

Comparing Positive and Negative Emotional Experiences between Women with and without Vaginismus

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Abstract

Sexual disorders are among the problems that negatively affect people's well-being and mental health. The most common sexual disorders for women are loss of libido, dyspareunia (painful intercourse) and vaginismus (spasm in the pelvic floor muscles). The present study was conducted to compare the positive and negative emotional experiences between women with and without vaginismus. In this causal-comparative study, 100 women with vaginismus were selected via random sampling method from among women referring to women's health centers. Then, two equal-sized groups of women with and without vaginismus (100 women in each group) were formed and examined via the Positive and Negative Affect Scale (PANAS). The ANCOVA results indicated that both groups of women were experiencing similar levels of positive emotions; but, women with vaginismus were experiencing more negative emotions.

Keywords: Positive Emotional Experience, Negative Emotional Experience, Sexual Disorders, Vaginismus.

INTRODUCTION

Marital satisfaction and happiness of a woman increase her self-esteem and self-confidence, causing her to establish a constructive relationship with her husband: a relationship that brings peace to both sides. Healthy sexual behaviors represent complex interactions between the nervous system and various psychological and physical factors. A healthy sexual response cycle and the experience of positive emotions play a decisive role in the psychological well-being of individuals, especially married ones. However, women with vaginismus are deprived of having a healthy sex life, and in addition to experiencing negative emotions, they face mental health problems and risks in marital affairs, especially marital conflicts with their husbands [1]. Sexual disorders are among factors that negatively affect well-being and psychological health. The most common sex-related disorders in women are the loss of libido, dyspareunia (painful intercourse), vaginismus (spasm in the pelvic floor muscles) and not experiencing sexual satisfaction. Several factors contribute to decreased marital satisfaction, and vaginismus is one of them; vaginismus is an independent predictor of divorce. Vaginismus is described as a sudden and painful vaginal contraction during sexual intercourse. This problem is caused by the contraction of the pelvic floor muscle, over which patients have no control. This contraction may happen during vaginal examination impeding the insertion of the speculum into the vagina. Some physicians do not consider painful intercourse as a sexual disorder, and hence, do not give adequate medical attention to patients with such a problem. Sometimes, psychotherapy is required before performing any

physical examination [2]. Women suffering from vaginismus have already experienced negative emotions due to their painful sexual activities. These sex-related false beliefs and negative emotions reduce marital satisfaction and psychological well-being, and eventually, lead to various psychological/mental illnesses, especially depression and mental health problems [3]. Emotion is experienced when a person is surprised, or becomes intolerant of the current situation. In fact, emotion denotes the lack of an individual's adaptability to a situation, or the effort of an organism to recreate the temporarily gone balance. Therefore, it can be said that the overall purpose of emotion is to create balance, maintain the organism's existence, and warn to watch psychological well-being and mental health [4]. Those who better express their emotions, also experience higher levels of marital satisfaction and sexual pleasure, less marital tensions,

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and lower rates of divorce, as they more effectively deal with their marital conflicts^[5]. Women, capable of controlling their negative emotions, can better deal with transient negative emotions and reduce the rates of negative emotional exchanges; thus, they experience higher levels of marital satisfaction. Women's capability of managing and regulating negative emotions is a predictor of their husbands' higher levels of marital satisfaction in the long run^[6]. Mohammadi *et al.* (2016) examined the effectiveness of cognitive-behavioral therapy in reducing anxiety in patients with vaginismus^[7]. They showed that having a favorable sexual relation, ensuring both parties' satisfaction, plays a very important role in the success and sustainability of a marriage. Khojastehmehr *et al.* (2015) found a positive relationship between negative emotional experiences and destructive marital exchanges in women^[8]. They explained that positive emotional experiences could modify the mentioned relationship. Motieian *et al.* (2014) examined the relationship between codependency and emotional regulation difficulties among women in Isfahan^[9]. According to their results, the relationship between emotional regulation difficulties and genital diseases in women was statistically significant, and significant multilayered relationships existed between the components of emotional regulation difficulties and codependency. Moreover, they found that components of emotional regulation difficulties could be predicted by the components of codependency. In their study, Moniek *et al.* (2017) attempted to study if women with vaginismus can ever experience pleasurable sexual intercourse with positive emotions^[10]. They reported that relaxation education while experiencing positive emotions was a successful treatment for those patients. In a study on the role of sexual counseling in the treatment or prevention of sexual dysfunction in women with vaginismus, Okomo *et al.* (2017) found that experiencing pain or painful intercourse and negative emotions during sexual intercourse prevented women from achieving orgasm^[11]. They reconstructed negative emotional experiences of their examined women via intervention and reported that the intervention was effective in reducing the negative effects of negative emotions on their participants' sex lives. Sexual disorders are associated with psychological problems -e.g., depression and anxiety; they also represent essential aspects of psychopathology. Thus, studying sexual disorders/complications -e.g., vaginismus- and examining women's mental health are very important factors in the success of marriages^[11]. Accordingly, this study aimed to compare positive and negative emotional experiences between women with and without vaginismus. Vaginismus is a problem that affects the amount of positive/negative emotional experiences and level of marital satisfaction, as establishing positive emotional relationships and expressing emotions in the right time can strengthen marital life, ensure women's mental health and enhance their knowledge of their psychological and emotional characteristics. However, if women do not express their emotions due to vaginismus, they will face higher levels of emotional tensions and more negative emotions in their marital relationships. In other words, women with vaginismus have problems in

