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The role of intimacy and sexual knowledge in predicting marital quality with the mediation of attachment style in Iranian couples

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Original Article

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Abstract

This study aimed to investigate the role of intimacy and sexual knowledge in predicting marital quality, with attachment style as a mediator, among Iranian couples. The research employed a correlational design using structural equation modeling (SEM). The statistical population consisted of couples referred to psychotherapy and welfare centers in East Azerbaijan Province in 2023, from which 250 participants were selected via multistage random sampling. Data were collected using the Revised Dyadic Adjustment Scale, Intimacy Scale, Sexual Knowledge Questionnaire, and Experiences in Close Relationships-Revised. Data analysis with SPSS26 and AMOS24 revealed that the proposed model had a good fit ($\chi^2/df=2.15$, RMSEA=0.06). Intimacy ($\beta=0.41$, $P<0.001$) and sexual knowledge ($\beta=0.20$, $P<0.01$) had direct effects on marital quality, while attachment style significantly mediated these relationships ($P<0.001$). These results underscore the critical role that cultivating emotional intimacy and deepening sexual understanding play in strengthening and enriching marital relationships. They suggest that counselors and therapists should prioritize integrating these essential elements into their therapeutic approaches and interventions to promote healthier, more fulfilling partnerships.

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Introduction

The family, as the fundamental unit of society, represents a dynamic and multilayered system characterized by deep emotional bonds, defined roles, and complex interactions (Rahimi et al., 2022). At the core of this system lies marital quality, recognized as a key indicator of marital health and stability (King et al., 2022). Marital quality is a multidimensional construct encompassing satisfaction, adjustment, cohesion, and commitment, and it is influenced by various factors, including psychological characteristics and spousal interactions (Troxel, 2006). Numerous studies have demonstrated that improving marital quality not only enhances the psychological well-being of couples but also positively impacts overall family functioning and even future generations (Fincham & Beach, 2020).

One significant factor affecting marital quality is intimacy. Intimacy is defined as emotional closeness, trust, and mutual support between partners, and has consistently been reported as a primary predictor of marital satisfaction (Nouranipour et al., 2017). For example, Greeley et al. (2021), in a study on American couples, found that intimacy was associated with greater cohesion and reduced marital conflicts. Similarly, in Iran, Sanaei et al. (2000) reported a strong correlation ($r = 0.75$) between intimacy and marital quality. These findings highlight the universal as well as culturally specific importance of intimacy in marital relationships.

Another factor is sexual knowledge, which refers to couples' awareness of sexual matters and their ability to communicate effectively in this domain. McCarthy (2021) found that sexual knowledge was positively related to sexual satisfaction, and consequently, to overall marital quality. In Iran, Torabi et al. (2023), studying couples in Tehran, reported that sexual education increased marital satisfaction by up to 30%. However, due to cultural taboos, this variable has received limited attention in Iranian studies, and its effects have not been comprehensively explored.

Attachment style, as another important psychological construct, also plays a significant role in marital relationships. According to Bowlby's attachment theory (1988), attachment styles (secure, avoidant, anxious) shape individuals' interactions with their partners. Hosseini et al. (2021) in Iran found that secure attachment was positively correlated with marital satisfaction ($r = 0.62$), while insecure attachment styles exacerbated marital conflicts. Similarly, international studies, such as Fraley's (2005), confirmed this relationship and suggested that attachment style may act as a mediator between psychological variables and marital quality.

Despite this evidence, a review of the literature reveals that most studies have examined intimacy, sexual knowledge, and attachment style in isolation, with fewer attempts to integrate these variables within a causal model. For instance, Nouranipour et al. (2017) explored the relationship between intimacy and marital quality but overlooked the mediating role of attachment style. Similarly, McCarthy (2021) addressed sexual knowledge without considering its effects through attachment style. This research gap is even more pronounced in Iran, where cultural restrictions have limited the study of sexual

issues and comprehensive models that combine these variables remain scarce (Rahimi et al., 2022).

This gap underscores the necessity of the present study. Understanding how intimacy and sexual knowledge influence marital quality through attachment style may inform the development of more effective interventions for couples. The significance of this study is particularly heightened in the Iranian context, where marital conflicts and limited sexual awareness are common challenges, exacerbated by cultural taboos and the lack of adequate education (Torabi et al., 2023). The aim of this research is to test a model demonstrating how intimacy and sexual knowledge affect marital quality through the mediating role of attachment style. The findings may provide practical guidance for psychologists and counselors seeking to improve couples' quality of life by focusing on these variables.

Method

This study employed a correlational design using Structural Equation Modeling (SEM) to examine the causal relationships among the variables.

