




The Relationship Between Gender Schema and Dysfunctional Sexual Beliefs with the Mediating Role of Psychological Hardiness in Women

Soodabeh. Sarkhosh¹, Naser. Amini^{*2}, Moloud. Keykhosrovani³

¹ Ph.D. Candidate in psychology, Bu.C., Islamic Azad University, Bushehr, Iran

² Assistant Professor, Department of Psychology, Bushehr Branch, Islamic Azad University, Bushehr, Iran

³ Assistant Professor, Department of Psychology, Bu.C., Islamic Azad University, Bushehr, Iran

* Corresponding author email address: amini_n2010@yahoo.com

Article Info

Article type:

Original Research

Section:

Family and Couple Therapy

How to cite this article:

Sarkhosh, S., Amini, N., & Keykhosrovani, M. (2026). Development of a Native Educational Package for Marital Life Enrichment Based on the Lived Experiences of Successful Couples. *KMAN Counseling and Psychology Nexus*, 4, 1-10.

<http://doi.org/10.61838/kman.fct.psynexus.5294>



© 2026 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

The present study aimed to examine the relationship between gender schema and dysfunctional sexual beliefs with the mediating role of psychological hardiness in married women. This study employed a descriptive-correlational design using structural equation modeling (SEM). The statistical population consisted of all married women aged 30 to 40 years working in official and governmental bank branches in Bushehr in 2025. A sample of 266 participants was selected through convenience sampling based on Cochran's formula. Data were collected using the Dysfunctional Sexual Beliefs Questionnaire (SDBQ), the Bem Sex Role Inventory (BSRI), and the Ahvaz Psychological Hardiness Inventory (APHI). Data analysis was conducted using SPSS version 28 for descriptive statistics and correlation and regression analyses, and AMOS software for testing the structural model and mediating effects. The results indicated that masculinity ($\beta = 0.22$, $p = 0.017$) and femininity ($\beta = 0.26$, $p = 0.010$) had positive and significant effects on dysfunctional sexual beliefs, while the effect of neutral gender schema was not significant ($\beta = -0.09$, $p = 0.212$). Masculinity ($\beta = -0.34$, $p = 0.010$) and femininity ($\beta = -0.28$, $p = 0.010$) had significant negative effects on psychological hardiness, whereas neutral traits showed no significant effect ($\beta = 0.08$, $p = 0.432$). Psychological hardiness had a significant negative effect on dysfunctional sexual beliefs ($\beta = -0.39$, $p = 0.010$). Additionally, the indirect effects of masculinity ($\beta = 0.13$, $p = 0.050$) and femininity ($\beta = 0.11$, $p = 0.050$) on dysfunctional sexual beliefs through psychological hardiness were significant, while the indirect effect of neutral traits was not significant ($\beta = -0.03$, $p = 0.268$). The findings highlight the significant role of gender schema dimensions and psychological hardiness in shaping dysfunctional sexual beliefs, emphasizing that psychological hardiness partially mediates the relationships between masculinity and femininity with dysfunctional sexual beliefs, and suggesting that enhancing resilience and promoting flexible gender schemas may reduce maladaptive sexual beliefs in women.

Keywords: Gender Schema, Dysfunctional Sexual Beliefs, Psychological Hardiness, Structural Equation Modeling, Married Women

1. Introduction

The study of sexual beliefs and gender-related cognitive structures has gained increasing attention in contemporary psychological research, particularly in relation to women's mental health and relational functioning. Sexual beliefs, especially those that are rigid, distorted, or dysfunctional, play a crucial role in shaping individuals' perceptions, behaviors, and emotional experiences within intimate relationships. Dysfunctional sexual beliefs are often rooted in culturally transmitted norms, personal experiences, and cognitive schemas, and they can significantly contribute to sexual dissatisfaction, relational conflict, and psychological distress (Brotto et al., 2025; Urea et al., 2025). These beliefs may include rigid expectations about sexual roles, moral judgments about sexual behavior, and misconceptions regarding desire, performance, and intimacy. When such beliefs become internalized, they can distort sexual self-concept and hinder adaptive functioning in marital relationships.

One of the central constructs in understanding these belief systems is the concept of gender schema, which refers to cognitive frameworks through which individuals interpret and organize information related to gender roles and identity. Gender schema theory posits that individuals internalize societal definitions of masculinity and femininity, which subsequently guide their attitudes, behaviors, and self-perceptions (Aste et al., 2025). These schemas influence not only how individuals perceive themselves but also how they interpret their roles within intimate relationships. Research has shown that rigid adherence to traditional gender roles can lead to maladaptive outcomes, including reduced flexibility in interpersonal interactions and increased vulnerability to dysfunctional beliefs (Yan et al., 2024). In the context of sexual relationships, gender schemas may shape expectations regarding sexual behavior, emotional expression, and relational dynamics, thereby contributing to the development of dysfunctional sexual beliefs.

