Predicting Family Stability Based on Emotion Regulation and Sexual Self-Efficacy: The Mediating Role of Marital Intimacy

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A B S T R A C T

Background: Consolidating families is a crucial strategy that can enhance and ultimately solidify marital relationships. Factors such as emotions, personality traits, and interpersonal intimacy significantly influence family stability, contributing to mental health promotion and overall societal happiness. Thus, this study aims to predict family stability through emotional regulation and sexual self-efficacy while examining the mediating role of marital intimacy.

Methods: This descriptive-correlational research targeted all married individuals in Yazd City (with a minimum of five years marriage) in 2022. A total of 200 participants were selected using convenience sampling methods. The study employed questionnaires assessing family stability(Low scores in the family stability questionnaire indicate greater stability), sexual self-efficacy, emotion regulation, and marital intimacy. Data analysis was conducted using Amos and SPSS software packages.

Results: The findings revealed that there was no statistically significant relationship between cognitive reappraisal and suppression considering family stability ($p > 0.05$). Conversely, a significant negative correlation was found between family stability and sexual self-efficacy ($p < 0.05$). Furthermore, a positive and significant association was between sexual self-efficacy and cognitive reappraisal, while a negative and significant correlation was observed between marital intimacy and suppression ($p < 0.05$). Sexual self-efficacy demonstrated a significant direct negative impact on family stability ($\beta = -0.22$). In addition, both sexual self-efficacy ($\beta = 0.16$) and cognitive reappraisal ($\beta = 0.66$) exhibited significant and direct positive effects, whereas suppression ($\beta = -0.46$) had a significant direct and negative effect on marital intimacy.

Conclusion: Enhancing sexual self-efficacy along with marital intimacy and effective emotion regulation among couples can create favorable conditions for family stability and consolidation, marking an important advancement in promoting lasting marital relationships.

Keywords: Emotion regulation, Family, marriage, , Sexual Behavior, Self-efficacy, Marital intimacy

Introduction

Intimacy encompasses closeness, similarity, and romantic or emotional connections with another person. It necessitates a profound understanding of the individual along with expressing thoughts and feelings that highlight their commonalities (Labrecque & Whisman, 2020). Intimacy is defined as the ability to engage with others while preserving one's individuality. It can also be seen as the capacity for self-awareness in the presence of others; this self-awareness and identity development are crucial for fostering intimacy (Gottman & Gottman, 2017). Marital intimacy involves closeness with a partner, sharing values and ideas, participating in joint activities, sexual relations, mutual understanding, and affectionate behaviors. This level of intimacy enhances couples' abilities to navigate challenges and changes together. Consequently, couples who maintain higher levels of intimacy tend to report greater marital satisfaction and experience stronger family cohesion (Patrick et al., 2007). Furthermore, intimate relationships create opportunities for emotional experiences between partners that significantly shape their relationship dynamics (Schoebi & Randall, 2015).

Emotions are vital elements that invigorate life and form the basis of daily experiences' highs and lows—enriching human existence with memorable moments. It is clear that emotions hold great importance in our lives; they play a critical role in our health, success, personal relationships, and overall survival (López et al., 2023). The ability to adapt psychologically heavily relies on effective emotion regulation. In everyday life, numerous challenges arise concerning emotion regulation; thus, it becomes one of the most essential tasks for maintaining physical and psychological well-being—especially within marital contexts (Ascher et al., 2010). Emotion regulation entails managing both positive and negative emotions within oneself and others according to present circumstances (Field & Duchoslav, 2009). Properly regulating emotions harmonizes cognitive processes with biological responses and motivational drives relative to one's environment. This alignment enables individuals to effectively address problems while achieving greater psychological equilibrium. It also fosters attention toward personal responsibilities without yielding to adverse situations (Safurai Parisi S, 2017). Thus, individuals who resort to maladaptive emotion regulation may struggle with tolerating challenging emotional experiences—such as those related to sexual performance—and may inhibit these emotions from following their natural progression (Labrecque & Whisman, 2020).

