Comparing the Effectiveness of Vaginismus-Specific Schema Therapy (VSST) with Conventional Schema Therapy (ST) Method on Sexual Self-Assertiveness & Self-Esteem in Women with Vaginismus Disorder

Abstract

Aims: Vaginismus disorder is the second most common sexual dysfunction in women and it is an essential issue in the lives of women suffering from this disorder it has unfortunate consequences and destructive consequences on the individual's health, the family institution and the couple's intimacy. The study was done with the aim of comparing vaginismus-specific schema therapy (VSST) with conventional schema therapy (ST) method on sexual self-assertiveness and self-esteem in women with vaginismus disorder.

Materials and Methods: This research was a Quasi-Experimental design study with a pretest, posttest and follow-up with a control group. The statistical population was women with vaginismus disorder referred to the obstetric and gynecology clinic of Payambaran Hospital in 2021 in Tehran, Iran. From them, 45 individuals were selected by purposive sampling method and three groups were randomly assigned by simple lottery method (each group 15 people). Persian version of Halbert's sexual self-assertiveness questionnaires and female sexual self-esteem of Zinar and Schwarz SSEI-W were used to measure dependent variables. Two experiment groups were treated in 10 sessions of 90 minutes each, and the control group did not receive any intervention. The data were analyzed using variance analysis of Repeated measures ANOVA and Bonferroni's post-hoc test in SPSS software-22.

Findings: Both VSST and conventional ST had an effect on increasing sexual self-assertiveness (Eta=0.83) and self-esteem (Eta=0.94) in women with vaginismus disorder compared to the control group (p=0.001). According to the comparison of the difference between the means of the two intervention groups and the control group, the VSST had a greater effect on the improving self-assertiveness and sexual self-esteem of women than the conventional ST (p=0.001).

Conclusion: The results of the research showed that the VSST for vaginismus can increase sexual self-assertiveness and self-esteem among women with vaginismus by identifying their problems.

Keywords: VSST, ST, sexual dysfunction, vaginismus

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Introduction

Sexual health and favorable marital relationship have known effects on physical, mental and social health (1). Therefore, any disorder in this field can affect sexual health (2). Among these disorders, pelvic-genital penetration pain disorder (vaginismus) is defined as any permanent problem including pain, fear or muscle stiffness in anticipation of, during or after attempting vaginal penetration, which lasts for at least 6 months (3). The prevalence of vaginismus disorder has been reported between 5 and 42% (4). In selected Iranian studies, the incidence of vaginismus in the general population of women was reported as 0.4% to 8% (5).

Urinary tract infection, cysts, eczema, pelvic inflammation; problems caused by childbirth such as pain due to vaginal delivery or difficult delivery, abortion; age-related changes such as menopause and hormonal changes, vaginal dryness; pelvic lesion or side effects of drugs are physical factors affecting vaginismus (6).

Factors such as an example pregnancy phobia, painful sex, recurrent medical problem with pelvic muscles, diffuse anxiety, performance anxiety (worrying that one will not perform well in sex), previous adverse sexual experiences, negative beliefs about sex, guilt feeling, emotional trauma or other unhealthy sexual emotions; problems in the relationship with spouse such as abuse, lack of emotional belonging, fear of lack of commitment, lack of confidence and trust, sense of loss of control; Suppressed memories of childhood experiences such as strict parents, unbalanced religious strictures, seeing shocking sexual scenes and images, lack of sexual education are among the psychological factors can affect vaginismus disorder (7 & 8). In patients with vaginismus disorder, these fears cause distress in many important sides of life (9). In fact, self-assertiveness' people transparently express their feelings and desires, without shame (10). According to the theory of behaviorism, women with vaginismus learn a lack of sexual self-assertiveness through encouragement or punishments such as a lack of verbal openness towards sexual issues, in the cultural-educational context of the family (11). These studies show that women who refuse to express their sexual desires to their husbands had a higher percentage of sexual dysfunction disorders, including vaginismus (12 & 13).

One of the other factors that are influenced by sexual performance is defined as a person's positive attitude and perception towards their sexual status based on which they adjust their behavior, which is defined in Interpersonal functioning also plays a role in the development of a healthy sex life; It is fluid and changes under the influence of conditions (14). Research has shown that there is a reciprocal effect between women's sexual self-esteem and their sexual performance, women with sexual disorders are more likely to suffer from low sexual self-esteem. Women who have sexual dysfunction and a feeling of sexual incompetence have low sexual self-esteem and stop sexual activity (15).

