

## The Effectiveness of Cognitive Hypnosis Therapy on Women's Sexual Desire and Marital Satisfaction

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### Abstract

This study aimed to investigate the effectiveness of cognitive hypnosis therapy on sexual desire and marital satisfaction of women. The study's design was semi-experimental and pre-test, post-test with the control group. The statistical population included all women referred to Babolsar Eltiam Psychological Clinic. Then, 22 women were selected through available sampling method and randomly assigned to experimental and control groups (11 women for each group). The experimental group received cognitive hypnosis therapy for 11 sessions, each lasting 90 minutes, while the control group did not receive any intervention during this research. Both groups completed the Apt and Halbert (HISD) Sex Desire Scale and Enriched Marital Satisfaction Scale (ESQ-47) in two stages; pre-test and post-test. The multivariate analysis of covariance showed a significant difference between the performance of the experimental and control groups in sexual desire and marital satisfaction scores in the post-test. In other words, cognitive hypnosis therapy improves sex desire ( $ES = 0.90$ ,  $P < 0/001$ ,  $F=19$ ), and increases marital satisfaction ( $ES = 0.87$ ,  $P < 0/001$ ,  $F=17$ ). Based on the findings, it can be concluded that cognitive hypnosis therapy can increase marital satisfaction and improve female sex desire; therefore, cognitive hypnosis therapy by using relaxation techniques, guided imaging, cognitive reconstruction, and suggested hypnosis skills training, is an appropriate and effective treatment method in individual, family, and couple counseling.

**Keywords:** Cognitive Hypnosis Therapy, Marital Satisfaction, Sex Desire, Women.

## Introduction

A successful marriage is the concern of young people. To achieve a successful marriage, it is necessary to pay attention to the various dimensions of marriage (Kiani, Navabi Nejad, Ahmadi, Taghvaei, 2021). Marital satisfaction is one of the variables researchers have considered essential in family strength and health (Karney and Bradbury, 2020; Bahari, 2015). Marital satisfaction means the adaptation between the current situation and the expected situation in marriage (Eckert Kunaszuk, 2009; Madanes, 1981); it has a vital role in physical health, life satisfaction (Abedi, Mosayebi, Oreyzi, 2013), sexual satisfaction (Dehghani Champiri, Dehghani, 2020), peace between couples (Bani Fatemeh, Taheri Teymourlooi, 2009), success at work, and job relationships (Aigbiremhon, Okonkwo and Kalunta, 2019). Marital satisfaction is one of the essential characteristics of life satisfaction (Beyrami, Fahimi, Akbari, Amiri Pichakolaei, 2012). Still, despite the critical role of marital satisfaction in strengthening couples' relationships, this feeling of satisfaction changes over time (Taban, Dolatshahi, Eftekhar, and Pourshahbaz, 2016); while couples report high marital satisfaction early in marriage, it declines over 10 to 20 years. Various researches have shown that the decline in early marital satisfaction has proven to be a U-shaped relationship (Huber, Navarro, Womble, Mumme, 2010).

Sex is an important, complex, and sensitive human issue that is blended with their whole being (Shah Hosseini, Gardeshi, Pourasghar, Salehi, 2014). Sexual desire is a state of motivation and interest in sexual subjects and activities, or it can be called desire, need or compulsion to seek sexual topics or engage in sexual activities (Laurent and Simons, 2009).

Studies by Berman, Berman, and Miles (2003), estimated that approximately 76% of women were dissatisfied with their sexual function, depending on their age, in cases such as decreased sexual desire, vaginal dryness, painful intercourse, decreased genital sensation, and difficulty to reach orgasm. Female sexual dysfunction is a significant problem affecting the quality of life of many women. Farrell, Shaw, and Webber (2010) found that about 50% of those who visited sexual health centers complained of sexual reluctance, harming the couples' relationship. Studies by Brotto and Basson (2014) have shown that at least one-third of women of reproductive age complain of arousal and low sexual desire, which leads to a decrease in quality of life (Bronner, Elran, Golomb and Korczyn, 2010). These issues cause a reduction in sexual satisfaction and sexual function (Platter and Kelley, 2012). However, research has shown that couple sexual desire issue has received less attention in scientific studies (Shah Hosseini et al., 2014); due to severe changes in sexual attitudes, functions, and behaviors, especially in adolescents. So, the need for further study deems necessary (Lehane, Dammeyer, Hovaldt, Elsass, 2017).

