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Effectiveness of Cognitive–Behavioral Sexual Skills Training (Masters and Johnson) on Sexual Satisfaction and Sexual Intimacy in Married Women

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ABSTRACT

Objective: This study aimed to evaluate the effectiveness of cognitive–behavioral sexual skills training (Masters and Johnson) on sexual satisfaction and sexual intimacy in married women attending health centers in Tehran.

Methods and Materials: A quasi-experimental design with pretest–posttest and control group was used. Thirty married women were selected via convenience sampling and randomly assigned to an experimental (n=15) and a control group (n=15). The experimental group received eight weekly two-hour sessions of cognitive–behavioral sexual skills training, while the control group received no intervention. Sexual satisfaction and intimacy were measured before and after the intervention using standardized questionnaires. Data were analyzed using ANCOVA with SPSS 26, and assumptions of normality, homogeneity of variances, and regression slopes were verified.

Findings: The results showed significant improvements in the experimental group compared to the control group. Sexual satisfaction increased from pretest (M=84.93, SD=14.10) to posttest (M=133.86, SD=8.62) in the experimental group ($p<0.001$, $\eta^2=0.924$). Sexual intimacy also increased significantly in the experimental group from pretest (M=85.73, SD=11.64) to posttest (M=110.60, SD=5.65) ($p<0.001$, $\eta^2=0.849$). The control group showed no significant changes.

Conclusion: Cognitive–behavioral sexual skills training effectively enhanced sexual satisfaction and intimacy in married women. These findings suggest that structured educational interventions based on the Masters and Johnson method can improve marital relationship quality, emotional closeness, and sexual well-being.

Keywords: Cognitive–behavioral sexual skills training, sexual satisfaction, sexual intimacy, married women, Masters and Johnson.

Introduction

Sexual satisfaction is one of the most important factors affecting the quality and stability of couples' relationships. Sexual satisfaction is a well-recognized indicator of sexual health and sexual well-being. A successful marriage, in most cases, is accompanied by both partners' satisfaction with their sexual relationship. Sexual satisfaction refers to an emotional–affective response that arises from an individual's positive and negative subjective evaluations of their sexual relationship with another person. Studies have shown that sexual satisfaction increases self-esteem, life satisfaction, capacity for loving, relationship satisfaction, emotional satisfaction, and feelings of happiness in life (Butzer & Campbell, 2008). Sexual satisfaction and healthy, satisfying sexual functioning are important factors in preventing sexual dysfunction (Shabani & Abdi, 2020).

Another important factor in marital relationships is a type of intimacy, namely, sexual intimacy. Intimacy is a sense of closeness, similarity, and a loving or emotional personal relationship with another person; it entails deep knowledge and understanding of the other person, enabling the expression of thoughts and feelings that serve as the source of that similarity and closeness. Intimacy is an interactive process and includes interrelated dimensions. The axis of this process involves knowing, understanding, accepting, empathizing with the other person's feelings, and appreciating and accepting their perspective. Sánchez-Sánchez et al. (2021) consider the presence of intimate relationships to be one of the factors influencing sexual satisfaction. Intimacy is defined as the ability to connect with others while maintaining individuality. Such self-based definitions imply that a person has reached a level of development that enables them to establish intimate relationships with others.

The results of Masters & Johnson's (1970) research showed that couples who cannot talk about their sexual desires and wishes experience sexual dysfunctions more than other couples. Marital relations, as part of family relationships, are of great importance; these relations have emotional, psychological, and sexual aspects, and across all domains, couples' awareness and knowledge of their roles in creating a healthy and fruitful relationship are especially important (Jalali et al., 2019).

Therefore, since sexual behavior is largely acquired and based on learning, it requires special education and training. Research has shown that knowledge and awareness of sexual issues can change lives and often improve them; however, there is sometimes a gap between what a person has learned and how it is integrated into their life (Yousefi Afrashteh et al., 2024). Lack of sexual knowledge or incorrect information about sexual matters increases individuals' vulnerability and provides a background for the emergence of sexual disorders. Sexual knowledge refers to the set of information, knowledge, and awareness a person has about gender and sexual issues, including physiological aspects, reproduction, sexual functioning, and individual and interpersonal sexual behavior (Yousefi Afrashteh et al., 2024). Masters & Johnson (1970), in their studies, found that in many cases, sexual dysfunctions result from a lack of awareness of the basic realities of the sexual response system or misconceptions about sexual issues. Bancroft (2008) found that the main problem in sexual dysfunctions is the lack of appropriate information about sexual functioning. Spence (2013) emphasized the remarkable impact of a lack of sexual knowledge on the development of sexual dysfunctions in women. Insufficient sexual information and knowledge increase vulnerability and lead to suboptimal sexual functioning. Knowledge about the opposite sex is often weak and inaccurate (Bancroft, 2008, cited in Dehghani Champiri & Dehghani, 2023). In sexual education, attention should be paid to cultural infrastructures and social attitudes. Sexual education should be provided in a timely, comprehensive, accurate, and appropriate manner, tailored to individuals' age, gender, and socio-cultural conditions.

Among educational and therapeutic methods used to alleviate sexual problems is the cognitive–behavioral approach. The cognitive–behavioral approach in treating sexual functioning disorders, founded by Masters & Johnson (1966), is an approach that simultaneously uses behavioral methods to change maladaptive cognitions, thereby enhancing therapeutic effects. Although historically various efforts by theorists and researchers in different parts of the world have addressed sexual relationships and sexual satisfaction, Masters and Johnson—and after them Kaplan—were scholars who seriously focused on sexual relations and sexual

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satisfaction within the framework of the sexual response cycle stage theory (Rahmani et al., 2009).