Previous studies have shown that symptoms of vaginismus disorder are reduced with conventional ST (16 & 17). ST determines the basis of behavior and the deepest cognitive structures of people. Primary maladaptive schemas are defective emotional and cognitive patterns that are formed from childhood and are repeated throughout life (4).

VSST for vaginismus disorder examines different sexual beliefs and mentalities in the formation of women's sexual dysfunction regarding sexual schemas and marital compatibility (18). The number of negative beliefs and thoughts such as criticism and negative self-image can harm women's pleasure and desirable sexual function and create negative emotions such as anger, fear, shame and guilt in them slow, Therefore, schema therapy can improve vaginismus disorder and the problems caused by it by examining unhealthy mental patterns (19). Reviewing the results of the research shows that ST can improve functioning by paying attention to women's problems, especially relationships with spouses (20). Correcting and adjusting the initially incompatible schemas and strengthening the healthy adult mentality led to the improvement and increase of sexual self-esteem. VSST focused on arousing emotions related to primary incompatible schemas that lead to the identification of behaviors and mentalities that threaten the personal value and self-esteem. Reparenting of women suffering from vaginismus disorder was performed to improve their emotions and to satisfy the relative satisfaction of unfulfilled needs to increase their self-esteem. Reparenting addressed the primary unfulfilled needs of women suffering from vaginismus disorder, through emotional support and effective factors in modulating the schema, to strengthen the adult mentality and ultimately a sense of worth (19 & 21).

Therefore, research on the effectiveness of Schema Therapy on self-assertiveness and sexual self-esteem in women with vaginismus is of special importance, as vaginismus not only negatively

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impacts the sexual quality of life for women but can also lead to emotional problems and marital relationship issues. Considering that many women avoid seeking help from healthcare professionals due to shame and embarrassment, providing effective and indirect solutions like schema therapy can help increase access to and acceptance of treatment. Additionally, this research can identify and enhance self-assertion skills and sexual self-esteem in women, helping them approach their relationships with a better sense of self. Schema therapy aids women in strengthening their self-assertion abilities, allowing them to express their sexual needs and desires more easily, while identifying and changing negative schemas can enhance individual self-esteem.

Despite schema therapy being recognized as an effective approach in treating psychological disorders, there are limited studies on its impact on women with vaginismus, particularly regarding their self-assertion and sexual self-esteem. Most existing research has focused more on the physiological and medical aspects of vaginismus, while the emotional and psychological dimensions of this disorder have received less attention. The cultural and social influences on the experience of vaginismus and treatment methods have also been less studied. This topic can contribute to a better understanding of the challenges women face when dealing with this disorder. Furthermore, most existing research focuses on a specific type of treatment, whereas examining the effects of combined methods (such as integrating schema therapy with other treatments) may yield better outcomes. Ultimately, the results of this research could significantly contribute to the development of innovative therapeutic methods and improve the sexual quality of life in society. Therefore, the aim of the present study was to investigate the effectiveness of a schema therapy package specifically designed for women with vaginismus, and conventional schema therapy methods on self-assertiveness and sexual self-esteem of women with vaginismus disorder.

Materials and Methods

The present research is Quasi-Experimental Design study of three groups including a group under special schema therapy for women with vaginismus, a conventional schema therapy group and a control group with three stages of pre-test, post-test and follow-up 45 days after the end of the intervention. This research started in the fall of 2021 and ended in the spring of 2022. The statistical population consisted of all women with vaginismus who were referred to the obstetric and gynecology clinic of Payambaran Hospital in Tehran 2021, aged 20 to 50 years, and 45 of them were selected as a sample in a targeted manner. The sample size was calculated at 20 individuals in each group based on similar studies (18), and considering the effect size of 0.40, confidence level of 0.95, test power of 0.80, and dropout rate of 10%. As a result, 60 cases were chosen as the samples via the purposive sampling method according to the inclusion and exclusion criteria. Then three groups were randomly assigned by simple lottery method. The inclusion criteria for the sample are diagnosis of vaginismus by a gynecologist, not receiving parallel medical and psychological treatments, having at least a diploma education and at least one year of cohabitation, and exclusion criteria from the research are lack of cooperation of the participants in doing the homework and absence of more than two treatment sessions. In addition to obtaining the code of ethics, the ethical principles of confidentiality, the use of data only in line with the goals of the research, the freedom and full authority of the people to continue participating in the research and detailed information if the participants request the results along with the training of the control group after the completion of the training. three groups have been observed in the study.