Cognitive therapists, in their treatment, consider cognitive processing to be more important than biological causes. Negative thoughts about sexual activity exacerbate sexual symptoms and problems. As a result, it will be adequate to study and find negative self-indoctrination (Araoz, 2005) and distorted thoughts in researching and analyzing sexual problems (Meston, Hull, Levin, Sipski, 2004). Cognitive therapists introduce marital satisfaction as a purely subjective concept that only couples themselves can report their degree of satisfaction (Mathews, 2015); the disturbing feelings and behaviors that

arise in interpersonal relationships are not just due to the wrong behavior of one side or a harmful factor. Instead, it is related mainly to the way each couple thinks, and it is the individual's thinking that significantly affects emotions and disrupts interactions between couples (Yousefi, Nouranipour, Besharat, 2006). In this theory, couples' perception of each other's behavior is more important than the behavior itself; because people judge their inferences and conclusions as reality and do not see it as an assumption that should be tested (quoted EpsteinEpste and Scaling, Mohammadi 2011). The use of hypnosis in treating diseases is one of the oldest treatment methods (Akhavan Akbari, Hosseinzadeh, 2021). Studies have shown convincing evidence about the role of hypnosis in the treatment of various physical and mental illnesses (Alladin, 2008).

The history of hypnosis goes back to Iran, India, Egypt, and Greece. Hypnosis was first introduced by Dr. James Bridg about 160 years ago (Akhavan Akbari, Hosseinzadeh, 2021), who used the word hypnosis as an artificial sleep versus natural sleep because he thought that hypnosis is a kind of sleep. The word hypnosis is derived from the ancient Greek god; James Bridg, who later found out he did not provide the correct definition of hypnosis. He tried to correct it, but unfortunately, the concept of sleep was pervasive. The last scientific definition was a mental state in which the individual's attention and focus around the environment are reduced. It focuses on the subject that the therapist induces (Alladin, 2008).

Hypnosis can be used in eclectic, psychodynamic, and cognitive-behavioral therapies with direct access to the unconscious. Cognitive therapy and hypnosis are similar in theoretical situations, techniques, and cognitive strategies. Several clinical models combine these perspectives, such as the cognitive skills model, the cognitive development model, and the cognitive-behavioral hypnosis model. When hypnosis is combined with cognitive-behavioral therapies, it is more effective as adjunctive therapy (Simpson, 2005; Siddiqui, 2007). The results of studies have shown that hypnosis therapy in sexual function (Rajaei and Eshghi, 2018; Walsh, 2011; Johnson & Johnson, Barton, & Elkins, 2016; Starc, 2019); had a positive effect. The hypnotherapy process of changing the conscious state, with three components: concentration, separation, and induction, puts the client in a situation where hypnotherapy can be applied. At this stage, the therapist has more power to influence the client's mind, and the words of the therapist penetrate the depth of the client's existence, which has an increasing effect if combined with other treatment methods (Alladin, 2008). Cognitive hypnosis therapy combines the concepts and techniques of hypnosis with the methods and concepts of cognitive therapy theory (Burrows, Stanley & Bloom, 2001).

