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Self-Compassion, Emotion Regulation, and Female Sexual Pain: A Comparative Exploratory Analysis

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ABSTRACT

Introduction: Sexual pain is a multideterminate phenomenon, resulting from the interplay between biopsychosocial dimensions. Research suggests that self-compassion plays a protective role on mental health through the enablement of adaptive emotion regulation strategies and that they both contribute to ease chronic pain experience. However, little is known about the role played by self-compassion and emotion regulation on female sexual pain.

Aim: The study aims to identify differences between women with self-reported sexual pain, women with other self-reported sexual dysfunctions, and women without sexual complaints regarding self-compassion and emotion regulation.

Methods: A total of 220 women (M_{age} = 27.73 years, SD = 8.46) were divided into 3 groups based on their clinical condition − 53 women with self-reported sexual pain, 30 women with other self-reported sexual dysfunctions, and 137 women without sexual complaints − completed measures of sexual functioning (Female Sexual Function Index), self-compassion (Self-Compassion Scale), and difficulties in emotion regulation (Difficulties in Emotion Regulation Scale). Multivariate analyses of variance (MANOVAs) with post hoc analyses were performed.

Main Outcome Measure: The main outcome measures were self-compassion, measured on a 5-point Likert scale using 26-item questionnaire, and difficulties in emotion regulation, assessed on a 5-point Likert scale using a 36-item questionnaire.

Results: Findings indicated that women with self-reported sexual dysfunction and particularly women with self-reported sexual pain report lower self-compassion (*P* values ranging between .001 and .044) and more difficulties in emotion regulation (*P* values ranging between .003 and .023) than women without sexual problems.

Clinical Implications: Findings highlight the association between lower levels of self-compassion and more difficulties in emotion regulation with self-reported sexual complaints, particularly with genito-pelvic pain−related sexual complaints.

Strength & Limitations: This is the first study to address differences between groups with different self-reported sexual dysfunctions regarding self-compassion and emotion regulation. Findings suggest that women with self-reported sexual dysfunction, particularly female sexual pain, report decreased levels of self-compassion and emotion regulation. The absence of equity on sample dimension and the correlational nature of the study are limitations to be considered.

Conclusion: Results indicated that self-compassion and emotion regulation are associated with sexual complaints, and particularly genito-pelvic pain complaints, suggesting the importance of conducting further investigation to address their potential positive outcomes in clinical intervention. **Vasconcelos P, Oliveira C, Nobre P. Self-Compassion, Emotion Regulation, and Female Sexual Pain: A Comparative Exploratory Analysis. J Sex Med 2020;17:289−299.**

Key Words: Female Sexual Pain; Sexual Dysfunction; Self-Compassion; Emotion Regulation

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INTRODUCTION

Sexual pain is a relatively common complaint, often of a chronic nature, that affects women's sexual and reproductive health.[1] The 5th edition of the Diagnostic and Statistical Manual of Mental Disorders[2] proposes a new diagnosis for genital pain: the "Genito-Pelvic Pain/Penetration Disorder" merging the Diagnostic and Statistical Manual-IV[3] sexual pain disorders: (i) dyspareunia − pain frequently associated with sexual activity and (ii) vaginismus − recurrent or persistent involuntary contraction of the perineal muscles when vaginal penetration is attempted or anticipated. Both clinical presentations are common among women, with prevalence rates of vaginismus ranging from 0.4% to 6.2%[4−7] and those of dyspareunia ranging from 0.4% to 30%.[8,9] In terms of etiological factors, female sexual pain may result from numerous physical and psychosocial conditions. Among its organic risk factors are an increased tendency to recurrent yeast infections,[10] hormonal changes, early use of contraceptives[11] and vulvar vestibule alterations.[12] On the other hand, there is growing evidence on the role of psychosocial factors on female sexual pain, such as negative attitudes, extreme religiosity, traumatic sexual events, anxious personality traits, and cognitive styles characterized by hypervigilance and catastrophizing.[13] Sexual pain is among the most common complaints in women who seek for help in clinical settings.[14] In fact, its negative implications regarding sexual and relationship satisfaction[15−18] and global quality of life[19−21] are well documented. However, less is known about the role of well-known psychological processes, such as self-compassion and emotion regulation.