The relationship between gender schema and sexual beliefs is further complicated by the influence of sociocultural and psychological factors. In many societies, women are socialized to adopt passive or restrictive roles in sexual contexts, which may reinforce beliefs that inhibit sexual expression and satisfaction. Such internalized norms can manifest as cognitive distortions, including beliefs that sexual desire is inappropriate or that women should prioritize their partner's needs over their own (Fedorova &

Vorobevskii, 2025; Wahyuni et al., 2024). These distortions are often associated with feelings of shame, guilt, and anxiety, which can negatively impact sexual functioning and overall well-being. Moreover, dysfunctional sexual beliefs have been linked to broader cognitive patterns, such as maladaptive metacognitive beliefs and depressive thinking styles, suggesting that they are part of a larger network of cognitive vulnerabilities (Bailey et al., 2025; Strand et al., 2024).

In addition to gender schema, psychological hardiness has emerged as a key variable in understanding individuals' resilience to stress and their ability to cope with challenging life circumstances. Psychological hardiness is characterized by a combination of commitment, control, and challenge, and it reflects an individual's capacity to perceive stressful situations as manageable and meaningful (Kowalski & Schermer, 2019). Individuals with high levels of hardiness are more likely to engage in adaptive coping strategies, maintain emotional stability, and exhibit greater psychological well-being. In the context of intimate relationships, hardiness has been associated with higher levels of marital satisfaction, better communication, and reduced conflict (Mahdikhani & Izadi, 2021; Seifi & Taghavi, 2019). It also plays a protective role against the negative effects of stressors such as emotional divorce and relational dissatisfaction (Jarwan & Al-frehat, 2020).

The potential mediating role of psychological hardiness in the relationship between gender schema and dysfunctional sexual beliefs is of particular interest. Individuals with rigid gender schemas may be more susceptible to stress and less capable of adapting to changing relational dynamics, which can increase the likelihood of developing dysfunctional beliefs. However, those with higher levels of psychological hardiness may be better equipped to reinterpret these schemas, challenge maladaptive beliefs, and maintain healthier cognitive and emotional functioning. Empirical evidence supports the notion that hardiness can buffer the impact of cognitive distortions and enhance individuals' ability to regulate their thoughts and emotions (Hashemi & Ahmadi, 2015; Parsafar & Yazdkhasti, 2014). Furthermore, interventions aimed at increasing psychological hardiness have been shown to improve sexual satisfaction and reduce marital conflict, highlighting its practical significance in therapeutic contexts (Najafi & Fakhimi Farhadi, 2023).

Recent studies have also emphasized the role of cognitive and metacognitive processes in shaping sexual beliefs and relational outcomes. Metacognitive beliefs, which involve individuals' beliefs about their own thinking processes, have

been linked to various psychological disorders and maladaptive behaviors (Levent, 2025). In the domain of intimate relationships, these beliefs can influence how individuals interpret their partner's behavior, manage conflict, and regulate emotional responses. Similarly, cognitive distortions, such as overgeneralization and catastrophizing, have been identified as key predictors of dysfunctional sexual beliefs and relational dissatisfaction (Urrea et al., 2025). These findings underscore the importance of examining both cognitive content and cognitive processes in understanding sexual and relational functioning.

The relevance of these constructs is further supported by research highlighting the interplay between psychological resilience, cognitive structures, and interpersonal dynamics. Psychological hardiness has been shown to be positively associated with self-differentiation, emotional regulation, and adaptive coping, all of which contribute to healthier relationship functioning (Heidari et al., 2024; Raeisi, 2024). Additionally, studies have demonstrated that gender roles and expectations can significantly influence individuals' attitudes toward marriage, family functioning, and sexual relationships (Yan et al., 2024). These findings suggest that the integration of gender schema and psychological hardiness provides a comprehensive framework for understanding the development and maintenance of dysfunctional sexual beliefs.

Despite the growing body of literature on these topics, there remains a need for integrative models that examine the complex relationships among gender schema, psychological hardiness, and dysfunctional sexual beliefs, particularly in specific cultural contexts. Cultural norms and values play a critical role in shaping gender roles and sexual attitudes, and their influence may vary across different populations. For instance, in more traditional societies, gender roles may be more rigidly defined, leading to stronger internalization of restrictive beliefs and greater challenges in achieving sexual and relational well-being. Therefore, investigating these variables within a specific cultural and demographic context can provide valuable insights into their interactions and implications.