In cognitive-behavioral hypnotherapy, it is assumed that the cause of most psychological disorders is due to the harmful forms of self-hypnosis, in which negative thoughts are accepted unconsciously without being criticized (Araoz, 1985; Starc, 2019). To solve this, clients must first be made aware of the existence and impact of these thoughts and then trained to use hypnotic cognitive reconstruction to replace more positive and adaptive self-talk (Golden, Dowd, Friedberg, 1987). In this model, the role of mental imagery in the duration of the disorder is emphasized (Veale, 2004; Veale and Neziroglu, 2010). Cognitive Hypnotherapy uses relaxation techniques, guided imaging, cognitive reconstruction, gradual desensitization, and hypnotic skills training (Robertson,

2008), divided into two separate but interrelated sections. The first part aims to reduce symptoms, including relaxation exercises which show the power of the mind on the body, strengthen the ego, expand awareness, modulate and regulate signs, self-hypnosis, positive mood induction, and post-hypnosis inductions. And the second stage of treatment is focused on revealing and improving the underlying causes of the disorder, which is a mainly psychodynamic mainly state including direct induction techniques, age hypnosis regression, emotion bridge, hypnosis exploration, cognitive reconstruction, unconscious correction and clearing, and the empty chair technique (Alladin, 2012; Yapko, 2012). A Meta-analyses study showed that clients treated with cognitive-behavioral hypnotherapy received 70% more improvement than those clients who received cognitive therapy without hypnosis (Kirsch, Montgomery, & Sapirstein. (2005); Starck, 2019). As the review of the research background showed, these interventions were mainly focused on teaching hypnosis or cognitive therapy. But, to the best of the researcher's knowledge, no research has been done on cognitive hypnosis therapy. Due to the effect of sexual reluctance and marital dissatisfaction and its consequences on married life, the vacuum of this research in Iran is quite apparent. So, this study examined the effectiveness of cognitive hypnosis therapy in sexual reluctance and marital satisfaction to find out a more appropriate, practical, efficient, and effective solution to increase sexual desire and marital satisfaction as a practical, helpful method to help the above suffering clients. More specifically, this study aims to determine the effectiveness of cognitive hypnosis therapy on sexual desire and marital satisfaction of couples.

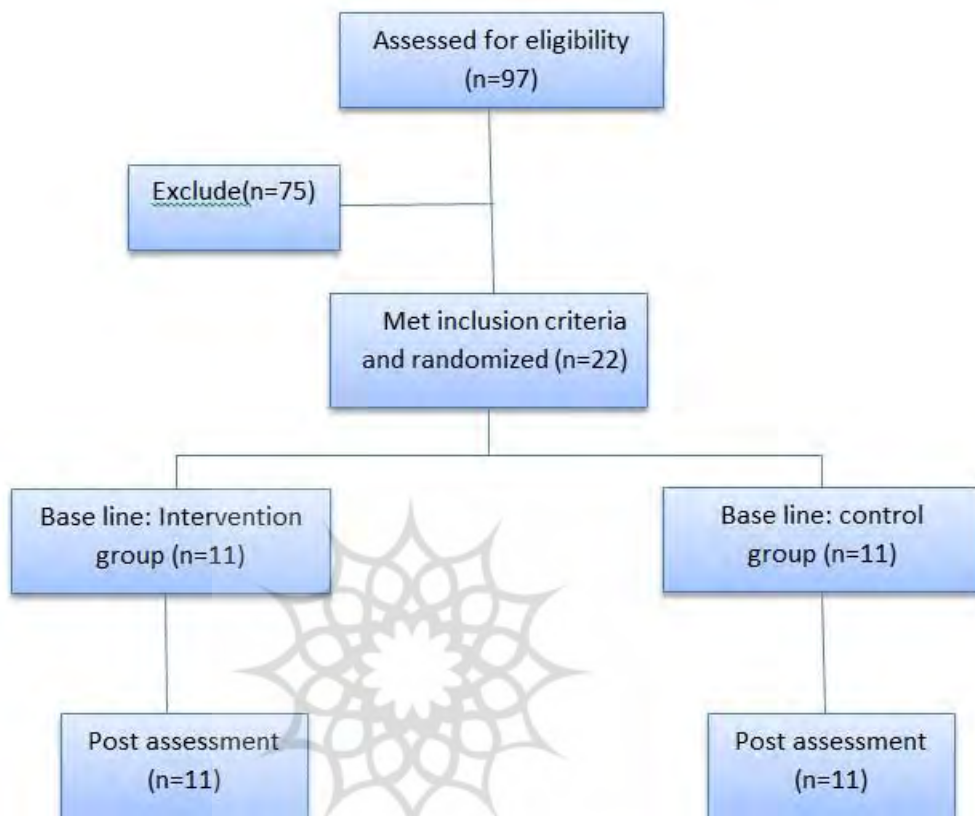
To address the research problem following hypotheses are posed:

- 1- Cognitive hypnosis therapy is effective in increasing women's sexual desire.
- 2- Cognitive hypnosis therapy is effective in marital satisfaction in women.