From a scientific and historical perspective, the sexual response cycle theory has been widely used to understand sexual response and then to define sexual functioning disorders. It remains the basis for classifying sexual problems for many researchers. This theory showed that encountering difficulty in any of the stages of sexual response (including sexual desire, arousal, orgasm, and resolution) can lead to various sexual dysfunctions (Avery-Clark et al., 2019). Evidence from studies on the effectiveness of Masters and Johnson's approach—referred to in research as both behavioral and cognitive–behavioral (Alizadeh et al., 2019; Avery-Clark et al., 2019)—has supported this theory. McCabe (2001), in a study, showed that cognitive–behavioral therapy influenced by the Masters and Johnson approach reduces sexual dysfunction, increases positive attitudes toward sexual relations, increases the perceived pleasurable nature of sexual intercourse, and reduces feelings of failure in sexual relations (cited in Jangi et al., 2023). Şafak Öztürk & Arkar (2017) reported the effectiveness of cognitive–behavioral sex therapy in increasing couples' sexual satisfaction and marital adjustment. Atkinson (2013), in their review, argued that the Masters and Johnson educational approach is itself mindful and introduced mindfulness training as an effective means of reducing couples' conflicts and increasing positive, constructive sexual functioning. Babakhani et al. (2018) showed that cognitive–behavioral sexual counseling increases women's sexual satisfaction and sexual functioning. Shayan et al. (2018) also reported cognitive–behavioral therapy as a factor in improving marital quality. Dehkordi et al. (2017) showed the effectiveness of cognitive–behavioral sex therapy in reducing anxiety and increasing sexual functioning in women with vaginismus.

The issue is that with increasing marital duration, the quality of individuals' sexual life decreases, which affects sexual satisfaction and sexual intimacy. In addition, learning sexual knowledge plays a substantial role in the quality of individuals' sexual life and leads to sexual well-being. Therefore, the present study was conducted to examine the effectiveness of cognitive–behavioral sexual skills training (Masters and Johnson) on sexual satisfaction and sexual intimacy among married women.

Methods and Materials

Study Design

The present study is applied in nature and, for data collection, uses a quasi-experimental design with a pretest–posttest control group. The statistical population comprised married women who attended health care centers across different areas of Tehran during 2024–25. The sample consisted of 30 married women selected from among those attending health-care centers in different areas of Tehran. First, health-care centers affiliated with three universities of medical sciences (Shahid Beheshti, Iran, and Tehran) were considered, and one health-care center from each university was selected using convenience sampling. Then, 30 participants (15 participants from the centers for placement into two groups) were selected after the necessary screening and were randomly assigned to two 15-person groups (the cognitive–behavioral sexual education intervention group and the control group). Afterward, participants were assessed at posttest, and an 8-session training program (one session per week) was then conducted for the experimental group.

Inclusion criteria included: no chronic mental or personality disorder; no simultaneous psychiatric treatment or psychotherapy and no use of medications that cause sexual dysfunction; no illnesses that cause sexual dysfunction; 2 to 5 years of marital life; and at least a high school diploma. Exclusion criteria included: withdrawal from treatment; absence from more than two sessions; lack of appropriate physical or psychological conditions to complete the questionnaires; and incomplete questionnaire responses that negatively affect the results.

Instruments

Sexual Satisfaction Questionnaire: This questionnaire was developed by Hudson (2013) to measure couples' level of sexual satisfaction. The Sexual Satisfaction Questionnaire includes 25 items scored on a 7-point scale from 0 (never) to 6 (always); some items are reverse-scored. Reverse scoring applies to items 4, 5, 6, 7, 8, 11, 13, 14, 15, 18, 20, 24, and 25. The minimum score is 25, and the maximum score is 150. A score between 25 and 67 indicates low sexual satisfaction; a score between 67 and 100 indicates moderate sexual satisfaction; and a score above 100 indicates high sexual satisfaction. The developers calculated the reliability of this

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questionnaire, and its Cronbach's alpha was 0.91; the validity of this test was confirmed and reported as 0.85. Scale reliability was also calculated using the test–retest method with a one-week interval and was 0.93. The reliability of this questionnaire in the study by Moradi & Madani (2020) was reported as 0.89 using Cronbach's alpha. In the present research, the reliability of this questionnaire, as measured by Cronbach's alpha, was 0.85.

Sexual Intimacy Questionnaire: This questionnaire was developed by Bagarozzi (2001) and adapted from valid scientific sources. It includes 30 items. Each item has a four-option response format (always, sometimes, rarely, never) scored from 1 to 4. The minimum score is 30, and the maximum score is 120 (always: 4; sometimes: 3; rarely: 2; never: 1). Reverse scoring applies to items 2, 6, 9, 11, 12, 13, 14, 16, 20, 22, 26, 27, and 29. A score between 30 and 50 indicates low sexual intimacy; a score between 51 and 100 indicates moderate sexual intimacy; and a score above 100 indicates high sexual intimacy. Content validity was confirmed by five counseling and psychology experts in the Faculty of Educational Sciences at the University of Isfahan. For internal reliability, the questionnaire was administered to 140 individuals (70 couples), and Cronbach's alpha was 0.81. In the present research, the reliability of this questionnaire, as measured by Cronbach's alpha, was 0.79.

