





## Original Article

# The share of sexual knowledge and attitude in predicting sexual intimacy and sexual satisfaction

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#### Abstract

**Introduction:** Maintaining the health of family as the most important basic social entity promotes social health. In this regard, this research was conducted to determine the share of sexual knowledge and attitude in predicting sexual intimacy and satisfaction in couples.

**Materials and Methods:** The statistical population of this correlational study includes all couples living in Kermanshah city in 2015 who aged 20 to 40 years and married for at least two years. The sample size included 67 couples selected by the multi-stage clustering method. To collect data the sexual knowledge and attitude scale, Bagarozi's sexual intimacy questionnaire, and sexual satisfaction index were used. Data analyzed through SPSS software, descriptive (mean and standard deviation), and inferential statistics (Pearson correlation and multiple regression analysis).

**Results:** The results showed a positive and significant relationship between sexual knowledge and attitude toward sexual intimacy and satisfaction ( $P \le 0.01$ ). However, multiple regression analyses showed that sexual knowledge, despite its correlation with sexual intimacy and satisfaction, cannot predict them, but sexual attitude can be an adequate predictor of sexual intimacy and satisfaction.

**Conclusion:** It seems that couples with higher levels of sexual knowledge and sexual attitude have more sexual intimacy and sexual satisfaction.

Keywords: Attitude, Knowledge, Sexual satisfaction.

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#### Introduction

The family is a social entity or organization, the most primitive in antiquity and the most universal in terms of extensiveness. This shows that the family has a significant survival value for the individuals and the human species (1). The family is also the human resources generator and passage of other social institutions. The normality or abnormality of society depends on the general conditions of the

families, and none of the social harms arise regardless of the family influence (2). Discussions about the family and ways to strengthen it are common discussions of scientific societies, and related sciences, especially psychology, which try to increase the stability of the family (3). In this regard, according to studies on successful marriages and research on the factors affecting marital satisfaction, which is

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psy.zahedi@yahoo.com Received: Oct. 12, 2019 Accepted: May. 15, 2020 the result of the efforts of psychologists over the years, it can be concluded that sexual intimacy exists between couples, as well as sexual satisfaction of marriage, are acceptable indicators of the stability and continuity of matrimony life. Sexual intimacy involves sharing romantic experiences, bodily contact needs, sexual intercourse, and communication designed for sexual stimulation, arousal, and satisfaction. Over the years, counselors have been working with clients to find that sexual intimacy delivers the most sensitivity; however, its absence delivers the most problems for couples (4). The needs to confide, share, and express sexual thoughts, feelings, and fantasies with the spouse are called sexual intimacy. Intimacy problems often present themselves as sexual problems in a failed relationship. When there are sexual problems, and the medical cause is not the reason for the relationship failure, intimacy problems are considered as part of a person's sexual history. If spouses are aware of their differences in sexual demands and intercourse desires, they can treat their relationship before it gets into trouble. Conversely, if the spouses are not aware of their sexual intimacy, they should be witnesses of problems outflow (5).

Paying attention to romantic, emotional, and bodily relationships in cohabitation is a step towards achieving sexual intimacy in a marital relationship. A marital relationship based on sexual intimacy has more psychological and spiritual value than a marital relationship devoid of intimacy. In the first case, men and women are completely satisfied physically and mentally; thus, they will be fresher, more attractive, more efficient, and more effective (6). On the other hand, dissatisfaction and lack of intimacy destroy the vitality and freshness of marriage and affect its quality (7). Sexual intimacy and success, and consequently increasing pleasure and satisfaction level among couples, are the main factors in preventing the rupture and severance of desires in sexual behaviors, also searching sexual satisfaction in extramarital and out of family affairs (8).

Sexual satisfaction is one of the human needs and defined as an evaluation of the sexual behavior pleasure (9), the couples' satisfaction and happiness level from sexual intercourse, and the ability to enjoy and giving each other joy (10). An emotional response arising from mental assessments of positive and negative aspects related to a person's sexual relations (11), which is closely related to human health and society and protects people against many disorders and diseases (12). Sexual satisfaction is not only physical pleasure but also sexual and excitement satisfaction (13). This is one of the most important factors in marital satisfaction, which plays an important role in couples' mental health and intimacy (14). Therefore, people with more sexual satisfaction have a better quality of life (15).