Moreover, recent advances in psychological research have emphasized the importance of using sophisticated analytical methods, such as structural equation modeling, to examine complex relationships among variables. These methods allow researchers to test both direct and indirect effects, providing a more nuanced understanding of the mechanisms underlying observed associations. In this

regard, examining the mediating role of psychological hardiness can help clarify how gender schema influences dysfunctional sexual beliefs and identify potential targets for intervention.

In conclusion, the interplay between gender schema, dysfunctional sexual beliefs, and psychological hardiness represents a critical area of inquiry in the field of psychology. Understanding how these variables interact can inform the development of more effective interventions aimed at improving sexual health, relational satisfaction, and psychological well-being among women. Therefore, the aim of the present study is to examine the relationship between gender schema and dysfunctional sexual beliefs with the mediating role of psychological hardiness in women.

2. Methods and Materials

2.1. Study Design and Participants

The present study employed a descriptive-correlational design and was conducted using structural equation modeling (SEM) to examine the relationships among gender schema, dysfunctional sexual beliefs, and psychological hardiness in women. The statistical population consisted of all married women aged 30 to 40 years who were employed in official and governmental bank branches in the city of Bushehr during the year 2025. A convenience sampling method was used to recruit participants, meaning that individuals who were accessible and willing to cooperate with the researcher were included in the study. The sample size was determined using Cochran's formula for unknown populations, assuming a 95% confidence level, a proportion estimate of 0.5, and a margin of error of 0.06, resulting in a required sample size of approximately 266 participants. Inclusion criteria consisted of being female, married, within the specified age range, willingness to participate, and provision of informed consent. Exclusion criteria included incomplete questionnaire responses and evidence of careless responding, such as marking multiple answers for a single item or displaying a repetitive response pattern. Data were collected using standardized questionnaires administered to participants under appropriate ethical considerations.

2.2. Measures

The Dysfunctional Sexual Beliefs Questionnaire (SDBQ), developed by Nobre and colleagues in 2003, was used to assess dysfunctional sexual beliefs. This instrument was designed to evaluate both adaptive and maladaptive

sexual beliefs and was later translated and standardized in Iran. The questionnaire consists of 40 items and includes separate forms for men and women; in this study, the female version was utilized. The female form comprises six subscales: beliefs related to sexual conservatism and passivity, beliefs about masturbation, age-related beliefs, beliefs that frame sexual desire and pleasure as sinful, denial of the primacy of affection in sexual relationships, and body image beliefs. Responses are scored on a five-point Likert scale ranging from “strongly disagree” to “strongly agree,” with several items reverse-scored to control for response bias. Previous research has confirmed the reliability of the instrument using both test–retest and Cronbach’s alpha methods, with coefficients reported above acceptable thresholds. In the present study, internal consistency reliability was also confirmed using Cronbach’s alpha, yielding a coefficient indicative of satisfactory reliability.

The Bem Sex Role Inventory (BSRI), originally developed in 1981, was used to measure gender schema. This instrument assesses individuals’ identification with traditionally masculine, feminine, and neutral personality traits. The questionnaire consists of 30 items divided into three subscales: masculinity, femininity, and neutrality. Participants respond using a five-point Likert scale ranging from very low to very high. Scores for each subscale are obtained by summing the relevant items, and overall scores are calculated accordingly. To standardize the results, subscale scores are converted into percentages, with higher scores indicating a stronger tendency toward the corresponding gender-related trait dimension. The psychometric properties of the BSRI have been well established, including high test–retest reliability and confirmed construct validity. In Iranian samples, acceptable levels of internal consistency and content validity have also been reported. In the current study, reliability coefficients calculated via Cronbach’s alpha indicated satisfactory internal consistency for both the overall scale and its subscales.

The Ahvaz Psychological Hardiness Inventory (APHI), developed by Kiamarsi and colleagues, was employed to assess psychological hardiness. This questionnaire consists of 27 items designed to measure individuals’ resilience and

ability to cope with stress. Responses are recorded on a four-point Likert scale ranging from “never” to “often.” Several items are reverse-scored to ensure accurate measurement. Total scores range from 0 to 81, with higher scores indicating greater psychological hardiness. The scale categorizes individuals into different levels of hardiness, ranging from low to high. Previous studies have reported acceptable levels of reliability using Cronbach’s alpha and have supported the construct validity of the instrument. In the present study, internal consistency reliability was again confirmed, with a Cronbach’s alpha coefficient indicating adequate reliability for research purposes.

2.3. Data analysis

Following data collection, statistical analyses were conducted using SPSS version 28 and AMOS software. Initially, descriptive statistics, including frequency, percentage, mean, and standard deviation, were calculated to summarize the data. For inferential analysis, Pearson correlation coefficients were used to examine the relationships between variables, and regression analysis was conducted to assess predictive associations. To evaluate the mediating role of psychological hardiness and to test the overall structural model, structural equation modeling (SEM) was performed using AMOS. Model fit indices and path coefficients were examined to determine the adequacy of the proposed model and to assess both direct and indirect relationships among the study variables.