Cognitive–Behavioral Sexual Skills Training Protocol (Masters and Johnson): Sexual skills training is a method used in the treatment of sexual disorders that increases individuals' awareness regarding sexual desires, attitudes, and related cultural values. It also improves and promotes effective communication on sexual topics and sexual functioning (Mohammadi et al., 2022). The sexual skills training protocol was developed based on the cognitive–behavioral approach of Masters & Johnson (1966). This educational protocol is presented in Rafiei's Sexual Health book cited in Sadri Damirchi et al. (2017), and includes eight two-hour sessions, which are fully described in Table 1.

Table 1

Sexual skills training with the cognitive–behavioral approach of Masters and Johnson

Session	Goal	Implementation method	Assignment
First	Welcome and introductions; stating goals; assessing participants' current awareness and knowledge about sexual skills and explaining the rationale for training; discussion about sexual health, sexual behavior, and history	Creating sensitivity and attracting members' attention to the overall content of all sessions; using Q&A to assess participants; reviewing all suggestions, classifying them, and developing strategies for the program; administering the pretest.	Talk with your spouse about the session.
Second	Familiarizing participants with the importance of verbal and nonverbal interactions in establishing sexual relations, familiarizing them with the conditions and characteristics of a healthy sexual relationship (inspired by the global definition of a healthy sexual relationship), and the causes of sexual dysfunctions.	Teaching skills for establishing good communication (including verbal affection, emotional expressions, and caresses) before initiating sexual relations and across its stages; teaching how to use language for needs and criticisms	Interact with your spouse and talk about the training.
Third	Familiarity with sensitive body points, sexual preferences of women and men, and examining incorrect beliefs about sexual relations	Introducing men's and women's sexual orientations and preferences; different forms of sexual relations; discussion and review of incorrect beliefs and viewpoints.	Interact with your spouse and talk about the training.
Fourth	Increasing sexual knowledge and attitudes by teaching body knowledge of female and male genital systems (physiology and anatomy) and the sexual response cycle based on the Masters and Johnson model	Clarifying female and male genital systems, their physiology and anatomy, and hormonal changes; stages of the sexual cycle based on the Masters and Johnson model	Talk with your spouse about the training.
Fifth	Familiarity with sexual functioning disorders in women and men; familiarity with and recognition of sexually transmitted diseases	Clarifying sexual disorders, symptoms, causes, and initial treatment approaches; identifying sexually transmitted diseases; teaching prevention methods and initial treatment steps; identifying situations that exacerbate sexually transmitted diseases	Talk with your spouse about the training.
Sixth	Familiarity with sensate focus techniques and their indicators; familiarity with emotion expression skills and establishing sexual intimacy	Teaching skills of focus, attention, and awareness of sensory indicators; teaching emotion expression and sexual self-disclosure; teaching how to establish sexual intimacy	Interact with your spouse and talk about the training.
Seventh	Familiarity with sexual "coolers" (factors that reduce sexual desire/arousal) and attractiveness standards; familiarity with sexual hygiene and family planning; familiarity with pubococcygeal muscle exercises (Kegel exercises)	Teaching sexual coolers and clarifying attractiveness standards; teaching sexual hygiene and family planning; teaching pubococcygeal muscle exercises (Kegel exercises)	Talk with your spouse about the training.
Eighth	Summary and consolidation of training; evaluation of training sessions based on group members' statements	Evaluating training sessions through participants' Q&A and administering the posttest.	Apply what was learned in interaction with the spouse during married life.

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Procedure

After administering the pretest and assigning participants to the experimental and control groups, the experimental group received a group-based cognitive–behavioral educational intervention in 8 two-hour sessions (one session per week) based on the sexual health cycle of Masters & Johnson (1966), following the protocol presented in Rafiei's Sexual Health book (cited in Sadri Damirchi et al. (2017). Descriptive and inferential statistics were used to analyze the data. Descriptive indices for the variables under study, including measures of central tendency (frequencies, percentages, means) and measures of dispersion (variances and standard deviations), were calculated and reported in tables. In the inferential section, to test the study hypotheses and examine the effectiveness of the independent variables on the dependent variables, one-way analysis of covariance (ANCOVA) was used. This analysis includes assumptions, such as the normality of the variables' distributions, which were examined using the Shapiro–Wilk test. The next assumption is homogeneity of error variances across groups, which was examined using Levene's test. The assumption of homogeneity of regression slopes was also checked. The data were analyzed using SPSS version 26.

Ethical Considerations

This study began after receiving ethical approval from the ethics committee of Islamic Azad University. The ethics code of this study is IRB.IAU.KSH.REC.1402.088.

Findings and Results

The participants in this study were 30 married women who attended health-care centers in different areas of Tehran (affiliated with three universities of medical sciences: Iran, Shahid Beheshti, and Tehran). They were assigned to two groups. Fifteen participants were assigned to the control group and fifteen to the Cognitive–Behavioral Sexual Skills Training (CBSST) group, with random assignment. Most participants were in the 20–25 age range. The results indicate that most participants had been married for 2 to 5 years.

Table 2

Descriptive indices related to the data obtained from the pretest and posttest

Stage	Variable	Experimental group Mean	Experimental group SD	Control group Mean	Control group SD
Pretest	Sexual satisfaction	84.93	14.10	84.80	13.55
	Sexual intimacy	85.73	11.64	85.66	11.12
Posttest	Sexual satisfaction	133.86	8.62	85.53	13.00
	Sexual intimacy	110.60	5.65	85.93	11.17

As the results show, the groups' mean scores changed from the pretest to the posttest stage. One important assumption for conducting one-way ANCOVA is the statistical normality of the study variables for inferential purposes, which was assessed in this study using the Shapiro–Wilk test. The significance values for all main variables at both the pretest and posttest stages were greater than the error coefficient of 0.01; therefore, the variable distributions are normal, confirming the assumption of normality. The homogeneity of error variances assumption was examined for each hypothesis. Another assumption of ANCOVA is homogeneity of error variances, which was assessed using Levene's test. The significance values for the main variables in the two groups were non-significant at the 0.05 error level; therefore, the assumption of homogeneity of error variances, as one of the ANCOVA assumptions, is confirmed. The significance values of the coefficients for the interaction effects between the covariates and the main dependent variables were greater than 0.05, meaning that the interaction effects were not significant. Therefore, the assumption of homogeneity of regression slopes, as one of the ANCOVA assumptions, is confirmed.

