but is embedded in broader systems of emotional and physiological regulation.

The origins of perceived partner responsiveness may also be linked to earlier attachment experiences. Individuals with histories of adverse or inconsistent relational environments may develop attachment-related expectations that influence how they interpret current partners' behaviors. Research examining childhood maltreatment, attachment, and perceived partner responsiveness has demonstrated that attachment can function as an intermediary variable connecting earlier adverse experiences with perceptions of a current romantic partner (Gosselin et al., 2024). These findings emphasize the interconnected nature of attachment representations and responsiveness perceptions: individuals do not necessarily interpret partner behavior independently of their prior relational schemas. Thus, attachment insecurity may influence marital satisfaction not only through emotional dysregulation but also by affecting how responsiveness is perceived and interpreted in close relationships.

Emotion regulation constitutes another major psychological process in marital functioning. Emotion regulation refers to the processes through which individuals monitor, interpret, modify, tolerate, express, and manage emotional experiences in accordance with situational demands and personal goals. Effective regulation involves the capacity to understand one's emotional state, tolerate distress, inhibit impulsive reactions, remain goal directed during emotional activation, access adaptive regulatory strategies, and communicate emotions appropriately. Difficulties in these domains can undermine relationship functioning by intensifying negative affect, increasing maladaptive responses during conflict, and impairing the capacity to communicate effectively. In marriage, where emotionally charged interactions are inevitable, regulatory difficulties may transform manageable disagreements into persistent conflict, withdrawal, criticism, or emotional distancing.

Evidence increasingly supports the association between emotion regulation and marital outcomes. Emotion regulation has been identified as an important mechanism connecting individual characteristics with marital satisfaction, including research demonstrating its mediating role between personality-related factors and marital satisfaction (Odeunmi & Сабіна, 2025). Emotional dysregulation has also been examined as a relational mechanism through which contextual stress affects marital satisfaction. For instance, dyadic research has shown that emotion dysregulation can mediate associations between parenting stress and marital satisfaction, suggesting that

stressors may undermine relationships partly by impairing partners' capacity to manage emotional responses adaptively (Wu et al., 2025). These findings are consistent with the broader proposition that marital satisfaction is shaped not only by what couples experience but also by how emotional responses to those experiences are managed.

The relationship between emotion regulation and marital well-being is further supported by intervention research. Emotional schema therapy has been found to improve emotion regulation as well as marital satisfaction among women experiencing anxiety-related difficulties, indicating that regulatory capacities may be modifiable and clinically relevant to intimate relationship quality (Razzaghi et al., 2025). In addition, recent research on couple burnout has highlighted marital satisfaction as an important mechanism in the association between emotion regulation and relational exhaustion, further demonstrating the close connection between effective emotional functioning and positive marital outcomes (Kocyigit, 2025). Taken together, these findings provide a strong rationale for considering emotion regulation as more than a correlate of marital satisfaction; it may represent a psychological pathway through which attachment-related and interpersonal experiences are translated into broader evaluations of the marital relationship.

Perceived partner responsiveness may also influence marital satisfaction through emotional processes. When individuals believe that their spouses understand and validate them, emotional experiences may become less threatening and easier to communicate and regulate. Conversely, perceived unresponsiveness may increase emotional reactivity, uncertainty, and dissatisfaction. Research examining emotional reactivity in couples has shown that perceived partner responsiveness can mediate associations between emotional reactivity and marital quality (Yuan et al., 2022). This suggests that emotional and relational processes operate reciprocally: emotional reactivity shapes experiences within the relationship, but the partner's perceived responsiveness can alter how those emotional experiences affect relationship quality. In a similar manner, mindfulness has been linked to relationship satisfaction through perceived responsiveness, demonstrating that intrapersonal psychological capacities may influence relationship quality partly by changing interpersonal responsiveness processes (Adair et al., 2019). These findings provide a conceptual foundation for models integrating intrapersonal regulation and interpersonal

responsiveness rather than examining them as isolated predictors.

The study of these processes may be especially important in student-teacher populations. Student-teachers are simultaneously engaged in university education, professional identity formation, preparation for teaching responsibilities, and adaptation to the interpersonal demands associated with future educational roles. Married student-teachers must additionally balance academic responsibilities with the practical and emotional demands of married life. Emotional regulation is particularly relevant in this population because it is central not only to personal and marital adjustment but also to future professional functioning in educational environments. Research among Farhangian University students has demonstrated meaningful associations involving cognitive emotion-regulation processes and psychological outcomes, including test anxiety (Khalili et al., 2024). Similarly, resilience has been shown to mediate relationships between cognitive emotion-regulation strategies and test anxiety among student-teachers at Farhangian University, indicating that regulatory processes occupy an important position within the psychological functioning of this educational population (Jahanbakhsh & Vafaeizadeh, 2025). However, the role of emotion regulation in their marital relationships has received comparatively limited attention.

This gap is important because the psychological demands experienced by married female student-teachers may differ from those of general community samples. They are often navigating early adulthood, the establishment of marital roles, educational pressures, professional preparation, and expectations related to future teaching careers at the same time. Within this context, insecure attachment patterns may intensify emotional sensitivity or withdrawal, while perceptions of a responsive spouse may provide an important source of emotional security and support. Emotion regulation may therefore represent a key mechanism through which these attachment-related and relational experiences influence marital satisfaction. A model that simultaneously considers attachment insecurity, perceived partner responsiveness, emotion regulation, and marital satisfaction may provide a more comprehensive account of marital functioning than analyses focused only on isolated bivariate associations.

Although previous studies have separately demonstrated relationships between attachment insecurity and emotional regulation, attachment and partner responsiveness, partner responsiveness and relationship quality, and emotional

regulation and marital satisfaction, fewer studies have integrated these variables into a single explanatory framework. Existing evidence strongly suggests that attachment insecurity is associated with regulatory difficulties (Messina et al., 2026; Salavou et al., 2026), that attachment orientations shape relational and regulatory behavior (Tiller et al., 2025; Walker & Kunst, 2025), and that perceived partner responsiveness is closely related to both relational security and marital quality (Kumar & Singh, 2024; Lu et al., 2024). At the same time, responsiveness may facilitate emotional expression (Ruan et al., 2020), and emotion regulation is increasingly recognized as a mechanism underlying marital adjustment (Odebunmi & Сабіна, 2025; Wu et al., 2025). The convergence of these findings supports a mediation framework in which emotion regulation may help explain how attachment insecurity and perceived partner responsiveness are associated with marital satisfaction.

Such an integrated model also has potential practical relevance. If emotion regulation significantly mediates the relationship between attachment insecurity and marital satisfaction, interventions targeting emotional awareness, acceptance, distress tolerance, and adaptive regulation may help reduce some of the relational consequences of insecure attachment even when attachment orientations themselves are relatively enduring. Likewise, if partner responsiveness is associated with marital satisfaction partly through emotion regulation, couple-based interventions that enhance validation, empathic understanding, emotional availability, and supportive responding may strengthen both emotional functioning and relationship satisfaction. These implications are particularly meaningful for young married women in educational settings, where preventive psychological services may be more feasible and effective when they address both intrapersonal and interpersonal processes.

Accordingly, the aim of the present study was to investigate the mediating role of emotion regulation in the relationships between attachment insecurity, perceived partner responsiveness, and marital satisfaction among female student-teachers at Farhangian University.

