



Original Article

The effect of cognitive behavioral intervention on women's sexual self-efficacy and marital satisfaction

*Marziyeh Jamali¹; Salimeh Feiz Abadi²; Maryam Jamali³

¹M.A. in educational psychology, Islamic Azad University, Science and Research branch, Iran

²M.A. in general psychology, Alzahra University, Iran

³Ph.D. student in women's studies, Tarbiat Modarres University, Iran

Abstract

Introduction: One of the main and important principles throughout the life is to search and maintain the relationship with the relatives, particularly the spouse. Despite the fact that multiple biological and psychogenic factors have been introduced as the underlying elements in reducing women's sexual desire, research trends in recent years have indicated that the impacts of psychogenic factors is more highlighted in the occurrence of such problem. The present study aimed to determine the effect of cognitive behavioral intervention on cognitive behavioral intervention on women's sexual self-efficacy and marital satisfaction.

Materials and Methods: This is interventional study with pre-test and post-test which consisted of 30 women referring to one of the psychological service centers in the city of Kashan in 2015-16. The participants were randomly assigned into two experimental and control groups. The experimental group participated in 8 sessions of cognitive behavioral therapy. Data analyzed via descriptive and analytical statistics such as multi variables and single variable covariance using SPSS software.

Results: There was a significant difference between the cognitive-behavioral and control groups in sexual self-efficacy and marital satisfaction. Therefore, cognitive behavioral therapy has increased sexual self-efficacy and marital satisfaction. According to the eta square, it can be said that 89.3% of changes in sexual self-efficacy and 93.7% of changes in marital satisfaction are due to the effect of cognitive-behavioral therapy ($P < 0.001$).

Conclusion: The results of the study revealed that cognitive behavioral intervention with improved sexual self-efficacy and marital satisfaction can modify the couple's relationship.

Keywords: Cognitive behavioral therapy, Marital satisfaction, Sexual self-efficacy, Women

Please cite this paper as:

Jamali M, Feiz Abadi S, Jamali M. The effect of cognitive behavioral intervention on women's sexual self-efficacy and marital satisfaction. *Journal of Fundamentals of Mental Health* 2017; 19(3-Special Issue): 191-198.

Introduction

Marital satisfaction is an enjoyable attitude that husband and wife have in various aspects of

marital relations such as communication, personality issues, conflict resolution, sexual relations, and children (1). However, divorce

*Corresponding Author: Islamic Azad University, Science and Research branch, Iran.

Marzieh.jamali81@gmail.com

Received: Feb. 13, 2017

Accepted: Mar. 15, 2017

statistics, the most reliable indicators of marital turmoil, show that marital satisfaction is not easily attainable (2). Machontosh and Johnson state that women are more dissatisfied with emotional deficits than men talk more excitedly about relationship issues and problems and give more importance to their problems in the details of sexual relations. Research shows a strong and direct relationship between sexual intercourse and marital satisfaction (3-6). Decreased sexual desire is defined as a continuous and repeated lack or absence of sexual ideas and the desire for sexual activity (7) and is the most common sexual problem in women that brings them to medical centers for treatment (8).

Psychological factors, specific in cognitive dimensions, play an essential role in developing and maintaining sexual disorders. Also, the role of cognitive processes in women's sexual disorders, significantly decreasing sexual desire, is observed (9,10). Unfortunately, despite its high prevalence and adverse side effects, psychological factors affecting women's sexual desire, the lack of controlled therapeutic studies is evident (11-13). It is worth mentioning that in cases where the treatment of women's sexual disorders has been addressed, sexual pain and orgasm disorders are the disorders that have been studied the most extensively (14). Also, the research on this disorder is mostly on drug and hormone therapy methods. However, recent researches show that drug and hormonal treatment for sexual dysfunctions, such as decreased sexual desire, is accompanied by side effects such as the appearance of masculinity symptoms, breast cancer, and cardiovascular diseases (15).

