

ORIGINAL RESEARCH

# The Mediating Role of Sexual Behavior in Event-Level Associations Between Sexual Difficulties and Sexual Satisfaction in Newlywed Mixed-Sex Couples



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## ABSTRACT

**Introduction:** Many sexual difficulties encountered by couples in their day-to-day lives, although of insufficient intensity and persistence to warrant a clinical diagnosis of sexual disorder, are nevertheless frequent and a source of individual and relational distress.

**Aim:** The aim of this study was to assess the event-level associations between couples' everyday, subclinical sexual difficulties (specifically, low subjective sexual arousal, low physiological sexual arousal, and genito-pelvic pain), the range of sexual behaviors that these couples engage in, and their sexual satisfaction.

**Methods:** 70 Newlywed participants (35 couples, average age = 25.6 years, SD = 3.2 years; average duration of relationship = 5.4 years, SD = 3.4 years) individually completed daily diaries about sexual difficulties, range of activities performed during sex, and sexual satisfaction over the course of 5 weeks. Analyses were guided by the actor-partner interdependence model.

**Main Outcome Measure:** The main outcome was sexual satisfaction, measured at the event-level on a 5-point Likert scale using a single-item question.

**Results:** On days of sexual activity, men and women's difficulties with subjective sexual arousal were associated with lower sexual satisfaction in both partners (actor and partner effects). This association was mediated by the range of couples' sexual behaviors, such that lower subjective arousal was associated with a more restricted range of sexual activities, which in turn was associated with lower sexual satisfaction. Men's and women's difficulties with physiological sexual arousal, and women's genito-pelvic pain, were each associated with their own lower sexual satisfaction. No partner effects were observed for these sexual difficulties, nor were they mediated by the range of couples' sexual activities.

**Clinical Implications:** The study's results highlight how couples' sexual difficulties can interfere with same-day sexual satisfaction, and how for subjective sexual arousal, this interference is reflected by a more restricted range of sexual behaviors.

**Strength & Limitations:** Strengths of the study include the daily diary methodology, which allowed a focus on event-level sexual activities with minimal retrospective bias. Further, the dyadic analyses allowed both intra-individual and inter-individual effects to be assessed. Limitations include the lack of a more general measure of sexual desire and of a more diverse sample, in terms of age, race, and sexual orientation.

**Conclusion:** These findings underscore the importance of treatments that include both partners, and that target the types as well as range of sexual activities in which couples engage. **Jodouin J-F, Bergeron S, Janssen E. The Mediating Role of Sexual Behavior in Event-Level Associations Between Sexual Difficulties and Sexual Satisfaction in Newlywed Mixed-Sex Couples. J Sex Med 2018;15:1384–1392.**

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**Key Words:** Sexual Difficulties; Subjective Sexual Arousal; Physiological Sexual Arousal; Sexual Pain; Sexual Behavior; Dyadic Diary Study

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## INTRODUCTION

Sexual difficulties are a source of distress in the daily lives of many couples. Sexual difficulties are prevalent in the general population, with estimates ranging from 31–50% for men and 43–77% for women.<sup>1,2</sup> Of these sexual difficulties, many are subclinical, in that the intensity, persistence, and duration of the symptoms are insufficient to be diagnosed as a sexual disorder. Despite their lower intensity, subclinical sexual difficulties nevertheless may cause significant distress in couples. Studies have reported associations between problematic sexual functioning and poor personal and relational outcomes,<sup>3–5</sup> including sexual and relationship dissatisfaction.<sup>6,7</sup> Given their widespread occurrence, it is surprising that everyday, subclinical sexual difficulties have not received more attention in the scientific literature. Of the existing studies, most have used retrospective measures, spanning 1 or many months, which are subject to memory bias and fail to address daily or event-level phenomena. Finally, most studies have neglected the interpersonal or dyadic nature of sexual difficulties and, instead, focused on within-subject or intra-individual effects.