Dissatisfaction with sex relationships can lead to serious issues in the relationship between spouses and creates hatred of the spouse, annoyance, jealousy, competition, a sense of revenge, the feeling of inferiority, feeling of diffidence, and like these. These issues are reinforced or manifested by tensions and disagreements, and gradually increase the gap between spouses (16). According to the theory of sexual incompatibility, sexual disagreement between couples is the first and most important factor in divorce. The basic principle of this theory is that sexual success leads to a successful marriage and sexual failure leads to divorce. Decreased sexual satisfaction for any reason has many negative consequences (17).

The prerequisite for achieving sexual satisfaction in matrimony life is sexual behavior in the right way (18). So sexual knowledge is also known as another factor affecting marital intimacy and satisfaction, and its acquiring requirement is felt. Sexual knowledge is defined as one's collection of information, knowledge, and awareness of sex and sexuality, including physiological aspects, reproductive knowledge. personal interpersonal sexual functions, and behaviors. Sexual knowledge encompasses all aspects of sexuality and includes identifying individuals with different sexual behaviors, including masturbation, Sexually Transmitted Diseases (STDs), pregnancy, and pregnancy prevention (19). Couples' sexual awareness and knowledge lead to pleasure, emotional, and matrimony relationship improvement between them. If couples have more knowledge of this important aspect of life, they will change and improve their communication practices. Conversely, ignorance and lack of sexual knowledge, and misinformation about sex lead to increased conflict and sexual harm in couples (20).

For couples to have an adequate sexual function that satisfies them both physically and mentally, they need information about the physiology of the sexual organs, the cycle of sexual response, and adequate communication with the spouse and gain sexual pleasure from intercourse. However, unfortunately, youth sexual knowledge about the opposite sex and intersex differences is low, and they do not have the right resources to acquire the proper sexual knowledge. The primary sources of people's sexual information from childhood to puberty are movies, newspapers, friends, and the changes and developments related to puberty and people's information about these changes. Since the audience for these resources is from different social classes, and the content is presented regardless of age, gender, or culture, it can affect people's sexual attitudes. Sexual attitude includes the style of positive or negative thinking in the interpretation of sexual events and relations, which plays a very important role in the content of sexual intercourse (21). Sexual beliefs are defined as one's beliefs and thoughts about sexual behavior, and based on cognitive theory; dysfunctional sexual beliefs can lead to the formation of sexual dysfunctions dissatisfaction. These dissatisfactions are more common in women and have numerous causes. including the complexity of women's sexual responses and behaviors, this gender legendary, women's desires inhibition, and many other cognitive factors. That is why it is constantly pointed out that to achieve sexual compatibility and satisfaction, men and women should be more adorned with correct and principled sexual knowledge and insight; otherwise, they become involved in misconceptions, affecting sexual relationship couple's Furthermore, in women's many sexual disorders, including sexual arousal disorder, orgasmic disorder, and vaginismus disorders, it has been found that psychological factors such as extremism misconceptions are very common during sexual intercourse (23).

Because the role of cognitive events has been approved as sexual behavior stimuli, an individual's thoughts, attitudes, and values are part of the important components of sexual behavior and are important sources of sexual responsiveness. Attitudes and beliefs do not refer to specific cognitive events; instead, it refers to ways of thinking or bias in interpreting information that affects the content of the cognitive activity. In sexuality, people have beliefs and attitudes about a wide range of topics, such as normal or abnormal sexual

activities, sexual roles, or sexual acts. Incompatible thoughts and attitudes play a very important role in how information is interpreted in sexual situations and ultimately experience, desire, arousal, and orgasm. If the input stimulus is interpreted in a way that evokes positive sexual thoughts, it probably has a different effect on a person's sexual response than the change that causes negative thoughts (24).

