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Research Article

Personality, Psychopathology and Coping Strategies of Women with Sexual Interest and Arousal Disorder

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Abstract

Sexual Interest and Arousal Disorder (SIAD) is the most common female sexual dysfunction. This mental disorder has a strong negative impact in the women's well-being, relationships and quality of life. A comprehensive approach to the multiple psychological factors that contribute to its appearance and maintenance is needed, in order to optimize the different therapeutic options. In this study, a sample of 10 women with SIAD was compared to a control group of women without a sexual dysfunction. For that purpose, participants were asked to complete standardized questionnaires. Results showed significant differences in psychopathological symptoms, personality dimensions and copying strategies between both groups. This study provides greater empirical understanding of the linkages between SIAD and personality traits, psychopathological symptoms, and stress coping strategies.Further research needs to be conducted to examine the effectiveness of interventions and improve current clinical treatments.

Keywords: Arousal disorder; Copying strategies; Personality; Psychopathology; Sexual interest

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Introduction

According to the DMS-5 [1], former diagnostic categories of "hypoactive sexual desire disorder" and "arousal disorder" have been merged into the single category "Sexual Interest and Arousal Disorder" (SIAD), not without controversy [2]. This new category of sexual dysfunction is characterized by a significant reduction of interest and/or sexual arousal and is associated with clinically significant discomfort. It lasts a minimum of 6 months. Common complains in patients who seek treatment due to a poor sexual function are lack of desire and difficulties in achieving and maintaining a satisfactory level of arousal during sexual encounter [3]. SIAD remains, therefore, as the most common female sexual disorder [4]. It occurs in women of all ages and it has a strong negative impact on their personal wellbeing and interrelationships [5]. Although a precise prevalence has not been stablished, high percentages have been estimated. It has been suggested that SIAD tends to increase with age and range between 20 and 40% [6]. SIAD is also one of the sexual disorders least detected by clinical professionals and highly resistant to treatment [7,8].

Female sexuality is complex and depends on a delicate balance between physical and psychological health. It is currently assumed that female sexual desire and arousal are determined by several factors (biological, psychological, socio-cultural and interpersonal). In addition, there are several variables that may contribute to the SIAD ethology and maintenance. It is also known the diagnosis of sexual dysfunction is associated with psychopathological symptoms. In fact, several studies suggest that psychological distress is associated with a detriment of sexual functioning and also highlight that psychopathological alterations are significant predictors of sexual disinterest [9,10]. However, the incidence of psychopathological symptoms at clinical and subclinical levels is not examined in a thorough manner in this particular subgroup of patients diagnosed with SIAD.

There is available evidence about how psychological variables are involved in most psycho-emotional disorders, including SIAD [11]. However, they have not been systematically evaluated in these patients. It is known that personality disorders are a predisposing factor for sexual dysfunctions and data regarding dimensional personality traits suggests that, at a minimum, some variables play a relevant role in the aetiology and maintenance of the disorder [12]. In a recent study, women diagnosed with vaginismus scored a higher degree of harm avoidance in comparison to women with dyspareunia [13]. In another study, postmenopausal women affected by sexual dysfunctions scored lower levels of extraversion and openness to experience compared to control to group [14]. In fact, extraversion has often been associated with high levels of sexual desire [15]), while neuroticism has consistently been associated with difficulties in sexual functioning and sexual dissatisfaction [16]. Identifying a pattern formed by vulnerabilities and personality strengths in patients diagnosed with SIAD would allow to gain a better understanding of how these factors predispose to and maintain this disorder in time, as well as pinpoint targets and available resources for treatment.

Finally, exploring the most commonly used stress coping strategies carried out by women diagnosed with SIAD is required for future research [17]. In fact, coping with stress is considered a crucial skill when it comes to personal functioning. According to Lazarus and Folkman, et al. this is a dynamic process involves an evaluation and re-evaluation of demanding situations, carrying out several strategies to achieve specific objectives [18]. Depending on personal characteristics and situational factors, coping may range from actively trying to regulate the situation (problem-centered management) to changing the emotional response that follows the problem (emotion-centered management). Certain medical conditions have been associated with unadaptive coping, such as cystitis [19]. However, the associated between sexual function and use of inadequate stress coping mechanisms has not been consistently established.

Aims and hypotheses

In the present study, we assessed personality traits, coping strategies and psychopathological symptomatology in a sample of patients diagnosed with SIAD. Results were compared with a sample of women without a diagnosis of sexual dysfunction.

We hypothesized that differences would be found between both groups regarding personality factors, psychopathology and coping strategies. Specifically, it was hypothesized that, compared to a sample of healthy women, patients with SIAD may present: a) lower levels of novelty search, self-directedness, b) higher levels of harm avoidance, c) more psychopathological symptoms such as anxiety or depression and d) a greater use of unadaptive stress coping strategies and lower use of adaptive strategies.

