Male Partners of Women with Provoked Vestibulodynia: Attributions for Pain and Their Implications for Dyadic Adjustment, Sexual Satisfaction, and Psychological Distress

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ABSTRACT

Introduction. Provoked vestibulodynia is a female genital pain condition that results in sexual dysfunction and impacts negatively on the couple. Although patients’ causal attributions have been linked to worse psychosexual outcomes, no study has documented the male partners’ perspective of this distressing problem and its potential influence on their psychosexual adaptation.

Aim. To identify whether male partners’ attributions for vestibulodynia are possible predictors of their dyadic adjustment, sexual functioning, sexual satisfaction, and psychological distress, as well as of women’s pain and sexual functioning.

Methods. Thirty-eight women with vestibulodynia first completed measures of pain intensity and sexual functioning. Male partners responded to mailed questionnaires assessing their own attributions for genital pain as well as their psychological distress, relationship adjustment, sexual functioning, and sexual satisfaction.

Main Outcome Measures. Women completed the McGill-Melzack Pain Questionnaire (MPQ) and the Female Sexual Function Index (FSFI). Attributions of male partners were measured using an adapted version of the Attributional Style Questionnaire (ASQ)—Partner Version. Men also filled out the Brief Symptom Inventory (BSI), the Dyadic Adjustment Scale (DAS), the Sexual History Form (SHF), and the Global Measure of Sexual Satisfaction (GMSEX).

Results. All four negative attribution dimensions and higher levels of women’s pain intensity successfully predicted increased psychological distress in male partners. Higher levels of both internal and global attributions were associated with men’s poorer dyadic adjustment, whereas global and stable attributions were related to their lower sexual satisfaction. Attributions failed to significantly predict sexual functioning in male partners and women’s pain and sexual functioning.


Key Words. Vestibulodynia; Dyspareunia; Partner’s Attributions; Dyadic Adjustment; Sexual Functioning and Satisfaction; Psychological Distress
Male Partners of Women with Provoked Vestibulodynia

Introduction

Provoked vestibulodynia, formerly termed vulvar vestibulitis syndrome, is the most common cause of dyspareunia in women under the age of 30 [1]. Provoked pain implies that it is triggered by physical contact as opposed to being experienced spontaneously or in a chronic manner. The pain is associated with several negative repercussions, such as impaired sexual functioning, distress related to intercourse, anxiety, and decreased quality of life [2–9]. Much less scientific attention has been devoted to the women’s male partners. Only two empirical studies focusing on vestibulodynia to date have examined male partners’ psychological and sexual functioning, and results did not show any differences between partners and population norms [6,10]. Whereas the chronic pain literature has demonstrated the influence of partner variables on pain and psychosocial functioning of both members of the dyad [11], the relation between partner-related factors, pain, and psychosexual adjustment has not been investigated in vestibulodynia couples.

Recent research based on male sexual dysfunction emphasized the negative impact of sexual dysfunction on the healthy partner and also underscored how the romantic relationship may influence the sexual functioning of both partners [12]. Shindel et al. found that sexual dysfunction in female partners of men having undergone radical prostatectomy correlated with sexual dysfunction in the male partner [13]. Another study conducted by Fisher et al. demonstrated that decreased female sexual satisfaction and frequency of orgasm were strongly associated with the male partner’s self-reported severity of erectile dysfunction [14].

Few studies have focused on determinants of spouse adjustment, that is, how pain may affect the adjustment of the healthy partner and how he copes with the chronic pain [15]. Geisser and colleagues showed that greater perceived physical and psychosocial disability of the patient by the spouse were highly associated with spouse marital dissatisfaction and affective distress [16].

An excellent way to investigate partners’ personal perspective is by examining their attributions for vestibulodynia. Indeed, when faced with a medical condition, individuals tend to engage in an attributional questioning in an attempt to restore a more coherent, cohesive, and predictive world vision [17]. Attributions have been shown to be major determinants of adjustment to illness, chronic pain, marital distress, and sexual dysfunction [18–21]. Attributions theory suggests that causal attributions are represented by three dichotomic dimensions: (i) internality (personal responsibility) or externality (cause lies in an external situation); (ii) globality (entire life is affected by the problem) or specificity (problem affects only a specific situation); and (iii) stability (problem will still remain in the future) or instability (weak probability that the problem will be maintained with time) [22]. Additionally, some studies in health psychology have shown that partner responsibility (whether my partner is responsible or not for my problem) is a fourth dimension to consider in the assessment of attributions [23]. Moreover, a positive attributional style concerning a negative event, such as vestibulodynia, suggests an interpretation of the situation using external, specific, and unstable attributions. A negative attributional style stems from a view that the negative situation is internal, global, and stable. This negative attributional style has been related to depression and helplessness [24].