## Methods

The research method was quasi-experimental, pre-test-post-test, designed employing with experimental and control groups. In this study, the level of intervention of the cognitive hypnosis therapy method was considered an independent variable, and sexual desire and marital satisfaction were deemed to be dependent variables. To select an example, first, the announcement of meetings and initial registration was informed to the clients, 97 people volunteered, after the primary interview, inclusion and exclusion criteria were considered, and Halbert sex desire and Enrich marital satisfaction inventory (Short form), were administered (obtaining a score lower than the cut point in research tools). Twenty-two subjects were identified as eligible for inclusion in the study and who were selected by through convenience sampling and randomly assigned to two groups (11 women in the experimental group and 11 women in the control group). The sample size was determined with reference to Quinn (2002), who emphasized that the sample size in experimental and quasi-experimental and intervention research is more than four people in each group.

Figure 1. The sample selection process in the present study



After that, the women in the experimental group underwent cognitive hypnosis therapy at the Babolsar Eltiam Counseling Center for 11 sessions, once a week (the first session was 90 minutes, and the rest of the sessions were 60 minutes). The post-test was administered after the therapy stages, and the results of the interventions applied to women's sexual desire and marital satisfaction were obtained. Also, to observe ethical principles, the same approach (cognitive hypnosis therapy) was presented to the control group in separate sessions after completing the research.

This study observed ethical criteria, including obtaining informed written consent and confidentiality. Also, when completing the questionnaires, the clients were free to leave the research cycle at any time. Also, it was ensured that the content of the meetings remained strictly confidential, which was strictly observed. Inclusion criteria were: completing the consent form, age range between 25 to 50 years, obtaining a score less than 25 on the sexual reluctance scale, and obtaining a score less than 140 on the Enrich Marital Satisfaction Scale (short form). Exclusion criteria were: non-receipt of any

medical and psychological interventions, absence of more than two consecutive sessions, rejection of cooperating with a therapist, not doing homework, and withdrawal from attending the study.

### **Instruments:**

**1. Hurlbert Inventory Sexual Desire (HISD):** This questionnaire was developed by Apt and Hurlbert (1992) and consisted of 25 items that measure the subject's sexual desire. Sexual desire questionnaire questions are widely used by therapists in clinical practice to measure sexual and marital problems and are applied in scientific research. The response scale of this questionnaire is five Likert options (I always have such a desire = 0 to never have such a desire = 4). Questions 1, 3, 5, 7, 8, 9, 10, 12, 13, 17, 18, 19, and 20 are scored in reverse (always = 4 to never = 0). The minimum possible score in this questionnaire is 0, and the maximum is 100. A score between 0 and 25 indicates a low sense of cohesion in sexual desire. A score between 26 and 50 indicates a moderate sense of cohesion, and a score above 50 indicates a high sense of cohesion in sexual desire. Hurlbert (1993) obtained the reliability by retesting (0/86); the internal consistency coefficients of the Hurlbert Sexual Desire Questionnaire using Cronbach's alpha methods were 0/89, which is a satisfactory index. The reliability of the above questionnaire was estimated Yousefi, Farsani, Shakiba, and Hemmati (2014), using Cronbach's alpha method as 0/92, which is considered a satisfactory index. In the present study, the reliability of the questionnaire was 0.83. Convergent validity coefficients of the Halbert Sexual Desire Questionnaire with the William Snell Sexual Self-Expression Scales ( $p < 0/001$  and  $r = 0/724$ ), and sexual function (Arizona sexual experiences), ( $p < 0/001$  and  $r = 0/716$ ), and the coefficient of concurrent validity of this questionnaire with the list of the sexual orientation of the spectrum ( $p < 0/001$  and  $r = 0/529$ ) proved to be high enough.

