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ORIGINAL ARTICLE

# Socio-demographic predictors of dyadic sexual communication among Iranian married women

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## KEYWORDS

Dyadic sexual communication;  
Reproductive age women;  
Contraception;  
Economic status;  
Sexual intercourse

## Summary

**Background and aim.** – Couples' communication concerning sexual issues is influenced by various individual and social factors. The present study investigated the socio-demographic predictors of dyadic sexual communication among married women of reproductive age.

**Methods.** – A cross-sectional survey study was conducted from May to October 2019 in comprehensive health centers of Qazvin City, Iran. The participants comprised 400 married women with mean age of 35.66 years recruited via a two-stage sampling method. The Dyadic Sexual Communication Scale (DSCS) and a socio-demographic questionnaire were used for data collection. Univariable and multivariable linear regression models with a significance level of 0.05 were used for statistical analysis.

**Results.** – The mean score of sexual communication was 59.19 out of 78 (SD = 12.63). Based on multivariable linear regression model, life satisfaction ( $\beta = 0.34$  high vs. moderate), frequency of sexual intercourse ( $\beta = 0.20$ ), moderate vs. poor economic status ( $\beta = 0.12$ ), and using contraception ( $\beta = -0.09$ ) were predictors of good dyadic sexual communication. These variables explained 32% of the variance concerning dyadic sexual communication among married women of reproductive age.

**Conclusion.** – Life satisfaction, frequency of sexual intercourse, moderate economic status, and using contraception were predictors of good dyadic sexual communication.

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## Introduction

Marital relationships and sexual issues are an important part of human life, a source of pleasure, comfort, a way of expressing love and emotion, and the beginning of family life (Anderson, 2013). Sexual function and satisfaction are influenced by different individual, social, and cultural factors, as well as interpersonal relationships, sexual experience, hormonal status, and physical and mental health (Cupach and Comstock, 2010). Sexual satisfaction is the most important reason for the quality and continuity of marital relationships (Sánchez-Fuentes et al., 2014). Marital relationships are influenced by various factors including socioeconomic status, education, love, adjustment, the quality of couple's relationship, couple conflicts, duration of marriage, and sexual satisfaction (Alimoradi et al., 2019; Baumeister et al., 2007; Eghtedar et al., 2021; Özyigit, 2017; Sayehmiri et al., 2020).

Communication among couples in a completely honest and transparent way is the key to sustaining intimacy (Iris et al., 2013) and is a dominant issue in sexual satisfaction and sexual distress (Byers and Demmons, 1999; Purnine and Carey, 1997). Couples' communication comprises five factors including contentment, communication, compatibility, relational concern, and personal concern (Meston and Trapnell, 2005). Humans express different kinds of emotions and behaviors such as intimacy, love, anger, aggression, hostility, anger, distrust, and distress in their sexual relationships (Lipton, 2002).

In a positive marital relationship, couples need to recognize communication skills including (i) equality, (ii) communication growth, (iii) proximity and dependence, (iv) logical and rational solution to their conflicts and tensions, and (v) commitment and trust in each other (Ahmadi et al., 2005; Velten and Margraf, 2017). Difficulty in talking about sexual needs can be a negative contributor of sexual relationships and can affect the quality of married life (Blanchard et al., 2009; McManus and Donovan, 2012). Expressing feelings and being comfortable talking about sexual issues can be very helpful in promoting successful marital relationships (Byers, 2011; Farah and Shahram, 2011). Indeed, many sexual education specialists recommend individuals to talk to their partner, and is considered as one of the main components of marital therapy as well as being one of the educational elements in the sexual relationships (Salazar-Molina et al., 2015).

Effective communication between sexual partners can help increase genital arousal and orgasm by facilitating intimacy and sexual satisfaction through elicitation of sexual desires and preferences. Research has shown that women who tend to be highly sexually assertive tend to have higher levels of desire, orgasmic ability, and sexual satisfaction (Hurlbert, 1991). Researchers have found that the quality of the marital relationship and the skill of building a good relationship play a key role in promoting the quality of marital life (Blanchard et al., 2009; McManus and Donovan, 2012). In a successful marital relationship, couples have good communication skills with each other (Young and Long, 1998). A couple's relationship with sexual issues, known as dyadic sexual communication, focuses on sexual concerns, desires, and problems (Mark and Jozkowski,

2013). Individuals who communicate more with their partner concerning sexual issues helps solve problems more effectively. Many couples do not engage in any form of sexual communication (verbal and non-verbal), and this silence and inability to communicate can lead to their separation (Long, 2005). Good communication with one's partner can result in higher sexual function and greater marital satisfaction and intimacy. Moreover, it can reduce sexual stress and sexual dysfunction among women (Pazmany et al., 2015).