In the area of dyspareunia, Meana et al. found that women’s psychosocial attributions for dyspareunia (as opposed to biomedical attributions) correlated with higher pain intensity, psychological distress, and increased dyadic and sexual difficulties [25]. A recent study involving women with vestibulodynia indicated that negative pain attributions were predictors of higher psychological distress and sexual impairment, as well as lower dyadic adjustment in female patients [26].

Until now, no studies have addressed attributions in male partners of women with provoked vestibulodynia. Previous findings concerning sexual dysfunction and chronic pain suggest that their psychosexual adjustment to the condition may be influenced by their personal interpretation of the pain.

Aims

The aim of this study was to assess whether pain attributions were predictors of dyadic adjustment, sexual functioning, sexual satisfaction, and psychological distress in male partners of women with vestibulodynia. A secondary aim was to examine the extent to which partners’ attributions also predicted women’s pain and sexual functioning. We hypothesized that negative attributions (internal, women responsibility, global, and stable) would predict lower levels of dyadic adjustment, sexual functioning, and sexual satisfaction, in addition to...
greater psychological distress in men, and worse pain and sexual functioning in women.

Methods

Participants
The sample was recruited from a larger study, which aimed to evaluate the efficacy of a cognitive-behavioral group treatment for provoked vestibulodynia. Women diagnosed with vestibulodynia and their partners comprised the present sample. Recruitment was completed over a 2-year period (2002–2004). This research was approved by our institution’s ethics review board. Inclusion criteria for the men were the following: (i) having a female partner with a diagnosis of provoked vestibulodynia; (ii) cohabiting with the partner; and (iii) relationship duration ≥ 6 months. The sole exclusion criterion was the presence of a serious psychiatric illness.

Procedure
In the context of the larger treatment study, women took part in a gynecological examination and a structured interview, in addition to completing standardized questionnaires, including the Brief Symptom Inventory (BSI) [27] for screening purposes (see the section on men’s questionnaires for a description of the BSI). We gave interested women preaddressed and prestamped envelopes which contained all of the men’s questionnaires with consent forms and explanations concerning the study. Two weeks after the interview, we contacted each male partner to ask whether he had any questions concerning the procedure.

Measures

Women’s Questionnaires

Pain Intensity
Women’s pain intensity was evaluated using the McGill-Melzack Pain Questionnaire (MPQ) [28]. This measure comprises qualitative as well as quantitative elements. This questionnaire has excellent psychometric properties [29–31]. A French version of this questionnaire was previously validated by Boureau et al. [32].

Sexual Functioning
Women also filled out the Female Sexual Function Index (FSFI), which is comprised of 19 items assessing five dimensions of global sexual functioning: (i) desire and arousal; (ii) lubrication; (iii) orgasm; (iv) satisfaction; and (v) pain/discomfort [33]. Daker-White reported very good psychometric qualities for this instrument [28]. This questionnaire was translated from English to French and factorial analyses confirmed that the factorial structure of the French version was similar to that of the original English version. In addition, internal consistency was excellent (α = 0.92).

Men’s Questionnaires

Partner Attributions
Men were asked to complete the Attributions for Dyspareunia Questionnaire—Partner Version (adapted from the Attributional Style Questionnaire, ASQ) [34]. Our adaptation describes 12 hypothetical situations provoking genital pain. The participants must evaluate the main cause of these 12 situations. We derived four scores from this scale: (i) internal attributions: I’m responsible for the pain problem; (ii) women’s responsibility attributions: my female partner is responsible for her pain problem; (iii) global attributions: the pain problem is affecting my entire life; and (iv) stable attributions: the pain problem will always be a part of my life. Each score was collected on a Likert 7-point scale. Factorial analysis confirmed that the translated and adapted partner version was similar to the original English version of the questionnaire. Internal consistency reliability estimates were excellent (α = 0.94).

Psychological Distress
We used the Brief Symptoms Inventory (BSI) to assess men’s psychological distress [27]. This self-report instrument has 53 items, nine dimensions of primary symptoms, and three total indices designed to evaluate general degree of psychological distress. The reliability and validity of this inventory are excellent across different populations and with a French population [35].