2. Methods and Materials

2.1. Study Design and Participants

The present study employed a descriptive-correlational, cross-sectional design using structural equation modeling to examine the mediating role of emotion regulation in the relationships between attachment insecurity, perceived

partner responsiveness, and marital satisfaction among female student-teachers. The statistical population consisted of married female student-teachers enrolled at Farhangian University campuses in Tehran during the 2025–2026 academic year. A total of 320 participants were recruited using a multistage convenience sampling procedure. Initially, selected Farhangian University campuses in Tehran were identified, after which eligible married female student-teachers were invited to participate in the study. The sample size was determined with consideration of the requirements of structural equation modeling, the number of observed variables included in the proposed model, and the need for sufficient statistical power to estimate direct and indirect effects. Inclusion criteria consisted of being a female student-teacher currently enrolled at Farhangian University, being legally married for at least one year, living with the spouse at the time of the study, being willing to participate voluntarily, and having sufficient literacy to complete the research questionnaires independently. Participants were excluded if they submitted substantially incomplete questionnaires, reported being in the process of marital separation or divorce, or withdrew their consent during data collection. Before questionnaire administration, the objectives and procedures of the study were explained to the participants, and they were assured that participation was entirely voluntary, their responses would remain confidential, and the collected information would be used solely for scientific purposes. Written informed consent was obtained from all participants. Questionnaires were administered either in person in an appropriate educational setting or through a secure electronic format, and participants were asked to respond to all items according to their current experiences and perceptions within their marital relationships.

2.2. Measures

Attachment insecurity was assessed using the Experiences in Close Relationships-Revised Questionnaire (ECR-R) developed by Fraley, Waller, and Brennan. The ECR-R is a widely used self-report instrument designed to assess individual differences in adult romantic attachment. The questionnaire contains 36 items and evaluates two major dimensions of insecure attachment: attachment anxiety and attachment avoidance. The attachment anxiety dimension reflects concerns regarding rejection, abandonment, insufficient affection, and excessive dependence on the availability and approval of one's romantic partner, whereas

attachment avoidance reflects discomfort with emotional intimacy, dependence, closeness, and self-disclosure within romantic relationships. Participants indicate the extent to which each statement describes their experiences in romantic relationships using a seven-point Likert-type response scale ranging from strong disagreement to strong agreement. Several items are reverse-scored, and higher scores on each subscale indicate higher levels of attachment anxiety or attachment avoidance. In the present study, attachment insecurity was conceptualized through these two dimensions, with higher scores representing greater insecurity in romantic attachment. Previous research has consistently demonstrated satisfactory internal consistency, construct validity, convergent validity, and factorial validity for the ECR-R. The internal consistency of the attachment anxiety and attachment avoidance dimensions was also evaluated in the current sample using Cronbach's alpha coefficients.

Perceived partner responsiveness was measured using the Perceived Partner Responsiveness Scale, which assesses the extent to which individuals perceive their spouse as understanding, validating, accepting, caring for, and responding supportively to their needs and experiences. Perceived partner responsiveness represents an individual's general belief that the romantic partner understands important aspects of the self, respects and values the individual's perspectives and abilities, and demonstrates concern for the individual's welfare. The items assess perceptions of emotional understanding, validation, appreciation, acceptance, and responsiveness within the marital relationship. Participants respond to the items on a Likert-type scale, with higher total scores reflecting a stronger perception that the spouse is emotionally available, attentive, understanding, and responsive. Because the construct is based on the respondent's subjective perception of the spouse's behavior rather than an objective evaluation of the partner, participants were instructed to answer the items according to their own experiences in their current marital relationship. Previous psychometric studies have reported satisfactory internal consistency and evidence of convergent and construct validity for measures of perceived partner responsiveness. In the present study, the reliability of the scale was reassessed using Cronbach's alpha, and its measurement properties were examined before testing the structural model.

Emotion regulation was assessed using the Difficulties in Emotion Regulation Scale (DERS) developed by Gratz and Roemer. This 36-item self-report instrument is designed to

evaluate difficulties associated with the awareness, understanding, acceptance, and effective regulation of emotional experiences. The DERS assesses several interconnected dimensions of emotion regulation difficulties, including nonacceptance of emotional responses, difficulty engaging in goal-directed behavior when distressed, impulse-control difficulties, limited access to effective emotion-regulation strategies, lack of emotional awareness, and lack of emotional clarity. Items are rated on a five-point Likert-type scale according to the frequency with which each statement applies to the respondent. After reverse-scoring the relevant items, scores are summed to obtain subscale scores and an overall score. Higher scores indicate greater difficulties in emotion regulation and, consequently, poorer emotion-regulatory functioning. For conceptual clarity in the mediation analyses, higher DERS scores were interpreted as greater emotion dysregulation. The DERS has been extensively used in studies of interpersonal functioning and psychological adjustment and has demonstrated favorable internal consistency, construct validity, and convergent validity. Cronbach's alpha coefficients were calculated in the present sample to determine the internal consistency of the total scale and its principal dimensions.

Marital satisfaction was assessed using the ENRICH Marital Satisfaction Scale, which is derived from the broader ENRICH marital assessment framework developed by Olson and colleagues. The instrument evaluates individuals' overall evaluation of the quality and satisfaction of their marital relationship and addresses important aspects of marital functioning, including emotional connection, communication, conflict management, mutual understanding, personality-related compatibility, leisure activities, financial issues, sexual relationship, family relationships, and general satisfaction with marriage. Participants indicate the extent to which the statements correspond to their marital experiences using a Likert-type response format. Relevant negatively worded items are reverse-scored before calculation of the total score. Higher scores indicate greater marital satisfaction, more favorable perceptions of the marital relationship, and a stronger overall evaluation of marital functioning. The ENRICH measure and its abbreviated forms have been widely applied in marital and family research and have demonstrated acceptable to strong reliability and validity across different cultural populations. In the current study, the internal consistency of the marital satisfaction measure was

examined using Cronbach's alpha coefficient before its inclusion in the hypothesized structural model.

2.3. Data Analysis

Data analysis was conducted using IBM SPSS Statistics and AMOS. Prior to inferential analyses, the dataset was screened for missing values, incomplete responses, outliers, and potential data-entry errors. Descriptive statistics, including frequency, percentage, mean, standard deviation, minimum, and maximum values, were calculated to characterize the participants and the major study variables. The assumptions required for multivariate analyses and structural equation modeling were subsequently evaluated. Univariate normality was assessed by examining skewness and kurtosis coefficients, while multivariate outliers were evaluated using Mahalanobis distance. The possibility of excessive multicollinearity among predictor variables was investigated using correlation coefficients, tolerance values, and variance inflation factors. Cronbach's alpha coefficients were calculated to determine the internal consistency reliability of the research instruments. Pearson correlation coefficients were then used to examine the preliminary bivariate relationships among attachment anxiety, attachment avoidance, perceived partner responsiveness, emotion regulation difficulties, and marital satisfaction.