Sexual activity and the satisfaction resulting from it are considered one of the most fundamental aspects of human life (16), and healthy sexual performance plays a vital role in feeling healthy and improving the quality of life (17,18). On the other hand, people who have sexual problems usually have low self-confidence, are more anxious and worried (19), are depressed (20-22), their sexual relationships are affected by the prediction of their failure (23), low well-being (24), and have unpleasant experiences (20). Most of the people who are active in the treatment of sexual problems have

observed that in evaluating the sexual problem and determining its nature, evaluating the sexual growth and development, as well as among the information obtained, an intervening variable such as sexual self-efficacy and introversion or Extroversion of pleasure (25) has a determining role. According to them, although the physiological part of the sexual response is autonomous and visceral and is created by increasing the blood flow in the reproductive organs under the control of the autonomic nervous system, it is quickly strengthened under the influence of emotions caused by appropriateness-inappropriateness, introversion-extroversion of pleasure. Alternatively, it is blocked. Self-efficacy is one of the critical variables in Bandura's social cognitive theory (26-28), which is the judgment and beliefs of people about their abilities in mobilizing motivations, cognitive resources, and exerting control over a certain event, how to face obstacles and challenges. So defined, it enables a person to adopt health-promoting behaviors and abandon harmful behaviors (29) and plays a vital role in psychological adaptation, solving mental problems, physical health, self-guided behavior change strategies, and counseling (30).

Self-efficacy is one of the essential components of achieving success and compromise (31) and is related to excellent health, integration of thought, and behavior (32). The theory of self-efficacy is based on the assumption that a person's belief about his ability to cope in special situations has an effect on the mental, behavioral and emotional patterns of a person at different levels of personal experience and determines whether a behavior Will it start or not, and if it starts, how much will the person try to do it and how much perseverance will he show (33). Judgment about self-efficacy is based on the person's thinking about the ability or inability to do the work, for example (I can do this work) or that (I cannot handle it) on the person's excitement (excitement and happiness versus anxiety and depression)) and affects people's performance (more commitment vs. helplessness) (34), the distorted recognition of negative thinking about sexual activity intensifies and perpetuates the symptoms, therefore, the discovery of these negative self-perceptions, in the successful analysis of sexual problems It

helps (35) and cognitive-behavioral therapy, while having a positive effect on sexual performance, will most likely increase the sexual satisfaction achieved on marital satisfaction. Christensen et al. (36) and Dilion and Beechler (37) have confirmed the effectiveness of cognitive-behavioral therapy on marital satisfaction. In Iran, Eshghi et al. (38) showed that cognitive-behavioral psychotherapy for couples effectively improves women's coldness. Salehzadeh et al. (39) showed in their research that cognitive-behavioral therapy significantly improved the sexual behavior disorders of the experimental group compared to the control group. The results of Trudel et al. (40), Himan (41), and Nezu (42) research have shown that cognitive-behavioral therapy is effective in improving women with dysfunctional sexual desire. The results of Metson et al. study (43) showed that the best and most common treatment method for sexual dysfunctions is the cognitive-behavioral approach through cognitive reconstruction techniques, methods of reducing anxiety, and providing sexual knowledge and sensory concentration. Furthermore, the desensitization was regular. The studies of Nobre and Pinto-Goya (44) have shown that different sexual beliefs are essential in forming different sexual dysfunctions. Consistent with the findings of the mentioned research, Turkuile et al. (45) also showed in a study that cognitive-behavioral therapy was beneficial in increasing the frequency of sexual intercourse. According to the issues raised, this study aims to investigate the effect of cognitive-behavioral intervention during an 8-session treatment package on women's sexual self-efficacy and marital satisfaction, which has not been addressed in recent studies.