To test this hypothesis, one-way analysis of covariance was used. Specifically, the posttest mean scores of sexual satisfaction were compared between the control group and the group receiving cognitive–behavioral sexual skills training, while controlling for the pretest scores (covariate). In the previous section, the assumptions of normality, homogeneity of error variances, and homogeneity of regression slopes across groups were examined. After checking and confirming these assumptions, the main between-group effects were

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examined using one-way ANCOVA with between-subjects effects. The output of this section is presented in Table 3.

Table 3

Tests of between-subjects effects (group effects)

Source	Sum of squares	df	Mean square	F	P	Eta squared
Group	17461.599	1	17994.129	329.383	0.001	0.924
Error	1423.933	27	52.738			
Total	20930.300	29				

Table 3 presents the statistical results related to determining the effectiveness of cognitive–behavioral sexual skills training on sexual satisfaction among married women. The results indicate that the group variable (experimental vs. control) had a statistically significant effect, such that the significance level (p) was reported as 0.001, which is less than the criterion level of 0.01, indicating that the observed differences between the two groups are statistically significant. The F statistic for sexual satisfaction was 329.383, indicating a strong effect of the intervention on this variable. In addition, the eta squared (η^2), a measure of effect size, was reported as 0.924 for sexual satisfaction, indicating that cognitive–behavioral sexual skills training explained 92.4% of the variance in changes in sexual satisfaction. Overall, the findings show that cognitive–behavioral sexual skills training had a significant effect in increasing sexual satisfaction among married women. Therefore, the first hypothesis of the study was confirmed. The results of the comparison of sexual satisfaction means in married women by group (experimental and control) after completion of the intervention are reported in Table 4.

Table 4

Comparison of mean sexual satisfaction by group

Variable	Group	Mean	Group	Mean difference	P	Lower bound	Upper bound
Sexual satisfaction	Experimental	133.82	Experimental vs. Control	48.25*	0.001	42.81	53.69
	Control	85.57	Control vs. Experimental	-48.25*	0.001	-53.69	-42.81

The results of Table 4 indicate a statistically significant difference between the two groups in the variable under study at the significance level ($p < 0.001$). For sexual satisfaction, the mean score in the experimental group was 133.826, and in the control group was 85.574. The mean difference between the two groups, in the direction of increased sexual satisfaction in the experimental group compared to the control group, was 48.252, with a significance level of 0.001. This finding indicates that women in the experimental group, after receiving cognitive–behavioral sexual skills training, had a significantly higher level of sexual satisfaction than the control group. Overall, the findings indicate the significant effectiveness of the intervention in increasing sexual satisfaction.

Table 5

Tests of between-subjects effects (group effects)

Source	Sum of squares	df	Mean square	F	P	Eta squared
Group	4548.070	1	4548.070	151.635	0.001	0.849
Error	809.824	27	29.993			
Total	6757.867	29				

Table 5 presents the statistical results related to determining the effectiveness of cognitive–behavioral sexual skills training on sexual intimacy among married women. The results indicate that the group variable

(experimental vs. control) had a statistically significant effect, such that the significance level (p) was reported as 0.001, which is less than the criterion level of 0.01, indicating that the observed differences between the two groups are statistically significant. The F statistic for sexual intimacy was 151.635, indicating a strong effect of the intervention on this variable. In addition, the eta squared (η^2), as a measure of effect size, was reported as 0.849 for sexual intimacy; this indicates that cognitive–behavioral sexual skills training explained 84.9% of the variance in changes in sexual intimacy. Overall, the findings show that cognitive–behavioral sexual skills training had a significant effect in increasing sexual intimacy among married women. Therefore, the study's second hypothesis was confirmed. The results of the comparison of sexual intimacy means in married women by group (experimental and control) after completion of the intervention are reported in Table 6.

Table 6

Comparison of mean sexual intimacy by group

Variable	Group	Mean	Group	Mean difference	P	Lower bound	Upper bound
Sexual intimacy	Experimental	110.591	Experimental vs. Control	24.625*	0.001	20.522	28.729
	Control	85.954	Control vs. Experimental	-24.625*	0.001	-28.729	-20.522

Table 6 shows the results of comparing the mean sexual intimacy in married women by group (experimental and control) after completion of the intervention. Data analysis indicates a statistically significant difference between the two groups in the variable under study at the significance level ($p < 0.001$). For sexual intimacy, the mean score in the experimental group was 110.591, and in the control group was 85.954. The mean difference between the two groups, in the direction of increased sexual intimacy in the experimental group compared to the control group, was 24.624, with a significance level of 0.001. This finding indicates that women in the experimental group, after receiving cognitive–behavioral sexual skills training, had a higher level of sexual intimacy than the control group. Overall, the findings indicate the significant effectiveness of the intervention in increasing sexual intimacy.

Discussion and Conclusion

The results showed that cognitive–behavioral sexual skills training had a significant effect on increasing sexual satisfaction in married women. This finding is consistent with previous research (Jangi et al., 2023; Jiang et al., 2015; Kharaghani et al., 2020; Lerner et al., 2022; Liu & Roloff, 2015; Mize, 2015; Mohammadi et al., 2022; Omidvar et al., 2021; Samadi et al., 2024).