Structural equation modeling was employed to evaluate the hypothesized relationships among the study variables and to determine whether emotion regulation mediated the relationships of attachment insecurity and perceived partner responsiveness with marital satisfaction. Attachment anxiety and attachment avoidance were specified as indicators of attachment insecurity, while perceived partner responsiveness was entered as an independent predictor, emotion regulation difficulties as the mediating variable, and marital satisfaction as the principal outcome variable. Both direct and indirect pathways were estimated simultaneously. Model adequacy was assessed using multiple goodness-of-fit indices, including the chi-square statistic relative to degrees of freedom, the Comparative Fit Index, Tucker-Lewis Index, Incremental Fit Index, Goodness-of-Fit Index, and Root Mean Square Error of Approximation. Standardized path coefficients were reported to indicate the magnitude and direction of the relationships among the study variables. The statistical significance of indirect effects was examined through a nonparametric bootstrap procedure with 5,000 resamples and bias-corrected 95% confidence intervals. An indirect effect was considered statistically

significant when its bootstrap confidence interval did not include zero. All statistical tests were conducted using a two-tailed significance level of .05.

3. Findings and Results

The final sample consisted of 320 married female student-teachers who completed the study questionnaires and whose responses were included in the statistical analyses. The participants had a mean age of 23.47 years ($SD = 2.41$), with ages ranging from 20 to 32 years. In terms of age distribution, 111 participants (34.7%) were between 20 and 22 years old, 143 participants (44.7%) were between 23 and 25 years old, 52 participants (16.2%) were between 26 and 28 years old, and 14 participants (4.4%) were 29 years of age or older. The mean duration of marriage was 3.62 years ($SD = 2.11$), ranging from 1 to 11 years. Regarding marital duration, 104 participants (32.5%) had been married for less than two years, 132 participants (41.2%) had been

married for two to four years, 61 participants (19.1%) had been married for five to seven years, and 23 participants (7.2%) had been married for more than seven years. With respect to academic year, 69 participants (21.6%) were first-year students, 86 (26.9%) were second-year students, 90 (28.1%) were third-year students, and 75 (23.4%) were fourth-year students. Most participants, 252 individuals (78.8%), reported living continuously with their spouses, whereas 68 participants (21.2%) reported temporary periods of living apart because of educational or occupational circumstances. In addition, 282 participants (88.1%) reported that they were not engaged in employment outside their student-teaching responsibilities, while 38 participants (11.9%) reported having additional part-time employment. Overall, the demographic characteristics indicated that the sample predominantly consisted of young married women in the early years of marriage, with relatively balanced representation across the four academic years.

Table 1

Descriptive Statistics and Correlations Among the Main Study Variables (N = 320)

Variable	M	SD	Skewness	Kurtosis	1	2	3	4	5
1. Attachment anxiety	3.62	0.91	0.31	-0.28	1				
2. Attachment avoidance	3.41	0.88	0.27	-0.34	.46***	1			
3. Perceived partner responsiveness	87.46	15.72	-0.26	-0.41	-.41***	-.44***	1		
4. Emotion regulation difficulties	91.73	18.64	0.38	-0.17	.52***	.48***	-.50***	1	
5. Marital satisfaction	119.68	20.37	-0.33	-0.21	-.49***	-.46***	.61***	-.58***	1

As presented in Table 1, all major study variables demonstrated acceptable distributions for subsequent parametric and structural analyses. The absolute values of skewness ranged from 0.26 to 0.38, and those of kurtosis ranged from 0.17 to 0.41, indicating no substantial departure from univariate normality. Attachment anxiety had a mean score of 3.62 ($SD = 0.91$), while attachment avoidance had a mean score of 3.41 ($SD = 0.88$). The mean scores for perceived partner responsiveness, emotion regulation difficulties, and marital satisfaction were 87.46 ($SD = 15.72$), 91.73 ($SD = 18.64$), and 119.68 ($SD = 20.37$), respectively. Examination of the correlation matrix showed that all relationships among the principal variables were statistically significant at $p < .001$ and were in theoretically expected directions. Attachment anxiety was positively correlated with attachment avoidance ($r = .46$, $p < .001$) and emotion regulation difficulties ($r = .52$, $p < .001$), while it was negatively correlated with perceived partner responsiveness ($r = -.41$, $p < .001$) and marital satisfaction ($r = -.49$, $p < .001$). Similarly, attachment avoidance showed a

positive association with emotion regulation difficulties ($r = .48$, $p < .001$) and negative associations with perceived partner responsiveness ($r = -.44$, $p < .001$) and marital satisfaction ($r = -.46$, $p < .001$). Perceived partner responsiveness demonstrated a relatively strong positive relationship with marital satisfaction ($r = .61$, $p < .001$) and a negative relationship with emotion regulation difficulties ($r = -.50$, $p < .001$). Finally, emotion regulation difficulties were negatively and substantially associated with marital satisfaction ($r = -.58$, $p < .001$). These findings provided preliminary support for the hypothesized mediation model, indicating that greater attachment insecurity was associated with poorer emotion regulation and lower marital satisfaction, whereas greater perceived partner responsiveness was associated with fewer emotion regulation difficulties and greater marital satisfaction.

Before evaluating the structural pathways, the assumptions underlying structural equation modeling were examined. The skewness and kurtosis values reported in Table 1 were within acceptable limits, supporting

approximate univariate normality. Inspection of Mahalanobis distance values did not reveal a sufficient number of influential multivariate outliers to compromise the analyses. In addition, correlations among predictor variables remained below levels generally associated with problematic multicollinearity. Tolerance statistics exceeded

.40 and variance inflation factor values remained below 2.50 for all predictors, indicating that multicollinearity was not a concern. Consequently, the data were considered appropriate for estimating the hypothesized structural model.

Table 2

Goodness-of-Fit Indices for the Hypothesized Structural Model

Fit index	Obtained value	Recommended criterion	Evaluation
χ^2	12.64	—	—
df	5	—	—
p	.027	—	—
χ^2/df	2.53	< 3.00	Acceptable
GFI	.987	> .90	Good
AGFI	.948	> .90	Good
CFI	.983	> .90	Good
TLI	.959	> .90	Good
IFI	.984	> .90	Good
RMSEA	.069	< .08	Acceptable
SRMR	.031	< .08	Good

The goodness-of-fit statistics presented in Table 2 demonstrated that the hypothesized structural model provided an adequate to good representation of the observed data. Although the chi-square statistic was statistically significant, $\chi^2(5) = 12.64$, $p = .027$, the chi-square test is sensitive to sample size and therefore was interpreted alongside several alternative fit indices. The ratio of chi-square to degrees of freedom was 2.53, which was below the conventional criterion of 3.00 and indicated an acceptable model fit. Incremental and comparative fit indices were consistently high, with the CFI equal to .983, the TLI equal to .959, and the IFI equal to .984. The absolute fit indices also supported the adequacy of the model, as the GFI was .987 and the AGFI was .948. Furthermore, the RMSEA

value of .069 was below the .08 criterion for acceptable approximation error, and the SRMR value of .031 was well below the commonly recommended threshold of .08. Taken together, these indices indicated that the proposed model adequately reproduced the observed covariance structure and that the hypothesized relationships among attachment insecurity, perceived partner responsiveness, emotion regulation difficulties, and marital satisfaction could therefore be interpreted. The combination of high comparative fit indices, a relatively low RMSEA, and a very low SRMR provided particularly strong evidence that the proposed mediation model was compatible with the empirical data.