establishing emotional relationships with their husbands, can not express their positive emotions, and experience severe negative emotions, which may also affect their mental health when dealing with social and friendship-related matters (they need to be further studied in the contexts of well-being and psychology)^[11].

METHODOLOGY

Design of the Study

The present study had a retrospective causal-comparative design.

Participants

The statistical population of the study included all women referring to Sina Obstetrics and Gynecology Center, in which vaginismus could be diagnosed. The sample size was determined using Morgan's table. Then, the samples were selected from among the whole population via purposeful random sampling method. Thus, 100 women with vaginismus and 100 without it entered the study. Then, they were divided into two equal-sized groups of experimental and control. In the next stage, the questionnaires were distributed among the participants after explaining the study's subject, getting the study-related permissions and ensuring the participants that their information would remain confidential. The inclusion criteria were having a medical profile at Sina Obstetrics and Gynecology Center, completing three questionnaires, being married and being diagnosed with vaginismus. The ethical criteria were getting a research permit from Saveh University of Science and Research, obtaining informed consent forms from the participants and observing the principle of confidentiality of subjects' information.

Instrument

The required data in this study were collected via the Positive and Negative Affect Scale (PANAS). The PANAS is a 20-item self-report scale designed to measure the two mood dimensions of positive and negative affect. By changing instructions, the PANAS can be used to measure both state and trait characteristics. If the timespan is selected as the moment or the current week, the results indicate an individual's affectual state; but longer timespans indicate the individual's affectual traits. In 1988, Watson, Clark, and Tellegen developed the PANAS to assess the two mentioned mood dimensions. The PANAS has 20 items, rated on a 5-point scale, ranging from 1 (not at all) to 5 (very much); thus, the range of possible scores for each subscale is 10-50.

- **Reliability and Validity of the PANAS**

The internal consistency coefficients for the subscale of positive and negative affect were respectively 0.88 and 0.87. Test-retest reliability coefficients of the PANAS over an 8-week interval have been reported as 0.68, for the subscale of positive affect, and 0.71, for the subscale of negative affect, indicating the internal validity of the scale (Watson, Clark, and Tellegen, 1988; quoted in Beirami *et al.*, 2013).

Research Procedure

Every participant signed an informed consent form, and then completed the study’s questionnaire at Sina Obstetrics and Gynecology Center.

Data Analysis

In this study, descriptive statistics (Mean and Standard Deviation (SD)) were used to analyze the collected data, and inferential statistics (MANOVA and Scheffe post hoc test) were used to answer the research questions. The whole data analysis process was conducted using SPSS, version 21, software.

RESULTS

The purpose of the present study was to compare positive and negative emotional experiences between women with and without vaginismus. The distribution of participants in terms of group membership has been shown in Table (1).