Sexual satisfaction is one of the most important factors affecting the quality and stability of the marital relationship. It is recognized as an indicator of sexual health and sexual well-being (sexual well-being). Sexual relations, by fulfilling human biological and social needs, enhance quality of life, and experiencing sexual satisfaction increases intimacy within the relationship and reduces tensions (Liu & Roloff, 2015). Research findings indicate that married women's sexual satisfaction is directly associated with their marital satisfaction, and poor-quality sexual relations lead to reduced marital satisfaction (Schoenfeld et al., 2017). Therefore, cognitive–behavioral sexual skills training can improve the quality and stability of couples' relationships by increasing sexual satisfaction and reducing marital tensions. The findings of this study align with previous research on sexual skills training and cognitive–behavioral interventions (Kharaghani et al., 2020). Based on an extensive body of research literature and strong empirical evidence, cognitive–behavioral sexual skills training has been confirmed as an effective and efficient intervention for enhancing sexual satisfaction among married women (Shamloo et al.; Vahidvaghef, 2015). This significant effect can be explained through multiple, interrelated mechanisms influenced by this type of training.

First, these trainings increase knowledge and correct inaccurate beliefs. The lack of formal and accurate education, together with a culture that restricts open discussion in this domain, leads to the formation of misconceptions and incomplete information about women's sexual anatomy, physiology, and sexual responsiveness. Structured education fills this knowledge gap and corrects ineffective beliefs, such as an exclusive focus on intercourse or sexual climax as the

sole indicators of success. This scientific awareness helps moderate unrealistic expectations and reduce performance anxiety. Second, strengthening communication skills lies at the heart of these interventions. Training in clearly and nonjudgmentally expressing needs, preferences, and personal boundaries, along with strengthening active listening skills, provides a foundation for deeper mutual understanding (Jalilian & Mokari, 2018). This reduces misunderstandings and increases emotional and behavioral coordination between partners. Third, emphasizing sensate exercises and focusing on pleasure rather than outcome orientation is a distinctive component of this approach. Techniques such as sensate focus remove the pressure to achieve specific outcomes (e.g., orgasm) and direct attention toward exploring pleasurable bodily and emotional sensations (Marvi et al., 2023). This process not only reduces anxiety but also helps women identify their unique cues more effectively. Fourth, these trainings address cognitive management and anxiety reduction. Women learn how to identify, challenge, and restructure negative automatic thoughts (e.g., "I do not have an attractive body" or "this is not normal") and deeper maladaptive schemas (Marvi et al., 2023). Challenging these destructive cognitive patterns substantially reduces psychological barriers such as embarrassment, shame, and the phenomenon of "spectatoring," creating mental space for the experience of pleasure. Fifth, this set of factors leads to increased self-efficacy and a sense of agency. Gaining knowledge and mastering practical skills strengthens women's feelings of competence, control, and ownership over their sexual lives (Babakhani et al., 2018). Moving out of passivity and adopting a more active, guiding role in the relationship is, in itself, one of the strongest predictors of sexual satisfaction.

In addition, some interventions directly target improvements in body image, correcting negative attitudes toward one's body. By reducing focus on perceived flaws and promoting body acceptance, fuller mindfulness during sexual experiences is achieved. These trainings also expand the range of sexual behaviors and, by emphasizing diversity in expressions of affection and intimacy (e.g., touching and foreplay), move the relationship away from routine and performance-centered patterns. From the researcher's perspective, the above finding was not only expected but also reflects an educational and health necessity within the cultural context of the studied society. It appears that formal educational and support systems have paid less attention to women's sexual needs as an inseparable part of their overall health and quality of life. This successful intervention shows that even in conservative cultural contexts, providing scientific, non-threatening education in a confidential and professional setting can break existing taboos without undermining core values and can lead to improved marital relationship health. The researcher believes that the central mechanism of this program's effectiveness lies in creating a paradigm shift from "performance orientation" to "relationship-centered pleasure orientation." When the focus shifts away from outcome alone (e.g., "successful intercourse") toward the quality of connection, mutual exploration, and the exchange of pleasure, anxiety decreases, and space is created for growth and shared satisfaction. Therefore, this finding is not merely an endorsement of a therapeutic method; it is also an endorsement of the urgent need for healthy, scientific, and nonjudgmental discourse about sexuality in society.

The results showed that cognitive–behavioral sexual skills training had a significant effect on increasing sexual intimacy among married women ($p < 0.001$). Specifically, women in the experimental group, after receiving cognitive–behavioral sexual skills training, had higher levels of sexual intimacy than those in the control group. This finding is consistent with theoretical foundations and previous studies (Bagarozzi, 2001; Farajkhoda et al., 2021; Jalali et al., 2019; Jalilian & Mokari, 2018; Jangi et al., 2023; Kamali et al., 2020; Samadi et al., 2024).

Sexual intimacy is one of the most important components of marital relationship quality. It is recognized in psychological research as a determining factor in satisfaction, relationship stability, and couples' psychological well-being. This type of intimacy goes beyond physical behavior and includes mutual understanding, trust, emotional connection, and the expression of sexual needs and desires. Numerous studies have shown that higher levels of sexual intimacy are associated with greater marital satisfaction and better relationship quality, and it is considered an important factor in improving sexual functioning and mental health in both women and men (Azimi et al., 2025).