Table 3

Standardized Structural Path Coefficients for the Hypothesized Model

Structural path	B	SE	β	Critical ratio	p	Result
Attachment insecurity → Emotion regulation difficulties	8.27	0.91	.56	9.09	< .001	Significant
Perceived partner responsiveness → Emotion regulation difficulties	-0.37	0.06	-.31	-6.17	< .001	Significant
Attachment insecurity → Marital satisfaction	-5.46	1.09	-.24	-5.01	< .001	Significant
Perceived partner responsiveness → Marital satisfaction	0.51	0.07	.39	7.29	< .001	Significant
Emotion regulation difficulties → Marital satisfaction	-0.35	0.06	-.32	-5.83	< .001	Significant

Table 3 presents the estimated direct structural relationships among the variables included in the hypothesized model. Attachment insecurity had a statistically significant positive effect on emotion regulation

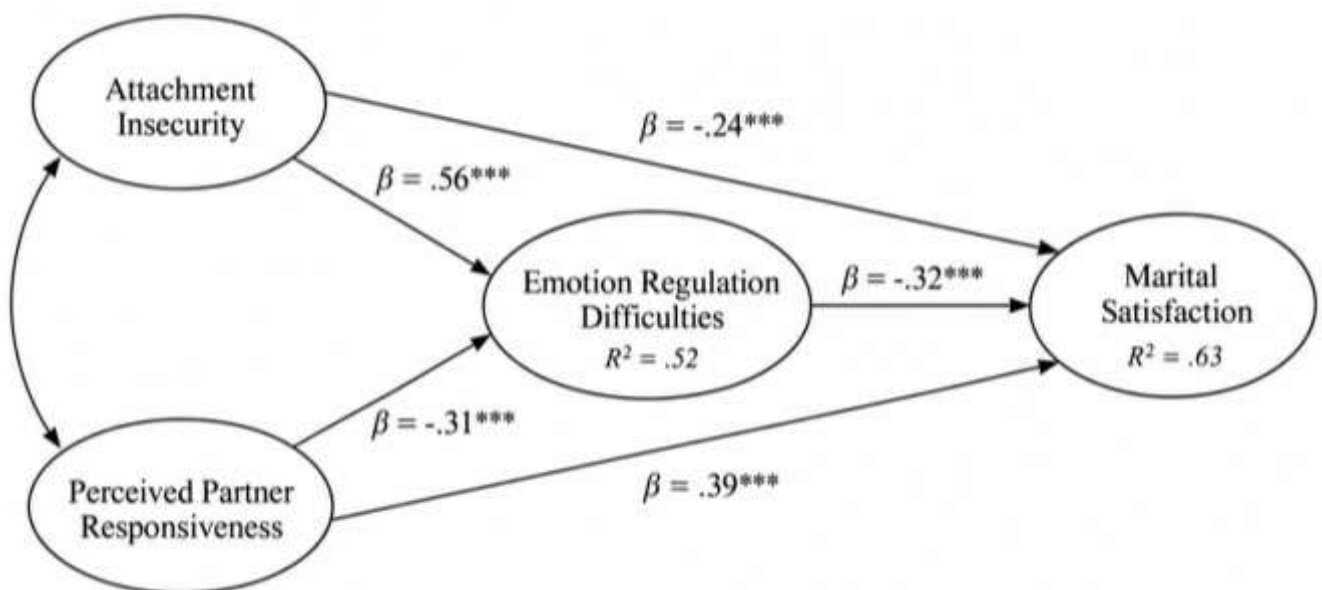
difficulties ($B = 8.27$, $SE = 0.91$, $\beta = .56$, $p < .001$), indicating that higher levels of attachment insecurity were associated with greater difficulty understanding, accepting, and effectively regulating emotional experiences. The

standardized coefficient of .56 represented one of the strongest pathways in the model and suggested that insecure attachment constituted an important predictor of emotional dysregulation among the participants. Perceived partner responsiveness, in contrast, had a significant negative effect on emotion regulation difficulties ($B = -0.37$, $SE = 0.06$, $\beta = -.31$, $p < .001$), demonstrating that participants who perceived their spouses as more understanding, validating, caring, and responsive tended to report fewer difficulties in regulating their emotions. Attachment insecurity also had a significant direct negative effect on marital satisfaction ($B = -5.46$, $SE = 1.09$, $\beta = -.24$, $p < .001$), suggesting that greater insecurity in romantic attachment was independently associated with lower marital satisfaction even after accounting for the mediating role of emotion regulation. Perceived partner responsiveness exerted a significant positive direct effect on marital satisfaction ($B = 0.51$, $SE = 0.07$, $\beta = .39$, $p < .001$), indicating that participants who

experienced their partners as more responsive reported greater satisfaction with their marital relationships. Finally, emotion regulation difficulties showed a statistically significant negative effect on marital satisfaction ($B = -0.35$, $SE = 0.06$, $\beta = -.32$, $p < .001$). Thus, as difficulties in regulating emotional experiences increased, marital satisfaction declined. Collectively, these findings confirmed all of the hypothesized direct structural pathways. The model explained 52% of the variance in emotion regulation difficulties ($R^2 = .52$), indicating that attachment insecurity and perceived partner responsiveness together accounted for more than half of the individual differences in the mediator. Furthermore, attachment insecurity, perceived partner responsiveness, and emotion regulation difficulties jointly explained 63% of the variance in marital satisfaction ($R^2 = .63$), demonstrating substantial explanatory power for the final outcome variable.

Figure 1

Standardized Structural Model of the Mediating Role of Emotion Regulation in the Relationships of Attachment Insecurity and Perceived Partner Responsiveness With Marital Satisfaction



The structural model illustrated in Figure 1 summarizes both the direct and mediated relationships among the study variables. Attachment insecurity was positively associated with emotion regulation difficulties and negatively associated with marital satisfaction, whereas perceived partner responsiveness was negatively associated with emotion regulation difficulties and positively associated with marital satisfaction. Emotion regulation difficulties, in

turn, were negatively related to marital satisfaction. The pattern of standardized coefficients indicated that the strongest predictor of emotion regulation difficulties was attachment insecurity ($\beta = .56$), while the strongest direct positive predictor of marital satisfaction was perceived partner responsiveness ($\beta = .39$). Emotion regulation difficulties also made a substantial unique contribution to marital satisfaction ($\beta = -.32$). Importantly, the persistence

of statistically significant direct pathways from both attachment insecurity and perceived partner responsiveness to marital satisfaction after the mediator was included suggested that emotion regulation did not completely account for these relationships. Instead, the pattern was consistent with partial mediation, whereby attachment-related insecurity and perceptions of a responsive spouse

influenced marital satisfaction both directly and indirectly through emotional regulatory functioning. The model therefore suggested that marital satisfaction among female student-teachers was associated not only with interpersonal characteristics of the marital relationship but also with the emotional processes through which relationship experiences were managed.