Dyadic Adjustment
The Dyadic Adjustment Scale (DAS) was used to evaluate couple adjustment [36]. This questionnaire has excellent reliability and validity [37]. In our study, a validated revised version of the DAS was used, which has 14 items with 5-point Likert scales (“always in agreement” to “always in dissen-sion”) [38]. This recent version was also validated with a French-speaking population [39].

Sexual Functioning
Male partners also completed the Sexual History Form (SHF) [40]. The SHF is a multiple-choice questionnaire, initially developed for clinical use. It provides reliable and valid results for diagnostic
and scientific purposes [41]. A French version of this questionnaire was also used [42].

Sexual Satisfaction
Sexual satisfaction was measured using the Global Measure of Sexual Satisfaction (GMSEX) [43]. This questionnaire evaluates global satisfaction concerning sexual activities. This questionnaire has good psychometric properties [43]. The five items were translated in French and internal consistency reliability estimates were excellent (α = 0.92).

Results
Sample Characteristics
Of the 68 women involved in a romantic relationship and solicited for participation in the present study, one stated that her partner would not be interested in participating. Of the couples having agreed to participate, 21 partners did not return their consent forms and questionnaires. Forty-six male partners of women with provoked vestibulodynia participated in our study, although eight had missing questionnaire data, resulting in a final sample of 38. Table 1 presents descriptive statistics for the couple variables.

Table 2 Zero-order correlations between attributions, women’s pain intensity, and psychosexual variables

<table>
<thead>
<tr>
<th>Measure</th>
<th>MPQ</th>
<th>FSFI</th>
<th>BSI-M</th>
<th>DAS-M</th>
<th>SHF-M</th>
<th>GMSEX-M</th>
<th>Internal</th>
<th>Women responsibility</th>
<th>Global</th>
<th>Stable</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPQ</td>
<td>—</td>
<td>0.08</td>
<td>0.35*</td>
<td>0.21</td>
<td>0.15</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>FSFI</td>
<td>—</td>
<td>0.01</td>
<td>0.10</td>
<td>0.04</td>
<td>0.09</td>
<td>0.08</td>
<td>0.01</td>
<td>0.00</td>
<td>0.07</td>
<td>—</td>
</tr>
<tr>
<td>BSI-M</td>
<td>0.01</td>
<td>—</td>
<td>0.26</td>
<td>0.03</td>
<td>0.09</td>
<td>0.40*</td>
<td>0.34*</td>
<td>0.33*</td>
<td>0.48**</td>
<td>—</td>
</tr>
<tr>
<td>DAS-M</td>
<td>0.04</td>
<td>0.10</td>
<td>—</td>
<td>0.14</td>
<td>0.13</td>
<td>0.38*</td>
<td>0.29</td>
<td>0.44**</td>
<td>0.32</td>
<td>—</td>
</tr>
<tr>
<td>SHF-M</td>
<td>0.03</td>
<td>0.03</td>
<td>0.14</td>
<td>—</td>
<td>0.30</td>
<td>0.05</td>
<td>0.03</td>
<td>0.09</td>
<td>0.09</td>
<td>—</td>
</tr>
<tr>
<td>GMSEX-M</td>
<td>0.15</td>
<td>0.09</td>
<td>0.09</td>
<td>0.30</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

*P < 0.05; **P < 0.01.
MPQ = McGill-Melzack Pain Questionnaire; FSFI = Female Sexual Function Index; BSI = Brief Symptom Inventory (M = Men); DAS = Dyadic Adjustment Scale (M = Men); SHF = Sexual History Form (M = Men); GMSEX = Global Measure of Sexual Satisfaction (M = Men).

Zero-Order Correlations
Couples who were initially solicited but who did not take part in the study were different from the study participants on some sociodemographic variables. The final participants were younger (t = -2.58, P < 0.01) and were more recently involved in their current relationships (t = -2.58, P < 0.01) than those in the nonparticipant group. However, nonparticipants did not differ from participants in terms of their psychological distress, global sexual functioning, dyadic adjustment, and pain intensity.

Table 2 shows simple correlations between women’s pain intensity, women’s sexual functioning, as well as men’s psychological distress, dyadic adjustment, sexual functioning, sexual satisfaction, and attributions. No significant associations were found between the sociodemographic variables and the other study variables. Regarding women’s variables, only a moderate relationship was found between their genital pain intensity and men’s psychological distress. Women’s sexual functioning was not related to any of the men’s variables.