Within the theoretical framework of cognitive–behavioral therapy, individuals' thoughts, beliefs, and cognitive patterns play a key role in their behaviors and interpretations of experiences. Cognitive–behavioral therapy works by identifying and modifying dysfunctional cognitions, changing ineffective behavioral patterns, and enhancing communication skills. This approach is based on the principle that inaccurate thoughts and beliefs about the self and sexual relationships can lead to performance anxiety, sexual shame, and difficulty establishing sexual intimacy. Therefore, by correcting these beliefs, teaching communication skills, and strengthening sexual self-awareness, sexual experiences can be improved and, ultimately, sexual intimacy can be increased. Cognitive–behavioral therapy is particularly used in treating sexual dysfunctions and improving sexual functioning, a point supported by controlled research (Jangi et al., 2023). Empirical studies have also shown that cognitive–behavioral interventions can improve various aspects of sexual functioning and sexual communication. For example, a study that examined cognitive–behavioral therapy and sexual health education on sexual expressiveness and sexual satisfaction among newly married women found that cognitive–behavioral therapy significantly increased sexual expressiveness and sexual satisfaction in the experimental group (Jangi et al., 2023). Other findings also indicate that cognitive–behavioral therapy is effective in improving sexual intimacy, marital relationship quality, and reducing marital silence among couples (Azimi et al., 2025; Samadi et al., 2024).

From a theoretical perspective, cognitive–behavioral sexual skills training helps women reconstruct incorrect and restrictive beliefs about sexuality and their roles, reduce sexual anxieties and concerns, and strengthen communication and emotion expression skills. These processes directly align with mechanisms that enhance sexual intimacy, because open and empathic communication and better understanding of sexual needs and preferences are among the most important prerequisites for experiencing sexual intimacy. In this regard, the data analysis results of the present study also showed that cognitive–behavioral sexual skills training had a significant effect on increasing sexual intimacy among married women, supporting the validity and effectiveness of cognitive–behavioral interventions in improving sexual and emotional relationships. In explaining this finding, it can be stated that cognitive–behavioral sexual skills training, by correcting cognitive patterns, increasing sexual awareness, strengthening communication skills, and reducing psychological barriers, provides stable conditions for increasing sexual intimacy. This is not only justifiable from a cognitive–behavioral perspective but also consistent with extensive research in the scientific literature, thereby supporting the confirmation of the study's second hypothesis. As a result, cognitive–behavioral sexual skills training increased women's capacity to express emotions, create emotional closeness, and establish positive sexual communication. Increased sexual intimacy, in addition to its direct effect on sexual satisfaction, can improve marital relationship quality and overall satisfaction with married life.

The present study, like other research in the human sciences, had limitations that should be considered in interpreting and generalizing the results: limited generalizability to other populations due to the use of a sample restricted to women; limitations due to the type of data collection tool and the reliance on questionnaires, which makes access to complete and comprehensive information difficult. These questionnaires are attitude-based measures, and caution is warranted when interpreting the results due to limitations in questionnaire validity. Limitations also relate to participants' responses, individual differences in characteristics, and the influence of these characteristics on questionnaire completion. Respondents' honesty and fidelity in choosing response options—and, in other words, their response style—are among the limitations that can affect research outcomes. This may stem from concerns about the identification of their views and disclosure of private matters, or from certain cultural characteristics of Eastern societies, such as illogical exaggeration or minimization influenced by relationships and emotions. Another limitation concerns the influence of confounding variables, as the researcher was not able to control all other effective variables; therefore, the study was subject to limitations related to the implementation conditions.

Given the limited generalizability due to a sample restricted to women, it is recommended that future research include men, couples, and more diverse demographic groups to enable broader generalization.

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Future studies should use mixed methods, including qualitative tools such as interviews and observation alongside questionnaires, to increase data validity and richness. In future research, participants' individual and personality characteristics should be considered as contextual or moderating variables. It is recommended that confidentiality of responses be more explicitly ensured and that anonymous data collection methods be used to reduce cultural and social biases. Given the presence of confounding variables and the limitations in controlling them, future studies should employ more rigorous designs, larger sample sizes, and better control of implementation conditions to enhance the validity of the results. It is recommended that health-care centers and family counseling clinics offer workshops and educational programs based on cognitive–behavioral sexual skills as effective interventions to enhance sexual satisfaction and sexual intimacy among married women. Family and sexual health counselors and therapists can use this method to correct dysfunctional beliefs, reduce relationship-related anxiety, and strengthen sexual communication skills. Short-term and long-term educational programs based on this approach can be incorporated into health centers as part of prevention and efforts to improve the quality of marital life.

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Declaration of Interest

The authors of this article declared no conflict of interest.

Ethical Considerations

The study protocol adhered to the principles outlined in the Declaration of Helsinki, which provides guidelines for ethical research involving human participants. Ethical considerations in this study were that participation was entirely optional.

Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

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Authors' Contributions

All authors equally contribute to this study.