Although various studies have been conducted that have examined the relationship between sexual communication and sexual function or other components of marital relationship, factors relating to couples' sexual communication has not been examined. Therefore, the present study investigated the predictor role of socio-individual characteristics of couples relating to their sexual communication. It was hypothesized that some socio-individual characteristics of couples might be important in predicting sexual communication among couples. However, given the exploratory nature of the study, no specific socio-cultural characteristics were identified *a priori*.

## Methods

### Participants, design, and procedure

A cross-sectional survey study was conducted from May to October 2019 and comprised 400 married women. More specifically, the participants comprised married women of reproductive age who were referred to health centers of Qazvin City (Iran) to receive various types of health care including preconception counseling, family planning, children's growth, and development monitoring. Participants were selected with maximum diversity of family backgrounds in terms of economic, social, and cultural status. Within randomly selected health centers, individuals were included in the present study using a convenience sampling method.

A two-stage sampling process was utilized. In the first stage, the city was divided into four regions based on geographical location. Two comprehensive health centers were randomly selected from each geographical area. In the second phase, 50 eligible women from each center were invited to participate in the study. In the second stage, potentially eligible women were randomly selected from the list of women affiliated to each comprehensive health center.

Inclusion criteria included being married, consenting to participate in the study, and having minimum primary education. In addition, pregnant and lactating women who experienced stressful events in the past trimester, such as death of a loved one, mental illness, or medical condition (self-reported), were excluded from the study. These conditions were selected as exclusion criteria due to their known effect on individuals' sexual activity.

Since the investigation was also a study to assess the psychometric properties of the Persian version of Dyadic Sexual Communication Scale (DSC), the sample size was not calculated separately (Alimoradi et al., 2021). However, calculating the test power showed that the regression test had a power of more than 80%, considering type I error of 0.05 and the sample size of 400, in determining socio-individual

predictors of couples' sexual communication. In addition, the 95% confidence interval of the b-coefficient was limited in all variables, which confirmed the adequacy of the sample size.

## Measures

In the present study, data collection was performed using the following measures.

### Socio-individual characteristics questionnaire

Age (of participant and their spouse), education level, occupation, family's economic status, as well as the duration of marital relationship were assessed.

### Life satisfaction

Life satisfaction was assessed with a single item question asking: "How do you rate your life satisfaction in general?". They could answer this question as low, moderate, high or very high life satisfaction.

### Dyadic Sexual Communication Scale (DSCS)

The 13-item DSCS was developed by Catania et al. (25) and responses are rated on a six-point scale from 1 (*strongly disagree*) to 6 (*strongly agree*). Total scores range from 13 to 78, with higher scores indicating more effective sexual communication (Catania, 1998). The psychometric properties of the DSCS have been reviewed and validated by Fisher et al. (2013) and Pazmany et al. (2015). The Persian version of the scale have been translated and validated (Alimoradi et al., 2021). The internal consistency of the DSCS (using Cronbach's alpha) in the present study was very good (0.88).

## Ethics

The present study was approved by the Ethics Committee of Qazvin University of Medical Sciences (ID IR.QUMS.REC.1398.019). When conducting the research, the necessary permits were obtained to attend comprehensive health centers. The design, objectives, and research methods were fully explained to the participants, and informed consent was obtained from individuals to participate in the study. Individuals were assured that their information would remain confidential. Voluntary participation in the project and having the full authority of the participants to continue or withdraw from the study was observed.