The current study sought to fill these gaps by examining event-level associations among sexual difficulties, the range of sexual behaviors, and sexual satisfaction in dyadic daily reports as provided by a non-clinical sample of couples. Although these objectives are potentially relevant to other populations, the focus of the present study was on the experience of low subjective sexual arousal, low genital or physiological sexual arousal, and genito-pelvic pain in newlywed, mixed-sex couples.

### Sexual Difficulties and Sexual Satisfaction

A recent consensus report indicated that individuals presenting clinical levels of sexual dysfunction score lower than the general population on many physiological and relational factors, including sexual satisfaction.<sup>8</sup> Although the authors caution that the presence of a sexual dysfunction does not necessarily imply sexual dissatisfaction, this association does appear to be statistically robust.<sup>7</sup> Clinical levels of sexual dysfunction have also been shown to have interpersonal effects. For instance, women's experiences of genito-pelvic pain<sup>9–11</sup> and men's reports of erectile difficulties<sup>12</sup> are both associated with their partners' lower sexual satisfaction.

Studies of subclinical sexual difficulties suggest that they too are negatively associated with sexual satisfaction in both the individuals reporting the difficulty and their partners. For example, general population surveys reported that lower levels of satisfaction with sexual function correlated with lower reported sexual happiness.<sup>13</sup> However, these findings stem from single-occasion measures, and event-level associations between subclinical sexual difficulties and sexual satisfaction have not yet received empirical attention. This is an important gap, given that key variables such as sexual distress and sexual satisfaction vary significantly on a daily basis.<sup>14–16</sup>

## Sexual Difficulties, Sexual Behavior, and Sexual Satisfaction

A question of both conceptual and clinical relevance concerns the mechanisms by which sexual difficulties are associated with lower sexual satisfaction. Studies show that both sexual difficulties and sexual satisfaction are associated with the couple's behavior during sexual activity.<sup>7</sup> Frequency and duration of sex, duration of foreplay,<sup>17</sup> duration of post-sex affectionate exchanges,<sup>18</sup> and of particular interest to this study, the range of sexual behaviors,<sup>19</sup> have all been shown to correlate with greater sexual satisfaction. Conversely, cross-sectional studies have linked sexual difficulties with lower frequency of sex and lower sexual satisfaction.<sup>20</sup> Further, restrictions in the range of sexual behaviors have been reported for both men and women experiencing difficulties in sexual arousal and orgasm<sup>21</sup> and for women with genito-pelvic pain.<sup>22</sup> Hence, one plausible hypothesis is that a couple's sexual difficulties may lead to restrictions in their range of behaviors during sexual activity, which in turn may result in lower sexual satisfaction. Support for this hypothesis to date has been indirect, and dyadic, event-level associations have not yet been investigated.

### Study Goals and Hypotheses

The present study examined event-level associations between subclinical sexual difficulties, the range of behaviors during sexual activity, and sexual satisfaction in newlywed couples. It was hypothesized that on days where the couple had had sexual activities: (1) reports of sexual difficulties would be associated with lower sexual satisfaction for both the respondents and their partners on the same day, and that (2) these associations would be mediated by restrictions in the range of the couple's sexual behaviors. Gender effects were also examined, but no a priori hypotheses were formulated, given that these effects have not yet been studied in the associations between sexual difficulties, sexual satisfaction, and sexual behavior. Finally, the hypotheses in this study were post-hoc.

## METHODS

### Participants

Working from the marriage registry of Monroe County, Indiana, USA, approximately 300 newlywed mixed-sex couples were sent a letter explaining the goals and nature of the study and were invited to contact the researchers if they were interested in participating. Interested individuals were screened for eligibility during a telephone interview. To be eligible, couples were required to be English-speaking, aged between 18 and 40 years old, childless, and intending to remain in the country for the duration of the study. These criteria allowed the study to focus on a homogeneous group of couples with subclinical sexual difficulties not associated with the transition to parenthood, perimenopause, or health issues.<sup>23,24</sup>

The first 35 couples (70 participants) who proved eligible to participate took part in the study. Participants were compensated

up to \$45 for their contribution to the study (\$1 per daily entry, with an additional \$10 for having completed all diary days).