3. Findings and Results

The demographic characteristics of the participants indicated that among the 266 married women included in the study, 117 individuals (44%) were aged between 30 and 35 years, while 149 participants (56%) were in the age range of 36 to 40 years. In terms of educational attainment, 174 participants (65%) held a bachelor’s degree, whereas 92 individuals (35%) possessed a master’s degree. Overall, the sample reflects a relatively balanced age distribution within the specified range, with a higher proportion of participants in the older subgroup, and a predominance of individuals with undergraduate-level education.

Table 1

Descriptive Statistics (Mean, Standard Deviation, Skewness, and Kurtosis) of Study Variables

Variable	Skewness	Kurtosis	Mean	Standard Deviation
Masculinity	0.64	1.06	35.24	5.53
Femininity	-0.84	1.24	32.99	4.05

Neutral	-0.31	-0.59	24.30	3.64
Psychological Hardiness	0.21	0.16	41.58	6.22
Dysfunctional Sexual Beliefs	-0.46	1.99	98.04	9.74

The descriptive statistics presented in Table 1 indicate that among the gender schema dimensions, masculinity had the highest mean score ($M = 35.24, SD = 5.53$), followed by femininity ($M = 32.99, SD = 4.05$) and neutral traits ($M = 24.30, SD = 3.64$). The mean score for psychological hardiness was 41.58 ($SD = 6.22$), suggesting a moderate to relatively high level of hardiness among participants. Dysfunctional sexual beliefs showed a mean score of 98.04 ($SD = 9.74$), indicating a moderate level of such beliefs within the sample. The skewness and kurtosis values for all variables fell within acceptable ranges, suggesting that the data distribution did not significantly deviate from normality and was appropriate for subsequent parametric analyses.

Prior to conducting inferential analyses, the statistical assumptions underlying parametric tests were examined. The normality of the data distribution was assessed using

skewness and kurtosis indices, which for all study variables were within acceptable ranges (generally between ± 2), indicating no serious deviation from normality. Linearity and homoscedasticity were evaluated through inspection of scatterplots, confirming that the relationships among variables were approximately linear and that the variance of residuals was relatively constant across levels of the predictors. Multicollinearity was assessed using tolerance and variance inflation factor (VIF) indices, with results indicating no problematic intercorrelations among independent variables. Additionally, independence of errors was verified using the Durbin–Watson statistic, which fell within the acceptable range. These findings collectively suggest that the assumptions required for Pearson correlation, regression analysis, and structural equation modeling were adequately met.

Table 2

Correlation Matrix of Study Variables

Variables	1	2	3	4	5
1. Masculinity	1				
2. Femininity	0.30**	1			
3. Neutral	-0.20**	-0.20**	1		
4. Psychological Hardiness	-0.24**	-0.53**	0.09	1	
5. Dysfunctional Sexual Beliefs	0.32**	0.51**	-0.10	-0.51**	1

** $p < 0.01$

The results presented in Table 2 indicate that masculinity had a positive and significant correlation with femininity ($r = 0.30, p < .01$) and dysfunctional sexual beliefs ($r = 0.32, p < .01$), while it showed a negative and significant relationship with neutral traits ($r = -0.20, p < .01$) and psychological hardiness ($r = -0.24, p < .01$). Femininity was negatively and significantly correlated with neutral traits ($r = -0.20, p < .01$) and psychological hardiness ($r = -0.53, p < .01$), but positively and significantly associated with dysfunctional sexual beliefs ($r = 0.51, p < .01$). Neutral traits

were not significantly related to psychological hardiness ($r = 0.09, p > .05$) or dysfunctional sexual beliefs ($r = -0.10, p > .05$). Furthermore, psychological hardiness demonstrated a strong negative and significant relationship with dysfunctional sexual beliefs ($r = -0.51, p < .01$), indicating that higher levels of hardiness are associated with lower levels of dysfunctional sexual beliefs among participants. These findings provide preliminary support for the hypothesized relationships among the study variables.