Sexual performance constitutes an integral aspect of human behavior and life, intricately woven into personal existence. It has consistently captured human attention, interest, and curiosity while exerting a profound influence on the quality of life for both individuals and their sexual partners (Besharat, 2012). Sexual self-efficacy is a multifaceted construct encompassing an individual's belief in their capability to engage effectively in sexual activities, their attractiveness to a partner, and their evaluation of competence in sexual behaviors. This sense of sexual self-efficacy is crucial for achieving satisfying and appropriate sexual performance. Furthermore, higher levels of sexual self-efficacy correlate with improved social and psychological well-being in individuals' lives. Sexual dysfunction represents a challenging experience for individuals or couples that can manifest at any point during the sexual response cycle. The sexual response itself is an autonomous reaction that can be easily influenced by emotions related to self-efficacy, feelings of inadequacy, and self-esteem; these factors can either enhance or impede sexual performance(Finotelli, 2020).

A review of existing research on relevant components reveals that (Abbasi et al., 2019; Nameni E, 2017) found a significant relationship between family stability and emotion regulation. Studies conducted by (Alizadeh 2021; Brasileiro et al., 2023; Lin & Yi, 2019) indicated a significant positive relationship between family stability and sexual self-efficacy. Additionally, research by

(Alizadeh 2021; Basharat & AsgharnejadFarid, 2019; BEYGI et al., 2016; Iranizadeh et al., 2019; Waring & Patton, 1984) demonstrated a meaningful connection between family stability and marital intimacy. While numerous studies have been conducted in the realm of family stability, research in this area remains sparse, with no specific studies exploring the prediction of family stability based on emotion regulation and sexual self-efficacy ,considering marital intimacy as a mediating factor(Faryabi & Zareii Mahmood-Abadi, 2015).

Given the critical role of consolidating family foundations in alleviating issues, along with acknowledging the family's position as the primary social institution for shaping future generations, there is a clear need for such research. Consequently, this study seeks to address whether marital intimacy serves as a mediating factor between family stability, emotion regulation, and sexual self-efficacy.

In this research, the variable "family stability" was classified as endogenous, whereas the variables of emotion regulation and sexual self-efficacy are considered exogenous, with marital intimacy functioning as a mediating variable. Consequently, the research model was depicted below following the identified variables and the aims of the study(figure 1).
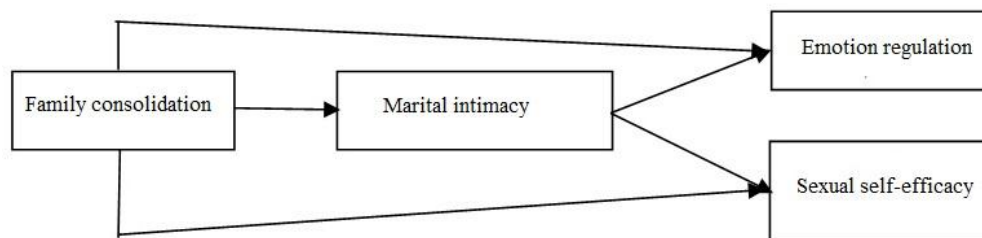
Figure 1. Default model

Methods

This research adopts a correlational approach to examine the causal relationships among the variables within a structural equation modeling framework, aligned with the nature of the topic and its objectives.

The statistical population for this study comprised all married women and men residing in District 1 of Yazd (with at least 5 years of cohabitation) in 2022. A convenience sampling method was employed to select the desired sample from these married individuals. In confirmatory factor analysis and structural modeling, the minimum sample size was determined by latent variables, necessitating 20 samples for each factor; thus, a total of 200 participants were chosen for the sample. To ensure this number was met, 250 questionnaires were distributed to accommodate incomplete responses and non-returned questionnaires. The inclusion criteria for participation included having at least 5 years of marital experience, no psychological problems or medication usage, and a willingness to participate, while exclusion criteria involved incomplete questionnaires.