Materials and Methods

The present research studies the effect of the cognitive-behavioral intervention on sexual self-efficacy and marital satisfaction. The statistical population of the research was all married people who were referred to one of the psychological service and counseling centers in Kashan in 2015-2016, who had been married for at least one year, had at least a diploma education, and were in the age range of 20-40 years. In the present study, 30 women whose scores were lower than the average on the scale of the sexual self-

efficacy questionnaire and Glombek marital status questionnaire were selected and randomly assigned to two groups of test and control. The test group participated in 8 training sessions emphasizing cognitive reconstruction, correction of cognitive distortions, and training of behavioral techniques. People with an acute psychological disorder, psychiatric and psychoactive drugs, and addiction were excluded from the sample. Before and after the training, both groups were tested with Waziri and Lotfi Kashani's sexual self-efficacy questionnaire and Glombek's marital status questionnaire. Then the test group underwent cognitive behavioral training in 8 sessions of 90 minutes, but the control group did not receive any training. Ultimately, both groups were tested again with the sexual self-efficacy questionnaire and Glombek's marital status questionnaire.

Research instruments

A) Waziri and Lotfi Kashani's Sexual Self-Efficacy Questionnaire: It is based on Schwartz's (46) general self-efficacy questionnaire. This questionnaire has ten questions that are graded from 0 to 3. The reliability of the sexual self-efficacy questionnaire has been reported as 0.86 Cronbach's alpha, 0.81 Guttman method, and 0.81 Spearman-Brown bisections. Validity of sexual self-efficacy questionnaire in Iran using content-dependent validity method confirmed (25).

B) Golombok Marital Status Questionnaire: It includes two separate forms for men and women. Each questionnaire has 28 questions that measure the subjects' sexual problems according to a five-point Likert scale from zero to four. This questionnaire was introduced by Rust, Bennun, Crowe, and Golombok (47). The questions on a four-point Likert scale measure the problems in couples' relationships from zero to three in terms of sensitivity and attention of couples to each other's needs, commitment, loyalty, cooperation, sympathy, expression of love, trust, intimacy, and empathy of couples. In addition, it measures the Cronbach's alpha of the Persian form of this questionnaire, which was reported as 0.92 for women and 0.94 for men (48). The treatment package was organized by using Eshghi's research (38) and foreign texts in the field of sexual disorder and its treatment and seeking the opinion and consultation of clinical specialists.

Table 1. Cognitive-behavioral therapy package on sexual self-efficacy and marital satisfaction of couples

Session	Context
1 st	The introduction and examination of the effective factors and the history of the problem, the explanation of the treatment rationale: establishing communication and stating the goals, defining and explaining sexual dysfunction and its effect on the quality of married life, and stating the value and importance of treatment, examining the causes of decreased sexual self-efficacy, examining the quality of the relationship Marriage and the emotional relationship of couples, examining the level of marital satisfaction of couples, the frequency, and quality of sexual relationships of couples, conducting a sexual interview and providing a brief explanation about the course and type of treatment.
2 nd	Investigation of thoughts and beliefs of sexual dysfunction: investigation of prevailing negative sexual attitudes; Investigating irrational sexual beliefs and explaining them from a scientific point of view; Examining the sexual preferences and desires of couples and how to express them to each other, an overview of the sexual attitudes of women suffering from reduced sexual self-efficacy, providing tasks, and prohibiting sexual intercourse.
3 rd	Cognitive reconstruction and change of negative attitudes towards sexual issues: a review of the second session, cognitive reconstruction of thoughts of sexual dysfunction of couples, and presentation of household tasks.
4 th	Providing sexual information and knowledge: explaining the causes and factors that cause sexual reluctance towards clients, getting familiar with male and female sexual organs, their physiological actions and hormones, teaching the sexual sensitive points of men and women, teaching the benefits of sexual intercourse from the point of view mental and physical; Scientific training of women's role in sexual communication, training of sexual response cycle and symptoms and changes in these stages in men and women, and training of communication skills.
5 th	Sexual sensation training: A review of the fourth session; Prohibition of sexual intercourse until the end of physical sensation training, training of concentration skills; attention, training to pay attention to feelings focused on non-genital organs, investigating the verbal communication of how couples express their emotions to each other, training to express emotions and verbalizing emotional feelings and sexual self-expression to the spouse, increasing the verbal intimacy of couples, and providing tasks.
6 th	Sexual awareness training: a review of the fifth session, removing the ban on touching genitals, providing more information about male and female genitals and sexual sensitive points, increasing women's sexual self-awareness, training to focus on sexual organs, paying attention to organ stimulation and pleasure Genital exercises, sexual fantasy training, Kegel exercise training, and task presentation.
7 th	Teaching how to have intercourse according to the problem of the couple: reviewing the fifth and sixth sessions, teaching various types of intercourse and proposing each of them for a week to the couple, teaching various types of intercourse according to the problem of the couple and the techniques related to it, and presenting tasks Step by step at home, turning point maneuver, teaching how to reach orgasm at the same time according to the sensitive points of couples, and presentation of tasks
8 th	Evaluation of the achievement of treatment goals: a review of the seventh session, evaluation of different techniques used by couples, feedback regarding the effectiveness or ineffectiveness of the treatment, solving existing problems, evaluation of the positive results of the treatment plan, and the level of couples' satisfaction with the treatment, and implementation post-exam.