Marriage creates shared experiences between husband and wife; sometimes can lead to differences in the quality of the matrimony relationship (25). Different attitudes and beliefs of couples about romantic relationships and sexual activity can be associated with lack of awareness and insufficient or even incorrect sexual information, which in this case, although young couples love each other, they may disagree over sexual issues and lose the ability to achieve pleasure and relaxation from the spouse and expressing love and interest.

Having the optimal level of sexual knowledge and a positive sexual attitude is essential to pleasure sex with the spouse. This means that if the couple's sexual knowledge is at a good level and they have a positive attitude towards sexual intercourse, it will lead to sexual intimacy and the ability to reach the sexual peak and the natural right of the sex, which is one of the goals of marriage. Satisfying this need, if done correctly within the family and satisfying both parties, while ensuring their physical and mental health, will reduce the problems and tensions within the family and the couple's commitment to loyalty and sacred covenant of marriage will be strengthened. Many moral and sexual deviations will be prevented. Since ignorance and lack of sexual knowledge and a negative and pessimistic attitude towards sex are obstacles to reaching sexual intimacy, it leads to increased sexual conflicts and harm to couples. On the other hand, if the spouses' awareness is to the extent that leads to positive interpretations, it can positively affect their performance, and as a result, the spouses will be able to regulate their sexual behaviors to achieve intimacy and sexual satisfaction.

Alomair believes that people's sexual knowledge can play a direct role in their sexual health (26). Meldrum expressed a link between sexual attitudes and sexual problems of Muslim women living in Australia (27). Shakarami et al. believe that increasing sexual knowledge through sex education significantly increases

women's sexual intimacy (28). According to Besharat and Rafizadeh, sexual knowledge and attitude are positively and significantly correlated with sexual satisfaction and can predict it (29). Shalani and Siahkamari also stated that sexual knowledge and attitude with sexual satisfaction as a component of sexual function are not significantly correlated, and sexual attitude is not able to predict sexual satisfaction (30).

It seems that major part of Iranian couples suffer from sexual dissatisfaction, but feel ashamed and guilty about discussing and talking about it, and they are unaware of its effect on marital dissatisfaction consequently, dissatisfaction with their lives (31); considering the importance of sexual intimacy and satisfaction in maintaining and strengthening the foundation of the family, and the increasing rate of divorces in our country, the need for more research is felt strongly. Therefore, this study aimed to determine the share of sexual knowledge and attitude in predicting the level of sexual intimacy and satisfaction of couples.

#### **Materials and Methods**

The statistical population of this correlational study included all 20-40 years old couples living in Kermanshah city in 2015 who had been married for at least two years. In the present study, due to the extent and large population of Kermanshah and inaccessibility to a complete list of living couples in it, the samples were collected by a cluster sampling method in several stages, and sample size using the statistical tables (the table of critical values Pearson correlation coefficient) estimated (32). The city of Kermanshah has eight residential regions; from each region, a town was randomly selected, from each town an alley, and from each alley, 30 residential houses were selected too. With this method, a total of 80 residential houses, or in other words, 80 couples (160 people), have been selected.

Inclusion criteria included married couples, being a resident of Kermanshah city, being married at least for two years, aged 20-40 years, lack of previous marriage record, no substance abuse, lack of physical and mental illness, and willing to participate.

Exclusion criteria included divorce and separation during the research, diagnosis of mental and physical problems during the research, unwillingness to continue, providing

false information by participants, and distorted answers to questionnaires.

After obtaining permission from the Vice Chancellor for Research of the Islamic Azad University, Kermanshah Branch, we referred to the selected participants and presented the necessary explanations about the research and importance for the participants, confidentiality of the personal information, Then we obtained their full consent to participate in the research, then we stated the correct way to answer the questions and distributed the questionnaire. The distribution of the questionnaires took four days, after which the questionnaires were gathered. Out of 160 distributed questionnaires, 142 were returned, and 134 were included in the study by removing eight distorted ones.