**2. Enrich Marital Satisfaction Questionnaire (47-item short form) (ESQ-47):** The Enrich Marital Satisfaction Questionnaire (short form) has 47 questions. The main version of this questionnaire consists of 115 questions and 12 subscales. Soleimanian (1995) has prepared a short version of this questionnaire with 47 questions in Iran for the first time. The response scale of this questionnaire is five Likert options (strongly disagree = 1 to strongly agree = 5). The maximum score of the subject in the short form is 235, and the minimum is 47. The alpha coefficients of the Enrich Questionnaire subscales in the report of Olson, Fournier, and Deckerman (1997; quoted by Bahrainian Yavari Kermani, 2009), range from 0/48 to 0/90. Soleimanian (1995) calculated and reported the test's internal consistency (0/93), and the short form is 0/95. In another study by Mahdavian (1997; quoted in Namni, 2017), the reliability of the Enrich test using the Pearson correlation coefficient and retest method (one week apart), with men was 0/93, and with women was 0/94, and with both men and women (total sample) it showed 0/94. The correlation coefficient of Enrich questionnaire with family satisfaction scales was reported from 0/41 to 0/60, and with life, satisfaction scales between 0/32 and 0 /41,

which a sign is of construct validity (Sanaei, Alaqband, Falahati and Hooman, 2017). In this study the reliability of the questionnaire using Cronbach's alpha showed to be 0/87.

**3. Cognitive hypnosis therapy:** The package for performing cognitive hypnosis therapy has been written based on the theory of cognitive hypnosis therapy of Aladdin (2008). In the present study, the content was approved by three faculty members and experts in this field. Table 1 summarizes the structure of the therapy sessions.

sessions	Content of sessions
1 <sup>st</sup> session	Acquainting with clients and stating the purpose of treatment, familiarity of clients with the cognitive hypnosis therapy, and correcting irrational beliefs about hypnosis.
2 <sup>nd</sup> session	Explaining the cognitive model of ABC and explain hypnotherapy based on the cognitive model of relaxation training through guided imagery (relaxation practice), hypnosis induction, and homework.
3 <sup>rd</sup> session	Checking homework, recognizing thoughts of sexual performance (correct information about sexual function and the need to process positive sexual reviews along with muscle relaxation during sexual intercourse). Muscle, respiratory, and brain relaxation techniques and indoctrination to strengthen the ego and induction of imagery combined with mental evocation in a state of hypnotic trance and recording thoughts at home.
4 <sup>th</sup> session	Checking homework, resolve misunderstandings caused by misconceptions about sex and marriage (cognitive skills), and give tasks ( registration of daily unpleasant events, automatic thoughts, and emotions, recognizing tension symptoms, confronting with tension strategies, relaxation, and guided imagery about sexual activities and couple relation) and applying behaviors related with that position in hypnotic trance state and homework.
5 <sup>th</sup> session	Teaching effective relationships between couples, checking thoughts with the patient and replacing rational belief, preparing sexual imageries list and doing it for positive conditioning and replacing pleasant imageries in a hypnotic trance state.
6 <sup>th</sup> session	Recognizing negative automatic thoughts related to sexual function and marital relationship, checking benefit and loss of belief and presenting strategies for correcting them, and related indoctrinations for healing sexual desire and marital relation in a hypnotic trance state and giving homework.
7 <sup>th</sup> session	Checking relation skills and irrational thoughts, removing misunderstandings, recognizing tension symptoms, tension confronting strategies, and relaxation during performing for positive conditioning.



8 <sup>th</sup> session	Using metaphors of satisfaction from interpersonal relationships to promote marital relationships, improve sexual desire, and perform cognitive reconstruction exercises at home.
9 <sup>th</sup> session	Checking unpleasant emotions, unpleasant thoughts chart and rational response for them in a hypnotic trance state, Applying mental imagery technics and other technics that made positive changes in client and self-hypnosis practice and homework.
10 <sup>th</sup> session	Expressing confronting cognitive technics and replacing belief along with strengthening ego skills by related indoctrinations in a hypnotic state, summarizing sessions with feedback, and giving homework.
11 <sup>th</sup> session	Checking improvement of clients, taking post-test of sexual desire and marital satisfaction.