Table 4

Bootstrap Analysis of the Indirect, Direct, and Total Effects on Marital Satisfaction

Predictor	Effect type	Standardized effect (β)	Boot SE	95% Bootstrap CI	p	Interpretation
Attachment insecurity → Emotion regulation difficulties → Marital satisfaction	Indirect	-.18	.034	[-.25, -.12]	< .001	Significant
Attachment insecurity → Marital satisfaction	Direct	-.24	.048	[-.33, -.15]	< .001	Significant
Attachment insecurity → Marital satisfaction	Total	-.42	.052	[-.52, -.32]	< .001	Significant
Perceived partner responsiveness → Emotion regulation difficulties → Marital satisfaction	Indirect	.10	.025	[.06, .15]	< .001	Significant
Perceived partner responsiveness → Marital satisfaction	Direct	.39	.049	[.30, .48]	< .001	Significant
Perceived partner responsiveness → Marital satisfaction	Total	.49	.048	[.40, .58]	< .001	Significant

As shown in Table 4, the bootstrap analysis provided clear evidence for the mediating role of emotion regulation difficulties in the associations of both attachment insecurity and perceived partner responsiveness with marital satisfaction. The standardized indirect effect of attachment insecurity on marital satisfaction through emotion regulation difficulties was negative and statistically significant ($\beta = -.18$, Boot SE = .034, 95% CI [-.25, -.12], $p < .001$). Because the confidence interval did not contain zero, the mediation effect was statistically supported. This finding indicated that higher attachment insecurity was associated with greater emotion regulation difficulties, which in turn were associated with lower marital satisfaction. In addition to this indirect effect, attachment insecurity retained a significant direct negative effect on marital satisfaction ($\beta = -.24$, $p < .001$), resulting in a total standardized effect of $\beta = -.42$. Therefore, emotion regulation difficulties partially mediated the relationship between attachment insecurity and marital satisfaction rather than completely accounting for it. In substantive terms, insecurely attached participants appeared to experience lower marital satisfaction partly because their attachment insecurity was associated with increased difficulty regulating emotional responses; however, attachment insecurity also retained an independent relationship with marital satisfaction beyond this emotional regulatory pathway.

The indirect effect of perceived partner responsiveness on marital satisfaction through emotion regulation difficulties was also statistically significant ($\beta = .10$, Boot SE = .025, 95% CI [.06, .15], $p < .001$). The positive direction of this indirect effect reflected the combination of two negative structural pathways: greater perceived partner responsiveness predicted fewer emotion regulation difficulties, and fewer emotion regulation difficulties were subsequently associated with greater marital satisfaction. In other words, perceiving one's spouse as understanding, accepting, validating, and emotionally responsive appeared to facilitate more adaptive emotional functioning, which was associated with greater satisfaction in the marital relationship. Perceived partner responsiveness nevertheless continued to exert a significant positive direct effect on marital satisfaction after emotion regulation difficulties were included in the model ($\beta = .39$, $p < .001$). Its total standardized effect on marital satisfaction was $\beta = .49$, indicating that perceived partner responsiveness represented the strongest overall predictor of marital satisfaction in the proposed model. Since both its direct and indirect effects remained statistically significant, emotion regulation difficulties also partially mediated the relationship between perceived partner responsiveness and marital satisfaction.

Overall, the findings supported the proposed conceptual model. Higher attachment insecurity was associated with

greater emotional dysregulation and lower marital satisfaction, whereas greater perceived partner responsiveness was associated with more favorable emotional regulatory functioning and higher marital satisfaction. Emotion regulation difficulties independently predicted marital satisfaction and transmitted a statistically significant proportion of the effects of both attachment insecurity and perceived partner responsiveness. The mediation effects were partial rather than complete, indicating that interpersonal attachment processes and perceptions of partner responsiveness were related to marital satisfaction through both emotion-regulatory and additional direct mechanisms. The relatively high proportion of explained variance in marital satisfaction (63%) further indicated that the combination of attachment insecurity, perceived partner responsiveness, and emotion regulation difficulties provided substantial explanatory value for understanding differences in marital satisfaction among the female student-teachers included in the study.

4. Discussion

The present study examined the mediating role of emotion regulation in the relationships between attachment insecurity, perceived partner responsiveness, and marital satisfaction among female student-teachers at Farhangian University. The findings showed that attachment insecurity was positively associated with emotion regulation difficulties and negatively associated with marital satisfaction. Perceived partner responsiveness was negatively associated with emotion regulation difficulties and positively associated with marital satisfaction. Emotion regulation difficulties, in turn, were negatively associated with marital satisfaction. Structural equation modeling further demonstrated that attachment insecurity had a significant positive direct effect on emotion regulation difficulties and a significant negative direct effect on marital satisfaction, while perceived partner responsiveness had a significant negative effect on emotion regulation difficulties and a positive effect on marital satisfaction. Emotion regulation difficulties also significantly predicted lower marital satisfaction. Most importantly, the bootstrap findings supported the mediating role of emotion regulation difficulties in both relationships. Emotion regulation difficulties partially mediated the negative association between attachment insecurity and marital satisfaction and also partially mediated the positive association between perceived partner responsiveness and marital satisfaction.

The model explained a substantial proportion of variance in both emotion regulation difficulties and marital satisfaction, indicating that the combination of attachment-related vulnerability, interpersonal responsiveness, and emotional functioning offers a meaningful framework for understanding marital satisfaction in this population.

The finding that attachment insecurity was associated with greater emotion regulation difficulties is consistent with contemporary attachment-based accounts of emotional functioning. Attachment orientations are believed to shape how individuals perceive emotional threats, interpret interpersonal signals, seek support, and regulate affective arousal. Individuals characterized by attachment anxiety may become highly vigilant to signs of rejection and may intensify emotional signals in an effort to obtain reassurance, whereas individuals characterized by attachment avoidance may suppress emotional expression and distance themselves from emotionally demanding interactions. Both strategies can interfere with flexible and adaptive regulation. The present result is therefore consistent with evidence showing close relationships between attachment processes and emotion regulation capacities (Messina et al., 2026; Salavou et al., 2026). It also accords with findings indicating that attachment style predicts patterns of emotion regulation and help-seeking under conditions of psychological stress (Tiller et al., 2025), as well as evidence that attachment shapes how individuals regulate emotions in both close and more distant relationships (Walker & Kunst, 2025). In this sense, attachment insecurity may function as a vulnerability factor that increases the likelihood of maladaptive regulation when emotional demands emerge within marriage.

This interpretation is also supported by developmental research suggesting that emotional regulation develops within relational contexts and is closely intertwined with earlier attachment experiences. Reviews of adverse childhood experiences indicate that attachment insecurity and emotion dysregulation frequently operate as connected mechanisms through which early relational adversity affects later psychological functioning (Araujo et al., 2026). Similarly, emotion regulation and attachment have been identified as important protective or risk-related factors in the aftermath of adverse experiences (Treveethan & Francis, 2025). Although the present study did not assess childhood adversity, these findings help explain why insecure attachment may be accompanied by difficulties in emotional awareness, acceptance, impulse control, and access to adaptive regulatory strategies. Individuals whose internal working models are organized around expectations of

rejection, inconsistency, or discomfort with dependence may be less able to use relational support as a resource during distress. Consequently, emotionally demanding marital interactions may activate attachment-related concerns that intensify dysregulation.