## Procedure

The data for this study were drawn from a larger project on predictors of sexual and relationship satisfaction, which included questionnaires, daily diaries, and couple observations,<sup>25</sup> which ran 9 months, from October 2006 to June 2007. Participants began by attending a training session during which the study was explained, the study's questions were read and explained, and informed consent obtained. Participants then completed a baseline questionnaire regarding their personal and relationship history, as well as their psychological and physiological state. The questions relating to sociodemographics and to sexual difficulties were used in the present analysis (for a more complete description of this study, see Gadassi et al<sup>25</sup>). Participants then completed a standardized, electronic daily diary for 35 consecutive days using smartphones. On days where the participants had had sex, the diary included questions about their sexual satisfaction, about any sexual difficulties, and about their behaviors during sex. Finally, participants were debriefed in a final face-to-face session once the diary period was completed.

## Measures

### Sex Today

Participants reported the days on which they had engaged in sexual activity through a single-item, yes/no question ("Did you engage in sexual activity with your spouse in the last 24 hours?").

### Sexual Difficulties

On days where the participants reported having had sex, 3 single-item questions were asked, all on a 5-point Likert scale (1 = "not at all" to 5 = "extremely"), and worded to be gender-neutral: *subjective arousal*: "Did you have difficulty becoming or staying sexually aroused mentally?"; *physiological arousal*: "Did you have difficulty becoming or staying sexually aroused physically?"; *genito-pelvic pain*: "Did you experience any pain or physical discomfort during sexual activity?"

### Sexual Behavior

Participants independently reported the couple's behavior during each sexual activity using a checklist ("What sort of sexual activity did you engage in?"), allowing 1–7 answers among a list of sexual behaviors: "non-genital touch," "genital touch," "vaginal intercourse," "anal intercourse," "oral sex (me on my partner)," "oral sex (my partner on me)," and "kissing." This list was a simplification of behavioral repertoires studied elsewhere,<sup>26</sup> chosen for their higher frequency of occurrence. All behaviors were summed into a composite score, describing the range of their sexual behavior during sexual activity; the higher the score, the greater the range of behaviors reported by the participant. A paired *t* test confirmed that there was no significant difference

between the 2 partners' reported range of sexual behaviors ( $t(499) = .000, P = 1.00 > .05$ ).

## Sexual Satisfaction

On sex days, participants' satisfaction associated with their sexual activity was assessed using a single diary question ("How sexually satisfying was this activity for you?" rated on a 5-point Likert scale (1 = "not at all" to 5 = "extremely"). This measure has been used in other daily diary studies.<sup>27</sup>

## Data Analytic Approach

Data manipulation and descriptive analyses were executed on software (SPSS, Version 21.0; IBM Corp, Armonk, NY, USA). Direct and indirect effects between variables were assessed using Hierarchical Structural Equation Modeling in Mplus 7 using maximum likelihood with robust SE, chosen for their greater robustness to non-normal data.<sup>28,29</sup> All other parameters in the simulation were set to Mplus defaults.<sup>29</sup> As recommended by Gefen et al<sup>30</sup> models in this study were validated using model fit indices (cutoff values: root mean square error of approximation < 0.08, standardized root mean square residual < 0.08, Comparative Fit Index > 0.9) and *P* values for individual estimates (*P* < .05 for all associations reported). Furthermore, models were required to be non-saturated. Following recommendations for SEMs by Cribbie,<sup>31</sup> no adjustments were made to the study's results to correct for familywise error. Finally, power analyses were performed using Monte Carlo simulation in Mplus, based on acceptability criteria recommended by Muthén and Muthén.<sup>32</sup> Note that Zhang and Willson<sup>33</sup> report that multi-level SEMs showed an asymptotic growth in efficiency when first-level unit size reached about 35.