Table 1. The distribution of participants in terms of group membership

Group	Frequency	Percentage
Women with vaginismus	100	50
Women without vaginismus	100	50
Total	200	100

The distributions of participants in terms of educational level and age have been presented in Table (2). As can be seen, the highest and the lowest percentages of educational level in the group of women with vaginismus were respectively related to BS/BA (n=45; 45%) and MS/MA (n=13; 13%) groups; and in the group of women without vaginismus, the highest and lowest percentages of educational levels were respectively related to BS/BA (n=42; 42%) and below high school diploma and high school diploma (n=11; 11%) groups. Moreover, in the group of women with vaginismus, the most and the least frequent age groups were respectively 41-50 (n=47; 47%) and 50/50< years (n=14; 14%); and, in the group of women without vaginismus, the most and the least frequent age groups were respectively 30-40 (n=45; 45%) and 50/50< years (n=18; 18%).

Table 2. The distribution of participants in terms of educational level and age

Variable	Group					
	Women with vaginismus		Women without vaginismus		Total	
	F	%	F	%	F	%
Below high school diploma and high school diploma	14	14	11	11	25	12.5
Associate degree	28	28	27	27	55	27.5
BA/BS	45	45	42	42	87	43.5

Age group (year)	MA/MS	13	13	20	20	33	16.5
	Total	100	100	100	100	200	100
30-40	39	39	45	45	84	42	
41-50	47	47	37	37	84	42	
50 & 50<	14	14	18	18	32	16	
Total	1001	100	100	100	200	100	

Descriptive statistics, including means, SDs, and positive/negative emotions scores of women with and without vaginismus, have been presented in Table (3).

Table 3. Mean, SD, and positive/negative emotions` scores of women with and without vaginismus

Variable	Subjects	Indices		Mean	SD	N
Positive emotions	Women with vaginismus	35.13	8.80	100		
	Women without vaginismus	36.60	8.62	100		
	Total	35.36	8.69	200		
Negative emotions	Women with vaginismus	33.45	7.36	100		
	Women without vaginismus	28.15	5.08	100		
	Total	30.30	6.24	200		

The results of Leven’s test have been presented in Table (4).

Table 4. The results of Leven’s test assessing the equality of variances for the study’s variables’ scores

Variable	F	First df	Second df	Sig.
Positive emotions	1.82	1	198	0.178
Negative emotions	0.778	1	198	0.379

The results of Kolmogorov Smirnov test to assess normal distribution of the study’s variables’ scores have been presented in Table (5). As can be seen, the null hypothesis concerning the equality of variances in the two groups was confirmed. Therefore, the scores were distributed normally in both groups. However, when the size of the sample is equal in both groups, the significance of Leven's test has no significant impact on the alpha level. As can be observed in Table (5), the null hypothesis concerning the normal distribution of the study’s variable’s scores was confirmed. As the number of samples increased, the abnormal distribution of some variables seemed natural.

Table 5. The results of Kolmogorov Smirnov test to assess the normal distribution of the study’s variables’ scores

Normal distribution of scores	Kolmogorov Smirnov test		
	Statistic	N	Sig.

Positive emotions	0.687	200	0.733
Negative emotions	1.22	200	0.073

In Table (6), the results of one-way ANOVA concerning positive/negative emotional experiences in women with and without vaginismus have been shown. As can be seen, no significant difference was detected between women with and without vaginismus in terms of positive emotions ($F=2.90$, $P=0.090$). In other words, according to the means of the two groups, women with and without vaginismus were experiencing almost similar positive emotions; but a significant difference was observed between women with and without vaginismus in terms of negative emotions ($F=14.026$, $P=0.873$). In other words, according to the means of the two groups, women with vaginismus were experiencing more negative emotions than women without vaginismus.

Table 6. The results of one-way ANOVA concerning positive/negative emotional experiences in women with and without vaginismus

Variable	Sum of squares	Df	Mean of squares	F	Sig.
Positive emotions	898.42	1	898.42	2.90	0.090
Negative emotions	1145.04	1	1145.04	14.026	0.0001

DISCUSSION AND CONCLUSION

According to the results of this study, there was no significant difference between women with and without vaginismus in terms of positive emotional experiences. In other words, according to the means of the two groups, women with and without vaginismus were experiencing almost similar positive emotions. This finding, however, was not in line with what Azuki (2012), Rajabi and Abbasi (2014) and Hasanzadeh *et al.* (2010) reported. To explain these contrary results, it can be said that positive emotional experiences can greatly enhance people's physical health. Considering the issue that emotional stimulation may have implications for physical health, it can be concluded that positive emotional experiences may increase the intensity of the immune system's responses. Therefore, unpleasant events reduce the immune system's sensitivity by increasing negative emotions, while pleasant events increase the immune system's sensitivity by reducing the number of negative emotions. Hashemian *et al.* (2016) showed that among individuals exposed to a respiratory virus, those who were experiencing more negative emotions, were also suffering from more acute illnesses in response to that virus than those experiencing a more positive mood^[12].