References

Alizadeh, M., AKBARI, T. N., Oohadi, B., & Mehrabi, R. F. (2019). Effectiveness of cognitive behavioral counseling-based film therapy on the communication skills of females with low sexual Desire. https://brieflands.com/journals/jnms/articles/141156.pdf

Atkinson, B. J. (2013). Mindfulness training and the cultivation of secure, satisfying couple relationships. *Couple and Family Psychology: Research and Practice*, *2*(2), 73. https://doi.org/10.1037/cfp0000002

Avery-Clark, C., Weiner, L., & Adams-Clark, A. A. (2019). Sensate focus for sexual concerns: An updated, critical literature review. *Current Sexual Health Reports*, *11*(2), 84–94. https://doi.org/10.1007/s11930-019-00197-9

Azimi, S., Hashemiparast, M., Mizani, M. A., Javadivala, Z., Bagherzadeh, B., & Allahverdipour, H. (2025). A qualitative exploration of declining sexual intimacy among married men and women. *Health Promotion Perspectives*, *15*(3), 286. https://doi.org/10.34172/hpp.025.44424

Babakhani, N., Taravati, M., Masoumi, Z., Garousian, M., Faradmal, J., & Shayan, A. (2018). The effect of cognitive-behavioral consultation on sexual function among women: a randomized clinical trial. *Journal of Caring Sciences*, *7*(2), 83. https://doi.org/10.15171/jcs.2018.013

Bagarozzi, D. (2001). Enhancing intimacy in marriage, Branner-Rouledye, Taylor & Francis group. In: USA. https://doi.org/10.4324/9781315787053

Bancroft, J. (2008). *Human sexuality and its problems*. Elsevier Health Sciences. https://doi.org/10.1016/B978-0-443-05161-6.00007-0

Butzer, B., & Campbell, L. (2008). Adult attachment, sexual satisfaction, and relationship satisfaction: A study of married couples. *Personal relationships*, *15*(1), 141–154. https://doi.org/10.1111/j.1475-6811.2007.00189.x

Dehghani Champiri, F., & Dehghani, A. (2023). Predicting sexual satisfaction in Iranian women by marital satisfaction components. *Sexual and Relationship Therapy*, *38*(1), 37–51. https://doi.org/10.1080/14681994.2020.1736279

Dehkordi, M. A., Mohammadi, A., Alipour, A., & Mohtashami, T. (2017). The impact of cognitive behavioral sex therapy on decreasing anxiety and increasing sexual function in people with vaginismus. *International Journal of Health Studies*, *3*(2), 15–20.

Farajkhoda, T., Ashrafi, F., Bokaie, M., & Zareei Mahmoodabadi, H. (2021). Online compared to face-to-face sexual intimacy enhancement training program counseling with cognitive-behavioral approach on sexual intimacy in pregnant women. *Journal of Sex & Marital Therapy*, *47*(5), 446–459. https://doi.org/10.1080/0092623X.2021.1895388

Hudson, W. W. (2013). Index of sexual satisfaction. In *Handbook of sexuality-related measures* (pp. 545–554). Routledge. https://doi.org/10.4324/9781315881089-69

Jalali, S. S., MAZAHERI, M., Kiyamanesh, A., & AHADI, H. (2019). Investigating the Effectiveness of Marital Life Enrichment Education Based on Emotion-focused Therapy on Improvement of Couples' Communicational Patterns. DOI:10.29252/jcr.18.69.59

Jalilian, N., & Mokari, Z. (2018). The effectiveness of sexual skills training with a cognitive-behavioral approach on sexual dysfunction among infertile women. *World Fam Med J Middle East J Fam Med*, *15*(07), 126–132. https://doi.org/10.5742/MEWFM.2017.93037

Jangi, S., Nourizadeh, R., Sattarzadeh-Jahdi, N., Farvareshi, M., & Mehrabi, E. (2023). The effect of cognitive-behavioral therapy and sexual health education on sexual assertiveness of newly married women. *BMC psychiatry*, *23*(1), 201. https://doi.org/10.1186/s12888-023-04708-w

Jiang, H., Wang, L., Zhang, Q., Liu, D. X., Ding, J., Lei, Z., Lu, Q., & Pan, F. (2015). Family functioning, marital satisfaction, and social support in hemodialysis patients and their spouses. *Stress and Health*, *31*(2), 166–174. https://doi.org/10.1002/smi.2541

Kamali, Z., Allahyar, N., Ostovar, S., Alhabshi, S. M. S. b. S. M., & Griffiths, M. D. (2020). Factors that influence marital intimacy: A qualitative analysis of Iranian married couples. *Cogent Psychology*, *7*(1), 1771118. https://doi.org/10.1080/23311908.2020.1771118

Kharaghani, R., Khani, M. E., Dangesaraki, M. M., & Damghanian, M. (2020). The effects of psychological interventions on sexual function of women: a systematic review and meta-analysis. *Nursing Practice Today*. https://doi.org/10.18502/npt.v7i3.3345

Lerner, T., Bagnoli, V. R., de Pereyra, E. A. G., Fonteles, L. P., Sorpreso, I. C. E., Júnior, J. M. S., & Baracat, E. C. (2022). Cognitive-behavioral group therapy for women with hypoactive sexual desire: a pilot randomized study. *Clinics*, *77*, 100054. https://doi.org/10.1016/j.clinsp.2022.100054

Liu, E., & Roloff, M. E. (2015). To avoid or not to avoid: When emotions overflow. *Communication Research Reports*, *32*(4), 332–339. https://doi.org/10.1080/08824096.2015.1089849

Marvi, N., Mollazadeh, S., Azmoude, E., & Latifnejad Roudsari, R. (2023). The effect of sexual counseling and education approaches on improving the sexual function of infertile women: A systematic review of clinical trials in Iran. *Journal of Mazandaran University of Medical Sciences*, *33*(227), 159–173. https://www.researchgate.net/publication/376786900_The_Effect_of_Sexual_Counseling_and_Education_Approaches_on_Improving_Sexual_Function_of_Infertile_Women_A_Systematic_Review_of_Clinical_Trials_in_Iran

Masters, W., & Johnson, V. (1966). Human sexual response. Toronto. In: Bantam Books, New York. https://archive.org/details/humansexualrespo00will