Family stability questionnaire: Developed by (Pourmovahed et al., 2018), this instrument features a final version comprising 56 items rated on a four-point Likert scale: strongly agree (1), agree (2), disagree (3), and strongly disagree (4). The questionnaire included ten factors or components: overall performance, problem-solving, communication, emotional support, emotional blending, role-playing, behavior control, religious beliefs, media influence, and superstitions. It encompassed a total of 56 items with a scoring range from 56 to 224. The tool demonstrated high validity and reliability; Cronbach's alpha coefficients obtained were as follows: 0.89 for problem-solving, 0.94 for communication, 0.80 for role-playing, 0.75 for behavior control, 0.75 for emotional blending, 0.71

for emotional support, 0.94 for religious beliefs, 0.79 for superstitions, and 0.78 for media in the initial phase (pilot test). In the present study, the alpha coefficient was determined as 0.86.(low scores in the questionnaire indicates greater stability)

Sexual self-efficacy questionnaire: This instrument was created by Vaziri and Lotfi Kashani (2008) based on Schwarzer's General Self-Efficacy Questionnaire (1996) and comprises 10 items. Each item was rated on a 4-point scale, from (1 = not at all true) to (4 = very true). The overall score for participants was calculated by summing the responses to the 10 questions, with a minimum score of 10 and a maximum of 40. Scores ranging from 0 to 10 indicated low sexual self-efficacy, scores from 10 to 30 indicated moderate sexual self-efficacy, and scores above 30 indicated high sexual self-efficacy. Preliminary studies reported the reliability of Sexual Self-Efficacy Questionnaire with a Cronbach's alpha of 0.86, a Spearman-Brown split-half reliability of 0.81, and a Guttman's coefficient of 0.81. Vaziri and Lotfi Kashani also reported a Cronbach's alpha reliability coefficient of 0.86 for this questionnaire. Furthermore, the validity of Sexual Self-Efficacy Questionnaire in Iran was confirmed through content validity methods (Nameni E, 2017). In this study, the alpha coefficient was determined to be 0.81.

Emotion regulation questionnaire: This instrument was designed to assess emotion regulation strategies as developed by Gross and John. It comprised two subscales: reappraisal with 6 items and suppression with 4 items. Participants responded using a 7-point Likert scale that ranged from strongly disagree (1) to strongly agree (7). Items 2, 4, 6, and 9 specifically measured suppression, while the other items focused on reappraisal. In Gross and John's research, the internal consistency was reported as 0.79 for reappraisal and 0.73 for suppression. Karimi and Wingerath found internal consistency values of 0.83 for reappraisal and 0.79 for suppression. In Iran, Hosseini reported a Cronbach's alpha of 0.79

for the reappraisal scale, while Bigdeli reported a Cronbach's alpha of 0.83 for reappraisal and 0.79 for suppression. The current study yielded a Cronbach's alpha coefficient of 0.92.

Marital intimacy questionnaire: This instrument consists of 17 items specifically designed to assess intimacy, created by (Patrick et al., 2007). The items are rated on a 6-point Likert scale, ranging from 1 (never) to 6 (always), where higher scores reflect greater levels of intimacy. The validity coefficient for this tool, along with Sternberg's Love Styles Scale, was reported at 0.81. Walker and Thompson (1983) indicated a Cronbach's alpha reliability coefficient of 0.91, while Mansouri et al. (2020) found it to be 0.95. In this study, the Cronbach's alpha was calculated to be 0.85. Data analysis was conducted using Amos and SPSS software. The model fit indices examined in this study included CFI (>0.9), NNFI (>0.9), NFI (>0.9), AGFI (>0.9), and RMR (<0.05).