## Data analysis

Data were analyzed using SPSS software version 24. Categorical variables are described with frequencies and percentages and ordinal variables are described with means and standard deviations. A multivariate linear regression model was used to examine the predictive role of socio-individual characteristics for couples' sexual communication. Sexual communication score as a dependent variable and socio-individual variables as independent variables were entered into the model utilizing the ENTER method. Assumptions of linear regression model (including checking the normality of sexual communication score

and the absence of controlled outliers) were tested. The Kolmogorov–Smirnov test confirmed the normality of the distribution of sexual communication score variables ( $p=0.8$ ). After performing regression analyses, the presence of values of VIF < 2 and Tolerance < 1 confirmed the conditions for using the regression model. The Durbin–Watson Index for the whole model was 1.82. Therefore, the assumptions associated with the linear regression model were established. The significance level ( $p$ -value) of all tests was considered  $\leq 0.05$ .

## Results

The mean age of the 400 participants was 35.66 years ( $SD=7.16$ ), and the mean age of their spouses was 39.66 years ( $SD=7.55$ ). Approximately half of the sample ( $n=203$ ) had been married for more than 10 years (50.8%). In relation to other socio-demographic variables, 71% had academic degrees (compared to 63.5% of spouses), 54.8% were housewives (91.8% of spouses had jobs), 68.5% had average economic status, 50% had average life satisfaction level, 37.5% had two children, 78.5% had a separate bedroom, and 52.3% were using the pill contraception method. Table 1 shows the distribution of demographic characteristics of the participants.

The mean score of sexual communication was 59.19 out of 78 ( $SD \pm 12.63$ ). The relationship between demographic variables and the sexual communication level was examined using a univariate regression test. The results are presented separately for the variables in Table 1. The results of the univariate model showed that age, spouse's age, frequency of sex per month, spouse's education level, economic status, life satisfaction, and duration of marriage were significantly related to women's sexual communication.

The results of multivariate linear regression test (Table 2) demonstrated that demographic components explained 32% of the variance of sexual communication among married women of reproductive age. Based on multivariable linear regression model, life satisfaction ( $\beta=0.34$  high vs. moderate), frequency of sexual intercourse ( $\beta=0.20$ ) and moderate vs. poor economic status ( $\beta=0.12$ ), and using contraception ( $\beta=-0.09$ ) were predictors of good dyadic sexual communication.

Among the demographic components, marital satisfaction was the most predictive of good sexual communication among women. The results based on non-standardized coefficients showed that the average score of sexual communication among individuals with very high life satisfaction was 10.68 higher compared to individuals with average life satisfaction. Moreover, the average score among individuals with high life satisfaction was 9.07 higher than individuals with average life satisfaction. However, the average score of sexual communication among individuals with low life satisfaction was 10 points lower than the group with low life satisfaction. In addition, for each increase in the number of times sexual intercourse occurred per month, 0.52 was added to the average score of sexual communication. High life satisfaction had the highest standardized coefficient (0.34) in predicting women's sexual communication score.

**Table 1** Distribution of demographic variables and its relationship with couples' sexual communication according to the results of univariate regression.

Variable	Range	Mean (SD)	Univariate regression test results		
			b-coefficient	Standard error	Significance level
Age (years)	19–50	35.66 (7.16)	–0.19	0.09	0.04
Spouse's age (years)	25–68	39.66 (7.55)	–0.21	0.08	0.01
Frequency of intercourses per month.	0–30	6.29 (4.93)	0.78	0.12	< 0.001
Number of children	0–4	1.26 (0.87)	–0.77	0.72	0.29
Duration of marriage	Less than one year	21 (5.3)	6.59	3	0.03
	One to five years	72 (18)	0.61	1.92	0.75
	More than ten years	203 (50.8)	–1.35	1.51	0.37
Wife' education	Five to ten years	104 (26)	Reference group		
	Academic	284 (71)	2.44	1.39	0.08
Husband's education	Non-academic	115 (28.8)	Reference group		
	Academic	254 (63.5)	2.99	1.30	0.02
Wife' occupation	Non-academic	146 (36.5)	Reference group		
	Housewife	219 (54.8)	0.87	1.26	0.49
Husband's occupation	Employed	181 (45.3)	Reference group		
	Unemployed	18 (4.5)	–5.26	3.04	0.08
	Retired	83 (20.8)	–4.44	3.32	0.16
Economic status of the family	Employed	367 (91.8)	Reference group		
	Poor	43 (10.8)	–7.49	2.04	< 0.001
	Good	83 (20.8)	–0.72	1.56	0.65
Life satisfaction	Average	274 (68.5)	Reference group		
	Low	28 (7)	–10.87	2.20	< 0.001
	High	131 (32.8)	9.73	1.23	< 0.001
	Very high	41 (10.3)	1.87	12.20	< 0.001
Having separate bedrooms	Moderate	200 (50)	Reference group		
	Yes	314 (78.5)	2.68	1.53	0.08
Method of contraception	No	86 (21.5)	Reference group		
	No method	35 (8.8)	–7.38	2.29	0.001
	Injections	32 (8.1)	–0.11	2.38	0.96
	Condom	104 (26)	0.18	1.50	0.91
	Sterilization	20 (5)	–0.44	2.93	0.99
	Pill	209 (52.3)			