## Results

In order to analyze the data, descriptive statistics, mean and standard deviation were used to describe the research variables. For the purpose inferential statistics, analysis of covariance, and Bonforoni post hoc test were used to test the research hypotheses. Regarding demographic characteristics, the mean and standard deviation of participants' ages showed to be equal in the experimental group (36/5, 4/71) and the control group (33/91, 3/59), respectively. In the experimental group, 46% of participants had one child, 40% had two children, 9% had three children, and only 5% had no children. In the control group, 41% of participants had one child, 37% had two children, 7% had three children, and 15% were childless. In the experimental and control groups, 23% and 18% of the participants had a diploma, 57% and 64% had a bachelor's degree, and 20% and 18% had a master's degree. Descriptive statistics of experimental and control group scores in the variables of sexual desire and marital satisfaction in the pre-test and post-test are presented in Table 2. The information in Table 2 shows the mean of the post-test scores in the variables of sexual desire and marital satisfaction compared with the mean scores of the pre-test. There is no significant difference between the post-test scores.

**Table 2.** Descriptive statistics of the variables of sexual desire and marital satisfaction in experimental and control groups

components	Tests	Experimental group		Experimental control	
		M	SD	M	SD
Total number of sexual desire	pretest	23/49	6/02	24/76	4/48
	posttest	62/91	4/57	26/59	3/39
Total number of	pretest	119/64	12/46	123/64	9/90
	posttest	201/64	12/20	125/18	11/73



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**marital  
satisfaction**


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Analysis of covariance (ANCOVA) was used to evaluate the significance of the changes. To comply with the assumptions related to the study of covariance, due to the lack of significance of the F value in the Levine test at an error level greater than 0.05, and given that the variance of error of research variables in the pre-test was equal, so the assumption of error variance assimilation is confirmed. About the assumption of homogeneity of regression slope, the levels of significance, and the interaction of the independent variable (group), with the covariate variables are not significant ( $P > 0/05$ ). Therefore, it can be said with confidence that there is no interaction between the groups and the pretest, and the condition of homogeneity of regression slope is established to perform an analysis of covariance. Also, in the results of the M BOX test to investigate the same assumption, the obtained P covariance matrix for the variables is more significant than 0.05, so the pre-test and post-test covariance matrices in the groups are equal to each other. Also, the Pearson correlation coefficient between confluence variables in the equation was equal ( $r = 0/69$ ) (the correlation of coefficient variables should not be more than 0/80). Therefore, auxiliary variables have a normal relationship, and the condition of correlation of auxiliary variables has been observed. Finally, all skewness coefficients are between -3 and 3; and all elongation coefficients are between -5 and 5. Therefore, there is an essential condition for the normality of the scores of research variables.

According to Table 3, the levels of significance (sig), the interaction of the independent variable (group) with the covariate variables (sexual desire and pre-test, marital satisfaction and pre-test), is more than ( $P > 0/05$ ); and is not significant. Therefore, it can be said with confidence that there is no interaction between the groups, and the condition of homogeneity of regression slope is established to perform an analysis of covariance.

**Table 3.** Homogeneity of regression slope

Effect		amount	F	hypothesis Df	Error Df	Sig	
Co- variable variable group	group	Pillai effect	0/619	0/731	12	16	0/63
	Sexual desire	Lambda Wilkes	0/319	0/711	12	14	0/61
		Hoteling effect	1/182	0/829	12	12	0/71

		<b>The biggest root of the error</b>	0/719	1/002	6	8	0/49
<b>Co-variable variable group</b>	<b>group Marital satisfaction</b>	<b>Pillai effect</b>	0/641	0/629	12	16	0/79
		<b>Lambda Wilkes</b>	0/454	0/564	12	14	0/83
		<b>Hoteling effect</b>	0/991	0/496	12	12	0/88
		<b>The biggest root of the error</b>	0/685	0/914	6	8	0/53

The results of multivariate analysis of covariance in the scores of the components and the total score of sex desire and marital satisfaction in the experimental and control groups showed that the levels of significant  $(p < 0/001)$ ,  $\lambda = 0/972$ ,  $F = 12/027$ ,  $\eta^2 = 0/806$ ,  $P$  (of all tests allow the use of multivariate analysis of covariance. These results also show a significant difference between the experimental and control groups, at least in terms of one of the dependent variables (sexual desire and marital satisfaction).