Methods

Sample and procedure

The final sample of the present study included n=20 female participants. The clinical group was formed by n=10 sexually active women with a diagnosis of SIAD. Our study sample also was formed by 10 healthy control participants recruited using word of mouth. In the compilation of the control group, intentional (non-probability) sampling was used, characterized by the deliberate effort to obtain representative samples. Participants were selected on the basis of the inclusion and exclusion criteria suggested by the DSM-5. Table S1 specifies the inclusion and exclusion criteria used.

	Clinical Group	Control Group
Inclusion criteria	Age range 18-40 years Report distress due to low sexual desire and/or arousal difficulties	Age range: 18-40 years Report sexual satisfaction
Exclusion Criteria	Severe psychopathology Menopause Pregnancy/Postpartum Substance abuse Drug-induced sexual dysfunction Sexual dysphoria, or asexuality Severe relationship issues	Menopause Psychopathology history

Table S1: Inclusion and exclusion criteria.

The patients were recruited in the Department of Psychiatry Psychology and Psychosomatics and in the Department of Obstetrics, Gynecology, and Reproduction at our hospital. It is a private hospital, located in an urban area of Spain. Sociodemographic and clinical additional information was taken, and patients individually completed all the questionnaires required for this study in the Department of Psychiatry Psychology and Psychosomatics.

Instruments

Symptom checklist-90-revised [20]: The SCL-90-R is a 90-item self-report symptom inventory developed to measure psychological symptoms and psychological distress in terms of nine primary symptom dimensions and three summary scores termed global scores. The principal symptom dimensions are: somatization, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism. The global measures are referred to as the global severity index, the positive symptom distress index, and the positive symptom total.

Temperament and character inventory-revised [21]: TCI-R is an instrument for personality assessment that was developed to provide a comprehensive biopsychosocial model of personality. It deconstructs personality into seven dimensions that vary widely in the general population, rather than focusing only on pathology or abnormal traits. The TCI has four temperament (novelty seeking, harm avoidance, reward dependence and persistence) and three character dimensions (self-directedness, cooperativeness, and self-transcendence). The temperament traits manifest early in life and generally involve automatic responses to emotional stimuli. Character is learned and can be greatly influenced by therapy and growth in recovery.

Coping strategies inventory [22]: This questionnaire assesses three different aspects: the most recent stressful situation experienced by the participants, the coping strategies used to manage the situation they mentioned and the participants' coping self-efficacy. It provides information about the 8 primary coping strategies: 2 emotion-focused adaptive strategies (express emotion and social support), 2 emotion-focused maladaptive strategies (social withdrawal and self-criticism), 2 problem-focused maladaptive strategies (problem avoidance and wishful thinking) and 2 problem-focused adaptive strategies (problem-solving and cognitive restructuring).

Other clinical and sociodemographic and variables: Additional demographic, clinical, sexual, and social/familiar information related to sexual function were measured using a semi-structured face to-face clinical interview. Some of the variables covered included age, gender, marital status and educational level.

Statistical analysis

Statistical analysis was carried out with SPSS v.17 for Windows. Descriptive statistics were calculated for all quantitative variables (test scores and age) and frequencies for qualitative variables (marital status, education level and work). The student t test was used for the equality of means in independent samples, by means of which the clinical group and the control were compared in all the scales.

Ethics

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Results

We tested differences between groups with a 95% confidence level (value of $p \leq 0.05$). A mean difference test was used for independent samples, based on the t student statistic.

Sample characteristics

Participants were 20 women, aged between 24 and 38 years. The mean age of the participants was 31.5 years (SD 2.45) in the patient group and 29.6 years (SD 2.8) in the control group. In the total sample, the mean age was 30. 5 years. In both groups, the majority of participants were either married or had a partner, a higher educational level and were employed.

Personality dimensions

In terms of personality traits, the values of the questionnaire allowed options in a variable range, with different dimensions. The descriptive statistics for the two groups and p value resulting form the t-test comparison are shown in table 1. Statistically significant differences are indicated using a single or double asterisk (*value of $p \leq 0.05$; ** $p \leq 0.01$).

	Clinical group (Mean value)	Control group (Mean value)	Significance (p value)
TEMPERAMENT			
Novelty seeking	87.6	100.5	.001**
Harm avoidance	108.9	88.6	.000**
Reward dependence	103.4	103.6	.975
Persistence	100.4	113.2	.050
CHARACTER			
Self-directedness	131	161.8	.000**
Cooperativeness	133.8	147.5	.005*
Self-transcendence	64.6	62.2	.720

Table 1: Personality dimensions in women with and without SIAD.

*value of $p \leq 0.05$; ** $p \leq 0.01$.

Coping strategies

In terms of coping strategies, the questionnaire was scored in a variable range of values with different subscales. The descriptive statistics for the two groups and p value resulting form the t-test for comparison are shown in table 2.

Psychopathology

In terms of psychopathological symptomatology, the questionnaire was scored in a variable range of values with different subscales. The descriptive statistics for the two groups and p value resulting form the t-test comparison are shown in table 3.

Discussion

This study was aimed to examine potential differences in personality, psychopathology and coping strategies between a group of women with SIAD and a group of sexually healthy women. The present study showed statistically significant differences between both groups in all the clinical features assessed.