#### Research instrument

A) Sexual Knowledge and Attitude Scale (SKAS): This scale developed by Besharat and included 30 questions that measures two dimensions of sexual knowledge and attitude on a 5-point Likert scale from 1 to 5. The scale of sexual knowledge and attitude was implemented in a sample of 63 married students (37 women, 26 men) from Tehran University and Iran University of Science and Technology. Cronbach's alpha coefficients of sexual knowledge and attitude subscales for the score of subjects were calculated to be 0.91 and 0.88, respectively, indicating good consistency of this scale. In addition, the correlation coefficients between the scores of 42 subjects were calculated twice in two to four weeks to measure the test-retest reliability. These coefficients were obtained for the sexual knowledge and attitude of r = 0.89 and r = 0.87, respectively, and for the total scale score of r= 0.88, which were significant at the level  $P \le$ 0.001 (33).

B) Sexual Intimacy Questionnaire: Regarding the reliable scientific sources, the Bagarozi's sexual intimacy questionnaire, and the conducted researches, the draft of the sexual intimacy questionnaire was prepared. In this draft, 30 questions were asked, and each question is scored in 1-4 degree Likert system (always, sometimes, rarely, never). A higher score indicates more sexual intimacy between couples. The validity of the questionnaire content was confirmed by five counselors and psychologists at the Faculty of Educational Sciences of the University of Isfahan. It was

performed to determine the reliability of 140 people (70 couples), and Cronbach's alpha coefficient of 0.81 was achieved (7).

C) Index of Sexual Satisfaction (ISS): Hudson, Harrison, and Crosscup provided this index. This scale has 25 questions and is one of the self-report questionnaires. The tester's response to each test is determined on a 7-point Likert scale between 1 and 7, and the total score of the subjects in the whole test varies between 25 and 175. Also, some of the items have a reverse score. A high score on this scale reflects sexual satisfaction. The designers calculated the internal stability of this scale, and its Cronbach's alpha was 0.91. The validity of the scale was calculated using the one-week retest method, which was 0.93. The validity of the scale was calculated through a separate validity, and the results showed that this scale could identify couples who have no sexual problems. The validity of this scale was also calculated through its correlation with the sexual satisfaction subscale of Enrich's questionnaire, which was 0.74. This questionnaire was revised 15 days later to assess the normative status of the scale. The results of the test and its re-test were analyzed by correlation test. The results of this test indicate the correlation rate of r = 0.956at the significance level of  $P \le 0.001$ . Also, for a more accurate study of the validity obtained from the test halving method, r= 0.88. The calculated Gatman coefficient is also 0.80 (34). In another study, Cronbach's alpha method was used to determine the reliability of this

questionnaire, which was 0.93 for the whole questionnaire (35). In the present study, the data collected from the questionnaires were analyzed by SPSS software using descriptive statistics (mean and standard deviation) and inferential statistics (Pearson correlation test and multiple regression analysis).

#### Results

In term of demographic characteristics, thirty three participants (%24.63) aged 20-25 years, thirty six participants (%26.87) aged 26-30 years, forty two participants (%31.34) aged 31-35 years, and twenty three participants (%17.16) aged 36-40 years. Twenty nine cases (%21.64) had a diploma, and below, thirty six participants (%26.87) have an associate degree, forty two participants (%31.34) had a bachelor degree, and twenty seven participants (%20.15) had a master degree or higher. In term of marriage duration, twenty two participants (%16.42) have been married for 2 to 5 years. Thirty participants (%22.39) had been married for 6 to 10 years. Thirty-eight participants (%28.36) married 11 to 15 years ago. Fortyfour participants (%32.83) had been married for 16 to 20 years.

Also, thirty eight participants (%28.36) had no child. Sixty-two participants (%46.27) had one child. Twenty-four participants (%17.91) had two children. Ten participants (%7.46) had three children.

Table 1 shows descriptive information for each of the research variables.

**Table 1.** The descriptive data of the variables

Variable	Minimum	Maximum	Mean	Standard Deviation
Sexual knowledge	34	75	63.44	8.668
Sexual attitude	39	75	65.28	8.229
Sexual intimacy	40	120	103.73	15.178
Sexual satisfaction	51	174	148.41	23.655

The relationship between sexual knowledge and sexual attitude with sexual intimacy and sexual satisfaction investigated through the Pearson correlation test (Table 2).