Analyses were based on the actor-partner interdependence mediation model,<sup>26</sup> an extension of the actor-partner interdependence model.<sup>34</sup> All models included independent and dependent variables for both the participants and their partners: their daily sexual difficulties with arousal, desire, and genito-pelvic pain, and their sexual satisfaction on the same day. The range of sexual behaviors, as reported by the participant, was used as a potential mediating variable. Analyses were performed using only the reports from days on which the couple had had sexual activity. In the analyses, we tested the associations between women's own sexual difficulties and their sexual satisfaction (actor effects), and between women's sexual difficulties and their men partners' sexual satisfaction (partner effects). Similarly, we tested the associations between men's own sexual difficulties and their sexual satisfaction, and between men's sexual difficulties and their women partners' sexual satisfaction. The analysis was performed using a 2-level cross model, where persons were nested within days, and where same-day reports from both partners were crossed. All variables were person-mean centered, so that their values reflected daily deviations from each respondent's mean values. Hence, this model assessed whether daily deviations from each respondent's average sexual difficulty was associated

**Table 1.** Descriptive statistics for key variables

	Mean	SD	Skewness	Kurtosis
Difficulty with subjective arousal	1.29	0.701	2.883	8.831
Difficulty with physiological arousal	1.28	0.688	2.869	8.27
Genito-pelvic pain	1.18	0.453	3.047	12.758
Sexual behavior	3.97	1.051	-0.912	0.123
Sexual satisfaction	3.74	1.261	-0.159	-0.277

with changes in sexual satisfaction, in both themselves and their partners. Finally, entries where critical data were missing were removed using listwise deletion (10 entries).

## RESULTS

### Sample Characteristics

The 70 participants (35 couples) individually completed a total of 2120 diary entries. This corresponds to an average of 30.7 diary entries per participant (89.9% of the participants completed 30 or more entries, and all completed 28 or more entries). Of these, 645 (324 for men, 321 for women) entries were made on days during which sexual activity had taken place. This corresponds to an average per participant of 9.3 sexual activity days ( $SD = 5.5$ ). Entries between partners were matched 91% of the time; the remaining entries were either missing for 1 partner (7%), or partners disagreed on whether sex had occurred (1.9%).

Participants were on average 25.6 years old ( $SD: 3.2$  years); 97.1% were white/non-Hispanic, 1.5% were Hispanic, and 1.4% (1 participant) reported to be of "other ethnicity." Average duration of their relationship with their spouse at the time of the study was 5.4 years ( $SD: 3.4$  years). These socio-demographic characteristics were not significantly correlated with the dependent variable, daily sexual satisfaction. Descriptive statistics for the variables used in this study are reported in Table 1. In particular, participants reported responses from 4 "happy" to 7 "perfect" on a 7-point Likert scale 71.7% of the time when asked about their overall sexual satisfaction.

Averaging values across diary entries on sex days showed that women reported sexual difficulties in the range of 2 ("a little") to 5 ("extremely") in at least 1 area 67% of the time, and men, 32% of the time. In this sample, difficulties with subjective arousal were the most frequently reported sexual difficulty. Difficulties with subjective and physiological sexual arousal were twice as frequent for women than for men, and genito-pelvic pain, 3 times as frequent. The majority of these sexual difficulties were of low- to mid-level intensity (Table 2). In this sample, participant's sexual frequency was not significantly associated with the average level of sexual difficulty they reported (difficult subjective arousal,  $P = .661 > .05$ ; with physical arousal,  $P = .773 > .05$ ; sexual pain,  $P = .355 > .05$ ).

**Table 2.** Sexual difficulties reported in the participants' daily diaries

Sexual difficulty	% Reported	
	Men	Women
Low mental/subjective sexual arousal	12.2	27.6
Low physical sexual arousal	11.3	24.2
Genito-pelvic pain	8.4	23

A sexual difficulty was considered to be reported when the entry was between 2 ("a little") and 4 ("extremely") on a 5-point Likert scale.

### Model Fit

Direct (actor, partner) and indirect (mediation) effects were assessed using actor-partner interdependence mediation model (Figure 1). This model converged without error and with an acceptable model fit ( $RMSEA .000 < .08$ ;  $SRMR$  (within)  $0.030 < 0.08$ ;  $TLI 1.050 > 1.000$ ).