The finding that attachment insecurity directly predicted lower marital satisfaction was also consistent with previous research on romantic and marital relationships. Attachment insecurity can impair marital functioning by altering expectations of intimacy, trust, availability, and support. Anxiously attached individuals may interpret ambiguous partner behavior as threatening, while avoidantly attached individuals may disengage from closeness or conflict, thereby limiting mutual responsiveness and emotional connection. The negative direct association observed in the present study therefore supports previous findings showing meaningful links between attachment orientations and marital quality (Lu et al., 2024). Similar evidence has emerged from research on arranged marriages, where attachment styles were associated with couple identity through perceived partner responsiveness (Kumar & Singh, 2024). Research among Saudi Arabian women has likewise demonstrated that attachment insecurity is related to relational experiences and perceptions of partner responsiveness (Attaky et al., 2020). Together, these studies support the present conclusion that attachment insecurity can undermine marital satisfaction through both direct relational processes and indirect emotional mechanisms.

The second major finding was that perceived partner responsiveness was negatively associated with emotion regulation difficulties. This suggests that women who experienced their spouses as understanding, validating, caring, and attentive also reported fewer difficulties in managing emotional states. One explanation is that perceived responsiveness creates a relational environment in which emotions can be expressed without excessive fear of rejection or invalidation. When individuals expect their partners to respond supportively, they may be more willing to disclose vulnerable feelings, seek comfort, and process emotional experiences collaboratively. This interpretation is strongly supported by evidence showing that perceived partner responsiveness encourages emotional expression (Ruan et al., 2020). The result is also compatible with research demonstrating that perceptions of responsiveness arise from multiple relational sources and are central to the quality of family interactions (Cook et al., 2018). In marital relationships, feeling understood and validated may

therefore reduce emotional threat and make adaptive regulation more accessible.

Perceived partner responsiveness may also operate as a form of interpersonal co-regulation. Emotional regulation within intimate relationships is not exclusively an individual process; spouses frequently contribute to the regulation of each other's emotions through validation, reassurance, perspective-taking, physical presence, and supportive communication. A responsive partner can reduce the intensity of distress and increase the sense of emotional safety necessary for reflective rather than impulsive responses. Conversely, low responsiveness may heighten uncertainty and amplify emotional reactivity. Evidence that rejection sensitivity has implications for perceptions of partner responsiveness further suggests that relational interpretations can shape the regulatory context in which emotional experiences unfold (Richter & Schoebi, 2023). Recent findings showing that fluctuations in perceived partner responsiveness predict ambivalence in romantic relationships also indicate that instability in responsiveness may increase uncertainty and emotional strain (Zoppolat et al., 2025). The present findings therefore support the view that partner responsiveness is not merely a positive relational evaluation but may also function as an important interpersonal resource for emotional regulation.

The positive direct relationship between perceived partner responsiveness and marital satisfaction was one of the strongest pathways in the model. This finding is consistent with a broad literature showing that responsiveness is central to intimacy and relationship quality. When individuals believe that their partners understand their needs, validate their perspectives, and care about their welfare, they are more likely to experience the relationship as secure, emotionally rewarding, and supportive. The present result is in line with dyadic research indicating that perceived partner responsiveness mediates associations between attachment styles and marital satisfaction (Lu et al., 2024). It is also supported by evidence showing that partner responsiveness connects attachment styles with couple identity (Kumar & Singh, 2024). Daily-diary studies have demonstrated that perceived partner responsiveness mediates the association between sexual and marital satisfaction (Polack et al., 2015), while research among couples experiencing genito-pelvic pain has shown that responsiveness is associated with sexual well-being and broader relational functioning (Bergeron et al., 2021). These findings collectively indicate that perceived responsiveness

is a robust interpersonal correlate of positive relationship outcomes.

Additional support comes from studies showing that responsiveness can buffer vulnerability associated with attachment anxiety. Perceived sexual responsiveness has been found to protect anxiously attached individuals from poorer relational and sexual quality in daily life (Raposo & Muise, 2021). This is particularly relevant to the current findings because individuals with insecure attachment may be highly sensitive to signals regarding a partner's availability or commitment. A responsive partner may counteract negative expectations and contribute to a greater sense of security. Moreover, mindfulness has been associated with greater relationship satisfaction through perceived responsiveness, suggesting that responsiveness may serve as a relational pathway through which individual psychological characteristics influence relationship quality (Adair et al., 2019). The importance of responsiveness is also reflected in psychophysiological research demonstrating complex associations between social support, perceived partner responsiveness, and cortisol among married couples (Fivecoat et al., 2024). Thus, the present study adds to a growing body of evidence suggesting that perceived partner responsiveness is a key relational resource with emotional, interpersonal, and potentially physiological implications.

The finding that emotion regulation difficulties significantly predicted lower marital satisfaction provides further support for the central role of emotional functioning in intimate relationships. Effective marital functioning requires partners to tolerate frustration, communicate needs, manage anger, recover from conflict, and maintain constructive interaction under emotional pressure. Individuals with greater emotion regulation difficulties may have greater trouble identifying their emotions, inhibiting impulsive responses, remaining goal-directed during distress, or accessing adaptive strategies. These difficulties may contribute to criticism, withdrawal, escalation, emotional distancing, or repetitive conflict, all of which can reduce marital satisfaction. The present result is consistent with research showing that emotion regulation is an important mechanism in marital adjustment. Emotion regulation has been identified as a mediator between personality characteristics and marital satisfaction (Odebunmi & CaбiHa, 2025), and emotion dysregulation has been shown to mediate the association between parenting stress and marital satisfaction in dyadic research (Wu et al., 2025). These findings reinforce the interpretation that the quality of emotional regulation plays a central role in

determining how individual and contextual pressures are translated into relationship outcomes.

Intervention-based findings further support this interpretation. Emotional schema therapy has been associated with improvements in emotion regulation and marital satisfaction among women with anxiety disorders, suggesting that enhancing regulatory capacities can have beneficial effects on marital functioning (Razzaghi et al., 2025). Research on couple burnout has likewise demonstrated important associations among emotion regulation, marital satisfaction, and relational exhaustion (Kocyigit, 2025). Together, these studies suggest that emotion regulation is not simply a stable individual characteristic but a potentially modifiable process with direct relevance to the quality of marital relationships. This is important because it implies that even when attachment insecurity is relatively enduring, its negative relational consequences may be reduced through the development of more adaptive emotional regulation skills.

The most important finding of the present study was that emotion regulation difficulties partially mediated the relationship between attachment insecurity and marital satisfaction. This indicates that attachment insecurity was associated with poorer marital satisfaction partly because insecurely attached individuals experienced greater difficulties regulating their emotions. The persistence of a significant direct pathway from attachment insecurity to marital satisfaction indicates that emotion regulation did not fully explain the relationship, but it accounted for a meaningful component of it. This finding is theoretically plausible because attachment systems are activated during interpersonal stress, particularly in situations involving perceived rejection, criticism, separation, or emotional unavailability. When these experiences activate insecure attachment patterns, individuals may respond with hyperactivation or deactivation strategies that compromise emotional regulation. Poor regulation may subsequently make conflicts more difficult to resolve and undermine relationship satisfaction. The mediation result is therefore consistent with evidence linking attachment insecurity with emotion dysregulation (Messina et al., 2026; Salavou et al., 2026) and with broader work demonstrating that attachment influences how individuals manage emotions and seek interpersonal support (Tiller et al., 2025; Walker & Kunst, 2025).