It should be noted that the data were analyzed after collection.

Therefore, the data were analyzed at two descriptive and inferential levels. At the descriptive level, mean and standard deviation indices were used, and at the inferential level, multivariate analysis and univariate covariance methods were used at the significance level of 0.01 to test statistical assumptions.

Again, SPSS software was used for this purpose.

Results

To investigate the effect of the treatment on increasing sexual self-efficacy and marital satisfaction, the mean and standard deviation of the pre-test and post-test sexual self-efficacy and marital satisfaction of the test and control groups are presented in Table 2.

Table 2. Sexual self-efficacy and marital satisfaction in the experimental and control groups

Groups	Sexual self-efficacy		Marital satisfaction	
	Pre-test	Post-test	Pre-test	Post-test
Cognitive behavioral	2.06 ± 0.81	3.78 ± 1.19	1.69 ± 0.68	3.23 ± 0.91
Control	1.98 ± 0.64	1.96 ± 0.65	1.76 ± 0.74	1.68 ± 0.70

Table 2 shows that the mean scores of the test subjects in the pre-test and post-test stages in the variables of sexual self-efficacy and sexual satisfaction in the test groups increased significantly compared to the control group. In other words, the results indicate that the test and control groups have a significant difference in at least one of the variables of self-efficacy and

marital satisfaction ($F=6.014$ and $P=0.0005$); Therefore, to investigate the effect of cognitive-behavioral therapy on improving sexual self-efficacy and marital satisfaction of women, the statistical test of single-variable covariance analysis was used with control of pre-test effect, the results of which are presented below (Table 3).

Table 3. Differential results of ANCOVA (analysis of covariance) for cognitive behavioral therapy (experimental) and control groups

Independent variables	Effect source	Sum of squares	Degree of freedom	Mean squares	P	Eta-squared
Self-efficacy	Pre-test	8.633	1	8.633	0.001	0.283
	group	1346.976	1	673.488	0.001	0.893
	Error variance	27.813	1	0.678		
	Total variance	1383.422	1			
	Pre-test	75.572	1	75.572	0.001	0.475
	group	1864.637	1	932.318	0.001	0.937
	Error variance	77.269	1	1.884		
	Total variance	2017.478	1			

The results showed that the group significantly affected the post-test scores. In other words, there is a significant difference between the cognitive-behavioral and control groups in sexual self-efficacy and marital satisfaction. Therefore, cognitive behavioral therapy has increased sexual self-efficacy and marital satisfaction. According to the eta square, it can be said that 89.3% of changes in sexual self-efficacy and 93.7% of changes in marital satisfaction are due to the effect of cognitive-behavioral therapy ($P < 0.001$). Therefore, the results indicate the effect of cognitive-behavioral therapy on improving sexual self-efficacy and marital satisfaction of women.