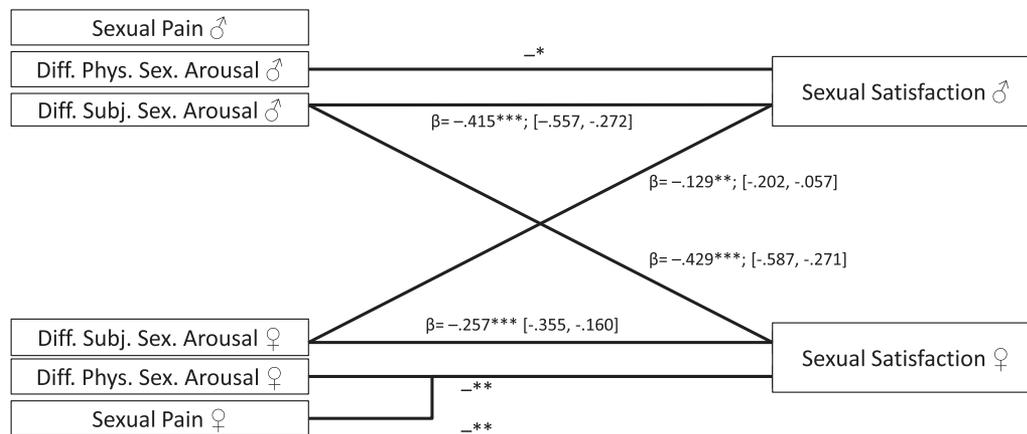
### Associations Between Sexual Difficulties and Sexual Satisfaction

Greater difficulties with subjective sexual arousal were significantly associated with lower levels of sexual satisfaction for both men ( $\beta = -.415$ ; 95%  $CI = -.557$  to  $-.272$ ;  $P < .01$ ) and women ( $\beta = -.257$ ; 95%  $CI = -.355$  to  $-.160$ ;  $P < .01$ ). Greater difficulties with physiological sexual arousal were significantly associated with lower levels of sexual satisfaction for both men ( $\beta = -.201$ ; 95%  $CI = -.337$  to  $-.066$ ;  $P < .05$ ) and women ( $\beta = -.194$ ; 95%  $CI = -.276$  to  $-.113$ ;  $P < .01$ ). Greater genito-pelvic pain was significantly associated with lower levels of sexual satisfaction for women ( $\beta = -.306$ ; 95%  $CI = -.446$  to  $-.165$ ;  $P < .01$ ) but not men ( $P > .05$ ).

Men's difficulties with subjective sexual arousal were significantly associated with their partner's lower levels of sexual satisfaction ( $\beta = -.429$ ; 95%  $CI = -.587$  to  $-.271$ ;  $P < .01$ ). Similarly, women's difficulties with subjective sexual arousal were significantly associated with their partner's lower levels of sexual satisfaction ( $\beta = -.129$ ; 95%  $CI = -.202$  to  $-.057$ ;  $P < .01$ ). Partner effects were not significant for difficulties with physiological arousal or genito-pelvic pain for either sex.

### Mediating Role of Range of Sexual Behaviors

A broader range of sexual behaviors during the couple's sexual activity was significantly associated with greater sexual satisfaction for both men ( $\beta = .289$ ; 95%  $CI = .209$ – $.369$ ;  $P < .01$ ) and women ( $\beta = .388$ ; 95%  $CI = .248$ – $.528$ ;  $P < .01$ ). Greater difficulties with subjective sexual arousal were significantly associated with a more restricted range of sexual behaviors for both men ( $\beta = -.157$ ; 95%  $CI = -.232$  to  $-.081$ ;  $P < .01$ ) and women ( $\beta = -.074$ ; 95%  $CI = -.125$  to  $-.024$ ;  $P < .05$ ). Difficulties with physiological sexual arousal and genito-pelvic pain were not significantly associated with the range of sexual behaviors for either sex (Figure 1).



**Figure 1.** Main (actor and partner) effects between sexual difficulties (subjective sexual arousal, physiological sexual arousal, sexual pain) and sexual satisfaction for men (♂) and women (♀). +/− = Direction of parameter estimates. \* $P < .05$ ; \*\* $P < .01$ ; \*\*\* $P < .001$ . Parameter values are represented for associations with subjective sexual arousal. [95% CI]. Covariance relations are not represented for clarity.