The partial mediation effect also suggests that attachment insecurity influences marital satisfaction through additional pathways beyond emotion regulation. These may include

negative interpretations of partner behavior, reduced trust, reassurance-seeking, avoidance of intimacy, difficulty depending on the spouse, or impaired communication. Research showing that attachment is an intermediary between childhood maltreatment and perceived partner responsiveness supports the idea that attachment schemas can shape how partner behavior is perceived (Gosselin et al., 2024). Insecurely attached individuals may therefore be more likely to interpret ambiguous relational events negatively, even when partner behavior is not objectively rejecting. Such interpretive biases may directly reduce marital satisfaction while also increasing emotional dysregulation. The coexistence of direct and indirect pathways is therefore consistent with a multidimensional attachment framework.

Emotion regulation difficulties also partially mediated the relationship between perceived partner responsiveness and marital satisfaction. This finding suggests that one reason responsive partners contribute to greater marital satisfaction is that responsiveness may support more adaptive emotional functioning. Perceiving a spouse as accepting and understanding may reduce emotional threat, facilitate open expression, and make it easier to use constructive regulatory strategies. In turn, better emotional regulation can reduce conflict escalation and support more positive interaction. This interpretation is consistent with evidence that perceived responsiveness encourages emotional expression (Ruan et al., 2020) and with findings showing that perceived partner responsiveness mediates the association between emotional reactivity and marital quality (Yuan et al., 2022). The current results extend this line of research by suggesting that the emotional regulatory process itself may function as a pathway linking perceptions of partner responsiveness with global marital satisfaction.

At the same time, the significant direct effect of perceived partner responsiveness on marital satisfaction indicates that responsiveness influences relationship quality through mechanisms beyond emotion regulation. Feeling understood, valued, and cared for may directly strengthen intimacy, trust, belonging, and couple identity. This interpretation is supported by research showing that perceived partner responsiveness is associated with sexual well-being (Bergeron et al., 2021), buffers attachment-related vulnerabilities (Raposo & Muise, 2021), and connects sexual experiences to marital satisfaction (Polack et al., 2015). The present finding therefore supports a dual-process interpretation: partner responsiveness may improve marital satisfaction directly by enhancing the interpersonal

quality of the relationship and indirectly by facilitating more adaptive regulation of emotional experiences.

The findings also have particular relevance for student-teachers. Research among Farhangian University students has highlighted the importance of cognitive emotion-regulation strategies for psychological outcomes such as test anxiety (Khalili et al., 2024), while resilience has been shown to mediate relationships between cognitive emotion regulation and test anxiety in student-teachers (Jahanbakhsh & Vafaeizadeh, 2025). The present study extends this evidence from academic and individual adjustment to marital functioning. Female student-teachers may simultaneously manage educational requirements, professional identity development, future occupational expectations, and the demands of married life. Under these circumstances, the ability to regulate emotions effectively and experience the spouse as emotionally responsive may provide important psychological resources. The findings therefore demonstrate that emotion regulation is relevant not only to academic well-being but also to relational adjustment among student-teachers.

5. Conclusion

Overall, the present findings support an integrated model in which attachment insecurity represents an intrapersonal relational vulnerability, perceived partner responsiveness represents an interpersonal relational resource, and emotion regulation functions as a mechanism linking both factors to marital satisfaction. The results are consistent with contemporary perspectives emphasizing that marital quality is shaped by interactions between enduring relational orientations, perceptions of partner behavior, and regulatory processes. Attachment insecurity appears to increase emotional dysregulation and reduce marital satisfaction, whereas perceived partner responsiveness appears to reduce dysregulation and enhance marital satisfaction. Emotion regulation provides a meaningful explanatory bridge between these processes. The substantial proportion of variance explained in marital satisfaction also indicates that this combined framework offers considerable explanatory value for understanding differences in marital adjustment among female student-teachers.

6. Limitations & Suggestions

The present study had several limitations that should be considered when interpreting the findings. First, the cross-sectional correlational design does not permit definitive

conclusions regarding temporal or causal relationships among attachment insecurity, perceived partner responsiveness, emotion regulation, and marital satisfaction. Although the structural model was theoretically specified and statistically supported, alternative causal directions remain possible. Second, all variables were assessed using self-report questionnaires, which may have increased the influence of shared method variance, social desirability, response bias, and participants' current emotional states. Third, the study focused exclusively on married female student-teachers, which limits the generalizability of the findings to male student-teachers, unmarried populations, nonstudent adults, or couples from other occupational and cultural contexts. Fourth, the study assessed marital functioning from the perspective of only one partner and did not include corresponding data from spouses. Consequently, dyadic processes such as partner effects, mutual responsiveness, and reciprocal emotion regulation could not be evaluated. Finally, potentially relevant variables such as socioeconomic status, conflict frequency, personality traits, relationship duration, perceived stress, social support, and spouse characteristics were not comprehensively incorporated into the model.

Future studies should employ longitudinal designs to clarify the temporal ordering of attachment insecurity, perceived partner responsiveness, emotion regulation, and marital satisfaction and to determine whether changes in emotion regulation predict subsequent changes in marital quality. Dyadic studies including both spouses are particularly recommended because marital processes are inherently interdependent and may involve reciprocal actor and partner effects. Future researchers could also examine attachment anxiety and attachment avoidance separately rather than treating them only as indicators of broader attachment insecurity, as these dimensions may operate through different regulatory mechanisms. Experimental and intervention-based studies could determine whether improvements in emotion regulation or partner responsiveness lead to measurable increases in marital satisfaction. It would also be valuable to replicate the model among male student-teachers, couples from other universities, teachers already employed in schools, and culturally diverse community samples. Additional mediators and moderators, including resilience, mindfulness, communication patterns, rejection sensitivity, conflict-management strategies, perceived stress, and social support, could be incorporated to develop a more comprehensive explanation of marital adjustment.

The findings suggest that university counseling centers, premarital and marital counseling services, and psychological support programs for student-teachers should consider both emotional and interpersonal processes when designing preventive and therapeutic interventions. Programs may benefit from teaching skills related to emotional awareness, acceptance of emotional experiences, impulse control, distress tolerance, cognitive reappraisal, constructive expression of needs, and maintenance of goal-directed behavior during conflict. Couple-based interventions may also focus on enhancing perceived partner responsiveness by strengthening empathic listening, validation, emotional availability, supportive responding, and accurate recognition of the spouse's needs. Counselors working with insecurely attached individuals may help clients identify attachment-related expectations and distinguish current partner behavior from automatic fears of rejection or discomfort with intimacy. Because student-teachers often face simultaneous academic, professional, and marital demands, university-based workshops that integrate emotion-regulation training with relationship skills may be particularly useful for promoting both individual well-being and marital adjustment.

Acknowledgments

We would like to express our appreciation and gratitude to all those who cooperated in carrying out this study.

Declaration of Interest

The authors of this article declared no conflict of interest.

Ethical Considerations

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

Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

Funding

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

Authors' Contributions

All authors have equally contributed 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.