Masters, W. H., & Johnson, V. E. (1970). *Human sexual inadequacy* (Vol. 467). Boston Little Brown. https://www.boodep.com/wp-content/uploads/2022/01/human-sexual-inadequacy.pdf

McCabe, M. P. (2001). Evaluation of a cognitive behavior therapy program for people with sexual dysfunction. *Journal of Sex &Marital Therapy*, *27*(3), 259–271. https://doi.org/10.1080/009262301750257119

Mize, S. J. (2015). A review of mindfulness-based sex therapy interventions for sexual desire and arousal difficulties: From research to practice. *Current Sexual Health Reports*, *7*(2), 89–97. https://doi.org/10.1007/s11930-015-0048-8

Mohammadi, Z., Maasoumi, R., Vosoughi, N., Eftekhar, T., Soleimani, M., & Montazeri, A. (2022). The effect of the EX-PLISSIT model-based psychosexual counseling on improving sexual function and sexual quality of life in gynecologic cancer survivors: a randomized controlled clinical trial. *Supportive Care in Cancer*, *30*(11), 9117–9126. https://doi.org/10.1007/s00520-022-07332-8

Moradi, Z., & Madani, Y. (2020). Predicting Sexual Satisfaction and Marital Commitment based on Religiosity and Marital Intimacy of Married University Students of the University of Tehran. *Journal of Applied Psychological Research*, *11*(3), 223–241. DOI:10.22059/japr.2020.303757.643536

Omidvar, Z., Bayazi, M. H., & Faridhosseini, F. (2021). Comparing the effectiveness of mindfulness-based cognitive therapy training and cognitive-behavioral therapy on the sexual satisfaction of women with vaginismus disorder. *Journal of Fundamentals of Mental Health*, *23*(4). https://openurl.ebsco.com/EPDB%3Agcd%3A15%3A25641103/detailv2?sid=ebsco%3Aplink%3Ascholar&id=ebsco%3Agcd%3A157266897&crl=c&link_origin=scholar.google.com

Rahmani, A., Khoei, E. M., & Gholi, L. A. (2009). Sexual satisfaction and its relation to marital happiness in Iranians. *Iranian Journal of Public Health*, *38*(4), 77–82.

Sadri Damirchi, E., Poorzor, P., & Esmaili Ghazivaloii, F. (2017). Effectiveness of sexual skills education on sexual attitude and knowledge in married women. *Family Counseling and Psychotherapy*, *6*(1), 1–15.

ŞAFAK ÖZTÜRK, C., & Arkar, H. (2017). Effect of cognitive behavioral therapy on sexual satisfaction, marital adjustment, and levels of depression and anxiety symptoms in couples with vaginismus. *Turkish Journal of Psychiatry*, *28*(3). https://doi.org/10.5080/u14872

Samadi, P., Alipour, Z., & Maasoumi, R. (2024). Evaluating an integrated approach to improve the couple's sexual desire disorders: A Randomized clinical trial study. *Iranian Journal of Public Health*, *53*(6), 1457. https://doi.org/10.18502/ijph.v53i6.15919

Sánchez-Sánchez, L. C., Rodríguez, M. F. V., García-Montes, J. M., Petisco-Rodríguez, C., & Fernández-García, R. (2021). Mindfulness in sexual activity, sexual satisfaction, and erotic fantasies in a non-clinical sample. *International journal of environmental research and public health*, *18*(3), 1161. https://doi.org/10.3390/ijerph18031161

Schoenfeld, E. A., Loving, T. J., Pope, M. T., Huston, T. L., & Štulhofer, A. (2017). Does sex really matter? Examining the connections between spouses' nonsexual behaviors, sexual frequency, sexual satisfaction, and marital satisfaction. *Archives of sexual behavior*, *46*(2), 489–501. https://doi.org/10.1007/s10508-015-0672-4

Shabani, J., & Abdi, H. (2020). The effectiveness of Mindfulness-Based Cognitive Therapy on sexual disorders and sexual satisfaction in women with spouses' extra-marital relationships. *Journal of Research in Behavioral Sciences*, *18*(1), 60–69. https://doi.org/10.52547/rbs.18.1.6

Shamloo, Z. S., Taherian, Z., & Fadardi, J. S. The Effectiveness of Sex Education on Unconsummated Marriage: A Case Study. *International Journal of Health Sciences*, *6*(S2), 12199–12212. https://doi.org/10.53730/ijhs.v6nS2.8161

Shayan, A., Taravati, M., Garousian, M., Babakhani, N., Faradmal, J., & Masoumi, S. Z. (2018). The effect of cognitive behavioral therapy on marital quality among women. *International journal of fertility & sterility*, *12*(2), 99. 10.22074/ijfs.2018.5257

Spence, S. H. (2013). *Psychosexual therapy: A cognitive-behavioral approach* (Vol. 6). Springer. https://books.google.com/books?id=XTABCAAAQBAJ&lpg=PP10&ots=Fo8b3yMxj3&dq=Spence%2C%20S.%20H.%20(2013).%20Psychosexual%20therapy%3A%20A%20cogn

itive-behavioural%20approach%20(Vol.%206).%20Springer.&lr&pg=PP10#v=onepage&q&f=false

Vahidvaghef, M. (2015). *Study the effectiveness of cognitive-behavioral sex training in improving women's sexual self-concept in Tehran, Iran*. Universitat Autònoma de Barcelona. https://ddd.uab.cat/record/149370

Yousefi Afrashteh, M., Blouri, R., & Morovati, Z. (2024). Sexual anxiety mediate relationship between sexual schemas and body image with sexual function in Iranian women. *Plos one*, *19*(7), e0305340. https://doi.org/10.1371/journal.pone.0305340