## Discussion

The aim of the present study was to investigate the socio-individual predictors of sexual communication among married women of reproductive age. The mean score on the DSCS was 59.19 and Cronbach's alpha coefficient was very good (0.88). Since the total scores on the DSCS range from 13 to 78, and the fact that the highest score indicates a stronger relationship in terms of sexual communication, the average of total score on this scale indicates a high level of sexual communication in the relationship (at least from the female's perspective). In the study, the relationship between demographic variables and sexual communication was investigated using a univariate regression test. The results of this regression analysis showed that the all the variables (age, spouse's age, frequency of sexual intercourse per month, spouse's education level, economic status, life

satisfaction, duration of marriage), and life satisfaction was associated with good sexual communication among women.

According to the results of the present study, as the age of the woman or her husband increases, the amount of sexual communication decreases. Younger individuals appear to be more inclined to talk about their sexual issues with their partner. Couples who have better dyadic sexual communication and who demonstrate better sexual assertiveness are usually more satisfied with their marital relationship (Greene and Faulkner, 2005). Aging has a significant and negative effect on the sexual quality and activity (Fallah et al., 2018; Nikbina and Afshari, 2019; Kingsberg, 2002; Sugimoto et al., 2019; Ziaee et al., 2014). Several studies have shown that marital satisfaction decreases with age, which indicates that couples with a higher average age are more likely to have more sexual problems than young couples (Cohen et al., 2014; Moshtagh et al., 2013).

**Table 2** Results of multivariable linear regression analysis regarding the predictive role of socio-demographic variables in dyadic sexual communication.

	Unstandardized coefficients		Standardized coefficients	Sig.	95.0% confidence interval for B	
	B	Std. error	Beta		Lower bound	Upper bound
Life satisfaction						
High	9.066	1.187	0.337	0.000	6.732	11.400
Very high	10.681	1.845	0.257	0.000	7.053	14.309
Low	−9.897	2.127	−0.200	0.000	−14.078	−5.716
Moderate	RG					
Coitus monthly	0.522	0.110	0.204	0.000	0.305	0.739
Moderate vs. poor economic status	3.361	1.138	0.124	0.003	1.125	5.597
Contraception = 0.0 (vs. having contraception)	−3.858	1.890	−0.086	0.042	−7.574	−0.143
Model summary	R = 0.57 Adjusted R Square = 0.32 Durbin–Watson = 1.82					

Spouse’s education level is another variable that can impact a couple’s sexual communication. In the present study, as the spouse’s education increased, the better the quality of sexual communication as rated by the female partner. It appears individuals with higher education have better communication skills than those with lower education, and that these skills help spouses to talk more easily about various issues in life, including sexual issues. In previous studies, the level of education has a significant effect on sexual satisfaction (Fallah et al., 2018; Ghahremani et al., 2017). For example, in the study by Nikbina and Afshari (2019), women with higher education had higher sexual satisfaction.

In the present study, economic status was another variable that appeared to impact couples’ sexual communication. Among those with poorer economic status, sexual communication was lower. In a study that examined the relationship between perceived economic status and sexual satisfaction, the results showed that the level of satisfaction in middle-income group was higher than the other two groups with good and poor income levels (Fallah et al., 2018). It appears that those who have more financial problems may experience more challenges in their family relationships and this also affects their sexual communication.