**Table 2.** The relationship between sexual knowledge and sexual attitude with sexual intimacy and sexual satisfaction

Correlation coefficient 0.777 0.798  Sexual knowledge Significance level 0.001 0.001  Correlation Coefficient 0.844 0.875  Sexual attitude Significance Level 0.001 0.001			Sexual intimacy	Sexual satisfaction
Correlation Coefficient 0.844 0.875		Correlation coefficient	0.777	0.798
	Sexual knowledge	Significance level	0.001	0.001
Sexual attitude Similifornia I and 0 001		Correlation Coefficient	0.844	0.875
Significance Level 0.001 0.001	Sexual attitude	Significance Level	0.001	0.001

Based on the findings, there is a high and a positive correlation between these variables. Therefore, we conclude that the higher sexual knowledge and sexual attitude of couples, correlated to the higher sexual intimacy and sexual satisfaction.

Also, we investigated the ability of sexual knowledge and sexual attitude in predicting sexual intimacy and sexual satisfaction together and separately. The criterion variable was first sexual intimacy and then sexual satisfaction. The predictor variables included in both cases were sexual knowledge and sexual attitude, and sexual satisfaction was removed from the model in both cases because of the low power in predicting sexual intimacy and sexual satisfaction. Information about these studies is listed in Table 3.

**Table 3.** Summary of the results of the selective multivariate regression analysis model to examine the ability of sexual attitude in predicting sexual intimacy and sexual satisfaction

Predictor variable		Criterion variable		
		Sexual intimacy	Sexual satisfaction	
	R	0.844	0.875	
Sexual attitude	R Square	0.712	0.766	
	Adjusted R Square	0.710	0.764	
	Standard error	8.172	11.493	

As can be seen, our chosen model has considered the share of sexual intimacy variance to be 0.712 and the share of sexual satisfaction variance to be 0.766 and takes into account the rate of 0.710 change in sexual intimacy scores, as well as, 0.764 change in sexual satisfaction scores. These values indicate

that our chosen model is a good model for predicting sexual intimacy and sexual satisfaction. The variance analysis, including the total sum of squares, degree of freedom, mean of squares, value F, and significance level. Since  $P \le 0.01$ , the model is significant (Table 4).

**Table 4.** Results of sexual attitude variance analysis in predicting intimacy and sexual satisfaction

Predictor variable	Criterion variable		Sum of squares	Freedom degree	Average of squares	Fisher's statistic	Significance level
		Regression	21823.179	1	21823.179	326.785	0.001
	Sexual intimacy	Residue	8815.149	132	66.781		
		Sum	30638.328	133			
Sexual attitude							
		Regression	56988.991	1	56988.991	431.452	0.001
	Sexual satisfaction	Residue	17435.435	132	132.087		
		Sum	74424.425	133			

According to the results, each unit increase in the amount of sexual attitude will increase by 1.557 in sexual intimacy and will also increase by 2.515 in the amount of sexual satisfaction. If sexual orientation increases a standard deviation, sexual intimacy will increase by 0.844 standard deviations, and sexual satisfaction will increase by 0.875 standard deviations. In terms of sexual intimacy, the T and *P* values for sexual attitude were 18.077 and 0.001, respectively, and in terms of sexual

satisfaction, the T and P values for sexual attitude were 20.771 and 0.001, respectively (Table 5). So, sexual orientation has a high potential in predicting sexual intimacy and sexual satisfaction. Sexual knowledge was removed from the model because it was correlated with sexual intimacy and sexual satisfaction, but due to its low predictive power. In other words, sexual knowledge is not a good predictor of sexual intimacy and sexual satisfaction.