The tools used in this research were Halbert's sexual self-assertiveness questionnaires, 1992, and Zinar and Schwarz's SSEI-W, 1996, women's sexual self-esteem questionnaires. Also we used Persian version of this instruments.

Halbert's sexual self-assertiveness questionnaire: For this variable, the Persian form of Halbert's sexual self-assertiveness index was used, which includes 25 questions on a Likert scale and the value of the options ranges from "always" = 0 to "never" = 4. Questions 3, 4, 5, 7, 12, 15, 16, 17, 18, 21, 22, and 23 are scored in reverse. The range of test scores is from 0 to 100 and a higher score is a sign of high sexual self-assertiveness. The validity of this test was obtained by David Farley at 0.86. In Shafii's performance on 40 married female students, Cronbach's alpha coefficient was 0.92. Re-implementing it by Bay, on 15 married educated women, the total alpha coefficient of the test was 0.95 (21). In the present study, the reliability of the questionnaire was obtained using Cronbach's alpha method of 0.95.

Women's Sexual Self-Esteem Questionnaire by Zinar and Schwarz (SSEI-W): This questionnaire has 35 items and was compiled to measure the effective responses in women's sexual evaluation of themselves. The questions are answered on a 6-point Likert scale (completely disagree to agree).

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This questionnaire has five subscales that reflect the areas of sexual self-esteem and includes experience and skill, attractiveness, control, moral judgment, and conformity. By adding the scores of five areas together, the total score of the scale is obtained, and a higher score indicates higher sexual self-esteem. Cronbach's alpha coefficient for this whole scale is 0.92 for experience and skill, 0.84 for attractiveness, 0.88 for control, 0.80 for moral judgment, and 0.80 for conformity. In the research of Zina and Schwarz (22), the convergent validity was confirmed through correlation with the Rosenberg self-esteem scale (r=0.57). In the research of Farrokhi and Share in a sample of 510 Iranian married women, the same 5 factors of the original version were obtained by factor analysis on the questionnaire. The internal consistency coefficient of the items in the whole sample was .88 and the correlation coefficients between each of the items with the total score of the scale were between 0.54 and 0.72. The retest reliability coefficient for the whole scale was reported as 0.91 and for its five scales in the range of 0.82 to 0.94 (23). In the present study, the reliability of the questionnaire was obtained using Cronbach's alpha method of 0.91.

At first, women with vaginismus disorder answered the questionnaires in the pre-test phase, then the collection process was such that after randomly assigning the participants to three groups, including two treatment groups and one control group. Then, each of the treatment groups was treated simultaneously as a group in the treatment class at the women's clinic. After the last session of intervention, the women of all three groups answered the mentioned questionnaires again in the post-test and follow-up stages. VSST for women with vaginismus and conventional ST each during 10 sessions of 90 minutes two sessions per week (in total during 5 consecutive weeks) was intervened by an experienced ST therapist with more than several years of treatment experience. The control group did not receive the treatment until the end of the training of the two groups. The VSST for women suffering from vaginismus has been used for the first time in this compilation study and after initial content, scientific and professional validation. The process of compiling VSST was that, first, through in-depth interviews and content analysis of the texts in this field, through the analysis of the Attride-Stirling topics network (24), the necessary organizing and basic topics for ST for women with vaginismus were extracted. At this stage, CVR calculated by three independent coders was equal to 1. After that, the therapeutic techniques for each of the subjects were extracted through conventional content analysis and then by an expert panel consisting of 6 psychologists with more than 10 years of treatment experience, the combination of therapeutic techniques to improve women's mental health for 10 sessions. The order of determination and initial treatment package was prepared. Then, the compiled package was reviewed by six expert judges in the field of health psychology and after applying the corrections of the judges, the overall agreement coefficient of 0.9 was obtained for the treatment package. After expert approval, during a pilot study, the preliminary effectiveness of the designed package was implemented on six women suffering from vaginismus disorder, and the initial validity of the package was confirmed. ST group was also treated through a validated treatment package, Young's schema therapy package in Iran (17). The summary of the sessions of both interventions used is presented in Tables 1 and 2.