References

- Adair, K., Boulton, A., & Algoe, S. (2019). The effect of mindfulness on relationship satisfaction via perceived responsiveness: findings from a dyadic study of heterosexual romantic partners. *Mindfulness*, 9(2), 597-609.
- Araujo, F. V. d., Lanzarote-Fernández, M. D., Sousa-Gomes, V., & Moreira, D. (2026). Relationship Between Adverse Childhood Experiences, Attachment, and Emotional Regulation: A Review of the Literature. *Psychological Trauma Theory Research Practice and Policy*. <https://doi.org/10.1037/tra0002099>
- Attaky, A., Kok, G., & Dewitte, M. (2020). Attachment Insecurity and Sexual and Relational Experiences in Saudi Arabian Women: The Role of Perceived Partner Responsiveness and Sexual Assertiveness. *Journal of Sexual Medicine*. <https://doi.org/10.1016/j.jsxm.2020.02.029>
- Bergeron, S., Pâquet, M., Steben, M., & Rosen, N. O. (2021). Perceived partner responsiveness is associated with sexual well-being in couples with genito-pelvic pain. *Journal of Family Psychology*, 35(5), 628-638. <https://doi.org/10.1037/fam0000829>
- Cook, W. L., Dezanré, M., & De Mol, J. (2018). Sources of perceived responsiveness in family relationships. *Journal of Family Psychology*, 32(6), 743-752. <https://doi.org/10.1037/fam0000411>
- Fivecoat, H. C., Mattson, R. E., Cameron, N. M., & Johnson, M. D. (2024). Social Support and Perceived Partner Responsiveness Have Complex Associations With Salivary Cortisol in Married Couples. *Journal of Social and Personal Relationships*, 41(7), 1913-1935. <https://doi.org/10.1177/02654075241229755>
- Gosselin, C., Daspe, M. È., Brassard, A., Lussier, Y., & Vaillancourt-Morel, M. P. (2024). Attachment as an Intermediary Variable Between Childhood Maltreatment and Perceived Partner Responsiveness in Adolescents and Young Adults. *Journal of marital and family therapy*, 50(2), 434-452. <https://doi.org/10.1111/jmft.12688>
- Jahanbakhsh, Z., & Vafaeizadeh, M. (2025). The Mediating Effect of Resilience in the Relationship Between Cognitive Emotion Regulation Strategies and Test Anxiety Among Student-Teachers at Farhangian University. *Quarterly Journal of Educational Psychology*, 21(75), 259-283.
- Khalili, K. M., Shafqati, S., Eshaghi, M. F., & Rafieipour, A. (2024). Expectancy Test Anxiety Based on Basic Psychological Needs and Cognitive Emotional Regulation among Students at Farhangian University. <https://www.sid.ir/paper/410735/en>
- Kocyigit, M. (2025). Emotion regulation and couple burnout in marriage: The mediating role of marital satisfaction. *Current Psychology*. <https://doi.org/10.1007/s12144-024-07253-1>
- Kumar, R. M., & Singh, R. M. (2024). Couple identity in Indian arranged marriages: Perceived partner responsiveness as the mediator of attachment styles and couple identity. *Couple and family psychology: Research and practice*, 13(2), 143. <https://doi.org/10.1037/cfp0000220>
- Lu, S., He, Y., Li, Q., Chen, Z., & Fang, X. (2024). Dyadic Effects of Attachment Styles on Marital Satisfaction among Chinese Couples: The Mediating Role of Perceived Partner Responsiveness. *Journal of Social and Personal Relationships*, 41(12), 3770-3790. <https://doi.org/10.1177/02654075241277227>
- Messina, I., Spataro, P., Gagliardini, G., Rossi, T., & Grecucci, A. (2026). Attachment Orientations and Borderline Personality Features: The Mediating Role of Difficulties in Interpersonal Emotion Regulation. *Borderline personality disorder and emotion dysregulation*, 13(1), 4. <https://doi.org/10.1186/s40479-025-00323-1>
- Odeunmi, O., & Сабина, Н. Ю. (2025). Emotional Regulation as a Mediator of Personality Traits and Marital Satisfaction Among Academic Staff in Colleges of Education in Oyo State. *Mejaee*. <https://doi.org/10.70382/mejaee.v7i8.028>
- Polack, R. G., Bar-Nahum, L. E., Newhouse, S., Anderson, R., Heiman, J. R., Rafaeli, E., & Janssen, E. (2015). Perceived Partner Responsiveness Mediates the Association Between Sexual and Marital Satisfaction: A Daily Diary Study in Newlywed Couples. *Archives of Sexual Behavior*, 45(1), 109-120. <https://doi.org/10.1007/s10508-014-0448-2>
- Raposo, S., & Muise, A. (2021). Perceived partner sexual responsiveness buffers anxiously attached individuals' relationship and sexual quality in daily life. *Journal of Family Psychology*, 35(4), 500-509. <https://doi.org/10.1037/fam0000823>
- Razzaghi, M., Zemestani, M., & Mashhadi, A. (2025). Effectiveness of Emotional Schema Therapy on Anxiety Symptoms, Emotion Regulation, and Marital Satisfaction in Women with Anxiety Disorders: A Preliminary Study. *International Journal of Cognitive Behavior Therapy*, 18, 334-358. <https://doi.org/10.1007/s41811-025-00238-3>
- Richter, M., & Schoebi, D. (2023). Rejection Sensitivity in Intimate Relationships: Implications for Perceived Partner Responsiveness. <https://doi.org/10.31234/osf.io/bfjv9>
- Ruan, Y., Reis, H. T., Clark, M. S., Hirsch, J. L., & Bink, B. D. (2020). Can I tell you how I feel? Perceived partner responsiveness encourages emotional expression. *Emotion*, 20(3), 329-335. <https://doi.org/10.1037/emo0000650>
- Salavou, V., Papanikolaou, K., Pehlivanidis, A., & Giannakopoulos, G. (2026). Mentalization and Emotion Regulation in Adolescent Attachment: A Scoping Review. *Children*, 13(3), 420. <https://doi.org/10.3390/children13030420>
- Tiller, J., Maguire, T., & Newman-Taylor, K. (2025). Attachment Style Predicts Emotion Regulation, Help-Seeking, and Recovery in Psychosis. *Mental Health Science*, 3(1), e70002. <https://doi.org/10.1002/mhs2.70002>
- Trevethan, M., & Francis, S. E. (2025). Protective Factors for Adverse Childhood Experiences: The Role of Emotion Regulation and Attachment. *Journal of Child and Family Studies*, 34(1), 25-40. <https://doi.org/10.1007/s10826-024-02989-7>
- Walker, S., & Kunst, H. (2025). Helping or Holding Back? How Attachment Shapes Emotion Regulation of Others in Close and Distant Relationships. https://doi.org/10.31234/osf.io/qtpfs_v2
- Wu, L., Xie, R., Zhang, Y., & Ding, W. (2025). Actor-partner interdependence of parents' parenting stress on marital satisfaction: The mediating role of emotion dysregulation. *Journal of affective disorders*, 120831. <https://doi.org/10.1016/j.jad.2025.120831>

- Yuan, Q., Fan, Z., & Leng, J. (2022). The Effect of Emotional Reactivity on Marital Quality in Chinese Couples: The Mediating Role of Perceived Partner Responsiveness. *Frontiers in psychology*, 12, 787899. <https://doi.org/10.3389/fpsyg.2021.787899>
- Zoppolat, G., Alonso-Ferres, M., Righetti, F., Balzarini, R. N., & Slatcher, R. B. (2025). Shifting Signals: Fluctuations in Perceived Partner Responsiveness Predict Ambivalence in Romantic Relationships. https://doi.org/10.31219/osf.io/rwu58_v1