

# Predicting Female Sexual Dysfunction based on the History of Child Abuse and Sexual Shame of Women in Iran

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| ARTICLE INFO   | ABSTRACT  |
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| Article type:<br>Original article                                  | <b>Background &amp; aim:</b> Sexual dysfunction can cause many injuries and problems for people and adversely affect their marital relationships. Addressing women's sexual issues is very important in light of sociocultural issues. To this end, this study aimed to predict female sexual dysfunction based on a history of child abuse (sexual, physical, and emotional) and sexual shame.   |
| Article History:<br>Received: 02-Dec-2022<br>Accepted: 08-Dec-2023 | <b>Methods:</b> This predictive correlational study was conducted on 402 women who were selected by voluntary sampling in Ahvaz, Iran in 2021. The data were collected using the Female Sexual Function Inventory (FSFI), NorVold Abuse Questionnaire (NorAQ) and Kyle Inventory of Sexual Shame (KISS). Based on the cut-off score of the FSFI, the women were divided into two groups with and without sexual dysfunction. Data analysis was performed using stepwise and discriminant analysis.  |
| Key words:<br>Child Abuse<br>Sexual Dysfunction<br>Female<br>Shame | <b>Results:</b> The data showed a significant difference between the women with and without sexual dysfunction in terms of child abuse (sexual, physical, and emotional) and sexual shame ( $P < 0.001$ ). Moreover, child abuse and sexual shame could, together and separately, discriminate the women with and without sexual dysfunction.<br><b>Conclusion:</b> Given the role of history of abuse and sexual shame in explaining women's sexual dysfunction, preventive interventions need to be implemented for women to reduce sexual, physical, and emotional abuse. Besides, effective training for women can reduce sexual shame. Moreover, therapeutic interventions need to be conducted to reduce the previous effects of sexual abuse and sexual shame, which could consequently, reduce sexual dysfunction in women. |

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## Introduction

Marriage is typically the most significant event in a person's life that develops intimacy and social relations and reinforces their impacts. People marry to meet their needs. Thus, if couples cannot meet their needs they may suffer

from stress, failure, frustration, anger, and eventually boredom. Female sexual function depends on the physical, emotional, and psychological conditions of women and involves complex and dynamic interactions between

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these variables (1). Sexual function is an important component of quality of life and is associated with mental and physical well-being and marital satisfaction (2). Sexual function is a part of human life and sexual health. The sexual function involves expressing sexual desire, sexual arousal, and orgasm that occur continuously in a person or couple and cause couples to fall in love or be loved. Female sexual dysfunction is a heterogeneous disorder that is clinically and significantly associated with sexual reactions or sexual pleasure experiences (3). In recent years, female sexual dysfunction has received more attention. It has a detrimental effect on a woman's quality of life and involves several disorders, so adequate screening and diagnosis of individuals with the disorder is essential before initiating effective treatment (4). Female sexual dysfunction involves impaired libido, arousal, orgasm, and genital pain that can lead to significant psychological distress. These disorders can severely affect relationships and overall quality of life (5).

Numerous factors are involved in developing female sexual dysfunction, including a history of sexual, physical, and emotional abuse (6-8). Child sexual abuse involves persuasion, seduction, and other provocations to force a child to engage in explicit sex or to simulate sexual acts. Survivors of sexual abuse usually tend to experience psychological and physical problems throughout their lives (9). Women exposed to abuse in their childhood/adolescence often experience high rates of sexual dysfunction. Evidence suggests that they often use avoidance coping strategies such as substance abuse, segregation, and emotional repression, which are probably factors that contribute to their psychological pathology (6).

Physical abuse means the deliberate use of physical force against a child, including beatings, kicking, shaking, biting, burning, poisoning, and suffocation often referred to as discipline or punishment (10). People who experience physical abuse in childhood are more prone to mental disorders, including major depressive disorder and posttraumatic stress disorder in adulthood (11).