Self-compassion involves being attentive, open, and sensitive to one's own suffering, in the presence of a desire to recover with feelings of care and kindness.[22] Neff[22,23] proposes that self-compassion presents 3 interrelated main components: self-kindness, common humanity, and mindfulness. Self-kindness involves the adoption of an attitude of understanding and kindness toward oneself in situations of suffering or inadequacy, as opposed to positions of self-criticism or self-punishment. Common humanity implies the ability to understand pain and failure as unavoidable and common aspects of human experience.[22−24] Finally, self-compassion entails an individual's mindful approach, characterized by being aware of experiences in the present moment, combined with the adoption of an attitude of acceptance and not avoidance of one's own feelings, emotions, and thoughts, in the absence of over-identification or avoidance.[22−24]

Research supports the role of self-compassion as an important predictor of mental health, being negatively associated with depression and anxiety and positively correlated with satisfaction with life, psychological well-being, and emotional intelligence.[24−26] In regard to sexual function, evidence shows that mindfulness-based therapy (one of the main components of self-compassion) increases sexual desire in women with desire or arousal dysfunction[27,28] and improves pain self-efficacy, pain catastrophizing, genital pain, pain hypervigilance, and sex-related distress in women with provoked vestibulodynia.[29] Furthermore, evidence demonstrates a positive effect of acceptance-based interventions in chronic pain management.[30,31] In fact, chronic pain sufferers with higher acceptance of pain present higher levels of self-kindness, common humanity, and mindfulness and lower values of self-criticism, isolation, and over-identification.[32]

Emotion regulation is a multidimensional construct that involves a set of "extrinsic and intrinsic processes responsible for monitoring, evaluating, and modifying emotional responses, especially their intensity and temporal characteristics"[33] (pp. 27-28). Emotion regulation can be regarded as the ability to understand emotional responses to enable the modification of their experience and expression.[34,35] Gratz and Roemer[36] suggest that the process of emotion regulation involves (i) awareness and understanding of emotions, (ii) acceptance of emotional states and responses, (iii) ability to control impulsive behaviors to act as per personal goals when experiencing negative emotions, and (iv) ability to use appropriate emotional regulation strategies in a flexible manner, toward modulating emotional responses as per individual goals and contextual demands. Alterations in these capabilities would involve the presence of difficulties in the emotion regulation process.

It is well established that adaptive emotion regulation strategies are related to mental health and greater well-being, being negatively associated with psychopathology.[37−39] In addition, maladaptive emotion regulation strategies seem to interfere with chronic pain experience,[40] including female sexual pain.[41,42] In relation to sexual functioning, Nobre and Pinto-Gouveia[43−45] proposed a cognitive-emotional model where emotional responses are regarded as maintaining factors for sexual dysfunction.[46] Studies based on this model conducted in women with vaginismus, found a higher prevalence of emotional responses of fear during sexual activity than in sexually healthy women,[43] suggesting the existence of difficulties in emotion regulation processes. Recent findings reveal that emotion regulation difficulties emerge as one of the predictors of sexual dissatisfaction,[47] influencing sexual functioning, sexual quality of life, and frequency of sexual behavior.[48,49] On the other hand, emotion regulation training can increase the response of sexual arousal during viewing of erotic images.[50,51] However, there are still few studies that analyze the role of emotion regulation in the development and maintenance of sexual problems and particularly of female sexual pain.

Self-compassion can be regarded as an adaptive emotional approach coping strategy as the mindful awareness of one's emotions allows the transformation of negative emotions into more positive emotional states.[24] Studies suggest that self-compassion plays an important role on chronic pain experience,[32] with growing evidence indicating that self-compassion improves mental health through the enablement of adequate emotion regulation strategies.[52−54] Considering that depressed mood is strongly associated with sexual dysfunction due to the

activation of negative self-schemas[55] and that self-compassion plays a protective role on psychopathology through the mechanism of emotion regulation,[56] it becomes evident that investigating the role of self-compassion and emotion regulation may contribute for a better understanding of predisposing/protective factors of sexual dysfunction and particularly sexual pain.