Table 1: Description of VSST (19)

Sessions	Brief description of therapy sessions
1	Analyse childhood thoughts
2	Empty chair technique for dialogue between the healthy aspect and the schema
3	Evaluating the underlying traumatic emotional experiences in the form of a special schema model
4	Mental imagery technique for unsatisfied emotional needs, conceptualizing the mental image in the form of a schema
5	Imaginary conversation technique for emotional deprivations of therapy-seekers
6	Implementing the technique of pleasant/unpleasant experiences to get rid of depression
7	Treating boredom towards oneself, feeling tired related to depressed mood
8	The connection between thoughts and feelings and the body through mental scanning
9	Breathing exercise technique to control anxiety in the context of vaginismus, transcendental meditation technique
10	Examining the factors that make sexual performance difficult, treating the schemas that cause sexual performance problems

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Table 2: Description of ST (17)

Sessions	Brief description of therapy sessions
1	Making a list of the client's main problem and other problems in his life.
2	Investigating the life history schemas in childhood.
3	Examining the relationship between the initial maladaptive schemas and current life problems.
4	Case conceptualization of schemas, coping styles and clients' mentalities
5	Implementation of cognitive techniques to change incompatible schemas.
6	A new definition of schema-confirming evidence.
7	Examining the advantages and disadvantages of incompatible schemas and coping styles
8	Preparation of schematic flash cards.
9	Implementation of experimental techniques to change incompatible schemas.
10	Implementation of behavioral techniques to practice identifying new behaviors.

In the statistical analysis of the data, at the descriptive level of the mean and standard deviation, and the inferential level, after checking the normality of the data distribution through the Shapiro-Wilk test, the equality of error variances through the Levine test, checking the default the equality of the variance-covariance matrix was determined through M-box test, analysis of variance of repeated measures ANOVA, and then Bonferroni's post hoc test. The data was analyzed through SPSS-22. The acceptable level of significance used in the present study was considered to be at least 0.05 and at most 0.001.

Findings

The three research groups were compared with each other in terms of age, education status, and occupation through a chi-square test. The result of this analysis showed that there is no significant difference in the mentioned demographic variables between the three research groups. The mean results of the self-assertiveness and sexual self-esteem of women showed that the two treatment groups showed more changes than the control group in the post-test and follow-up (45 days after the end of the intervention) (Table 3).

Table 3: Mean and standard deviation of self-assertiveness and sexual self-esteem in research groups in three-time stages

value	time	VSST group		ST group		control group		Sig
		Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation	
Sexual self-assertiveness	Pre-test	64.40	3.96	64.60	5.38	66.13	7.80	0.001
	Post-test	115	2.03	108.13	4.76	65.53	4.95	0.001
	Follow-up	113.3	3.29	100.33	12.75	46.53	4.53	0.001
Sexual self-esteem	Pre-test	25.13	7.96	25.07	5.87	25.27	6.05	0.001
	Post-test	130.67	3.73	120.13	8.90	26.13	6.91	0.001
	Follow-up	128.40	6.15	99.20	11.82	27.13	7.29	0.001

Before implementing the analysis of the variance of repeated measures, the statistical assumptions of this analysis were examined. The results of the Shapiro-Wilk test in self-assertiveness and sexual self-esteem indicated that the distribution of these two variables was significant (p=0.001) and the results of the Levine test also indicated that the variance of the study groups in self-assertiveness and sexual self-esteem was equal (p=0.001). The M-box test for self-assertiveness and self-esteem sexual indicated the equality of the variance-covariance matrix and the interaction of group membership with the pre-test also indicated the equality of the slope of the regression lines (p=0.001). According

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to the results related to the mentioned presuppositions, the results of the analysis of variance of repeated measures showed that in the part of the intra-group effect, the time factor and its interaction and group membership show that in both the variables of self-assertiveness and self-esteem sexual, There is a significant difference in terms of time and the interaction of time with the three research groups (p=0.001). This result shows that for both factors of time and its interaction with the group, 90 and 97% of the difference in sexual self-assertiveness and 83 and 94% of the difference in sexual self-esteem were related to the actions of the independent variable (one of the two treatments in the research). Both of which are confirmed with 100% power. Also, as seen in Table 4 in the intergroup effect section, there is a significant difference (p=0.001) in both sexual self-assertiveness and self-esteem variables in the group factor. The parametric Eta square for the group factor is equal to 0.93 and 0.97, respectively, and the power of the test is equal to 1. This means that the variance analysis performed with 100% power has shown a significant difference of 93% and 97% between at least one of the experimental groups (VSST & ST) and the control group in sexual self-assertiveness and self-esteem (Table 4).