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<b>Table 5.</b> Coefficients of sexual	l attitude regression i	nredicting sexiis	il infimacy and	L CAYDIAL CATISTACTION
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	Sexual intimacy		Sexual satisfaction	
	Constant value	Sexual attitude	Constant value	Sexual attitude
В	2.114	1.557	-15.801	2.515
Standard error	5.665	0.086	7.968	0.121
Beta		0.844		0.875
T	0.373	18.077	-1.983	20.771
Significance level	0.710	0.001	0.049	0.001

#### **Discussion**

This study aimed to investigate sexual knowledge and attitude in predicting the level of sexual intimacy and satisfaction of couples. The results of this study showed that sexual knowledge has a significant and positive sexual correlation with intimacy satisfaction; however, it is not able to predict them, and also sexual attitude has not only a significant and positive correlation with sexual intimacy and satisfaction, but also the ability to predict them. Relevant researches have been conducted in this field that is consistent with the results of the present study. Alomayer et al., in a study entitled "sexually transmitted infection knowledge and attitudes among Muslim women worldwide," examined the narrative synthesis and thematic analysis of 18 studies conducted in 13 countries. They found that people's sexual knowledge could play a direct role in their sexual health (26). In this study, sexual health has been discussed as its general title and its micro-factors such as sexual intimacy and satisfaction have not been specifically addressed, and sampling among women and men did not participate in this

In background research entitled "sexual health knowledge and needs: Young Muslim women in Melbourne, Australia," Meldrum et al., through face-to-face interviews with 11 Muslim women using the convenient sampling method, showed that there is a relationship between sexual attitudes and sexual problems of Muslim women living in Australia (27), in this study, women's sexual problems were discussed in general, and men's sexual problems were not investigated. Also, sexual intimacy and satisfaction were not specifically emphasized, and sampling method was convenient, and the number of samples was low. Shakarami et al. conducted quasiexperimental and pretest-posttest follow-up research, with a witness group entitled "The effect of sex education on sexual intimacy of

married women" in an available sample of 48 women referring to the Center for Psychiatric Health Assistants in Bojnourd, interventions were conducted through sex education classes and collected information using a sexual intimacy questionnaire, and the statistical method was the analysis of covariance. The results showed that increasing sexual knowledge through sexual education sexual increased women's intimacy significantly (28). In this study, effectiveness of sex education was examined, while the present study was correlational type, and no intervention was performed.

Besharat and Rafizadeh in descriptivecorrelational research entitled "predicting levels of sexual satisfaction and marital adjustment based on job, commitment, intimacy, and sexual knowledge and attitude variables" in a sample of 100 selected oil company employees using the Golombok Rust Inventory of Sexual Satisfaction (GRISS) and the Sexual Knowledge and Attitude Scale (SKAS) concluded that sexual knowledge and attitude were positively and significantly correlated with satisfaction. sexual Furthermore, the results of stepwise regression also showed that sexual knowledge and attitude could predict sexual satisfaction (29). Therefore, the results of this study regarding the relationship between sexual knowledge and attitude with sexual satisfaction support the findings of the present study; however, another finding of this study based on this fact that sexual knowledge and attitude can predict sexual satisfaction are contrary in terms of sexual knowledge and are aligned in terms of sexual attitude with the present study findings.

Shalani and Siahkamari conducted a descriptive correlational study entitled "correlation of sexual knowledge and attitude with sexual function in female nurses" on 109 female nurses in Kermanshah city, using sexual knowledge and attitude scale and the Women's Sexual Function Index (FSFI). The results of

the Pearson correlation coefficient test showed that sexual knowledge and attitude have no significant correlation with sexual satisfaction as one of the components of sexual function, and also the results of the stepwise regression test showed that sexual attitude is not able to sexual function which satisfaction is one of its components. In this study, a sample was selected among female nurses by the convenient sampling method, and the information obtained from the participants was collected with tools other than the tools used in the present study, and some findings inconsistent with the results of the present study were obtained (30). The present study also faces some limitations such as the self-report questionnaires and bias under the influence of motivation, ignorance, mistrust, and so on. In addition, in most correlational studies, the main limitation is the generalizability of the research results. The present study is also a correlation type, so it has not examined the cause-andeffect relationships, and there may be other variables as moderating and mediating variables that mediate the relationship between the main research variables. This allows us to be cautious in generalizing the results to other communities. Since the implementation of this study was correlational, it is suggested that research be conducted in the form of experimental schemes to investigate the causeand-effect relationship between the main

variables of this study, and the role of intermediary variables should considered. Considering the positive effect of sexual knowledge on sexual intimacy and sexual satisfaction, educational and health centers, family counseling centers, infertility treatment centers, family courts, dispute resolution councils, and all organizations and institutions supporting the family by providing accurate and desirable knowledge in the field of sexual issues to couples and correcting their misconceptions and misguided attitudes in this regard, as well as teaching how to perform the sexual function in spouses properly can use the findings of this study to treat sexual dysfunction, increase sexual intimacy, gain sexual satisfaction and reduce divorce rates and maintain family and community health.