Positive emotional experiences can have immediate effects on some aspects of the immune system; but, the duration of those effects have not been detected yet. Nevertheless, there is some evidence that some of the patterns that individuals employ are related to the maintenance of a desirable/undesirable physical condition. For example, more

funny and hilarious people show higher levels of the immune system's sensitivity or those exposed to acute stressors for more than a month are more likely to become infected with a cold.

Concerning the psychological effects of positive emotional experiences, it can be said that expressing positive emotions leads to the feelings of satisfaction, happiness, vitality, intimacy, and sympathy for others, and helps people be less vulnerable to negative emotions. A study on marital affairs showed that girls, who express their positive emotions more, probably get married sooner; they are also less exposed to sexually transmitted diseases such as vaginismus. In general, people who are more expressive of their positive emotions, feel higher levels of marital/sexual satisfaction, experience fewer tensions, and are less likely to get divorced because they can resolve their marital conflicts more effectively^[5]. Frederickson pointed out that positive emotions create people's personalities by developing their creative thinking skills, preparing them for taking advantage of the existing opportunities, strengthening their social bonds and neutralizing the effects of their negative emotional experiences^[13]. The expression of positive emotions leads to the emergence of some personality traits such as acceptance and perceived self-efficacy, which can be indicative of adequate cognitive and interpersonal skills. Those who have the ability to express their emotions, are more mentally focused; they focus on their progress; are less vulnerable to repeated negative emotional experiences; and are more courageous and extroverted^[14]. The facial expression of emotions shapes the structure of social interactions by transferring information about feelings and social goals to others and stimulating their emotional responses. Typically, people enjoy interacting with people who can express their positive emotions. Emotional regulation strategies, usually activated before a stressful situation, result in the interpretation of the situation in a way that reduces the emotional responses associated with that condition. The threat to mental health is one of the most important problems of the present century. Today, a verity of physical and mental illnesses are threatening human life. When a person faces an emotional situation, in addition to be optimistic and hopeful, s/he needs to have the best possible cognitive functioning. In fact, negative emotional regulation requires an optimal interaction between cognition and emotion, since humans interpret whatever they face, and their cognitive interpretations determine their reactions to different situations. According to Gross (2005), negative self-beliefs are the main causes of depression. Such negative attitudes constitute the main component of mood disorders, which are also caused by changes in each of the sections of the cognitive system, including memory, attention, and awareness. Thus, the role of cognitive regulation of emotions in people's adaptability to stressful situations cannot be ignored. According to Wells (2007), even in the most recent approaches, defective cognitive control is the main cause of emotional disorders; therefore, disability in controlling negative emotions occurs due to the existence of negative

thoughts and false beliefs about the use of ineffective coping strategies.

The results of previous studies indicated that people's capacity for effective regulation of their emotions affects their psychological, physical and interpersonal happiness. For instance, symptoms of impaired cognitive regulation of emotions occur in more than half of the axis I disorders, and in all axis II personality disorders. Research evidence also suggested that problematic regulation of emotions (e.g. showing anger and anxiety) is involved in the incidence of physical problems, such as cardiovascular and gastrointestinal diseases. For this reason, the topic of emotional regulation strategies has attracted the attention of many researchers, theorists, and clinical experts. These experts consider perceived self-efficacy as an important factor in emotional regulation and the identification of its underlying factors. Emotional regulation is an intrinsic aspect of emotional response tendencies. In fact, emotional regulation refers to activities done to change or modify an emotional state. In psychological texts, this concept is often used to describe the process of negative affect adjustment. Although emotional regulation can involve conscious processes, it does not necessarily require awareness and obvious strategies. Emotional regulation plays a vital role in emotional management. The results of this study showed that, according to the mean scores of the two groups, women with and without vaginismus had almost similar positive emotions.