Results

The descriptive findings revealed that out of the respondents, 106 (53%) were females and 94 (47%) were males. Furthermore, 21 participants (10.5%) fell within the age range of 20-30, while 84 participants (42%) aged between 31 and 40 , and 95 participants (47.5%) were over 41. In terms of marital history, 58 respondents (29%) had been married for 5 to 10 years, and 25 respondents (12.5%) had been married for more than 25 years. Regarding educational attainment, 91 respondents (45.5%) held a bachelor's degree, while 10 respondents (5%) possessed a doctoral degree. Additionally, among the participants, 93 individuals (46.5%) had two children and 14 individuals (7%) had four children. Finally, there were 59 respondents (29.5%) who were educators and 11 respondents (5.5%) who were students.

To apply structural equation modeling, the primary assumptions were initially assessed.

The normality of data distribution for the research variables was evaluated using Kolmogorov-Smirnov test. The results indicated

that the research variables within the study groups followed a normal distribution (P < 0.05), confirming the assumption of normality for these variables.

According to Table 1, the mean, standard deviation, minimum score and maximum score of

each of the research variables were calculated and then listed in the table shows the mean and standard deviation of the research variables. Family stability had the highest average and sexual self-efficacy had the lowest average. (Table 1).

Table 1. Mean and standard deviation of research variables

Variable	Mean	Standard deviation	Minimum score	Maximum score
Family stability	156.507	14.298	98	181
Cognitive reappraisal	28.645	7.025	8	42
Suppression	17.490	4.286	7	28
Sexual self-efficacy	27.725	4.973	16	38
Marital intimacy	86.990	21.509	19	102

According to Table 2, there was no significant relationship between cognitive reappraisal, suppression, and marital intimacy with family stability (p > 0.05). However, a significant

negative relationship was found between family stability and sexual self-efficacy (due to the reverse scoring of the items in the family stability questionnaire) (p < 0.05)(Table2).

Table 2. Pearson Correlation Coefficient between Family Stability and the Research Variables (N=200)

Variable 1	Variable 2	Correlation coefficient	Sig
Family stability	Cognitive reappraisal	-0.13	0.066
	Suppression	-0.073	0.303
	Sexual self-efficacy	-0.218	0.002
	Marital intimacy	-0.053	0.453

According to Table 3, the regression between family stability and re-evaluation, suppression, emotion regulation and sexual self-efficacy components was performed and the result showed

that only the sexual self-efficacy component was able to negatively predict family consolidation (Table 3).

Table 3. Regression results of family stability based on reappraisal, suppression, emotion regulation, and sexual self-efficacy

Adjusted coefficient of determonation	Coefficient of determinationsignificant	Level of significant	F	Mean of squares	Degree of freedom	Sum of squars	model	Imput variable
0.057	0.239	0.021	2.956	581.541	1	2326.164	regression	**Re-evaluaton**
				196.725	195	38361.431	remaining	**Suppression,emotion regulation**
					199	40687.595	total	**Sexual self efficacy**

According to the value of the f statistic with the inclusion of variables, it was equal to 2.956 with a significance level of 0.021, which was less than the assumed error in the research (0.05). According to

the coefficient of determination, it was 0.239, which contained 23.9 percent of changes. The variable of family consolidation was determined by the variables of re-evaluation, suppression,

emotion regulation and sexual self-efficacy. Therefore, the regression model was significant.

According to Table 4 and according to the significance level of only the sexual self-efficacy variable (0.006), which was less than the assumed error in the research (0.05), it was the only predictor of family stability which was negative (table 4).