Marriage duration can also impact sexual communication. Couples who have been married for less than a year had a higher rate of sexual communication than those with longer marriages. In Huong’s study, the quantity and quality of sexual communication decreased as the duration of marriage increased. Furthermore, ambiguity in talking about sexual issues was the biggest obstacle in couples’ sexual conversation (Huong, 2010). Some studies found a negative relationship between the duration of marriage and sexual satisfaction (Fallah et al., 2018; Nikbina and Afshari, 2019). Therefore, as the duration of marriage increases, sexual satisfaction decreases. Since one of the goals of marriage is to meet the sexual needs of individuals and many couples in the early years of adult life are more focused on sexual issues to achieve this goal, there will be more sexual communication among them.

The frequency of sexual intercourse per month is another variable that can impact couple’s sexual communication. In the present study, sexual communication was higher among couples who had more monthly sexual intercourse. According to the results of the regression model, for each increase in the number of times of sexual intercourse per month, 0.52 was added to the average score of sexual communication. Frederick et al. (2017) reported that sexual satisfaction and maintaining sexual intimacy were higher among couples who had more sexual intercourse and better sexual communication. Frequent sexual intercourse is associated with higher sexual satisfaction in both sexes (Schoenfeld et al., 2017). In the present study, sexual communication was higher among women who used contraception. It appears that coming to an agreement on various issues in life, such as adopting contraceptive methods, can predict communication on other issues in married life, such as sexual communication. Moreover, individuals should talk with peace of mind about their sexual issues after choosing a contraception method and making sure they have safe sex without unwanted pregnancy. Consistent with the findings of the present study, open communication over sexual issues was associated with increased use of contraceptive methods in couples (Widman et al., 2006).

The results of multivariate linear regression demonstrated that socio-individual components explained 32% of the variance related to sexual communication among married women of reproductive age. Among the socio-individual components, life satisfaction was the most predictive factor in women’s sexual communication. The findings of the present study confirm the results of previous studies in relation to this factor (Alizadeh et al., 2020; Mark and Jozkowski, 2013; Velten and Margraf, 2017).

An individual’s ability to make sexual requests is associated with higher sexual satisfaction by communicating about sexual issues (Byers, 2011). Lavner et al. (2016) conducted a cross-sectional study and found out that couples who were relatively satisfied with their marital relationship engaged in more positive and more effective communication with their spouses. Longitudinally, they found that the

reliable communication-to-satisfaction and satisfaction-to-communication associations were identified, but it was not possible to say exactly which one affects the other.

## Limitations

The cross-sectional nature of the study, the use of a self-report method to complete the questionnaires, and failure to examine spouses simultaneously were the main limitations of the present study. Further studies using longitudinal design with participation of both couples are recommended.

## Conclusion and implications

In the present study, life satisfaction was significantly associated with the level of couples' sexual communication among married women of reproductive age. Based on the results, the importance of demographic factors such as age, the spouse's age, frequency of sex per month, spouse's education level, economic status, life satisfaction, and duration of marriage were all identified as factors that can promote couples' sexual communication. Moreover, some of these factors including life satisfaction, amount of monthly sex, having moderate economic status and using contraception were independent significant predictors of couples' sexual communication. Based on these findings, it is clear that multifaceted interventions are needed to help couples improve their sex life. This could include (i) providing proper family planning consultation to help couples choose the best contraceptive method based on their situation. Having context-specific appropriate contraception would help couples engage in more sexual talk and practice and reduce pregnancy worries; (ii) providing sexual enrichment programs to promote couples' frequency of sexual activity. Based on the findings of the present study, facilitating ways to increase frequency of sexual activity would likely improve their sexual communication and sex life; (iii) providing opportunities and strategies to improve life satisfaction and economic status to help enhance couples' sexual communication and sex life. In this regard, macro-level interventions and policies are needed to promote overall aspects of individual and family life. Improving overall life situations would help people to enjoy different aspects of life including their sex life.

## Disclosure of interest

The authors have not supplied their declaration of competing interest.