Table 3

Standardized Path Coefficients, t-values, and Significance Levels of Structural Model Paths

Path	Standardized Coefficient (β)	t-value	p-value
Masculinity → Dysfunctional Sexual Beliefs	0.22	2.41	0.017
Femininity → Dysfunctional Sexual Beliefs	0.26	2.78	0.010
Neutral → Dysfunctional Sexual Beliefs	-0.09	1.42	0.212
Masculinity → Psychological Hardiness	-0.34	-4.77	0.010

Femininity → Psychological Hardiness	-0.28	-3.09	0.010
Neutral → Psychological Hardiness	0.08	-1.21	0.432
Psychological Hardiness → Dysfunctional Sexual Beliefs	-0.39	-6.22	0.010

The results presented in Table 3 indicate that masculinity ($\beta = 0.22, t = 2.41, p = 0.017$) and femininity ($\beta = 0.26, t = 2.78, p = 0.010$) had positive and statistically significant effects on dysfunctional sexual beliefs, whereas the effect of neutral traits on dysfunctional sexual beliefs was not significant ($\beta = -0.09, t = 1.42, p = 0.212$). Regarding psychological hardiness, both masculinity ($\beta = -0.34, t = -4.77, p = 0.010$) and femininity ($\beta = -0.28, t = -3.09, p = 0.010$) showed significant negative effects, indicating that higher levels of these gender schema dimensions were associated with lower psychological hardiness, while the

effect of neutral traits was not significant ($\beta = 0.08, t = -1.21, p = 0.432$). Furthermore, psychological hardiness had a significant negative effect on dysfunctional sexual beliefs ($\beta = -0.39, t = -6.22, p = 0.010$), suggesting that increased hardiness is associated with reduced dysfunctional sexual beliefs. Overall, these findings support the proposed structural relationships, particularly highlighting the mediating role of psychological hardiness in the relationship between gender schema dimensions and dysfunctional sexual beliefs.

Table 4

Indirect Effects of Gender Schema Dimensions on Dysfunctional Sexual Beliefs through Psychological Hardiness

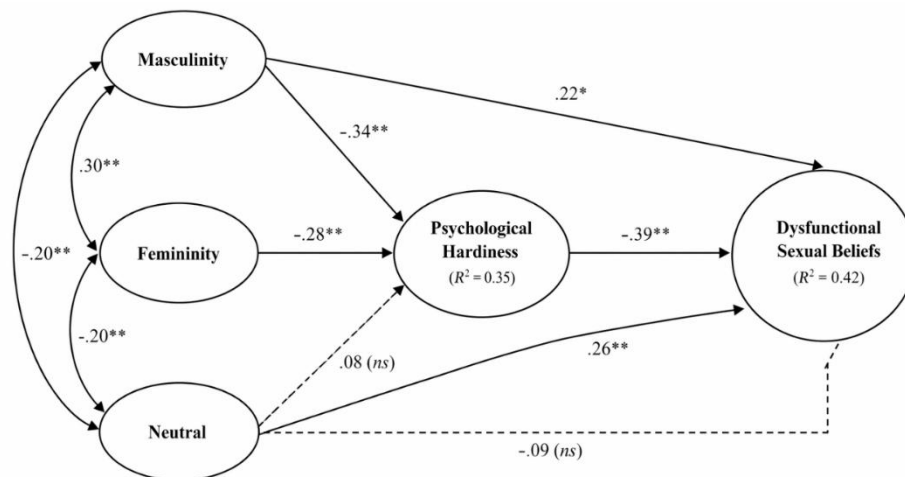
Indirect Path	Standardized Coefficient (β)	p-value
Masculinity → Psychological Hardiness → Dysfunctional Sexual Beliefs	0.13	0.050
Femininity → Psychological Hardiness → Dysfunctional Sexual Beliefs	0.11	0.050
Neutral → Psychological Hardiness → Dysfunctional Sexual Beliefs	-0.03	0.268

The results presented in Table 4 indicate that the indirect effect of masculinity on dysfunctional sexual beliefs through psychological hardiness was positive and statistically significant ($\beta = 0.13, p = 0.050$), suggesting that psychological hardiness partially mediates this relationship. Similarly, femininity demonstrated a positive and significant indirect effect on dysfunctional sexual beliefs via psychological hardiness ($\beta = 0.11, p = 0.050$), indicating a mediating role of hardiness in this pathway as well. In

contrast, the indirect effect of neutral gender schema on dysfunctional sexual beliefs through psychological hardiness was not statistically significant ($\beta = -0.03, p = 0.268$). These findings support the mediating role of psychological hardiness in the relationships between masculinity and femininity with dysfunctional sexual beliefs, while no such mediating effect was observed for neutral traits.