Attributions as Predictors of Dyadic Adjustment, Sexual Satisfaction, and Psychological Distress
Hierarchical regression analyses were conducted to establish the relative contribution of male partners’ attribution dimensions to their dyadic adjustment, sexual satisfaction, and psychological distress. Predictor variables were internal attributions, women
responsibility attributions, global attributions, and stable attributions. Women’s genital pain intensity (MPQ) was controlled for in the analyses because it correlated significantly with psychological distress.

**Internal Attributions**

**Dyadic Adjustment (DAS)**

Internal attributions contributed significantly to the explained variance in dyadic adjustment, $\Delta R^2 = 0.12$; $F_{1,36} = 6.105$, $P = 0.01$. Specifically, greater use of internal attributions predicted lower levels of dyadic adjustment, $\beta = -0.38$, $t = -2.471$, $P < 0.01$.

**Psychological Distress (BSI)**

Women’s pain intensity (MPQ), included in the first step, significantly contributed to the explained variance in psychological distress, $\Delta R^2 = 0.10$; $F_{1,36} = 4.947$, $P = 0.03$. Higher levels of pain intensity were associated with higher levels of male psychological distress, $\beta = 0.35$, $t = 2.224$, $P < 0.05$. The inclusion of the second step, internal attributions, resulted in a significant increase in the prediction of psychological distress, $\Delta R^2 = 0.21$; $F_{2,35} = 6.230$, $P = 0.02$, with higher levels of internal attributions associated with higher levels of psychological distress, $\beta = 0.37$, $t = 2.496$, $P < 0.05$ (Table 3).

**Women Responsibility Attributions**

**Psychological Distress (BSI)**

In step 1, women’s pain intensity contributed significantly to the variance in men’s psychological distress, $\Delta R^2 = 0.10$; $F_{1,36} = 4.947$, $P = 0.03$. The second step, women responsibility attributions, resulted in a significant increase in the prediction of psychological distress, $\Delta R^2 = 0.19$; $F_{2,35} = 5.003$, $P = 0.03$. Men with female partners who reported higher levels of pain intensity and men who tended to blame the women for their pain had higher levels of psychological distress, $\beta = 0.33$, $t = 2.237$, $P < 0.05$ (Table 4).

**Global Attributions**

**Dyadic Adjustment (DAS)**

Men’s global attributions resulted in a substantial increase in the ability to predict their dyadic adjustment, $\Delta R^2 = 0.17$; $F_{1,36} = 8.690$, $P = 0.00$. Specifically, greater use of global attributions predicted lower levels of dyadic adjustment, $\beta = -0.44$, $t = -2.948$, $P < 0.001$.

**Sexual Satisfaction (GMSEX)**

Men’s global attributions resulted in a significant increase in the amount of variance explained for sexual satisfaction, $\Delta R^2 = 0.18$; $F_{1,36} = 7.731$, $P = 0.00$. Men who reported greater use of global attributions tended to report lower levels of sexual satisfaction, $\beta = -0.42$, $t = -2.780$, $P < 0.001$.

**Psychological Distress (BSI)**

In step 1, women’s pain intensity contributed significantly to the variance in psychological distress, $\Delta R^2 = 0.10$; $F_{1,36} = 4.947$, $P = 0.03$. The inclusion of global attributions in step 2 contributed significantly to the resultant increase in psychological distress, $\Delta R^2 = 0.17$; $F_{2,35} = 4.249$, $P = 0.02$. Men who employed more global attributions and had a partner who experienced higher levels of pain showed more psychological distress, $\beta = 0.31$, $t = 2.061$, $P < 0.05$ (Table 5).

**Stable Attributions**

**Sexual Satisfaction (GMSEX)**

Stable attributions significantly predicted scores on the sexual satisfaction scale, $\Delta R^2 = 0.19$; $F_{1,36} = 9.374$, $P = 0.001$. Moreover, higher use of stable attributions predicted lower levels of sexual satisfaction, $\beta = -0.46$, $t = -3.062$, $P < 0.001$.

**Psychological Distress (BSI)**

Women’s pain intensity (MPQ), included in the first step, significantly contributed to the explained variance in psychological distress, $\Delta R^2 = 0.01$; $F_{1,36} = 6.105$, $P = 0.01$. Specifically, greater use of stable attributions predicted lower levels of psychological distress, $\beta = -0.38$, $t = -2.471$, $P < 0.01$.