**Table 4.** Results of analysis of covariance of post-test scores of experimental and control groups on variables of sexual desire and marital satisfaction

<b>component</b>	<b>Difference source</b>	<b>Total Squares</b>	<b>Df</b>	<b>Square mean</b>	<b>F</b>	<b>Sig</b>	<b>Square share .Eta(</b>
<b>Total number Sexual Desire</b>	<b>Pretest</b>	1409/003	13	1409/003	19/482	0/001	0/582
	<b>Group</b>	1251/107	17	1257/107	16/009	0/001	0/504
	<b>Error</b>	1428/279	189	76/868			

	<b>Total</b>	672819	22				
<b>Total</b>	<b>Pretest</b>	1377/44	1	1377/44	17/920	0/00	0/499
<b>Number</b>		9		9		1	
<b>Sexual</b>	<b>Group</b>	1166/56	1	1166/56	15/176	0/00	0/457
<b>Desire</b>		8		8		1	
	<b>Error</b>	1383/86	18	1383/86			
		8		8			
	<b>Total</b>		22	622/471			

Table 4 shows the significance or non-significance of the whole model and the effects of the intervention variable (cognitive hypnotherapy) on the variables of sexual desire and marital satisfaction in the post-test stage separately. As can be seen in the table, the effect of the intergroup variable of the intervention on increasing the score of sexual desire ( $P < 0/001$  ( $F = 16/009$ )) and marital satisfaction ( $P < 0/001$ ,  $F = 15/167$ ) is significant. Cognitive hypnosis intervention has improved the score of female sexual desire and marital satisfaction components compared to the control group. Cognitive hypnosis therapy effectively increases the sexual desire and marital satisfaction of women.

## Discussion

This study aimed to investigate the effectiveness of cognitive hypnosis therapy on sexual reluctance and marital satisfaction in women. The results showed that performing cognitive hypnosis intervention could improve the score of components of sexual desire and marital satisfaction of women compared to the control group. The result was consistent with other developments, such as those posed in Rajaei and Eshghi's studies (2018), which showed that cognitive-behavioral therapy improved sexual anxiety and sexual function. And in line with the results reported by Asadi Jajaei, Abolghasemi, Ghaffari, and Narimani (2020), mindfulness-based therapy is effective in the sexual operations of sexually cold women. Results of the present study were consistent with the findings of Starc (2019), Safak Ozturk, Arkar (2017), and Johnson and Johnson, Barton, and Elkins (2016). The effect of hypnosis on orgasm experience and sexual satisfaction was consistent with Terkвуиле et al. (2007); Meston et al. (2004); Masheb, Kerns, Lozano, MinKin, and Richman (2009), Trudel and Goldfarb (2010) and Ter Kuile, van Lankveld, de Groot, Melles, Neffs, Zandbergen (2007), Zolfaghari, Rahimi, Kajbaf, Salehzadeh (2011). Also, it was consistent with the study of Attar, Attar, Behnia Asl, Heidari, & Mahmoudi (2020). In the field of Cognitive-behavioral therapy to increase sexual intimacy in women with sexual dysfunction (sexual inclination), Afzali, Farrokhzadian (2019), and in the field of Metacognitive Therapy (MCT) in changing the level of sexual satisfaction, marital satisfaction, Fani Sobhani, Khalatbari, Rahmati (2018), the

Cognitive-behavioral therapy based on sexual satisfaction and marital adjustment were consistent.