	Clinical group (Mean value)	Control group (Mean value)	Significance (p value)
ADAPTIVE Emotion focused			
Social support	6.3	14.5	.000**
Cognitive restructuring	12.7	88.6	.000**
Problem focused			
Problem solving	10.2	16.1	.002**
Express emotion	6.8	9.2	.166
MALADAPTIVE Emotion focused			
Self-criticism	9	3.7	.050*
Wishful thinking	15.1	8.1	.000**
Problem focused			
Problem avoidance	7.3	3.4	.000**
Social withdrawal	6.9	2.2	.000**

Table 2: Coping strategies in women with and without SIAD.

*value of $p \leq 0.05$; **$p \leq 0.01$.

	Clinical group (Mean value)	Control group (Mean value)	Significance (p value)
Somatization	0.54	0.34	.298
Obsessive-compulsive	1.3	0.62	.041*
Interpersonal sensitivity	0.97	0.49	.082
Depression	1.13	0.56	.044*
Anxiety	0.76	0.25	.005**
Hostility	0.23	0.28	.730
Phobic anxiety	0.17	0.15	.844
Paranoid ideation	0.45	0.33	.647
Psychoticism	0.24	0.14	.587

Table 3: Psychopathological symptoms in women with and without SIAD.

*value of $p \leq 0.05$; ** $p \leq 0.01$.

In terms of personality traits, the dimension that was most relevant regarding temperament, when differentiating the two groups, was harm avoidance, followed by novelty seeking. These personality traits may be limiting the patients from correcting negative cognitions and expectations regarding their sexual activity. Moreover, they may be interfering them from having gratifying sexual experiences that would positively affect their sexual desire. In terms of character, significant differences were found in self-direction and, to a lower extent, in cooperation. This could be explained by the fact that most patients who seek psychological help have a low perception of control over their lives and, as a result of multiple disappointments, may end up limiting their affiliative behaviors. Therefore, these results suggest that, as we hypothesized, the women that formed the clinical sample reported: a) greater presence of avoidance and apprehension behaviors when faced with unfamiliar situations or situations perceived as hazardous (harm avoidance); b) difficulties in establishing clear goals and directing their behavior toward achieving them (self-direction); and c) less exploratory or interest in novelty (novelty seeking). These findings are consistent with previous studies in the field of sexual dysfunctions [23].

Regarding stress coping strategies, previous research has demonstrated an associated between sexual function and coping strategies [24]. Specifically, the use of negativecopingstrategieshas been significantly associated with poor sexual function [25]. Relatedly, in the present study the women diagnosed with SIAD showed a significantly lower capacity to re-attribute a constructive meaning to the stressful situation (cognitive restructuring), and a significantly lower use of cognitive and behavioral strategies aimed at modifying situations that they perceive as stressful (problem-solving). They also reported significantly greater use in the four main strategies considered ineffective or maladaptive in coping with stress. The most relevant differences were found in cognitive strategies that reflect the desire that reality not be stressful (wishful thinking), withdrawal from friends and family (social withdrawal), and the denial and avoidance of thoughts and behaviors related to the stressful event (problem-avoidance). The tendency to self-incrimination was also significantly higher, although to a lesser degree (self-criticism). The relationship between sexual function and the use of inappropriate stress coping mechanisms has not been consistently established and this work contributes to our understanding in this issue.

Finally, regarding psychopathology, its association with female sexual functioning appears to be relatively poorly explored [26]. However, in the present study significant differences were found in the depression, obsession-compulsion and anxiety scales between both groups, with patients with SIAD showing significantly higher levels compared to the control group. These findings support previous research that already pointed to this relationship between sexual dysfunctions and the presence of psychopathological alterations [27]. Therefore, sexual dysfunctions are associated with high levels of psychological distress, showing characteristic symptom patterns, although the causal association remains complex [28].

Clinical implications

At the clinical level, these results have implications for the evaluation and treatment. It can be highlighted that psychological therapy in patients diagnosed with SIAD may help them to develop a better management of their temperamental traits -especially the high harm avoidance- and to increase their self-direction and cooperation, character dimensions that are more susceptible to modification. Moreover, it is essential to identify and address their psychopathological symptomatology, to improve the efficiency of the sexual dysfunction treatment. Finally, the assessment of the stress management abilities of these patients is decisive in order to promote adaptive coping strategies and help them to unlearn ineffective ones.

Limitations and future research

Although this study has its strengths, there are some limitations that should be taken into account. Firstly, our sample size was modest, and this limitation has an impact on the statistical power of our analysis, raising the possibility of Type I error. Future studies should include larger and balanced samples. Secondly, our study only included patients with a diagnosis of SIAD. Future studies would benefit from including women with other female sexual dysfunctions. Finally, the cross-sectional nature of our study does not lead us to conclusions regarding causality. Longitudinal research is needed for this purpose.

Conclusion

This study provides greater empirical understanding of the association between personality traits, psychopathological symptoms, stress coping strategies and SIAD. These factors may play a predisposing and/or sustaining role in this mental disorder. Further research should be conducted to examine the effectiveness of interventions with women diagnosed with sexual dysfunctions.

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