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**Table 3** Results of the hierarchical regression analyses for internal attributions associated with dyadic adjustment and psychological distress

<table>
<thead>
<tr>
<th>Variables</th>
<th>Beta</th>
<th>$\Delta R^2$</th>
<th>$F$</th>
<th>$P$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dyadic adjustment</td>
<td>-0.38*</td>
<td>0.12</td>
<td>6.105</td>
<td>0.01</td>
</tr>
<tr>
<td>Psychological distress</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pain during intercourse (MPQ)</td>
<td>0.35*</td>
<td>0.10</td>
<td>4.947</td>
<td>0.03</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal attributions</td>
<td>0.37*</td>
<td>0.21</td>
<td>6.230</td>
<td>0.02</td>
</tr>
</tbody>
</table>

* $P < 0.05$; ** $P < 0.01$.

MPQ = McGill-Melzack Pain Questionnaire.

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**Table 4** Results of the hierarchical regressions analyses for women responsibility attributions associated with psychosocial distress

<table>
<thead>
<tr>
<th>Variables</th>
<th>Beta</th>
<th>$\Delta R^2$</th>
<th>$F$</th>
<th>$P$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychological distress</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pain during intercourse (MPQ)</td>
<td>0.35*</td>
<td>0.10</td>
<td>4.947</td>
<td>0.03</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women responsibility attributions</td>
<td>0.33*</td>
<td>0.19</td>
<td>5.003</td>
<td>0.03</td>
</tr>
</tbody>
</table>

* $P < 0.05$; ** $P < 0.01$.

MPQ = McGill-Melzack Pain Questionnaire.
variance in men’s psychological distress, $\Delta R^2 = 0.10; F_{1,16} = 4.947, P = 0.03$. Higher levels of pain intensity were associated with higher levels of psychological distress, $\beta = 0.35, \ t = 2.224, \ P < 0.05$. Stable attributions added in the second step resulted in a significant increase in the prediction of psychological distress, $\Delta R^2 = 0.26; F_{2,35} = 8.668, \ P = 0.00$, with higher levels of stable attributions associated with higher levels of psychological distress, $\beta = 0.43, \ t = 2.944, \ P < 0.001$ (Table 6).

**Discussion**

The main goal of the present study was to evaluate the impact of male partners’ attributions for vestibulodynia on their dyadic adjustment, sexual functioning, sexual satisfaction, and psychological distress. The four negative attribution dimensions (internal, women responsibility, global, and stable), in addition to higher levels of women’s pain intensity, were found to predict increased psychological distress in male partners. Moreover, higher levels of both internal and global attributions predicted men’s poorer dyadic adjustment, whereas global and stable attributions were associated with their lower sexual satisfaction. Despite our initial hypotheses, attributions failed to predict sexual functioning in male partners, and women’s pain and sexual functioning.

The fact that negative attribution dimensions in addition to women’s pain contributed 17–26% of the explained variance in psychological distress of the male partners is in line with previous research highlighting their association with higher rates of depression and helplessness [24,44,45]. Further, the present results concerning the relationship between women’s higher pain intensity and increased psychological distress in men are in accordance with the findings of Geisser et al., who showed that greater perceived physical disability of the patient by the spouse was associated with higher spouse-affective distress [16]. Another study focusing on women with orgasmic dysfunction found that male partners were more likely to blame themselves (internal attributions) than the circumstances for the sexual dysfunction [46]. It is plausible that if male partners perceived that they were responsible for the vulvo-vaginal pain problem, they would experience strong feelings of guilt, and that women’s higher levels of pain would elicit more psychological distress in them.

Moreover, women responsibility attributions and higher levels of women’s pain together accounted for 19% of the variance in psychological distress of the partners. In the case of dyspareunia, where physical signs are difficult to identify and couples consult several physicians before receiving a proper diagnosis [47], men may come to believe that indeed there is no physical problem, but rather that the woman is somehow creating her pain, perhaps because of a lack of attraction to her partner—a personal theory that could increase their psychological distress.

Additionally, global attributions and higher levels of women’s pain intensity explained 17% of the total variance in men’s psychological distress, whereas stable attributions and pain accounted together for 26% of the variance. Global and stable causal explanations are associated with more extensive helplessness, which means the failure to initiate action to resolve the problem [48]. Thus, the more men view the pain problem as disturbing for their entire life and possibly lasting forever, the less they will tend to deploy approach-coping strategies to resolve the pain problem, and the more they may experience elevated levels of psychological distress.