#### Conclusion

The present study results showed that sexual knowledge and attitude are related to sexual intimacy and satisfaction, and sexual attitude can predict sexual intimacy and satisfaction.

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## References

- 1. Herlbert DF, Apt C, Rabehl SM. Key variables to understanding female sexual satisfaction: an examination of women in nondistressed marriages. J Sex Marital Ther 1993; 19(2): 154-65.
- 2. Hamidi F, Afrooz GA, Kiamanesh AR, Rasoulzadeh Tabatabai SK. [Investigating the family structure of runaway girls and the effectiveness of family therapy and supportive therapy in changing it]. Journal of new findings in psychology 2004; 7(2): 114-27. (Persian)
- 3. Lawrence E, Penerson A, Bunde M, Barry RA, Brock RL, Fazio E, et al. Objective ratings as predictors of marital Satisfaction trajectories. J Soc Pers Relat 2008; 25(3): 445-66.
- 4. Bagarozzi DA. Marital intimacy needs questionnaire: Preliminary report. Am J Fam Ther 1997; 25(3): 285-90.
- 5. Hazan C, Shaver P. Romantic love conceptualized as an attachment process. J Pers Soc Psychol 1987; 52(3): 511-24.
- 6. Esmaeilbaigi Z, golamrezaei HR. [The miracle of intimacy, the key to successful life and relationship]. 3<sup>rd</sup> ed. Tehran: New Generation Thought; 2009. (Persian)
- 7. Botlani S, Ahmadi SA, Bahrami F, Shahsiah M, Mohebbi S. [Effect of attachment-based couple therapy on sexual satisfaction and intimacy]. Journal of fundamentals of mental health 2010; 12(2): 496-505. (Persian)
- 8. Azartash F. [The effectiveness of sexual education training on reducing marital conflict in women who referring to health home of Regional 2 Tehran city]. MA. Dissertation. Tehran: Science and Research University, 2011. (Persian)
- 9. Flynn KE, Lin L, Bruner DW, Cyranowski JM, Hahn EA, Jeffery DD, et al. Sexual satisfaction and the importance of sexual health to quality of life throughout the life course of U.S. adults. J Sex Med 2016; 13(11): 1642-50.