AIM

The main objective of the present exploratory study is to understand if and how women with self-reported sexual pain, women with other self-reported sexual dysfunctions, and sexually healthy women (ie, women without sexual complaints) differ in terms of self-compassion and emotion regulation. Based on the existing evidence, we hypothesize that (i) women with self-reported sexual pain and other self-reported sexual dysfunctions present significantly lower levels of self-compassion than sexually healthy women and (ii) women with self-reported sexual pain and other self-reported sexual dysfunctions present significantly more difficulties in emotion regulation than sexually healthy women.

METHODS

Participants and Procedure

The present study was part of a larger online survey that collected data regarding different cognitive, emotional and social dimensions, beyond sexual functioning, self-compassion, and emotion regulation (eg, body image, sexual and relational satisfaction). After giving their informed consent, participants completed the survey, which took an average of 30 minutes. The online survey was developed on the LimeSurvey computer platform which allows ensuring the security and confidentiality of the data by the institutional server. No personal information that could identify the participants was asked. To ensure that the survey was comprehensible and cohesive, a pilot study was conducted with volunteer participants. Multiple submissions were controlled through the analysis and comparison of sociodemographic data.

Participants were recruited online via mailing lists from national universities, social media, and blogs. Asymptomatic women were recruited from the same community-based population. All participants were assessed with the same protocol, except for the female sexual pain group, whose protocol had specific questions addressing pain-related symptomatology. Before being asked to select the survey that most described their current sexual experience (sexual pain, another sexual dysfunction, no sexual problem), participants received an explanation of the purpose of the study (ie, investigate the role of different psychobehavioral variables on female sexual complaints). In case of more than one sexual problem (sexual pain and other sexual dysfunction), participants were asked to select the problem that was most impactful at the time.

To participate in the present study, participants had to be aged 18 years old or older and to report having had sex in the past 4 months. The inclusion criteria for the group of women with sexual pain were report of pain duration of at least 6 months; pain intensity of at least 3 points, according to a 9-point Likert scale, varying from 1 (no pain) to 9 (worst pain ever); and distress and/or interference of at least 3 points, according to a 5-point Likert scale, varying from 1 (no distress/interference) to 5 (extreme distress/interference). In regard to women with other sexual dysfunction, the inclusion criteria were the absence of genital pain and the presence of self-reported sexual dysfunction with reports of distress and/or interference of at least 3 points, according to a 5-point Likert scale, varying from 1 (no distress/interference) to 5 (extreme distress/interference). In regard to sexually healthy women, the exclusion criterion was the presence sexual dysfunction (Female Sexual Function Index [FSFI] total score $\leq$ 26.55). Moreover, FSFI scores were also used to exclude sexually healthy women from the symptomatic groups (FSFI total score $>$ 26.55).[43] There was no monetary compensation or other incentive to participate in the study. Data were collected between June and September 2017.

A total of 284 women completed the survey. The combination of the aforementioned exclusion criterion resulted in the exclusion of 31 women from the sexual pain group, 27 women from the other sexual dysfunctions group, and 6 women from the sexually healthy group, which were not included in any of the groups.

Measures

General Introductory Questionnaire

The introductory questionnaire assesses sociodemographic variables, medical and sexual history dimensions, life habits, and pain-related characteristics. This questionnaire is divided into 4 parts. The 1st part explores sociodemographic variables such as age, education level, occupation, residence area, marital status, type and duration of current relationship, sexual orientation, ethnicity, and religion. The 2nd part focuses on the assessment of medical and physiological dimensions, including questions related to health condition, use of medication, surgery, and family medical history. The 3rd part evaluates sexual pain and chronic pain in its various dimensions (frequency, location, intensity, level of discomfort, interference in daily activities). Finally, the 4th part assesses participants' sexual history, through questions related to sexual dysfunction, menstruation, birth control methods, and pregnancy.