Childhood emotional abuse, defined as verbal abuse or degrading treatment of a child

by an adult, is at the core of all types of abuse in children and creates a pattern of deep-rooted maladaptation between an adult and a child (12). Certain aspects of emotional abuse, such as constant swearing, shouting, criticizing, or humiliating a child, are easily visible but other issues such as unrealistic expectations, unreasonable demands on the child, or unfair behavior due to certain characteristics (e.g. physical disability), are not always visible. These aspects of emotional abuse can be developed due to childhood or life experiences with parents, caregivers, teachers, and others, but cause unintended harm to the child (13).

Moreover, sexual shame is one of the most important factors in sexual dysfunction. Sexual shame may be defined as shame that results from a negative evaluation of a person's sexual identity, behaviors, attractions, thoughts, or feelings. Cultural and educational factors can contribute to developing sexual shame as well as experiences of sexual abuse in childhood. Growing up in a strictly religious home, viewing pornography, homosexual experiences, rape, and unprotected and unrestrained sex are all factors that contribute to sexual shame (14). This phenomenon is formed through a social learning process that discriminates "natural" sex from deviant sex and thus is embarrassing (15). It involves feeling these negative emotions that are related to a person's current or past sexual thoughts, behaviors, or experiences (16) and attacks one's self-esteem because sex is rooted in one's identity and also creates a high level of self-awareness. Thus, when perceiving the fear of sexual deficiencies, a concealment process is activated so that others do not know the real self (17).

The relationship between sexual shame and sexual function can be explained by Barlow's cognitive model of sexual function, whereby negative influences and incompatible causal characteristics lead to distraction during sexual activity and impair sexual function. Although this model was originally developed through research on men, there is evidence that distraction also impairs women's sexual function (18). Sexual shame is a common phenomenon that most people experience at some point in their lives. Sexual shame can be painful for people, sometimes leading to a

tendency to withdraw from others. It is more intense and leads to an ongoing cycle when a person needs to withdraw or wants to hide parts of himself. Unresolved sexual shame is a shame that has not been explored before, and the person experiencing it may have difficulty coping with the resulting emotions. When experiences of early sexual shame occur, such as when parents tell a child that sex is dirty, adults receive the message that issues such as sex, menstruation, erection, and talking about and exposing genitals are taboo and shameful (19).

Sexual dysfunction in women is generally a specific disorder with a complex (psychological, socio-cultural, relational, and organic) pathology. Thus, therapists and women-related specialties should have high levels of knowledge and skills to treat sexual problems (20). Sexual dysfunction is a multifactorial disorder and is associated with decreased self-esteem, emotional well-being, and quality of relationships (21). Psychologists, counselors, gynecologists, and midwives can benefit from the findings of this study and conduct early and effective intervention and counseling programs to reduce the negative effects of sexual dysfunction on women's individual and married life and ensure women's mental health. Accordingly, the present study aimed to predict female sexual dysfunction based on the history of child abuse and sexual shame of women in Iran.

## Materials and Methods

The present study was a predictive correlational study. The research population included all married women aged 18 years and higher in Ahvaz in 2021. The research sample included 627 women (201 persons with sexual dysfunction based on the cut-off point of the Female Sexual Function Inventory (FSFI) and 426 persons without sexual dysfunction, who were selected using voluntary sampling. Then they divided into two groups of women with sexual dysfunction (N= 201) and without sexual dysfunction (N= 201), who were selected randomly from among 426 women to use discriminant analysis with equal groups. Meyers et al. recommended the smallest group sample size to be between 10 and 20 per predictor (22).

The inclusion criteria were as follows: being female, residing in Ahvaz, being at least 18 years old, being heterosexual, having at least a high school diploma, having been married for at least 6 months, six months after giving birth, not being pregnant, not feeding a child with breast milk, not having physical illness, and not taking drugs or any disease that affect libido.