## References

- Ahmadi K, Fathi-Ashtiani A, Navabinejad S. *The study of contextual-personal and relationship-mutual factors on marital adjustment.* *Fam Res* 2005;1(3):221–37.
- Alimoradi Z, Ghorbani S, Bahrami N, Griffiths MD, Pakpour AH. *Psychometric properties of the Persian version of the Dyadic Sexual Communication Scale among Iranian married women of reproductive age;* 2021 [under review].
- Alimoradi Z, Lin CY, Imani V, Griffiths MD, Pakpour AH. *Social media addiction and sexual dysfunction among Iranian women: the mediating role of intimacy and social support.* *J Behav Addict* 2019;8(2):318–25.
- Alizadeh S, Ebadi A, Kariman N, Ozgoli G. *Dyadic sexual communication scale: psychometrics properties and translation of the Persian version.* *Sex Relationship Ther* 2020;35(1):103–14.
- Anderson R. *Positive sexuality and its impact on overall well-being.* *Bundesgesundheitsblatt-Gesundheitsforschung-Gesundheitsschutz* 2013;56(2):208–14.
- Baumeister RF, Vohs KD, Tice DM. *The strength model of self-control.* *Curr Dir Psychol Sci* 2007;16(6):351–5.
- Blanchard VL, Hawkins AJ, Baldwin SA, Fawcett EB. *Investigating the effects of marriage and relationship education on couples' communication skills: a meta-analytic study.* *J Fam Psychol* 2009;23(2):203.
- Byers ES. *Beyond the birds and the bees and was it good for you?: Thirty years of research on sexual communication.* *Can Psychol/Psychol Can* 2011;52(1):20.
- Byers ES, Demmons S. *Sexual satisfaction and sexual self-disclosure within dating relationships.* *J Sex Res* 1999;36(2):180–9.
- Catania JA. *Dyadic sexual communication.* In: Fisher TD, Davis CM, Yarber WL, Davis SL, editors. *Handbook of sexuality-related measures.* 3rd ed. New York: Routledge; 1998. p. 130–2.
- Cohen S, O'Leary KD, Foran H, Kliem S. *Mechanisms of change in brief couple therapy for depression.* *Behav Ther* 2014;45(3):402–17.
- Cupach WR, Comstock J. *Satisfaction with sexual communication in marriage: links to sexual satisfaction and dyadic adjustment.* *J Soc Pers Relationships* 2010;7(2):179–86.
- Eghtedar S, Asghari E, Aparnak F-S, Asgarloo Z, Rasti P. *Marital adjustment as a predictor of quality of life in infertile couples.* *Asian J Soc Health Behav* 2021;4(3):105–9, <http://dx.doi.org/10.4103/shb.shb.10.21>.
- Fallah M, Saei Ghare Naz M, Ozgoli G, Mehrabi Y, Farnam F, Bakhtyari M. *Correlation of women's marital and sexual satisfaction in different family life cycle stages in Khorram Abad, Iran.* *Int J Womens Health Reprod Sci* 2018;6(4):432–7.
- Farah LK, Shahram V. *The effect of sexual skills training on marital satisfaction.* *Procedia - Soc Behav Sci* 2011;30:2581–5.
- Fisher TD, Davis CM, Yarber WL. *Handbook of sexuality-related measures.* Routledge; 2013.
- Frederick DA, Lever J, Gillespie BJ, Garcia JR. *What keeps passion alive? Sexual satisfaction is associated with sexual communication, mood setting, sexual variety, oral sex, orgasm, and sex frequency in a national US study.* *J Sex Res* 2017;54(2):186–201.
- Ghahremani F, Ahmadi Doulabi M, Eslami M, Shekarriz-Foumani R. *Correlation between number and gender composition of children and marital satisfaction in women presenting to health centers in Tehran – Iran, 2015.* *Iran J Psychiatry Behav Sci* 2017;11(2), <http://dx.doi.org/10.5812/ijpbs.9598>.
- Greene K, Faulkner SL. *Gender, belief in the sexual double standard, and sexual talk in heterosexual dating relationships.* *Sex Roles* 2005;53(3–4):239–51.
- Huong BT. *'Let's talk about sex, baby': sexual communication in marriage in contemporary Vietnam.* *Cult Health Sex* 2010;12(5):S19–29.
- Hurlbert DF. *The role of assertiveness in female sexuality: a comparative study between sexually assertive and sexually nonassertive women.* *J Sex Marital Ther* 1991;17(3):183–90.
- Iris A, Kirmizi DA, Taner CE. *Effects of infertility and infertility duration on female sexual functions.* *Arch Gynecol Obstet* 2013;287(4):809–12.
- Kingsberg SA. *The impact of aging on sexual function in women and their partners.* *Arch Sex Behav* 2002;31(5):431–7.
- Lavner JA, Karney BR, Bradbury TN. *Does couples' communication predict marital satisfaction, or does marital satisfaction predict communication?* *J Marriage Fam* 2016;78(3):680–94.
- Lipton JE. *Gender gap: the biology of male-female differences.* Transaction Publishers; 2002.