Table 4. Regression coefficients of reevaluation, suppression, emotion regulation, and sexual self-efficacy variables

Significance	Amount of t	Regression coefficient	Standard error	B	Variables
0.243	-1.172	-0.148	0.258	-0.303	Re evaluation
0.776	0.284	0.030	0.356	0.101	Suppression
0.260	1.130	0.107	0.63	0.071	Marital intimacy
0.006	-2.765	-0.211	0.220	-0.609	Sexual self efficacy

The model of the study revealed that sexual self-efficacy exerted a significant negative direct effect on family stability ($\beta = -0.22$), attributed to the reverse scoring of the items in the Family Stability Questionnaire. The findings indicated that both sexual self-efficacy ($\beta = 0.16$) and reappraisal ($\beta = 0.66$) had significant positive direct effects, whereas suppression ($\beta = -0.46$) had a significant negative direct effect on marital intimacy.
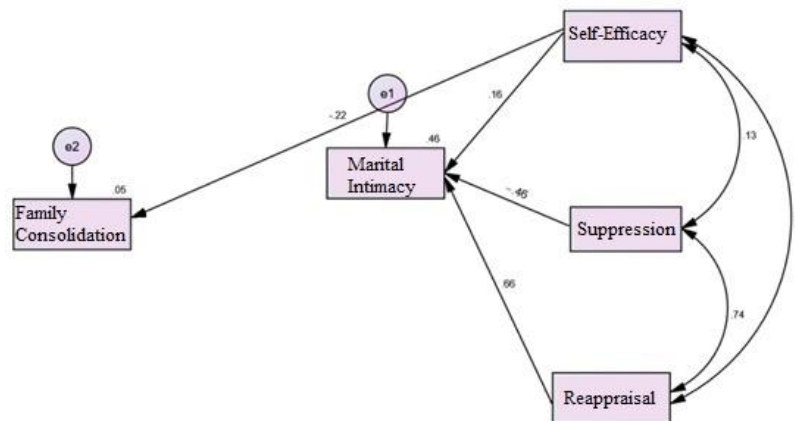
Figure 2. The final model

The standardized and unstandardized path coefficients were detailed in Table 5and shows the standard and non-standard coefficients for the research variables along with the significance level(Table5).

Table 5. Standardized and unstandardized coefficients of the research variables

Paths	Unstandardized coefficients	Standardized coefficients	Standard Deviation	T-value	P-value
Self-efficacy -> family stability	-0.5	-0.21	0.15	-3.04	0.002
Self-efficacy -> marital intimacy	0.35	0.17	0.11	2.98	0.002
Reappraisal -> marital intimacy	1.31	0.66	0.12	10.8	0.001
Suppression -> marital intimacy	-1.08	-0.46	0.10	.8.5	0.002

The findings indicated that the final model of the study exhibited a good fit, as the Chi-square statistic (CIMIN/DF =0.52) and is significant at the 0.001 level. Moreover, both the non-normed fit index (NNFI) and the Bentler-Bonett normed fit index (NFI) were above 0.90. In addition, the Holter index was greater than 70, suggesting an acceptable fit. The root mean square error of approximation (RMSEA) was below0.05, confirming further the model's adequacy. relationship between emotion regulation and sexual self-efficacy and family stability did not have a mediating roleThe results of the Sobel test showed that indirect relationships are not significant (sobel=83381,Se=.15 , sig= .15).

Discussion

The findings of this study revealed that sexual self-efficacy had a significant negative impact on family stability (attributed to the reverse scoring of items in the Family Stability Questionnaire). Furthermore, both self-efficacy and emotion regulation exhibited direct, positive, and significant effects on marital intimacy. This suggested that stronger and more enduring relationships among family members contribute to what is considered a solid family unit. These findings were consistent with (ZareeiMahmoodAbadi, 2017) research, which demonstrated that strong familial connections led to enhanced family stability. Thus, family stability is influenced by various factors that can interact with each other as well as multiple other variables.

The current study's results indicated no significant correlation between family stability and emotion regulation, which contrasted with the findings of (Abbasi et al., 2019; Nameni E, 2017) who reported a significant relationship between these two variables. To interpret this discrepancy, it is important to note that emotion regulation is a process through which individuals manage their emotions during experiences and determine how they express them; this can happen either consciously or unconsciously and automatically. In some instances, married couples may experience familial disintegration despite mutual efforts at

emotion regulation due to other underlying issues. Conversely, some couples lack essential skills for effective emotion regulation but endure each other's company to avoid external judgments, resulting in emotional detachment within the marriage. Therefore, effective emotion regulation does not automatically lead to enhanced family stability.