The data were collected using the following questionnaires. Female Sexual Function Inventory (FSFI) (brief 19-item instrument) developed by Rosen et al. (2002), which measures female sexual function. It assesses six domains of women's sexual dysfunction: desire (2 items), arousal (4 items), lubrication (4 items), orgasm (3 items), satisfaction (3 items), and pain (3 items). The items in the inventory are scored on a 6-point Likert scale (from 0 to 5 except for the first factor, which is scored from 1 to 5). Items 8, 10, 12, 17, 18, and 19 are scored reversely (23). The minimum and maximum scores obtained by administering the instrument are 2 and 36, respectively. A score of 26 or less is taken as the cut-off score to diagnose women with sexual dysfunction. The reliability of the instrument assessed for each factor using the test-retest method varied from  $r = 0.79$  to 0.86. Besides, the internal consistency for the whole instrument measured using Cronbach's alpha was higher than 0.88. Amanelahi et al. (2008) estimated the reliability values using Cronbach's alpha, and the corresponding values for the factors varied from 0.70 to 0.91, and the related value for the whole instrument was 0.92. Moreover, the reliability values for the factors assessed using Cronbach's alpha vary from 0.73 to 0.83, and the corresponding value for the whole instrument was 0.91 (24). In the present study, the reliability of the instrument using Cronbach's alpha estimated 0.97.

NorVold Abuse Questionnaire (NorAQ) is a 10-item tool developed by Swahnberg and Wijma to assess sexual, physical, and emotional abuse. It has three subscales of sexual (4 items), physical (3 items), and emotional abuse (3 items). The respondents' answers are scored on a 4-point Likert scale: 1 (No), 2 (Yes in childhood), 3 (Yes in adulthood), and 4 (Yes in childhood and adulthood). The minimum and maximum scores of this instrument are 10 and

40, with a higher score indicating a higher incidence of abuse. The test-retest reliability of the questionnaire ranged from 0.84 to 0.95, and the validity for sexual abuse was -0.94/+ 0.94, the corresponding value for physical abuse was -0.79/+0.79, and the validity for emotional abuse was -0.87/+0.95 (25). In the present study, the reliability of the instrument estimated using Cronbach’s alpha was 0.78, (sexual abuse 0/65, emotional abuse 0/74, physical abuse 0/69).

Kyle Inventory of Sexual Shame (KISS) is a 20-item inventory that assesses the amount of shame resulting from sexual experiences (e.g. “I recount the painful sexual events in the past over and over in my mind,” “I feel I’m never good enough to talk about sex”, and “I think people look at me if they know about my sexual experiences”). The items are scored on a 6-point Likert scale ranging from 1 (strongly disagree) to 6 (strongly agree). A respondent’s minimum and maximum scores on the inventory are 20 and 120, respectively, with a higher score indicating the shame of sexual experiences. The scores on the Kyle Inventory of Sexual Shame provide evidence of its good internal consistency. Volk et al. (2016) reported a Cronbach’s alpha coefficient of 0.92 for the instrument (17). In the present study, the reliability of the instrument estimated using Cronbach’s alpha was 0.79.

The data in this study were collected online. After determining the research topic and receiving the code of ethics. The instruments

were prepared as online questionnaires and the link was posted on different online social media and networks, and the volunteers were asked to click on the link and answer the questions.

The data in the present study were summarized using descriptive statistics (mean, standard deviation, frequency, and percentage), and the research hypotheses were tested using synchronous stepwise discriminant analysis with SPSS 26 software.

**Results**

This study was conducted on 402 women aged over 18 years in Ahvaz. The age range of the participants was between 20 and 50 years (M=32.77 SD= 6.57), the mean age of marriage was 23.70±4.63, and the mean length of marriage was 9.07±7.11. Moreover, 5 women (1.2%) had a high school education, 67 persons (16.7%) had a diploma, 196 persons (48.8%) had a bachelor’s degree, 133 persons (28.1%) had a master’s degree, and 21 persons (5.2%) had a Ph.D. degree. The occupational status included housewife (186), self-employed (115), and employed (101).