FSFI—Portuguese Version

The Portuguese version of the FSFI[57] is a 19-item questionnaire that assesses 6 dimensions of female sexual functioning: sexual desire, subjective sexual arousal, lubrication, orgasm, sexual satisfaction, and sexual pain. In addition to specific indexes for each of the measure's dimensions, a total index of sexual function (minimum = 3; maximum = 36) can also be

computed. In terms of psychometric characteristics, the measure revealed adequate temporal stability (correlations between r = 0.79 and r = 0.86) and demonstrated discriminant validity.[57] The Portuguese version also presented similar characteristics, revealing adequate psychometric qualities regarding internal consistency (Cronbach α values between 0.88 and 0.93). In the present study, this measure revealed adequate global internal consistency (Cronbach α values between 0.81 and 0.94 for the domains and Cronbach $\alpha = 0.95$ for the total scale).

Self-Compassion Scale—Portuguese Version

Self-Compassion Scale[58] is composed of 26 items divided into 6 subscales: self-kindness, self-judgment, common humanity, isolation, mindfulness, and over-identification (see Table 1). Participants rate their answers on a 5-point Likert scale that ranges from 1 ("almost never") to 5 ("almost always"). In addition to specific indexes for each of the measure's subscales, a total index of self-compassion (minimum = 1; maximum = 5) can also be computed. Psychometric characteristics of the original version of the scale[58] indicated a high intercorrelation between these 6 dimensions and a good internal consistency (Cronbach $\alpha = 0.92$). The Portuguese version of the SCS equally presented a good global internal consistency (Cronbach $\alpha = 0.89$), with α values for each of the subscales ranging from 0.73 to 0.82. In the present study, the global scale presented good internal consistency (Cronbach $\alpha = 0.95$), and for each subscale, α values were also adequate (Cronbach α values between 0.80 and 0.91).

Difficulties in Emotion Regulation Scale—Portuguese Version

The Difficulties in Emotion Regulation Scale[36] is a 36-item questionnaire that assesses difficulties in modifying or regulating emotional cues, experiences, actions, verbal, and/or nonverbal responses (see Table 2). The scale allows evaluation of different emotion regulation difficulties across 6 factors: nonacceptance of negative emotions, difficulty to engage in goal-directed behaviors when experiencing negative emotions, difficulties controlling impulsive behaviors when experiencing negative emotions, limited access to emotion regulation strategies that are perceived as effective, lack of emotional awareness, and lack of emotional clarity. Participants rate their answers on a 5-point Likert scale ranging from 1 ("almost never ") to 5 ("almost always"). In relation to its psychometric properties, the original validation study[36] revealed its adequate internal consistency (Cronbach $\alpha = 0.93$), with similar values for the Portuguese version of the scale (Cronbach $\alpha = 0.91$). In the present study, the scale revealed good global internal consistency (Cronbach $\alpha = 0.94$) and, for each factor, α values were equally adequate (Cronbach α values between 0.71 and 0.92).

Data Analysis

Missing values were not substituted by the mean (only fully completed questionnaires were included in the analysis).

For the purpose of assessing how self-compassion and emotion regulation differ between the 3 groups, multivariate analyses of variance (MANOVAs) with post hoc analyses were performed. Effect size was assessed through eta-squared calculation. The MANOVAs were carried out in cases in which the correlations between the variables were weak to moderate and the Box's M test were not significant, thus fulfilling the assumptions needed to carry out the analyses.

RESULTS

Sample Characteristics

The final sample comprised a total of 220 sexually active women, all aged 18 years or older. The sample is composed of 3 groups: 53 women with self-reported sexual pain; 30 women whose report indicated the presence of other sexual dysfunctions; and 137 sexually healthy women, without sexual complaints participated in the study. There was no significant statistical difference between the 3 groups in terms of age ($F_{2,217} = 2.85$, $P = .060$), education level ($\chi^2(6) = 8.42$, $P = .209$) or marital status ($\chi^2(6) = 4.21$, $P = .648$). Overall mean age of the participants was 27.73 years (SD = 8.46; range: 18−58). The majority of the participants were single (69.1%) and highly educated (more than 75% had at least one college graduation).