Participants

The statistical population consisted of married couples who attended psychotherapy centers in Tabriz and the Welfare Organization of East Azerbaijan Province in 2023 (N = 3,000). The sample size was determined based on Kline's (2020) rule of thumb—ten times the number of model parameters (25 parameters)—resulting in 250 participants. A multistage random sampling method was applied: first, centers were randomly selected, and then eligible couples were recruited based on the following inclusion criteria: residence in Tabriz, experiencing marital conflict, and willingness to participate. Exclusion criteria included incomplete responses to the instruments or withdrawal from the study.

Instruments

Revised Dyadic Adjustment Scale (RDAS): Developed by Busby et al. (1995), this scale consists of 14 items and three subscales (consensus, satisfaction, cohesion). Cronbach's alpha reliability has been reported between 0.79 and 0.90 (Holist et al., 2005) and 0.85 in Iranian samples (Yousefi, 2011). Convergent validity with the Marital Satisfaction Scale has been confirmed ($p < .001$).

Intimacy Scale (IS): Designed by Walker and Thompson (1983), this 17-item scale measures marital intimacy. Reliability in Iranian samples was reported as 0.96 (Sanaei, 2000), with convergent validity established through significant correlation with the Love Questionnaire ($r = .88$).

Sexual Knowledge Questionnaire: Developed by Hooper et al. (1992), consisting of 15 items. Rahimi (2009) reported a Cronbach's alpha of 0.82 in Iranian samples, and content validity has been confirmed by subject matter experts.

Experiences in Close Relationships–Revised (ECR-R): Developed by Waller et al. (2000), this 36-item questionnaire assesses adult attachment style. Test-retest reliability

was 0.70 in Fraley (2005) and 0.78 in Iranian research (Shokarkan et al., 2006). Validity was confirmed through correlations with the Hazan and Shaver attachment scale (r = .40–.60).

Procedure

After obtaining approval from the heads of the selected centers and receiving ethical clearance from the University of Mohaghegh Ardabili (IR.UMA.REC.1402.093), data collection was carried out from October to December 2023. Questionnaires were administered in person, with couples completing them separately after providing informed consent. Data were analyzed using SPSS version 26 (descriptive statistics) and AMOS version 24 (structural modeling). The significance level was set at 0.05.

Results

Data from 250 couples were analyzed. The mean age of the participants was 32.36 years (SD = 0.72).

Table 1. **Demographic Variables of Couples (n=250)**

Demographic Variable	Level	Percentage	Number
Husband's Education	Elementary	10/4	26
	Middle School	13/6	34
	High School Diploma	36/8	92
	Bachelor's Degree and Higher	39/2	98
Wife's Education	Elementary	12/8	32
	Middle School	17/6	44
	High School Diploma	47/2	118
	Bachelor's Degree and Higher	22/4	56
Number of Children	1	27/6	69
	2	42/4	106
	3	28	70
	4	1/6	4
	More than 4	0/4	1
Husband's Occupation	Unemployed	1/2	3
	Government Employee	26	65
	Self-Employed	67/06	169
	Other	5/2	13
	Housewife	69/6	174
	Government		

Wife's Occupation	Employee Self-Employed Other	5/6 24/8 0	14 62 0
Age (years); Mean (Standard Deviation)			(72/0)32/36

Descriptive statistics of the study variables are presented in Table 2.

Table 2. **Descriptive indices (mean and standard deviation) of research variables among couples (N = 250)**

Variable	Kurtosis	Skewness	Maximum – Minimum	Standard deviation	mean
Marital quality	-0/399	0/592	20-63	12/42	35/93
Agreement	-0/489	0/682	11-35	8/92	18/13
Satisfaction	0/656	0/686	7-21	5/84	11/102
Coherence	0/960	0/850	7-20	5/43	11/86
Intimacy	-0/292	-0/666	6-18	5/80	14/06
Sexual knowledge	-0/251	-0/039	11-38	8/13	23/96
Attachment style (secure)	-0/435	0/253	20-83	16/16	46/31

Table 3 displays the Pearson correlation coefficients among marital quality, intimacy, sexual knowledge, and secure attachment in couples.

Table 3. **Correlation matrix among predictor, mediating, and dependent variables in the final model**

	1	2	3	4
1. Marital quality	1			
2. Intimacy	0.41**	1		
3. Sexual knowledge	0/20**	0/15**	1	
4.Attachment style (secure)	0/18*	0/15**	0/25**	1

<0/05P<، 0/001 P**

As shown in Table 4, the standardized coefficients and critical ratios for all paths in the revised (final) model were examined.