Table 4: Results of variance analysis of repeated measures ANOVA for self-assertiveness and sexual self-esteem

Value	The source of the effect		The sum of the squares	df	The mean of the squares	F	Sig	Eta	Power
Sexual self-assertiveness	Intergroup	Time	26263.51	1.24	21220.59	379.49	0.001	.90	1
		Time × Group interaction	14708.44	2.47	5942.12	106.26	0.001	.83	1
		Error(time)	2906.71	5.98	55.92	-	-	-	-
	Extra group	Group	26023.24	2	13011.62	272.41	0.001	.93	1
		Error	2006.09	42	47.76	-	-	-	-
sexual self-esteem	Intergroup	Time	12151.1	1.08	11241.538	130.155	0.001	.97	1
		Time × Group interaction	62387.67	2.16	28859.86	335.05	0.001	.94	1
		Error(time)	3910.22	4.405	86.13	-	-	-	-
	Extra group	Group	12023.732	2	60116.36	794.51	0.001	.97	1
		Error	3177.91	42	75.66	-	-	-	-

To determine the pairwise difference between the three research groups, Bonferroni's post hoc test was performed. The results of the Bonferroni test showed that in the variables of sexual self-assertiveness and self-esteem, between pre-test and post-test and follow-up and between post-test and follow-up and at the same time between the two treatment groups and the control group (p=0.001) and between There is a significant difference between VSST and ST (p=0.001). Therefore, according to the presented results, whether the effectiveness of the VSST and conventional ST is different in sexual self-assertiveness and self-esteem in women with vaginismus? the answer is as follows. There is a significant difference between the pre-test and post-test and between post-test and follow-up and at the same time between the two treatment groups with the control group (Table 5).

Table 5: The results of the Bonferroni follow-up test to compare research groups for self-assertiveness and sexual self-esteem

Value	Source	Base Group	Compared group	Mean difference	SE	Sig
Sexual self-assertive	**Time**	Pre-test	Post-test	-31.18	0.95	0.001
		Pre-test	Follow-up	-27.69	1.66	0.001
		Post-test	Follow-up	3.49	0.98	0.003
	Group	VSST	ST	6.56	1.46	0.001

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		VSST	Control	32.18	1.46	0.001
		ST	Control	25.62	1.46	0.001
self-	**Time**	Pre-test	Post-test	-67.16	1.58	0.001
		Pre-test	Follow-up	-59.42	1.86	0.001
		Post-test	Follow-up	7.73	0.49	0.001
Sexual esteem		VSST	ST	13.27	1.83	0.001
	Group	VSST	Control	68.89	1.83	0.001
		ST	Control	55.62	1.83	0.001

Discussion

This study, which was carried out to compare the effectiveness of the VSST with the conventional ST on the sexual self-assertiveness and self-esteem of women with vaginismus disorder, showed the effectiveness of the two treatments in significantly improving sexual self-assertiveness and self-esteem. In other words, it can be said that according to the comparison of the means of the two intervention groups with the control group, the VSST had a greater effect on improving self-assertiveness and sexual self-esteem than the ST.

Vaginismus, characterized by involuntary pelvic floor muscle contractions during attempted vaginal penetration, poses significant psychological and emotional challenges for affected women. This condition not only disrupts sexual intimacy but can also lead to diminished self-esteem and feelings of inadequacy. Therefore, effective therapeutic interventions are essential for restoring sexual health and enhancing overall well-being.

The findings of this study underscore the potential advantages of the VSST with the conventional ST While ST has long been recognized for its role in reducing anxiety and enhancing intimacy through gradual exposure, it often emphasizes partner involvement and may inadvertently reinforce feelings of pressure or inadequacy. In contrast, VSST empowers women to take control of their own sexual experiences in a safe and private setting. This autonomy can foster a sense of agency that is particularly beneficial for those grappling with vaginismus. In matching the results of the present research with similar research, although due to the newness of the VSST, no research was found that completely matches this research from the point of view of the subject; But considering the general orientation of the interventions, with the present study, it can be said that the results obtained from this study regarding the effectiveness of conventional ST on increasing women's sexual self-assertiveness and self-esteem are in line with the findings of previous studies regarding the effectiveness of using cognitive behavioral therapy and special health education for marital relationships. Its beneficial effect on sexual self-assertiveness (13 & 21) and the effectiveness of ST for vaginismus on other variables related to marital relations, such as sexual schemas and marital adjustment (18), are consistent. The results of another study about the relationship between early maladaptive schemas and sexual self-esteem in females showed that couple therapy based on acceptance and commitment and cognitive self-compassion were significantly effective on sexual adjustment and self-esteem compared to the control group (25). According to the schema concept of Beck, 1996, most likely, when the incompetence schema is activated in a sexual situation, people actively seek schema-congruent cues, ignore conflicting stimuli, and exaggerate the negative interpretation of the event. (For example, “I am incompetent”, “I am ineffective”, and “I am a failure” (26).