A significant correlation was found between family stability and sexual self-efficacy, aligning with studies conducted by (Alizadeh 2021; Arthur, 2018; Ascher et al., 2010; Labrecque & Whisman, 2020), all of which indicating a significant positive relationship between these two constructs. To further elucidate this finding, it can be stated that sexual self-efficacy is a multidimensional construct encompassing beliefs about one's capabilities in sexual contexts, desirability to partners, and self-assessment regarding competence in sexual behaviors. This sense of sexual fulfillment may allow individuals to overlook numerous everyday challenges and marital disputes; therefore, higher levels of sexual self-efficacy correspondingly enhance individuals' abilities to resolve issues arising from their sexual relationships, ultimately leading to increased family stability.

Conclusion: The analysis revealed no significant relationship between family stability and marital intimacy, which contradicts the findings of (Alizadeh 2021; BEYGI et al., 2016; Iranizadeh et al., 2019; Schoebi & Randall, 2015; Zareei MahmoodAbadi, 2017), all of whom found a significant correlation between these two variables. This discrepancy can be explained by the notion that when individuals engage in relationships founded on commitment and trust, their mutual respect remains intact, leading to a robust family structure. It is possible that high levels of marital intimacy do not exist among some married couples; however, their family foundation remains strong due to loyalty, commitment, and trust.

This study focused on married individuals in Yazd City, which may limit the generalizability of its findings. Furthermore, the personality traits shaped by the unique culture of Yazd could impact the applicability of these results.

As a result, sexual self-efficacy is predicted to have a negative effect on family stability, while intimacy, reappraisal, and suppression do not predict family stability effectively. There is a positive and significant correlation between marital intimacy and both sexual self-efficacy and reappraisal; conversely, a negative and significant relationship was found between marital intimacy and suppression. Therefore, it is advisable to prioritize initiatives aimed at enhancing sexual self-efficacy as a key strategy for preventing familial issues and promoting marital stability.

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Conflict of interest

The authors declared no conflict of interests.

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Ethical considerations

The ethical confirmation for this study was obtained from the Ethical Committee of Yazd University.Consentscripts,forms and protocols were also approved by Ethical Committee of Yazd University. All interview participants provided formal written informed consent. This research was controlled by the internal committee of Yazd University, which was based on the Declaration of Helsinki.

Code of ethics

03/50/20995

Authors' Contributions

H.Z.M. and A.B. developed the theoretical formalism, RB andAB did statistical analysis and taught students. AB supervised the project. H.Z.M. and RB contributed to the fnal version of the manuscript. R.B. and AB and H.Z.M. read and approved the fnal manuscript and were responsible

for questions related to the article.

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References

Abbasi, S., Dokaneifard, F., & Shafiabadi, A. (2019). The comparison of the effectiveness of emotionally focused therapy and cognitive behavioral therapy on family cohesion and marital satisfaction of veteran'wives in Khoramabad city. Journal of psychologicalscience, 17(71), 823-829.[persian]

Alizadeh , T. (2021). The role of intimacy and sexual self-efficacy in predicting family cohesion with the mediating role of cognitive emotion regulation. [persian]

Arthur, E. K. (2018). Development and Psychometric Performance of the Self-Efficacy to Communicate About Sex and Intimacy (SECSI) Scale in Women Treated for Cancer. The Ohio State University.

Ascher, E. A., Sturm, V. E., Seider, B. H., Holley, S. R., Miller, B. L., & Levenson, R. W. (2010). Relationship satisfaction and emotional language in frontotemporal dementia and Alzheimer disease patients and spousal caregivers. Alzheimer Disease & Associated Disorders, 24(1), 49-55.