- 10. Nordstrom MPC, Westercamp N, Jaoko W, Okeyo T, Bailey RC. Medical male circumcision is associated with improvements in pain during intercourse and sexual satisfaction in Kenya. J Sex Med 2017; 14(4): 601-12.
- 11. Lawrance K, Byers ES. Sexual satisfaction in long term heterosexual relationship: The interpersonal exchange model of sexual satisfaction. Pers Relat 1995; 2(4): 267-85.
- 12. Klapilova K, Brody S, Krejcova L, Husarova B, Binter J. Sexual satisfaction, sexual compatibility, and relationship adjustment in couples: The role of sexual behaviors, orgasm, and men's discernment of women's intercourse orgasm. J Sex Med 2014; 12(3): 667-75.
- 13. Chan JL, Letourneau J, Salem W, Cil AP, Chan SW, Chen LM, et al. Sexual satisfaction and quality of life in survivors of localized cervical and ovarian cancers following fertility-sparing surgery. Gynecol Oncol 2015; 139(1): 141-7.
- 14. Seftel AD. Re: Female partners of men with Peyronie's disease have impaired sexual function, satisfaction, and mood, while degree of sexual interference is associated with worse outcomes. J Urol 2016; 196(5): 1516-7.
- 15. Qian R, Chen Z, Tang L, Zhang W. Postpartum adverse effects and sexual satisfaction following cesarean delivery in Beijing. Int J Gynaecol Obestet 2016; 132(2): 200-5.
- 16. Chistopher FS, Sprecher S. Sexuality in marriage, dating, and other relationships: A decade review. J Marr Fam 2000; 62(4): 999-1017.
- 17. Mahdavi N. [Comparison of sexual satisfaction and marital satisfaction, gender role, attachment styles and nervousness in individuals on the verge of divorce and ordinary people]. MA. Dissertation. Tehran: Science and Culture University; 2011. (Persian)
- 18. Beutel ME, Stöbel-Richter Y, Brahler E. Sexual desire and sexual activity of men and woman across their life spans: results from a representative German community survey. BJU Int 2008; 101(1): 76-82.
- 19. Gallegos EC, Villarruel AM, Gomez MV, Onofre DJ, Zhou Y. Research brief: Sexual communication and knowledge among Mexican parents and their adolescent children. J Assoc Nurses AIDS Care 2007; 18(2): 28-34. 20. Mirzaee Jahed A, Saberi H. [The prediction of marital disaffection of women based on their sexual attitudes and their husbands' tendency toward dark personality]. Journal of applied psychology 2019; 13(3): 371-89. (Persian)
- 21. Naderi F, Haidarei AR, Hosainzadeh Maleki Z. [The relationship between knowledge and sexual attitude components of love and marital satisfaction with domestic violence in married employees of government offices in Ahvaz city]. Journal of women and culture 2009; 1(1): 28-45. (Persian)
- 22. McCarthy BW. Sexual dysfunction. In: Hersen M. (editor). Clinical behavioral therapy: Adult and children. New York: John Wiley; 2002: 198-9.
- 23. Ouhadi B. [Human sexual desires and behaviors]. 8th ed. Isfahan: Sadegh Hedayat; 2006. (Persian)
- 24. Spence S. [Psychosexual therapy]. Touzandehjani H. (translator). 3<sup>rd</sup> ed. Tehran: Peik Farhang; 2006. (Persian)
- 25. Beam CR, Marcus K, Turkheimer E, Emery RE. Gender differences in the structure of marital quality. Behav Genet 2018; 48(3): 209-23.
- 26. Meldrum RM, Liamputtong P, Wollersheim D. Sexual health knowledge and needs: young Muslim women in Melbourne, Australia. Int J Health Serv 2016; 46(1): 124-40.
- 27. Alomair N, Alageel S, Davies N, Bailey JV. Sexually transmitted infection knowledge and attitudes among Muslim women worldwide: A systematic review. Sex Reprod Health Matters 2020; 28(1): 1731296.
- 28. Shahkarami M, Davarneia R, Zahrakar K, Gohari SH. [The effect of sex education on the sexual intimacy of married women]. Psychiatric nursing 2014; 2(1): 34-42. (Persian)
- 29. Besharat MA, Rafiezadeh B. [Prediction of sexual satisfaction and adjustment levels according to job variables, commitment, intimacy, and sexual knowledge and attitude]. Journal of family psychology 2016; 3(1): 31-46. (Persian)
- 30. Shalani B, Siyahkamari R. [Correlation of sexual knowledge and attitude with sexual function in female nurses]. Journal of Qom University of Medical Sciences 2018; 12(9): 66-74. (Persian)
- 31. Mottaqi M. [A study of couples' sexual knowledge and attitude, and its relationship with sexual satisfaction, in education employees, district 4 Tehran city]. MA. Dissertation. Tehran: Alzahra University, College of psychology and education science; 2009. (Persian)
- 32. Hassanzadeh R. [Research methods for behavioral sciences]. 9th ed. Tehran: Savalan; 2010: 130-1. (Persian)
- 33. Besharat MA, Ranjbar Kelagari E. [Development and validation of Sexual Knowledge and Attitude Scale]. Contemporary psychology 2013; 8(1): 21-32. (Persian)
- 34. Hudson WW, Harrison DF, Crosscup PC. A short-form scale to measure sexual discord in dyadic relationships. J Sex Res 1981; 17(2): 157-74.
- 35. Mohammadzadeh A, Rezaei A, Alizadeh Mansour E. [The comparison of life and sexual satisfaction among two personality type of A and B according to attachment style]. Journal of psychological science 2019; 18: 307-16. (Persian)