As for dyadic adjustment, internal and global attributions contributed, respectively, to 12% and 17% of its variance. These results confirm our initial hypothesis whereby internal and global attributions were thought to be associated with

**Table 5** Results of the hierarchical regression analyses for global attributions associated with dyadic adjustment, sexual satisfaction, and psychological distress

<table>
<thead>
<tr>
<th>Variables</th>
<th>Beta</th>
<th>$\Delta R^2$</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dyadic adjustment</td>
<td>-0.44***</td>
<td>0.17</td>
<td>8.690</td>
<td>0.00</td>
</tr>
<tr>
<td>Sexual satisfaction</td>
<td>-0.42***</td>
<td>0.18</td>
<td>7.731</td>
<td>0.00</td>
</tr>
<tr>
<td>Psychological distress</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pain during intercourse (MPQ)</td>
<td>0.35*</td>
<td>0.10</td>
<td>4.947</td>
<td>0.03</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Global attributions</td>
<td>0.31*</td>
<td>0.17</td>
<td>4.249</td>
<td>0.02</td>
</tr>
</tbody>
</table>

* $P < 0.05$; *** $P < 0.001$.
MPQ = McGill-Melzack Pain Questionnaire.

**Table 6** Results of the hierarchical regression analyses for stable attributions associated with sexual satisfaction and psychological distress

<table>
<thead>
<tr>
<th>Variables</th>
<th>Beta</th>
<th>$\Delta R^2$</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sexual satisfaction</td>
<td>-0.46***</td>
<td>0.19</td>
<td>9.374</td>
<td>0.00</td>
</tr>
<tr>
<td>Psychological distress</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pain during intercourse (MPQ)</td>
<td>0.35*</td>
<td>0.10</td>
<td>4.947</td>
<td>0.03</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stable attributions</td>
<td>0.43***</td>
<td>0.26</td>
<td>8.668</td>
<td>0.00</td>
</tr>
</tbody>
</table>

* $P < 0.05$; *** $P < 0.001$.
MPQ = McGill-Melzack Pain Questionnaire.
lower dyadic adjustment. More recently, in women with vestibulodynia, Jodoin et al. (in press) demonstrated that patients’ global and stable attributions were associated with a decrease in dyadic adjustment after controlling for pain and relationship duration [26]. Male partners may assume that they are less competent sexually and develop a fear of losing their significant other.

Furthermore, males’ sexual satisfaction was predicted by global and stable attributions, with each respectively accounting for 17% and 18% of the variance. These results are in accordance with other studies which have shown that sexual problems in one partner were a strong predictor of the other’s sexual dissatisfaction [49].

We found no associations between the four negative attribution dimensions and men’s sexual functioning. It is possible that negative attributions may influence sexual functioning only when these are related to one’s own sexual performance or dysfunction [50]. Finally, partners’ attributions failed to predict women’s sexual functioning and pain intensity. Perhaps a future study conducted with a larger sample or with different partner variables (e.g., partner hostility) [10] could better explain the variations in women’s pain intensity and sexual functioning.

There are some limitations to this study. First, the design was cross-sectional, limiting the inferences regarding causal relationships between the variables. Experimental and prospective studies are necessary to determine the extent to which causal attributions result in psychosexual adjustment problems in male partners of women with vestibulodynia.

In spite of these limitations, the present findings hold important theoretical and clinical implications. Although a number of recent studies have addressed the role of the female partner in the context of male sexual dysfunction and its treatment [12–14], this is the first study to examine the male partner’s perspective in the experience of a female sexual dysfunction. As such, the present research paves the way for future work focusing on the contribution of dyadic and partner variables to the experience of women’s sexual health problems. Specifically, results of the current research contribute to a better understanding of the impact of sexual pain on the healthy partner and highlight the important role of cognitive factors in coping with a significant other’s sexual difficulties.

Clinically, the present findings suggest that the partner should be an integral part of the treatment of vestibulodynia. Partner involvement in sexual treatment has been shown to lead to superior outcomes for women with orgasmic dysfunction or hypoactive sexual desire disorder [51,52]. Cognitive-behavioral approaches could serve to modify the negative attributional styles of both partners, with a view to increasing their dyadic adjustment, sexual functioning, sexual satisfaction, and psychological distress.

**Conclusion**

Negative male partners’ attributions for vestibulodynia were found to be significant predictors of their lower dyadic adjustment and sexual satisfaction, as well as increased psychological distress, although they failed to predict their sexual functioning. These findings suggest that partners should be involved in the treatment of dyspareunia and that focusing on their perspective could be beneficial for the overall adjustment of the couple.

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**Statement of Authorship**

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