Figure 1

Final Model of the Study



4. Discussion

The findings of the present study provide a comprehensive understanding of the relationships among gender schema dimensions, dysfunctional sexual beliefs, and psychological hardiness in married women. The results indicated that both masculinity and femininity were positively and significantly associated with dysfunctional sexual beliefs, while neutral gender traits did not show a significant relationship. Additionally, masculinity and femininity were found to have significant negative effects on psychological hardiness, whereas neutral traits again showed no significant association. Psychological hardiness, in turn, demonstrated a strong negative relationship with dysfunctional sexual beliefs. Furthermore, the mediating analysis revealed that psychological hardiness significantly mediated the relationships between masculinity and femininity with dysfunctional sexual beliefs, but not the relationship involving neutral traits. These findings collectively highlight the complex interplay between gender-related cognitive structures and psychological resilience in shaping sexual belief systems.

The positive relationship between masculinity and femininity with dysfunctional sexual beliefs suggests that stronger identification with traditional gender roles may contribute to the internalization of maladaptive sexual cognitions. This finding aligns with theoretical perspectives on gender schema, which emphasize that rigid adherence to socially constructed gender roles can limit cognitive flexibility and reinforce stereotypical expectations (Astle et al., 2025). In many cultural contexts, both masculine and feminine schemas carry implicit norms regarding sexual behavior, which may lead to unrealistic or restrictive beliefs. For instance, femininity may be associated with passivity and modesty, while masculinity may emphasize performance and control, both of which can contribute to distorted sexual expectations. Empirical evidence supports this interpretation, as studies have shown that traditional gender role attitudes are significantly associated with attitudes toward marriage and interpersonal functioning (Yan et al., 2024). Moreover, dysfunctional beliefs about sexuality have been linked to broader cognitive distortions that negatively impact relationship quality and sexual satisfaction (Urrea et al., 2025).

The lack of a significant relationship between neutral gender traits and dysfunctional sexual beliefs further

underscores the role of rigid gender identification in the development of maladaptive cognitions. Individuals with more balanced or less stereotyped gender schemas may exhibit greater psychological flexibility, allowing them to adopt more adaptive and realistic beliefs about sexuality. This interpretation is consistent with research suggesting that cognitive flexibility and reduced adherence to rigid schemas are associated with better psychological outcomes and healthier interpersonal relationships (Strand et al., 2024). Thus, the absence of significant effects for neutral traits highlights the protective role of flexibility in gender identity.

The findings regarding psychological hardiness are particularly noteworthy. The negative associations between masculinity and femininity with psychological hardiness indicate that stronger adherence to traditional gender roles may reduce individuals' resilience to stress. This result is consistent with previous studies showing that rigid gender roles can limit adaptive coping strategies and increase vulnerability to psychological distress (Hashemi & Ahmadi, 2015; Parsafar & Yazdkhasti, 2014). Psychological hardiness, characterized by commitment, control, and challenge, reflects an individual's capacity to perceive stressful situations as manageable and meaningful (Kowalski & Schermer, 2019). When individuals are constrained by rigid gender expectations, they may be less able to reinterpret stressful experiences in adaptive ways, leading to lower levels of hardiness. Supporting this interpretation, research has demonstrated that psychological hardiness is positively associated with emotional regulation, social adjustment, and resilience in various populations (Goodarzi, 2023; Jafar Tabatabaei & Zakeri, 2023).

The strong negative relationship between psychological hardiness and dysfunctional sexual beliefs suggests that higher levels of resilience are associated with more adaptive sexual cognitions. This finding is consistent with previous research indicating that individuals with greater psychological resources are better able to challenge and modify maladaptive beliefs (Najafi & Fakhimi Farhadi, 2023). Psychological hardiness may facilitate cognitive restructuring by enabling individuals to view their beliefs as modifiable rather than fixed, thereby reducing the impact of dysfunctional cognitions. Furthermore, hardiness has been linked to improved marital satisfaction and reduced conflict, both of which are closely related to sexual functioning (Mahdikhani & Izadi, 2021; Seifi & Taghavi, 2019). The present findings extend this literature by demonstrating that

hardiness also plays a crucial role in shaping sexual belief systems.

The mediating role of psychological hardiness provides further insight into the mechanisms underlying the relationship between gender schema and dysfunctional sexual beliefs. The significant indirect effects for masculinity and femininity indicate that part of their influence on sexual beliefs operates through their impact on psychological resilience. This finding supports theoretical models that emphasize the interaction between cognitive structures and emotional regulation processes. Individuals with rigid gender schemas may experience increased stress and cognitive conflict, which, in the absence of sufficient hardiness, can lead to the development of dysfunctional beliefs. Conversely, individuals with higher levels of hardiness may be better able to reinterpret gender-related expectations and maintain more adaptive cognitive patterns. This interpretation is supported by research highlighting the role of psychological hardiness in buffering the effects of stress and cognitive distortions (Heidari et al., 2024; Raeisi, 2024).