Table 1 shows the descriptive statistics for sexual, physical, and emotional abuse and sexual shame in the two groups of women with and without sexual dysfunction. The data in this table (Skewness ≤ 3, and Kurtosis ≤ 10) confirm the requirements for performing discriminant analysis. Moreover, there was no correlation higher than 0.55 between the variables:

**Table 1.** The mean of predictor variables in the two groups of women with and without sexual dysfunction

| Predictor variables | Women with sexual dysfunction | Women without sexual dysfunction | Skewness |      | Kurtosis |      | Correlate |        |        |   |  |
|---------------------|-------------------------------|----------------------------------|----------|------|----------|------|-----------|--------|--------|---|--|
|                     | Mean (SD)                     | Mean (SD)                        | SK       | SD   | Ku       | SD   | 1         | 2      | 3      | 4 |  |
| 1- Sexual abuse     | 6.05(2.28)                    | 4.94(1.24)                       | 1.66     | 0.12 | 3.10     | 0.24 | 1         |        |        |   |  |
| 2- Physical abuse   | 4.97(2.29)                    | 3.95(1.60)                       | 1.47     | 0.12 | 1.51     | 0.24 | 0.27**    | 1      |        |   |  |
| 3- Emotional abuse  | 6.38(2.88)                    | 4.79(2.38)                       | 0.82     | 0.12 | -0.41    | 0.24 | 0.30**    | 0.55** | 1      |   |  |
| 4- Sexual shame     | 60.29(16.8)                   | 52.43(11.93)                     | 0.63     | 0.12 | 0.10     | 0.24 | 0.34**    | 0.25** | 0.29** | 1 |  |

\*\*=p<0.01

In the enter method, all the variables are included in the analysis, but in the stepwise method, the variable whose significance of the regression coefficient exceeds 10% is removed

from the equation and the next variable is entered into the equation. By performing a stepwise discriminant analysis on 4 variables, inefficient variables (physical abuse) were

removed and the remaining efficient variables (3 variables) were included in the analysis.

As shown in Table 2, given the small Wilks' lambda value and the high chi-square, there is a significant difference between the two groups in terms of the predictive variables (P = 0.001).

Standard, non-standard and structural coefficients in the stepwise method for different variables was as follows: Sexual abuse: 0.48, 0.26 and 0.72; emotional abuse: 0.51, 0.19 and 0.72; and sexual shame: 0.41, 0.02 and 0.67 respectively. Also, the constant number was -

4.17. Based on the standard and structural coefficients, the variables of emotional abuse, sexual abuse and sexual shame, respectively, have more predictive power for women's sexual dysfunction. Also based on the information of non-standard coefficients and constant number, the equation of the stepwise discriminant function was written as follows:  $Y = -4.17 + 0.26(X_1) + 0.19(X_2) + 0.02(X_3)$  ( $X_1$ =sexual abuse,  $X_2$ =emotional abuse,  $X_3$ = sexual shame).

**Table 2.** Comparison between methods of enter and stepwise discriminant function to predict female sexual dysfunction based on the history of child abuse and sexual shame

| Analysis Method | Eigenvalue | Variance | Canonical correlation | Wilks' lambda | $\chi^2$ | df | Sig.  | Prediction accuracy | Kappa coefficient | Sig.  |
|-----------------|------------|----------|-----------------------|---------------|----------|----|-------|---------------------|-------------------|-------|
| Enter           | 0.18       | 100      | 0.39                  | 0.84          | 65.83    | 4  | 0.001 | 65.7%               | 0.31              | 0.001 |
| Stepwise        | 0.17       | 100      | 0.38                  | 0.85          | 63.54    | 3  | 0.001 | 66.2%               | 0.32              | 0.001 |

**Table 3.** Discriminant analysis of predicting female sexual dysfunction based on the history of child abuse and sexual shame

| Variables       | Eigenvalue | Variance | Canonical correlation | Wilks' lambda | $\chi^2$ | df | Sig.  | Non-standardized coefficient | Constant | Prediction accuracy | Kappa coefficient | Sig.  |
|-----------------|------------|----------|-----------------------|---------------|----------|----|-------|------------------------------|----------|---------------------|-------------------|-------|
| Sexual abuse    | 0.09       | 100      | 0.28                  | 0.91          | 34.95    | 1  | 0.001 | 0.54                         | -2.99    | 60%                 | 0.19              | 0.001 |
| Physical abuse  | 0.06       | 100      | 0.25                  | 0.93          | 26.08    | 1  | 0.001 | 0.50                         | -2.25    | 60.9%               | 0.21              | 0.001 |
| Emotional abuse | 0.09       | 100      | 0.28                  | 0.91          | 34.70    | 1  | 0.001 | 0.37                         | -2.11    | 64.9%               | 0.29              | 0.001 |
| Sexual shame    | 0.07       | 100      | 0.26                  | 0.92          | 29.82    | 1  | 0.001 | 0.07                         | -3.98    | 63.9%               | 0.27              | 0.001 |