The results of this study showed a significant difference in negative emotions between women with and without vaginismus. In other words, according to the mean scores of the two groups, women with vaginismus were experiencing more negative emotions than women without it. This finding was not consistent with the results of Anderson (2012) and Atadokht *et al.* (2014) studies. To explain the result of this hypothesis, it must be reminded that inhibiting the expression of negative emotions has a significant impact on the incidence of coronary heart diseases. The researchers reported that patients with arthritis and rheumatism, who had talked about their stressful life events, had better physical performance three months after their expression of emotions. Oral or written assignments (concerning emotional expression) played an important role in enhancing those patients' ability to cope with their stressful life events. Their results suggested that the physical performance of those patients improved as a result of expressing their positive and negative emotions. Those patients could repeat their positive emotional experiences. They were also less expected to become ill and use medication after experiencing a stressful event^[15].

People consider their emotional states as a source of information. On the other hand, people's emotions can easily be changed by the information coming to their minds. Emotion is highly affected by the recognition or interpretation of physical symptoms. To prove this, people's moods were systematically manipulated and the effects of those manipulations were examined on physical symptoms.

As a result, those who were forced to feel sad, showed more negative physical symptoms than those experiencing happiness. Physical symptoms are also incentives for people to regain their health or seek illnesses. For instance, based on the results of this study, joyful people with more positive emotions considered themselves less vulnerable than others; they also felt more capable of reliving their illnesses. On the other hand, gloomy people with more negative emotions suffered from more severe and distressing symptoms; they were also less likely to seek solutions to improve their physical states. Emotional experiences provide people with information about their surrounding environment. Positive emotional experiences indicate a safe environment, while negative emotional experiences indicate that there are aspects of the environment that need to be corrected or modified. The interesting point here is that people with positive and negative emotional experiences have different attitudes towards their physical symptoms. Happy people pay less attention to their unpleasant physical symptoms, and may even be less likely to seek treatment for those symptoms, while sad people are more sensitive to their negative physical symptoms, and seek medical care and medication. Experiencing positive emotions increases optimism, and optimist people perform more effectively when they have physical problems. They better respond to medication therapies and can plan for the future of those therapies. The results of a study on patients, who had undergone heart surgery, revealed that optimist patients had more healthy habits for taking their medications and vitamins, observing their diets and attending cardiac rehabilitation programs five years after their surgeries. Moreover, patients with positive emotional experiences and optimistic views spend more time on studying and collecting information about their diseases than those with negative emotional experiences and pessimistic views. Optimist patients also have a better memory of information they collect information more than pessimist patients. When faced with severe diseases -like cancer-, optimist patients have a more positive affect and can use their psychological capabilities more effectively to deal with their diseases and their consequences^[12].

People with negative emotional experiences have a higher tendency to become addicted to a variety of things. Because addictive substances give them a chance to escape from themselves and help them experience negative emotions more slowly. Their addiction can range from strong substances to cigarette, and even chocolate^[16]. Experiencing either positive or negative emotional experiences yields different consequences even in terms of receiving or not receiving social support. Individuals with positive emotional experiences enjoy a more rigorous social support network because others consider them more attractive and support them more strongly. In a study, more emotionally positive patients diagnosed with hepatitis responded better to the treatment than emotionally negative ones, because the latter group had a weaker social support network. People with positive emotional experiences have more positive feelings towards themselves, their environments, and others.

Cognitive regulation of emotion implies the cognitive way of emotion-based information manipulation or refers to the ways people think after the occurrence of negative events. In the face of an emotional situation, in addition to be optimistic and hopeful, people need to have the best possible cognitive functioning in order to regulate their emotions. In fact, negative emotional regulation requires an optimal interaction between cognition and emotion, since humans interpret whatever they face, and their cognitive interpretations determine their reactions to different situations. According to Gross (2005), negative self-beliefs are the main causes of depression. Such negative attitudes constitute the main component of mood disorders, which are also caused by changes in each of the sections of the cognitive system, including memory, attention, and awareness. Thus, the role of cognitive regulation of emotions in people's adaptability to stressful situations cannot be ignored. Therefore, it was shown that, according to the mean scores of the two groups, women with vaginismus had more negative emotional experiences than women without it.

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