These studies also showed that cognitive-behavioral therapy, relaxation exercise, and hypnosis effectively improve a variety of sexual disorders. These studies have also shown that in the field of health psychology, the use of strategies based on cognitive-behavioral theory against tense situations and negative emotions is an essential factor in the formation of physical and mental health of individuals (Ter Kuile et al., 2007, Johnson et al., 2016, Rajaei, Eshghi, 2018). The results of Meston, Hull, Levin, and Sipski's (2004) study showed that the most effective and standard treatment methods were the cognitive-behavioral approach through cognitive reconstruction techniques, ways of reducing anxiety such as relaxation, providing sexual information and knowledge, practicing sensory concentration and regular desensitization.

Hypnosis facilitates the process of cognitive reconstruction in sexual reluctance and the components of marital satisfaction; the person can better interpret the thoughts and events around him with the divergent thinking he achieves in hypnosis. In general, one of the problems in various mental disorders is the patient's lack of divergent thinking and one-sidedness, which leads to cognitive errors and distortion of reality. Hypnosis facilitates divergent thinking by affecting open-mindedness and expanding consciousness (similar to third-wave therapy techniques such as mindfulness), which helps solve this problem. At-risk clients, under hypnotic conditions, display disturbing mental imagery when there is an objective effect of that image on the mind (Lazarus, 2008); this can probably lead to a relatively real experience of avoiding events and avoiding rituals that hypnosis causes these behaviors to desensitize gradually. Various studies have shown that sexual cognitive-behavioral therapy improves women's coldness and sexual function (Masheb, Kerns, Lozano, MinKin, & Richman, 2009). It has been effectively influential in the adjustment and reduction of marital boredom (Ter Kuile, Both, Van Lankveld, 2010) and improves sexual pleasure (Zolfaghari et al., 2011). The use of hypnosis in the treatment process facilitates divergent thinking by maximizing long-term awareness and multiple levels of brain function, as well as maximizing attention and concentration and minimizing distraction and interference from other stressful sources (Tosi, Baisden, 2008). Hypnosis also provides a mental framework that attention can be directed to broader experiences such as feelings of intimacy and joy. Such strategies can increase divergent thinking and facilitate the actual reconstruction of abnormal thoughts (Alladin, 2008).

Positive self-hypnosis can be developed by inducing various hypnotic and post-hypnotic inductions and distancing from the tendency to induce self-hypnosis negatively (Robertson, 2008). As a result, negative self-hypnosis in sexual reluctance and marital dissatisfaction can be modified with positive self-hypnosis exercises to form healthier thoughts with cognitive-behavioral exercises. Hypnosis enhances the learning of healing skills. Hypnosis is a provider of inductions; it can be compelling in changing behavioral problems, cognitive disabilities, and negative emotions. Most inductions after hypnosis

are used to shape behavior (Alladin, 2008). Since cognitive therapy can also be considered a kind of conditioning in beliefs and behaviors, incorporating hypnosis into cognitive therapy can be regarded as a facilitator of such a condition. Combining cognitive-behavioral psychotherapy and hypnotherapy reduces negative emotions, fatigue, and muscle weakness (Pirirani, Soleimankhani, Motamedi Shalamzari, Sayyad, 2018).

## Conclusion

In this study, cognitive hypnosis therapy with relaxation techniques, imagery, self-hypnosis, backward age were employed to discovering the roots of reluctance and marital dissatisfaction, and evacuation of emotions, promoted sexual desire and marital satisfaction. But due to some limitations it was impossible to select clients randomly. Available sampling was used, and the statistical population was limited to clients who had been referred to the Eltiam clinic by calling. Since only cognitive hypnosis therapy was used, so there was no possibility of comparing its findings with those of other methods.

Given the fact that the present study was conducted among women referring to Babolsar Eltiam Counseling and Psychological Services Center and due to the small number of samples, higher generalizability required further studied employing larger samples from various contexts. As a result, the findings need to be generalized with caution. It is also suggested that researchers compare the effectiveness of cognitive-behavioral therapy and cognitive hypnotherapy in the form of programs with the same intensity in future studies.

## Disclosure Statements

There is no conflict of interest in this study.

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