Table 4. **Standardized coefficients of the modified (final) pattern paths**

Significance level(P)	Critical ratio	Standard error	Standard coefficients	path
<0/001	4/09	0/00	0/32	Marital quality → Intimacy
0/625	0/47	0/00	0/05	Marital quality → Agreement
0/001	-3/17	0/16	-0/22	Marital quality → Satisfaction
<0/001	-3/57	0/03	-0/23	Marital quality →

				Coherence
0/713	**0/35**	**0/07**	**0/02**	**Marital quality → Extreme imitation**
<0/001	**3/72**	**0/05**	**0/24**	**Marital quality → Attachment style**
0/005	**-2/81**	**0/46**	**-0/19**	**Marital quality → Isolation**
<0/001	**-6/94**	**0/34**	**-0/73**	**Marital quality → Sexual knowledge**
<0/001	**5/20**	**0/00**	**0/66**	**Intimacy → Attachment style**
<0/001	**5/250**	**0/161**	**0/480**	**Sexual knowledge → Attachment style**

Intimacy (β = 0.41, p < .001) and sexual knowledge (β = 0.20, p < .01) had direct effects on marital quality. Bootstrap analysis (2,000 samples) demonstrated that the indirect effects of intimacy (β = 0.15, CI = 0.09–0.22) and sexual knowledge (β = 0.10, CI = 0.04–0.17) through attachment style were significant (p < .001).

Discussion

The present study demonstrated that intimacy, sexual knowledge, and attachment style play significant roles in predicting marital quality. The findings are discussed in detail and compared with previous studies.

Hypothesis 1: Direct effect of intimacy on marital quality

The results showed that intimacy directly predicted marital quality with a coefficient of 0.41 (p < .001). This finding is consistent with King et al. (2022), who reported a coefficient of 0.48 for the effect of intimacy on marital satisfaction. Similarly, Greeley et al. (2021) found that intimacy enhances relationship quality by increasing cohesion and reducing

conflict. In Iran, Nouranipour et al. (2017) also confirmed a strong positive correlation ($r = 0.75$) between intimacy and marital quality. Taken together, these findings underscore intimacy as a central emotional factor underlying successful relationships across cultures, including Iran. A plausible explanation is that intimacy fosters a sense of trust and security, which in turn strengthens positive interactions between partners.

Hypothesis 2: Direct effect of sexual knowledge on marital quality

Sexual knowledge was found to have a significant positive effect on marital quality ($\beta = 0.20$, $p < .01$). This result is in line with Torabi et al. (2023), who reported that sexual education increased marital satisfaction by up to 30% among Iranian couples. Internationally, McCarthy (2021) documented a stronger effect ($\beta = 0.35$) of sexual knowledge on sexual satisfaction and, consequently, marital quality. However, the smaller effect size in the current study may be attributed to cultural restrictions in Iran, where discussions on sexual issues remain taboo and formal education in this domain is limited. This suggests that sexual knowledge may exert a stronger influence in more culturally open contexts, whereas in Iran its impact is moderated by social barriers.

Hypothesis 3: Mediating role of attachment style

Bootstrap analysis revealed that attachment style significantly mediated the relationship between intimacy ($\beta = 0.15$, CI = 0.09–0.22) and sexual knowledge ($\beta = 0.10$, CI = 0.04–0.17) with marital quality ($p < .001$). This finding is consistent with Bowlby's (1988) attachment theory, which identifies attachment as a foundation for emotional interactions. In Iran, Hosseini et al. (2021) reported a positive relationship between secure attachment and marital satisfaction ($r = 0.62$), although they did not examine mediation effects. Globally, Fraley (2005) emphasized that secure attachment strengthens the positive impact of emotional variables, whereas avoidant or anxious styles weaken such effects. By highlighting the mediating role of attachment, the present study advances the literature by showing that intimacy and sexual knowledge achieve their greatest influence in the presence of secure attachment.

Overall, the findings converge with prior research regarding the role of intimacy (Nouranipour et al., 2017; King et al., 2022), but diverge

somewhat from Western studies on sexual knowledge (McCarthy, 2021), reflecting the cultural context of Iran. With respect to attachment, the results extend earlier Iranian studies (Hosseini et al., 2021) by demonstrating its mediating function. Unlike Nouranipour et al. (2017), who examined only direct effects, this study identified secure attachment as a key mechanism through which intimacy and sexual knowledge affect marital quality. The main implication is that secure attachment reinforces couples' relationships, whereas insecure styles (avoidant or anxious) may diminish the benefits of intimacy and sexual knowledge.

Conclusions

This study showed that intimacy and sexual knowledge influence marital quality through attachment style, with secure attachment serving as a key facilitator. These findings not only address gaps in the Iranian research literature but also provide practical insights for strengthening marital relationships.

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Conflict of interest

The authors declare that there are no conflicts of interest regarding the writing of this article.

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