As shown in Table 3, the data from discriminant analysis in the table above (the small Wilks' lambda value and the high chi-square) indicate that sexual, physical, and emotional abuse and sexual shame can separately predict sexual dysfunction and discriminate the women with and without sexual dysfunction (P = 0.001).

**Discussion**

This study investigated the role of sexual, physical, and emotional abuse and sexual shame

in predicting sexual dysfunction in women. The results showed that both abuse and sexual shame can positively and significantly predict sexual dysfunction in women. These results are consistent with the findings of the previous studies that confirmed the relationship between a history of sexual, physical, and emotional abuse and sexual shame with sexual dysfunction (6, 7, 18).

Following these findings, it can be argued that childhood adverse experiences are strong and powerful risk factors for the current and

subsequent developmental consequences, including poor mental, physical, and sexual health (26). Furthermore, childhood harms are one of the major predictors of psychiatric problems (27). One of the cognitive strategies to cope with hyperarousal and fear during the experience of sexual abuse is dissociation. Research shows that people who have been sexually abused in childhood and those who have used the dissociation mechanism during the abuse are more likely to use this coping strategy in adulthood when having sex (28). Dissociative responses affect sexual relations in women with a history of abuse (29). Sexual dysfunction is perceived by individuals with sexual abuse experienced as a response to sexual abuse. These individuals sometimes resort to a defense mechanism to protect themselves, and thus they refrain from engaging in sexual intercourse that provokes traumatic emotions and return to the abused past (30).

Accordingly, sexual dysfunction in people with sexual abuse experiences is one of the outcomes of traumatic sexualization, feelings of infidelity, and the development of abnormal and distorted views about sex and sexual partners (31). Other studies on mental health outcomes of adults exposed to sexual trauma have highlighted issues such as self-blame, guilt, avoidant behavior, and, in particular, the experiential avoidance in individuals with a history of sexual abuse. Experiential avoidance refers to a person's unwillingness to experience private events, thoughts, feelings, or memories that are negatively evaluated. The experiential avoidance of any stressors related to past trauma reduces some of their stress. However, these people may face more problems and are unwilling to have sex with their spouses (6). Physical, sexual, and emotional abuse is a specific and insidious issue because it does not belong to a particular period as it influences all stages of one's life, affects both sexes and can be found in all ethnic and racial groups (32).

A history of abuse is one of the most traumatic experiences a person can have in their lifetime, even if it occurred in childhood and adolescence. It can be a very destructive experience due to its developmental nature and impact on future stages of life. People who have been exposed to these destructive experiences

throughout their lives perceive their impacts on all their issues and relationships. As a result, they are often affected by these experiences. These people are frustrated with their early life experiences and are now afraid that these experiences may reoccur in their current close relationships. These traumatic experiences put a lot of pressure on the person, and thus they may use various strategies to alleviate it, but they are likely to have similar experiences in the future. These strategies include avoiding potential traumatic situations that evoke memories of past trauma, severing a mental connection to the situation, anesthesia or situational pain that causes the person to leave the situation, and psychological projection. The exposure to a similar sexual experience evokes previous emotions of being in the situation and recreates the traumatic moment. Physical injuries also make a person sensitive to any activity related to the body organs that have been physically abused, especially if the injury targets sexual organs or is close to organs active in the sexual act. In particular, exposure to abuse and emotional trauma prevents an individual from engaging in activities that require emotional expression, which culminates in a healthy sexual relationship. (6, 32, 33, 34)