Basharat, M. A., & AsgharnejadFarid, A. A. (2019). Predicting marital adjustment based on marital intimacy and deficit emotional regulate. Journal of psychologicalscience, 18(78), 635-646. [persian]

Besharat, M. A. (2012). The relationship between fear of intimacy and marital satisfaction in a sample of Iranian couples: moderating role of attachment styles. Journal of Applied counseling, 2(1), 1-18. [persian]

BEYGI, A., REZAEI, A. M., MOHAMMADIFAR, M. A., & NAJAFY, M. (2016). THE ROLE OF MARITAL INTIMACY, SPIRITUAL BELIEFS AND RELIGIOUS PRACTICES IN THE PREDICTION OF FAMILY COHESION AND ADAPTABILITY. [persian]

Brasileiro, J., Widman, L., & Hurst, J. L. (2023). Sexual self-efficacy and sexual communication among adolescent girls: moderated mediation results from a randomized controlled trial. Psychology & health, 38(10), 1273-1287.

Faryabi, Z., & Zareii Mahmood-Abadi, H. (2015). Comparative Study of Marital Adaptation, Happiness and Divorce Inclination in Traditional and Non Traditional Marriages. Tolooebehdasht, 14(3), 83-94. [persian]

Field, C., & Duchoslav, R. (2009). Family influence on adolescent treatment outcomes. Behavioral approaches to chronic disease in adolescence: A guide to integrative care, 47-54.

Finotelli , I. (2020). Association between Alexithymia and Female Sexual Self-Efficacy in Patients with Sexual Dysfunctions. The Journal of Sexual Medicine, 12(1).

Gottman, J., & Gottman, J. (2017). The natural principles of love. Journal of Family Theory & Review, 9(1), 7-26.

Iranizadeh, J., Abadi, H. Z. M., & Afshani, S. A. (2019). Exploring a Family Consolidation Model based on the Lazarus Multifaceted Theory among Couples in Yazd City. The Journal of Tolooebehdasht. [persian]

Labrecque, L. T., & Whisman, M. A. (2020). Extramarital sex and marital dissolution: Does identity of the extramarital partner matter? Family process, 59(3), 1308-1318.

Lin, W.-H., & Yi, C.-C. (2019). The effect of family cohesion and life satisfaction during adolescence on later adolescent outcomes: A prospective study. Youth & Society, 51(5), 680-706.

López, M. T. I., Marchena-Giráldez, C. A., &

Bernabéu-Brotons, E. (2023). Nutrient intake, alcohol consumption, emotional eating and anxiety in women nursing students. Heliyon, 9(12).

Nameni E, N. F. (2017). The mediating role of sensation seeking in the relationship between passion for social networks and attachment style with family cohesion in married women.

Patrick, S., Sells, J. N., Giordano, F. G., & Tollerud, T. R. (2007). Intimacy, differentiation, and personality variables as predictors of marital satisfaction. The family journal, 15(4), 359-367.

Pourmovahed, Z., Mahmoodabadi, H. Z., Ardekani, S. M. Y., Fallahzadeh, H., Tavangar, H., & Mahmoodabad, S. S. M. (2018). Validation of the Family Stability Questionnaire in married couples: A confirmatory factor analysis. Electronic Physician, 10(8), 7185. [persian]

Safurai Parisi S, S. P. M. (2017). Investigating the relationship between cognitive regulation of emotion and family efficiency and life satisfaction and explaining it based on Islamic sources. Bi-quarterly Journal of Islamic Psychology Research, 1(1), 65-82. [persian] Schoebi, D., & Randall, A. K. (2015). Emotional dynamics in intimate relationships. Emotion Review, 7(4), 342-348.

Waring, E. M., & Patton, D. (1984). Marital intimacy and family functioning. Psychiatric Journal of the University of Ottawa.

ZareeiMahmoodAbadi, H. (2017). The effectiveness of the training of the positive psychology on the growth of devotion and trust to the life in the normal women of bafq city. Tolooebehdasht, 16(2), 98-109. [persian]