In accordance with descriptive analysis, 64.1% of women with sexual pain rated their pain as being frequent or almost always present. Regarding pain location, the majority of the participants reported a greater discomfort in the vaginal entrance area (86.8%) and in the urethra (18.9%). Sexual activity with penetration (43.4%), gynecological examination (41.5%), sexual activity without penetration (35.8%), and the use of tampons (35.8%) were the activities indicated as the most limited by pain-related symptoms. At the same time, the majority of participants with sexual pain (71.7%) reported not having engaged in any type of treatment. Regarding women with other sexual dysfunction, the most reported problem was related to orgasm (43.3%), followed by sexual desire (33.3%) and lubrication (10.0%).

The sociodemographic characteristics of the sample based on its clinical condition are described on Table 3.

Self-compassion

A multivariate analysis of variance (MANOVA) with post hoc analyses was performed to evaluate how self-compassion differs as per the subclinical conditions. For this purpose the 3 subclinical conditions were considered as independent variables and the specific domains of self-compassion were regarded as dependent variables. Results indicated the presence of statistically significant differences between the groups, (Pillai's Trace = 0.147; $F_{12,424} = 2.80$, $P = .001$). More specifically, results from univariate tests indicated that women with self-reported sexual pain scored significantly lower on self-kindness ($P = .007$, 95% CI [−0.83, −0.10]), common humanity ($P = .015$, 95% CI [−0.71, −0.06]), and mindfulness

Table 1. Examples of questions from the Self-Compassion Scale (SCS)[57]

Items by subscale	Responses	
Self-Kindness Subscale	1	5
I'm kind to myself when I'm experiencing suffering.		
When I'm going through a very hard time, I give myself the caring and tenderness I need.		
I'm tolerant of my own flaws and inadequacies.	Almost never	Almost always
Self-Judgment Subscale	1	5
When I see aspects of myself that I don't like, I get down on myself.		
When times are really difficult, I tend to be tough on myself.		
I can be a bit cold-hearted towards myself when I'm experiencing suffering.	Almost never	Almost always
Common Humanity Subscale	1	5
When I feel inadequate in some way, I try to remind myself that feelings of inadequacy are shared by most people.		
When I'm down and out, I remind myself that there are lots of other people in the world feeling like I am.		
When things are going badly for me, I see the difficulties as part of life that everyone goes through.	Almost never	Almost always
Isolation Subscale	1	5
When I fail at something that's important to me I tend to feel alone in my failure.		
When I'm feeling down I tend to feel like most other people are probably happier than I am.		
When I'm really struggling I tend to feel like other people must be having an easier time of it.	Almost never	Almost always
Mindfulness Subscale	1	5
When I'm feeling down I try to approach my feelings with curiosity and openness.		
When something painful happens I try to take a balanced view of the situation.		
When I fail at something important to me I try to keep things in perspective.	Almost never	Almost always
Over-Identification Subscale	1	5
When I'm feeling down I tend to obsess and fixate on everything that's wrong.		
When something painful happens I tend to blow the incident out of proportion.		
When I fail at something important to me I become consumed by feelings of inadequacy.	Almost never	Almost always

Table 2. Examples of questions from the Difficulties in Emotion Regulation Scale (DERS)[36]