The results also showed that sexual shame is a significant predictor of sexual dysfunction in women. Shame in sexual desires can lead to distraction during sexual activity. The cognitive-emotional model of sexual function assumes that negative emotions along with inconsistent causal attributes lead to distractions during sexual activity that can impair healthy sexual function (35). Sexual shame is defined as anything related to sexuality or sexual orientation, sexual desire, and other related characteristics that do not allow for a common discourse on sexual issues. Much of the things a child learns during developmental stages are placed in the context of social and family relationships. Moreover, shame is associated with tendencies and aspects related to self that children are not allowed to discuss together. In these environments, sexual issues are often considered taboo and any discussions about them are avoided. Lack of social conversation about sexual issues makes people believe that their private thoughts about sexuality are

problematic or too embarrassing to be exposed to and talked about. Thus, sexual shame is formed through gaps and disruptions in human relationships and the lack of effective communication about expectations and discourse in the relationship (36).

Children learn from an early age that questions and behaviors related to sexual orientation cause embarrassment or upset parents, and if children feel that they have lost their parental satisfaction, they feel ashamed. Thus, children learn to hide their sexual thoughts and behaviors so they can present a more acceptable face. In this situation, the person becomes sensitive to all sexual thoughts and behaviors and tends to denounce them. In the same way, the person carries this sexual shame with them in their future interpersonal and sexual relationships, and for fear of experiencing it, they subdue all the emotions and thoughts associated with it, not leaving a chance to receive a different response. Thus, sexual shame has a circular state: It arises interpersonally, resides within the person, and then reappears interpersonally. Being in a future sexual situation continues to make the person shameful, and this shame will be accompanied by a self-defeating cycle (37, 38, 39).

Sexual shame also involves harmful and disgusting views of one's identity because of one's sexual thoughts, desires, fantasies, and tendencies. These views induce a sense of self-humiliation of having these sexual desires and tendencies as obnoxious and unacceptable issues. As a result, the person denounces all issues related to sexual relations and avoids them as much as possible. These people either avoid sexual activity all in all or at least are not able to experience some type of normal sexual activity because they consider them abnormal. Moreover, people with sexual shame are skeptical about their sexual abilities, and they assess that they may not be able to satisfy themselves and their spouse sexually. In most cases, they have little sexual desire and are skeptical about having sex with their spouse, and if they do, they will not be able to convey the normal amount of sexual intimacy and pleasure, and they are more concerned about ending it. These factors together have caused

these people to face many problems and fail to have an effective sexual function (37, 38, 39, 40).

The limitation of this study include selection bias and the fact that it was conducted through social media which can affect participation of cases with lower economic status. One of the strengths of this research was dealing with the variables that play an important role in sexual dysfunction but have been less investigated. Also, the number of samples, especially in the case of women with sexual dysfunction, is one of the strengths of this research. It is suggested that in the future research, the sexual function of women with a history of sexual abuse should be investigated with a qualitative method, and this research should be conducted on other samples and in other cities.

## Conclusion

According to the results of the present study, history of abuse (sexual, physical, and emotional) and sexual shame increases the probability of sexual dysfunction. Based on history of abuse (sexual, physical, and emotional) and sexual shame of female sexual dysfunction can be predicted. Given the significance of sexual function in marital life and women's mental health, addressing the factors affecting sexual function such as a history of sexual abuse and sexual shame and their treatment can help have a normal and good sexual function and have a pleasant sexual relationship with the spouse. Moreover, some effective programs need to be developed to prevent sexual abuse and behaviors that lead to sexual shame.

## Declarations

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## Conflicts of Interest

The authors declared no conflicts of interest.

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### Ethical Considerations

The following ethical considerations were observed in the data collection process: Explaining the objectives of the research to the participants, voluntary participation in the research, maintaining anonymity and confidentiality of data collected from the participants.

### Code of Ethics

The study was approved by the Ethics Committee of Shahid Chamran University of Ahvaz, Ahvaz, Iran (EE/ 1400.3.02.37647/scu.ac.ir).

### Authors' Contributions

Abbas Amanelahi: contributed to the conception, drafting the manuscript and language editing of the manuscript; Maryam Khaksar Nasirabadi: contributed to the conception, data collection and Drafting the manuscript; Khadijeh Shiralinia: contributed to the conception, data collection, statistical analyses and interpretation of data. All authors read and approved the final manuscript and agreed to be accountable for all aspects of the work.

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