The present findings are also consistent with broader perspectives on cognitive and metacognitive processes in psychological functioning. Dysfunctional sexual beliefs can be understood as a specific manifestation of maladaptive cognitive patterns, which are influenced by both content (e.g., gender schemas) and process (e.g., metacognitive beliefs). Studies have shown that metacognitive beliefs play a significant role in the development and maintenance of psychological disorders (Bailey et al., 2025; Levent, 2025). In the context of intimate relationships, these processes may influence how individuals interpret and respond to sexual experiences. Additionally, psychodynamic perspectives suggest that unconscious conflicts and internalized norms can shape sexual attitudes and behaviors, further contributing to the development of dysfunctional beliefs (Traylor et al., 2024). The integration of these perspectives provides a comprehensive framework for understanding the observed relationships.

Another important implication of the findings relates to the role of sociocultural factors in shaping gender schemas and sexual beliefs. Cultural norms and values influence the content of gender schemas and the acceptability of certain sexual attitudes, which in turn affect individuals' cognitive and emotional experiences. For example, in more traditional contexts, strict gender roles may reinforce beliefs that limit sexual expression and promote feelings of guilt or shame (Fedorova & Vorobevskii, 2025). These findings are

consistent with research showing that dysfunctional marital beliefs and expectations can significantly impact relationship commitment and satisfaction (Nkurunziza et al., 2025). Additionally, factors such as divorce and marital instability have been linked to maladaptive beliefs and relational dysfunction, highlighting the broader social implications of these cognitive patterns (Wahyuni et al., 2024).

5. Conclusion

Overall, the results of this study contribute to the growing body of literature on the interplay between cognitive structures, psychological resilience, and relational functioning. By demonstrating the mediating role of psychological hardiness, the study provides a more nuanced understanding of how gender schemas influence dysfunctional sexual beliefs. These findings have important implications for both research and practice, suggesting that interventions aimed at enhancing psychological hardiness and promoting flexible gender schemas may be effective in improving sexual and relational outcomes.

One of the main limitations of this study is the use of a cross-sectional design, which limits the ability to draw causal inferences about the relationships among variables. Additionally, the reliance on self-report questionnaires may have introduced response biases, such as social desirability or inaccurate self-assessment. The use of convenience sampling also limits the generalizability of the findings, as the sample may not be representative of all married women. Furthermore, cultural factors specific to the study population may influence the results, making it difficult to generalize the findings to other cultural contexts.

Future research should consider employing longitudinal designs to examine the causal relationships among gender schema, psychological hardiness, and dysfunctional sexual beliefs over time. It would also be beneficial to include more diverse samples, including individuals from different cultural, socioeconomic, and age groups, to enhance the generalizability of the findings. Additionally, future studies could explore other potential mediating or moderating variables, such as emotional regulation, attachment styles, or communication patterns, to provide a more comprehensive understanding of these relationships.

From a practical perspective, the findings of this study suggest that interventions aimed at reducing dysfunctional sexual beliefs should focus on both cognitive and emotional factors. Programs designed to increase psychological

hardiness and promote flexible gender schemas may help individuals develop more adaptive beliefs and improve their relational functioning. Therapists and counselors working with couples may benefit from incorporating strategies that address gender role expectations and enhance resilience, ultimately contributing to healthier and more satisfying relationships.

Authors' Contributions

Authors equally contributed to this article.

Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

Acknowledgments

We would like to express our gratitude to all individuals helped us to do the project.

Declaration of Interest

The authors report no conflict of interest.

Funding

According to the authors, this article has no financial support.