The mechanisms through which VSST enhances sexual self-assertiveness and self-esteem merit further exploration. Engaging in self-stimulation allows women to cultivate body awareness and comfort with their own anatomy, which is crucial for overcoming the fear and anxiety associated with penetration. By normalizing the experience of pleasure and reducing performance pressure, VSST may facilitate a more positive self-image and greater sexual confidence. This empowerment can translate into improved communication with partners, leading to healthier sexual relationships.

Our findings align with existing literature that emphasizes the importance of self-exploration in overcoming sexual dysfunction. Research has demonstrated that interventions promoting body positivity and sexual self-acceptance can significantly improve sexual functioning and emotional well-being. For instance, studies have shown that women who engage in self-exploration report higher levels of sexual satisfaction and self-esteem. By situating our results within this broader context, we reinforce the argument that VSST represents a viable alternative or complement to traditional therapeutic approaches.

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The implications for clinical practice are profound. Therapists working with women experiencing vaginismus should consider integrating VSST into their treatment protocols. Not only does this technique provide a practical tool for overcoming physical barriers to penetration, but it also addresses the psychological components of sexual dysfunction. By promoting self-assertiveness, clinicians can help patients reclaim their sexual identities and foster healthier relationships.

In explaining this research finding, it can also be said that the main goal of the VSST for the sexual self-esteem of women with vaginismus disorder indicates the effect of ST to adjust the schemas that cause weak sexual self-esteem, such as abandonment/instability, emotional deprivation, the criteria were stubbornness/extreme fault-finding, mistrust/abuse, social isolation/alienation, failure, dependency/incompetence and punishment. VSST through the representation of schemas forming weak sexual self-esteem at the active conscious level and overcoming the emotional distance, provided the context for a real sense of value associated with sexual self-esteem. The use of cognitive techniques was able to improve the cognitive distortions of women with vaginismus to increase the sexual self-esteem of women. These cognitive changes, along with behavioral changes and corrective emotional experiences, ultimately led to the adjustment of schemas of the increase of sexual self-esteem.

In explaining the results of the present study regarding the effectiveness of VSST for women with vaginismus on the sexual self-assertiveness of women with vaginismus disorder, the content and application orientation of this type of treatment in the form of specialized techniques is very important. In the approach of special schema therapy, emotional and cognitive issues are the main foundations of problems. Therefore, the main focus of the therapy was on emotional and cognitive problems, solving depression problems, solving physical problems, solving anxiety problems. In explaining this research finding, it can be said that the main goal of the VSST introduces sexual self-assertiveness as one of the main components of sexual performance and addresses verbal and non-verbal openness such as expressing emotions and sexual needs in women through strengthening adult and healthy mentalities. VSST improves the ability to express feelings, beliefs, pleasant and unpleasant emotions, make suitable decisions and fulfil desires.

Conclusion

In conclusion, the findings from this study highlight the potential of the Vaginal Self-Stimulation Technique as an effective intervention for enhancing sexual self-assertiveness and self-esteem in women with vaginismus disorder. By empowering women to explore their sexuality on their own terms, VSST offers a promising alternative to conventional Sensate Focus Therapy. As clinicians continue to seek effective strategies for treating vaginismus, embracing innovative approaches like VSST could lead to more positive outcomes for patients, ultimately fostering healthier sexual relationships and improved emotional well-being.

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Ethical Considerations

This research is taken from the doctoral dissertation in psychology and has the approval of the ethics committee from the secretariat of the academic committee of ethics in biome research, with license number (IR.IAU.KHUISF.REC.1400.228). Also, this research has been registered in the Iranian Clinical Trial Registration Center (IRCT) with the **IRCTID: IRCT20211120053113N1**

Conflict of interest

The authors of this paper do not have any conflict of interest in the article. Furthermore, the paper is done at personal expense.

Authors' contributions

Writing the initial version and final review: RK; Data Interpretation: Dr FKh; Main idea: RK; Study design and data collection: All authors.

Highlight

What is current knowledge?

Sexual self-assertiveness & self-esteem is important factors in women with vaginismus. Recent studies have shown an association between schema therapy and improved these factors. However, the effect of the VSST on sexual self-assertiveness & self-esteem in women with vaginismus has not been studied.

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What is new here?

The results of the research showed that the VSST for vaginismus can improve sexual self-assertiveness & self-esteem among women with vaginismus.

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