Items by subscale	Responses				
Non-Acceptance Subscale	1	2	3	4	5
When I'm upset, I become embarrassed for feeling that way.					
When I'm upset, I feel like I am weak.					
When I'm upset, I feel guilty for feeling that way.	Almost Never (0–10%)	Sometimes (11–35%)	About half the time (36–65%)	Most of the time (66–90%)	Almost Always (91–100%)
Goals Subscale	1	2	3	4	5
When I'm upset, I have difficulty getting work done.					
When I'm upset, I have difficulty focusing on other things.					
When I'm upset, I have difficulty thinking about anything else.	Almost Never (0–10%)	Sometimes (11–35%)	About half the time (36–65%)	Most of the time (66–90%)	Almost Always (91–100%)
Impulses Subscale	1	2	3	4	5
I experience my emotions as overwhelming and out of control.					
When I'm upset, I become out of control.					
When I'm upset, I have difficulty controlling my behaviors.	Almost Never (0–10%)	Sometimes (11–35%)	About half the time (36–65%)	Most of the time (66–90%)	Almost Always (91–100%)
Awareness Subscale	1	2	3	4	5
I pay attention to how I feel.					
I care about what I am feeling.					
When I'm upset, I believe that my feelings are valid and important.	Almost Never (0–10%)	Sometimes (11–35%)	About half the time (36–65%)	Most of the time (66–90%)	Almost Always (91–100%)
Strategies Subscale	1	2	3	4	5
When I'm upset, I believe that I will end up feeling very depressed.					
When I'm upset, I believe there is nothing I can do to make myself feel better.					
When I'm upset, I start to feel very bad about myself.	Almost Never (0–10%)	Sometimes (11–35%)	About half the time (36–65%)	Most of the time (66–90%)	Almost Always (91–100%)
Clarity Subscale	1	2	3	4	5
I am clear about my feelings.					
I have difficulty making sense out of my feelings.					
I am confused about how I feel.	Almost Never (0–10%)	Sometimes (11–35%)	About half the time (36–65%)	Most of the time (66–90%)	Almost Always (91–100%)

Table 3. Sociodemographic characteristics of women with sexual pain, women with other sexual dysfunction, and women from the general population without sexual problems (N = 220)

	Sexual pain (n = 53)	Other sexual dysfunctions (n = 30)	Sexually healthy (n = 137)	*P*
Age				.60
M	25	29	28	
Range	19-45	18-46	18-58	
SD	5.68	8.50	9.19	
Education level, N (%)				.21
Secondary education	17 (32.10)	6 (20.00)	28 (20.40)	
Undergraduate	24 (45.30)	11 (36.70)	54 (39.40)	
Postgraduate	12 (22.60)	13 (43.30)	55 (40.10)	
Marital status, N (%)				.65
Married/CLM	12 (22.60)	12 (40.00)	36 (26.30)	
Single	40 (75.50)	17 (56.70)	95 (69.30)	
Divorced	1 (1.90)	1 (3.30)	5 (3.60)	
Widow	0 (0.00)	0 (0.00)	1 (0.70)	

M = mean; SD = standard deviation; CLM = common-law marriage.

($P = .001$, 95% CI [0.19, 0.84]) and significantly higher on over-identification ($P = .044$, 95% CI [0.01, 0.71]) than women without sexual complaints. In addition, women with other self-reported sexual dysfunctions present higher isolation ($P = .001$, 95% CI [−0.93, −0.19]) than women without sexual complaints. Women with self-reported sexual pain and other sexual dysfunction do not differ in any dimension of self-compassion (see Table 4).

Emotion Regulation Difficulties

A second MANOVA with post hoc analyses was performed to evaluate how emotion regulation differs as per the subclinical conditions. For this purpose, the 3 subclinical conditions were considered as independent variables and the specific factors of difficulties in emotion regulation were regarded as dependent variables. Results revealed the presence of statistically significant differences between the groups (Pillai's Trace = 0.098; $F_{12,426} = 1.83$, $P = .043$). More specifically, results from univariate tests indicated that both women with self-reported sexual pain and other sexual dysfunctions present significantly higher difficulty in accepting their emotional responses ($P = .012$, 95% CI [0.08, 0.89], $P = .009$, 95% CI [0.12, 1.13]) and in accessing emotion regulation strategies perceived as effective ($P = .008$, 95% CI [0.09, 0.79], $P = .003$, 95% CI [0.17, 1.05]) comparing with women without sexual complaints (see Table 5). Furthermore, women with self-reported sexual pain, when compared with women without sexual complaints, report higher difficulty in engaging in goal-directed behaviors when experiencing negative emotions ($P = .023$, 95% CI [0.05, 0.84]) and in controlling impulsive behavior ($P = .007$, 95% CI [0.11, 0.87]).