Discussion

In the study of the effectiveness of cognitive-behavioral therapy on the disorder of decreased sexual desire in women, the findings indicate the positive effect of cognitive-behavioral therapy on the disorder of decreased sexual desire in women

and the disorder of decreased sexual desire in women in the test group was significantly reduced compared to the control group. In this treatment method, in the beginning, background factors, revealing factors, and continuation of the problem were thoroughly investigated, and then the cognitive-behavioral therapy method was used according to Masters and Johnson's treatment method. Data analysis showed that cognitive-behavioral intervention increases sexual self-efficacy and marital satisfaction in women. Also, the obtained effect index indicates an 89.3% increase in sexual self-efficacy and a 93.7% increase in marital satisfaction in the test group can be attributed to the cognitive-behavioral intervention. The results of this research are consistent with previous studies (40,42,49) and other studies (39,50-52) regarding the effect of cognitive-behavioral therapy on the improvement of women's sexual dysfunction, especially the disorder of decreased sexual desire in women. It is

coordinated. The results of Meston et al. study (43) showed that the best and most common treatment method for sexual dysfunctions is the cognitive-behavioral approach through cognitive reconstruction techniques, methods of reducing anxiety, and providing sexual knowledge, sensory concentration and sensitivity. Removal was regular. Also, the results show that cognitive-behavioral techniques in this field, including increasing sexual awareness and sexual skills, imagining, increasing insight and understanding of systematic causes, reducing sexual desire and how to express feelings, and behavioral interventions have an effect on improving women's sexual desire. Furthermore, mutual positive effects on the spouse, especially in communication, bring marital satisfaction.

Since one of the aspects of marital satisfaction is satisfaction with sexual relations in communal life, improving sexual relations and reducing sexual desire disorder reduces the deterioration of marital status, which increases the quality of life and marital satisfaction. In this regard, the results of Dillion and Bilger's research (37) showed that the use of awareness programs to enrich the sexual relationship of couples, which was one of the treatment components of the present study, increases satisfaction with married life.

References

1. Gorchoff SM, John OP, Helson R. Contextualizing change in marital satisfaction during middle-age: An 18-year longitudinal study. *Psychol Sci* 2008; 19: 1194-200.
2. Lin YC, Raghur P. Gender differences in unrealistic optimism about marriage and divorce: Are men more optimistic and women more realistic? *Pers Soc Psychol Bull* 2005; 31: 198-207.
3. Machontosh HB, Johnson S. Emotional focused therapy for couple and childhood. *Sexual abuse survivors. J Marit Fam Ther* 2008; 34(3): 298-315.
4. Lieser ML, Tambling RB, Bischof GH, Murry N. Inclusion of sexuality in relationship education programs. *The Fam J* 2007; 15: 374-81.
5. Mortazavi M, Bakhshayesh A, Fatehizadeh M, Emaminiya S. [The relationship between sexual frigidity and marital conflict in women residing in Yazd]. *The journal of Urmia University of Medical Sciences* 2013; 24(11): 913-21. (Persian)
6. Arefi M, Mohsenzadeh F. [Predictions based on the relationship between marital satisfaction and sexual intimacy]. *Journal of counseling and psychotherapy family* 2014 (special issue): 34-42. (Persian).
7. Brotto LA. The DSM diagnostic criteria for hypoactive sexual desire disorder in women. *Arch Sex Behav* 2010; 39(2): 221-39.
8. Bancroft J. *Human sexuality and its problems*. Elsevier Health Sciences; 2009.
9. Géonet M, De Sutter P, Zech E. Cognitive factors in women hypoactive sexual desire disorder. *Sexologies* 2013; 22(1): e9-e15.
10. Tiefer L, Hall M, Tavris C. Beyond dysfunction: A new view of women's sexual problems. *J Sex Marit Ther* 2002; 28(S1): 225-320.
11. Colling ML. Female hypoactive sexual desire disorder. a summary paper presented to the Faculty of the Adler Graduate School; 2011.

Also, in the study of Byers (53), it was found that there is a positive relationship between sexual satisfaction and marital satisfaction. Berzniak and Wissman (54) also found in their study on 60 couples that marital satisfaction has a direct relationship with sexual desire, and there is a positive relationship between sexual satisfaction and marital satisfaction. These results are in line with the findings of the present research. Therefore, it can be said that marital dissatisfaction is related to many problems, including sexual disorders. It was generally said that with behavioral and cognitive interventions, not only can sexual disorders be treated, but they also help to improve the marital status of the couple. For better effectiveness, subsequent training can be done in pairs, and its effects on men can be investigated alone. It should be noted that this method was obtained in the case of women who were referred to one of the counseling centers in Kashan city, and caution should be exercised in generalizing the findings of this research.