Ethical Considerations

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

References

- Astle, S., Anders, K. M., McAllister, P., Hanna-Walker, V., & Yelland, E. (2025). The Conceptualization and Measurement of Sexual Self-Concept and Sexual Self-Schema: A Systematic Literature Review. *The Journal of Sex Research*, 62(1), 95-106. <https://doi.org/10.1080/00224499.2023.2244937>
- Bailey, R., Oba, E. C., & Allen, R. (2025). The Role of Metacognitive Beliefs in Generalized Anxiety Disorder in Men Who Have Sex with Men Living with HIV in Nigeria. *Journal of Health Psychology*. <https://doi.org/10.1177/13591053251314989>
- Brotto, L. A., Atallah, S., Carvalho, J., Gordon, E., Pascoal, P. M., Reda, M., & Tavares, I. M. (2025). Psychological and Interpersonal Dimensions of Sexual Function and Dysfunction: Recommendations from the Fifth International Consultation on Sexual Medicine (ICSM 2024). *Sexual Medicine Reviews*, 13(2), 118-143. <https://doi.org/10.1093/sxmrev/qeae073>
- Fedorova, A. I., & Vorobeuskii, A. A. (2025). The Influence of Shame and Guilt on Sexuality in Men and Women. *Neurology Bulletin*, 57(1), 54-63. <https://doi.org/10.17816/nb640827>
- Goodarzi, S. (2023). Comparison of Defense Mechanisms, Psychological Hardiness, and Social Adjustment in Female and Male Students. *Hoorin Psychology Journal*, 1(1), 59-70.
- Hashemi, S., & Ahmadi, O. (2015). The Role of Self-Efficacy and Masculine and Feminine Gender Roles in Psychological Hardiness. *New Psychological Research Quarterly*, 10(37), 71-87.
- Heidari, S., Pouyaifar, Z., & Delavar, F. (2024). *Examining the Relationship Between Psychological Hardiness and Depression in the Academic Progress of Psychology Students in Golpayegan*. Khorramabad. <https://civilica.com/doc/2289464>
- Jafar Tabatabaei, T. S., & Zakeri, A. (2023). The Effect of Moral Intelligence on Psychological Hardiness and Social Adjustment of Students. *Islamic Lifestyle Journal*, 7(1), 432-441.
- Jarwan, A. S., & Al-frehat, B. M. (2020). Emotional Divorce and Its Relationship with Psychological Hardiness. *International Journal of Education and Practice*, 8(1), 72-85. <https://doi.org/10.18488/journal.61.2020.81.72.85>
- Kowalski, C. M., & Schermer, J. A. (2019). Hardiness, Perseverative Cognition, Anxiety, and Health-Related Outcomes: A Case for and Against Psychological Hardiness. *Psychological Reports*, 122(6), 2096-2118. <https://doi.org/10.1177/00332941188800444>
- Levent, K. U. R. T. (2025). Metacognition in Couple Relationships. *Clinical Psychology Research*, 1, 39.
- Mahdikhani, B., & Izadi, M. (2021). Determining the Relationship of Psychological Hardiness and Responsibility with Quality of Life in Couples with Marital Conflicts. *Modern Advances in Psychology*, 5(41), 11-20.
- Najafi, Z., & Fakhimi Farhadi, R. (2023). Effectiveness of Psychological Hardiness Training on Sexual Satisfaction and Marital Conflicts in Couples with Emotional Divorce. *Journal of Psychology*, 2(1), 1-12.
- Nkurunziza, A., Niyonsenga, J., Munganyinka, C., Ntete, J. M., & Mutabaruka, J. (2025). Do Gender and Relationship Length Jointly Moderate the Effects of Marital Dysfunctional Beliefs and Expectations on Marital Commitment Among Rwandan Married Couples? *Journal of Family Issues*. <https://doi.org/10.1177/0192513X251347318>
- Parsafar, S., & Yazdkhasti, F. (2014). Examining the Causal Relationships Among Gender Roles, Resilience, Hardiness, Learned Helplessness, and Codependency in Spouses of Addicted Individuals. *Social Psychological Studies of Women*, 12(4), 69-92.
- Raeisi, Z. (2024). *Examining the Relationship Between Psychological Hardiness and Self-Differentiation with Mother-Child Interaction in Employed Mothers of Marvdasht Hamedan*. <https://civilica.com/doc/2215231>
- Seifi, Y., & Taghavi, M. (2019). The Relationship Between Spiritual Well-Being and Marital Satisfaction: The Mediating Role of Psychological Hardiness. *Contemporary psychology*, 1(14), 31-41.
- Strand, E. R., Anyan, F., Hjemdal, O., Nordahl, H. M., & Nordahl, H. (2024). Dysfunctional Attitudes Versus Metacognitive

- Beliefs as Within-Person Predictors of Depressive Symptoms Over Time. *Behavior therapy*, 55(4), 801-812. <https://doi.org/10.1016/j.beth.2023.12.004>
- Traylor, J., Overstreet, L., & Lang, D. (2024). Psychodynamic Perspective: Psychoanalysis. *Lifespan Development*, 2(1), 3-13.
- Urrea, G. E. V., Cibrian, L. J. S., & Armenta, R. E. A. (2025). The Relationship of Cognitive Distortions and Female Sexual Dysfunction. *Enfermeria Global*, 75(1), 2-13.
- Wahyuni, S., Pranata, S., Mubin, M. F., & Ernawati, E. (2024). Discovering Factors Causing Divorce Through Biblio. *Journal of Client-Centered Nursing Care*, 10(2), 79-90. <https://doi.org/10.32598/JCCNC.10.2.79>
- Yan, C. M., Yin, C. N. C., & Qing, C. C. Y. (2024). Exploring the Modern Malaysian Marriage: Understanding the Relationship of Gender Role Attitudes, Attitudes Toward Childbearing, Family Functioning and Attitudes Toward Marriage Among Young Adults in Malaysia. *Journal Psychology Malaysia*, 38(2), 1-13.