DISCUSSION

Female sexual pain is a multidimensional complex phenomenon, frequently of a chronic nature, with significant impact on multiple life facets. Despite the existing evidence of the role played by a number of psychological factors on sexual pain, very little is known about the impact of well-known processes such as self-compassion and emotional regulation. The present study aimed to investigate whether and how women with self-reported sexual pain, women with other self-reported sexual dysfunctions, and women without sexual complaints differ regarding self-compassion and emotion regulation.

Overall, findings revealed that women who report having sexual pain and other sexual dysfunctions tend to present lower levels of self-compassion than women with no sexual complaints, thus confirming our 1st hypothesis. More specifically, participants with self-reported sexual pain, when compared with sexually healthy women, report to adopt, less frequently, an attitude of understanding and kindness toward themselves in situations of suffering or inadequacy. These participants also indicate that they have more difficulties in understanding pain or failure as common aspects of human experience and that they are less aware of their experience in the present moment, tending to not accept their own feelings, emotions, and thoughts, overidentifying themselves with them. Both participants with self-reported sexual pain and other sexual dysfunctions report feeling more isolated in the experience of pain or failure. Despite the lack of studies that focus on the role of self-compassion in sexual functioning, it is relatively consensual that self-compassion is related to adaptive psychological functioning.[24–26] Studies also indicate that mindfulness has significant positive effects on female sexual response in women with low sexual desire and vulvodynia.[27–29] In addition, individuals with chronic pain who present greater pain acceptance tend to report higher levels of self-kindness, common humanity, and mindfulness and lower values of self-judgment, isolation, and over-identification.[32] Even though there are no studies, to our knowledge, that directly address self-compassion on sexual dysfunction, we may consider that the results obtained in the present study are consistent with the literature, since, as happens with other psychological problems, the dimensions of self-compassion seem to be related with sexual function and potentially more with female sexual pain.

Table 4. Self-compassion according to the groups (sexual pain/other sexual dysfunctions/sexually healthy) (N = 219)

Groups									
	Sexual pain (n = 53)		Other sexual dysfunctions (n = 29)		Sexually healthy (n = 137)				
Self-Comp.	M	SD	M	SD	M	SD	*F* (2,216)		η^2
S.- kindnes.	2.51[a]	0.81	2.77[ab]	1.06	2.98[b]	0.95	4.87*	.009	.043
S.- judgment.	3.11	0.89	3.19	1.04	2.82	0.94	2.98	.053	.027
C. Humanity	2.79[a]	0.82	2.98[ab]	0.79	3.18[b]	0.85	4.13†	.017	.037
Isolation	3.17[b]	0.93	3.28[b]	1.06	2.61[a]	0.91	10.69*	.000	.090
Mindfulness	2.67[a]	0.75	3.05[ab]	0.87	3.18[b]	0.87	7.10*	.001	.062
Over-ident.	3.26[b]	0.87	3.31[ab]	0.91	2.90[a]	0.91	4.52†	.012	.040

M = mean; SD = standard deviation; Self-Comp. = self-compassion; S.-kindness. = self-kindness; S-judgment = self-judgment; C. Humanity. = common humanity; Over-ident. = over-identification. For each factor, the adjusted means marked with different letters—a or b—differ significantly among themselves as per the Bonferroni test ($P < .05$). In the presence of statistical significance, superscript a indicates lower adjusted mean and superscript b indicates higher adjusted mean. Adjusted means marked with ab did not differ with the other groups.
*$P < .01$.
†$P < .05$

Table 5. Emotion regulation difficulties according to the groups (sexual pain/other sexual dysfunctions/sexually healthy) (N = 220)