Conclusion

The results of the present study showed that cognitive-behavioral intervention improves couples' relationships by improving sexual self-efficacy and marital satisfaction.

12. Aghighi A. [Sexual dysfunction a problem with the inner face of the outer]. Tehran: Tazkieh; 2012. (Persian)
13. Arnow BA, Millheiser L, Garrett A, Lake Polan M, Glover GH, Hill KR, et al. Women with hypoactive sexual desire disorder compared to normal females: a functional magnetic resonance imaging study. *Neuroscience* 2009; 23(2): 484-502.
14. Pereira VM, Arias-Carrión O, Machado S, Nardi AE, Silva AC. Sex therapy for female sexual dysfunction. *Int Arch Med* 2013; 6(1): 37.
15. Buster JE. Managing female sexual dysfunction. *Fertil Steril* 2013; 100(4): 905-15.
16. Litzinger S, Gordon KC. Exploring relationships among communication, sexual satisfaction, and marital satisfaction. *J Sex Marit Ther* 2005; 31(5): 409-24.
17. Schwarzer R, Fuchs R. Self- efficacy and health behaviors; 1996.
18. Laurent SM, Simons AD. Sexual dysfunction in depression and anxiety conceptualizing sexual dysfunction as part of an internalizing dimension. *Clin Psychol Rev* 2009; 29(7): 573-85.
19. Desrochers G, Bergeron S, Khalife S. Fear avoidance and self-efficacy in relation to pain and sexual impairment in women with provoked vestibulodynia. *Clin Pain* 2009; 25(6): 520-1.
20. Baranyi A, Stepan A, Rothenhausler H. [Sexual dysfunction in remittent depressive women]. *Der Nervenarzt* 2009; 80(9): 1093-102. (German)
21. Chen KC, Yeh T, Lee H. Age, gender, depression, and sexual dysfunction in Taiwan. *J Sex Med* 2009; 6(11): 3056-62.
22. Simon JA. Opportunities for intervention in HSDD. *J Fam Pract* 2009; 58(7): 26-30.
23. Duits A, Van Oirschot N, Van Oostenbrugge RJ, Van Lankveld J. The relevance of sexual responsiveness to sexual function in patients. *J Sex Med* 2009; 6(12): 3320-6.
24. Davison SL, Bell RJ, Lachina M, Holden SL, Davis SR. The relationship between self-reported sexual satisfaction and general well-being in woman. *J Sex Med* 2009; 6(10): 2690-7.
25. Vaziri S, Lotfi Kashani F. [Study of factor structure, reliability and validity of sexual self-efficacy questionnaire]. *Journal of Andisheh va Raftar* 2013; 8: 47-56. (Persian)
26. Bandura A. (1997) Self-efficacy: The exercise of control. New York: Freeman; 1997.
27. Bandura A. Exercise of human agency through collective efficacy. *Curr Direct Psychol Sci* 2000; 9: 75-8.
28. Bandura A. Social cognitive theory. *Ann Rev Psychol* 2001; 52: 1-26.
29. Manne SL, Ostroff JS, Norton TR, Fox K, Grana G, Goldstein L. Cancer-specific self-efficacy and psychosocial and functional adaptation to early stage breast cancer. *Ann Behav Med* 2006; 31(2): 145-54.
30. Maddux JE. The power of believing you can. *Handbook of positive psychology*. Oxford: Oxford University press.
31. Schwarzer R, Boehmer S, Luszczynska A, Mohamed NE, Knoll N. Dispositional self-efficacy as a personal resource factor in coping after surgery. *Pers Individ Dif* 2005; 39: 807-818.
32. Schwarzer R, Fuchs R. Self-efficacy and health behaviors. In: Conner NP. (editor). *Predicting health behavior: research and practice with social cognition models*. UK: Open University Press; 1996.
33. Bandura A. Adolescent development from and agnatic perspective. In: Pajares F, Urdan T. (editors). *Self-efficacy beliefs of adolescent*; 2006: 143-6.
34. Pervin LA, John OP. *Personality: theory and research*. 8th ed. New York: Wiley; 2001.
35. Araoz D. Hypnosis in human sexuality problems. *Am J Clin Hypnos* 2005; 47(4): 229-42.
36. Christensen A, Atkins DC, Baucom B, Yi J. Marital status and satisfaction five years following a randomized clinical trial. *Compar Clin Psychol* 2010; 78: 225-35.
37. Dilion LM, Beechler MP. Marital satisfaction and the impact of children in cultures: A meta- analysis. *J Evolution Psychol* 2010; 8: 7-22.
38. Eshghi R, Bahrami F, Fatehizade M. [The study of effectiveness couple sexual cognitive-behavioral therapy on improvement of sexual self-confidence, sexual self-disclosure and sexual knowledge in frigid women in Isfahan]. Ph.D. Dissertation. Isfahan University, 2005. (Persian)
39. Salehzadeh M, Kajbaf M, Molavi H, Zolfaghari M. [The effectiveness of cognitive behavioral therapy for sexual dysfunction in women]. *Psychological studies* 2011; 7(1): 11-31. (Persian)
40. Trudel G, Marchand A, Ravart M, Aubin S, Turgeon L, Fortier P. The effect of a cognitive-behavioral group treatment program on hypoactive sexual desire in women. *Sex Relat Ther* 2001; 16(2): 145-64.
41. Himan JR. Psychologic treatments for female sexual dysfunction: are they effective and do we need them? *Arch Sex Behav* 2002; 31(5): 445-50.
42. Nezu AM. Problem solving and behavior therapy revisited. *Behav Ther* 2005; 35(1): 1-33.
43. Meston CM, Hull E, Levin RJ, Sipski M. Disorders of orgasm in women in women. *J Sex Med* 2004; 1(1): 66-8.