- Long A. [Doctoral thesis] The relationship among marital quality, sexual frequency, sexual disagreement, depression, and married women's sexual satisfaction [Doctoral thesis]. US: Auburn University; 2005.
- Mark KP, Jozkowski KN. The mediating role of sexual and nonsexual communication between relationship and sexual satisfaction in a sample of college-age heterosexual couples. *J Sex Marital Ther* 2013;39(5):410–27.
- McManus TG, Donovan S. Communication competence and feeling caught: explaining perceived ambiguity in divorce-related communication. *Commun Q* 2012;60(2):255–77.
- Meston C, Trapnell P. Outcomes assessment: development and validation of a five-factor sexual satisfaction and distress scale for women: the Sexual Satisfaction Scale for Women (SSS-W). *J Sex Med* 2005;2(1):66–81.
- Moshtagh N, Teimourpour N, Pourshanbaz A. The relationship between attachment styles, marital satisfaction and sex guilt with sexual desire in Iranian women. *Iran J Clin Psychol* 2013;1(1):18–28.
- Nikbina M, Afshari P. The sexual satisfaction and related factors in Ahvazi women in 2015. *Shiraz E-Med J* 2019;20:e81500.
- Özyigit MK. The meaning of marriage according to university students: a phenomenological study. *Educ Sci Theory Pract* 2017;17(2):679–711.
- Pazmany E, Bergeron S, Verhaeghe J, Van Oudenhove L, Enzlin P. Dyadic sexual communication in pre-menopausal women with self-reported dyspareunia and their partners: associations with sexual function, sexual distress and dyadic adjustment. *J Sex Med* 2015;12(2):516–28, <http://dx.doi.org/10.1111/jsm.12787>.
- Purnine DM, Carey MP. Interpersonal communication and sexual adjustment: the roles of understanding and agreement. *J Consult Clin Psychol* 1997;65(6):1017–25.
- Salazar-Molina A, Klijn TP, Delgado JB. Sexual satisfaction in couples in the male and female climacteric stage. *Cad Saude Pub* 2015;31(2):311–20.
- Sánchez-Fuentes M d M, Santos-Iglesias P, Sierra JC. A systematic review of sexual satisfaction. *Int J Clin Health Psychol* 2014;14(1):67–75.
- Sayehmiri K, Kareem KI, Abdi K, Dalvand S, Gheslugh RG. The relationship between personality traits and marital satisfaction: a systematic review and meta-analysis. *BMC Psychol* 2020;8(1):15.
- Schoenfeld EA, Loving TJ, Pope MT, Huston TL, Stulhofer A. Does sex really matter? Examining the connections between spouses' nonsexual behaviors, sexual frequency, sexual satisfaction, and marital satisfaction. *Arch Sex Behav* 2017;46(2):489–501.
- Sugimoto CR, Ahn Y-Y, Smith E, Macaluso B, Larivière V. Factors affecting sex-related reporting in medical research: a cross-disciplinary bibliometric analysis. *Lancet* 2019;393(10171):550–9.
- Velten J, Margraf J. Satisfaction guaranteed? How individual, partner, and relationship factors impact sexual satisfaction within partnerships. *PLoS One* 2017;12(2):e0172855.
- Widman L, Welsh DP, McNulty JK, Little KC. Sexual communication and contraceptive use in adolescent dating couples. *J Adolescent Health* 2006;39(6):893–9.
- Young ME, Long LL. *Counseling and therapy for couples*. Thomson Brooks/Cole Publishing Co; 1998.
- Ziaee T, Jannati Y, Mobasheri E, Taghavi T, Abdollahi H, Modanloo M, et al. The relationship between marital and sexual satisfaction among married women employees at Golestan University of Medical Sciences, Iran. *Iran J Psychiatry Behav Sci* 2014;8(2):44–51.