Groups									
	Sexual pain (n = 53)		Other sexual dysfunctions (n = 30)		Sexually healthy (n = 137)				
Emotion regulation difficulties	M	SD	M	SD	M	SD	F (2,217)	*P*	η^2
Acceptance	2.58[b]	1.07	2.72[b]	1.11	2.09[a]	1.00	7.11*	.001	.062
Goals	3.14[b]	1.03	3.17[ab]	1.11	2.69[a]	0.98	5.14†	.007	.045
Impulses	2.48[b]	1.07	2.47[ab]	1.03	1.99[a]	0.93	6.31*	.002	.055
Awareness	2.67	0.64	2.54	0.79	2.57	0.70	0.49	.615	.004
Strategies	2.53[b]	0.91	2.70[b]	0.95	2.08[a]	0.89	8.45*	.000	.072
Clarity	2.31	0.82	2.45	0.74	2.07	0.79	3.76	.025	.033

M = mean; SD = standard deviation; Acceptance = nonacceptance of negative emotions; Goals = difficulty to engage in goal-directed behaviors when experiencing negative emotions; Impulses = difficulties controlling impulsive behaviors when experiencing negative emotions; Awareness = lack of emotional awareness; Strategies = limited access to emotion regulation strategies that are perceived as effective; Clarity = lack of emotional clarity.
For each factor, the adjusted means marked with different letters—*a* or *b*—differ significantly among themselves according to the Bonferroni test ($P < .05$). In the presence of statistical significance, superscript a indicates lower adjusted mean and superscript b indicates higher adjusted mean. Adjusted means marked with ab did not differ with the other groups.
*$P < .01$.
†$P < .05$.

Regarding our second hypothesis, results indicated that women with self-reported sexual pain and other self-reported sexual complaints report having more emotion regulation difficulties. More specifically, both groups reported higher difficulty in accepting their emotional response and having a more restricted access to effective emotion regulation strategies. At the same time, participants with self-reported sexual pain report higher difficulty in engaging in goal-directed behaviors when experiencing negative emotions and in controlling their impulsive behaviors. These results are consistent with those of previous studies[41,42,48] because difficulties in emotion regulation differed based on sexual functioning. In fact, evidence suggests that emotion regulation processes are associated not only with sexual pain experience[41,42] but also with sexual functioning, sexual satisfaction, and sexual behavior. Thereby, emotion regulation not only is determinant for greater quality of life and adaptive psychological functioning but also is associated with sexual function and especially with female sexual pain.

Given the exploratory and correlational nature of the study, we cannot establish causal relationships. However, these findings suggest that sexual complaints involves the consideration of multiple factors of vulnerability, development, and maintenance, which may include difficulties in emotion regulation and self-compassion. Considering the sustained mediating role of self-compassion on mental health through the enablement of adaptive emotion regulation strategies,[52–54] further investigation is needed to establish the mediating role of self-compassion on sexual functioning and health. Furthermore, such results underlines the gap in clinical research, pointing out the necessity of further investigation regarding the promotion of more adaptive emotion regulation strategies and self-kindness on psychosocial interventions in sexual dysfunction and particularly female sexual pain.

Notwithstanding, these results must be carefully regarded because the study has limitations that should be reflected upon. The small size of the groups with self-reported sexual pain and other self-reported sexual dysfunctions, compared with the group of sexually healthy women, is an evident limitation because there is no equity on sample dimension, which limits the power of the statistical analysis. Owing to the correlational nature of the study, causality cannot be determined. In addition, the fact that the inclusion criteria in the groups were mostly based on self-reported data compromises a formal clinical diagnosis. Furthermore, the online convenience sampling not only limits the heterogeneity of the sample in terms of economic and social status but is also not representative of the Portuguese population.

CONCLUSIONS

Our results suggest that self-compassion and emotion regulation are associated with self-reported sexual dysfunction. Many implications can be drawn from the present study. Future research should begin to explore the predictive role of self-compassion and emotion regulation on sexual functioning of different clinical conditions. Clinical intervention on sexual dysfunction, particularly on women with sexual pain, which obtain information about self-compassion and difficulties in emotion regulation, not only may contribute to a more comprehensive conceptualization of clinical cases but also identify critical areas for further intervention. Hence, both research and clinical intervention could benefit from the inclusion of self-compassion and emotion regulation strategies on their assessment protocols. It is then, beyond question, that the study of the psychosocial determinants of female sexual pain remains a demanding and still to be largely explored field of research.

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