44. Nobre PJ, Pinto-Gouveia J. Dysfunctional sexual beliefs as vulnerability factors for sexual dysfunction. *J Sex Res* 2006; 43(1): 68-75.
45. Turkuile M, Vanlankveld J, Groot E, Melles R, Neffs J, Zandbergen M. Cognitive behavioral therapy for women with lifelong vaginismus: process and prognosis factors. *Behav Res Ther* 2007; 45(2): 359-73.
46. Schwarzer R, Fuchs R. Self-efficacy and health behaviors. In: Conner NP. (editor). *Predicting health behavior: research and practice with social cognition models*. UK: Open University Press; 1996.
47. Rust J, Bennun I, Crowe M, Golombok S. *The Golombok rust inventory of marital state (GRIMS) questionnaire*. London: Nefer-Nelson; 1998.
48. Besharat MA. [Assessment on relationship between attachment styles and marital problems in infertile couples]. *Journal of news in psychotherapy* 2002; 19: 55-66. (Persian)
49. Lazarus AA. The treatment of chronic frigidity by systematic desensitization. *J Nerv Ment Dis* 1963; 136(3): 272-8.
50. Seraji M, Dafr M. [Efficacy of cognitive-behavioral, fluoxetine and combine them in the female identified as being phobic]. *Original journal* 2009; 14-19. (Persian)
51. Hosseiny F, Kajbaf M, Faramarzi S. [Effectiveness of cognitive-behavioral therapy on female frigidity and intimacy in women in Bandar Abbas]. *Journal of counseling and family therapy* 2012; 3(2): 307-21. (Persian)
52. Bakhtiari M, Sheydaei H, Bahreinian AM, Noori M. [The effect of cognitive-behavioral therapy on hyposexual desire and marital satisfaction]. *Andisheh va Raftar* 2016; 36(7): 9-16. (Persian)
53. Byers ES. Relationship satisfaction and sexual satisfaction. A longitudinal study of individuals in long- term relationships. *J Sex Res* 2005; 42(2): 113-18.
54. Brezsnayak M, Whisman MA. Sexual desire and relationship functioning: the effects of marital satisfaction and power. *J Sex Marit Ther* 2004; 30: 199-217.