A reduced range of the couple's sexual behaviors was found to mediate the (actor) association between greater difficulties with subjective sexual arousal and lower sexual satisfaction for both men ( $a*b = -.045$ ; 95% CI =  $-.071$  to  $-.020$ ;  $P < .05$ ) and women ( $a*b = -.029$ ; 95% CI =  $0.051$  to  $-.007$ ;  $P < .05$ ). Similarly, reductions in the range of sexual behaviors mediated the (partner) association between men's greater difficulties with subjective arousal and their partner's lower sexual satisfaction ( $a*b = -.061$ ; 95% CI =  $0.093$  to  $-.029$ ;  $P < .05$ ), and women's greater difficulties with subjective arousal and their partner's lower sexual satisfaction ( $a*b = -.021$ ; 95% CI =  $-.036$  to  $-.007$ ;  $P < .05$ ). Interactions between these indirect effects were tested and found to be non-significant ( $P > .05$ ) (Figure 2).

## DISCUSSION

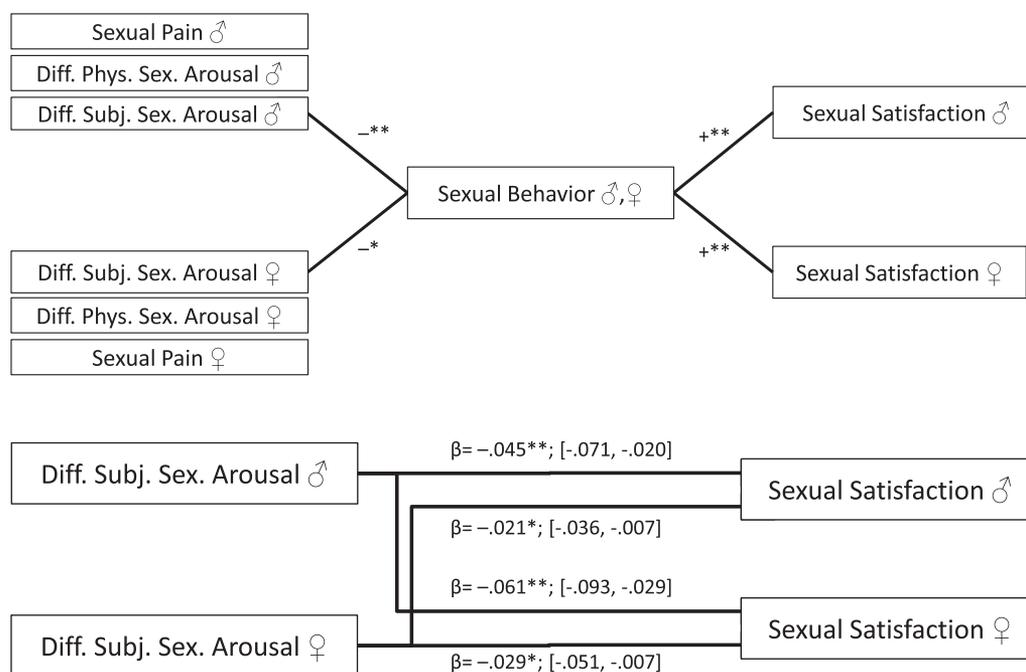
This study assessed event-level associations between couples' everyday, subclinical sexual difficulties—specifically, low subjective sexual arousal, low physiological sexual arousal, and genito-pelvic pain—the couples' range of sexual behaviors, and their sexual satisfaction. Despite the relatively high overall levels of sexual satisfaction in this sample, which may result from the fact that it was composed of young newlyweds, sexual difficulties were frequently reported. These frequencies were consistent with those observed elsewhere, as were the gender differences in the reports.<sup>1,2</sup> These sexual difficulties were subclinical in that they would not be diagnosed as a sexual disorder in any of the participants, based on the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition* criteria for persistence (75–100% of the time) and intensity (“marked”) of symptoms.<sup>35</sup> In this sample, sexual frequency was not significantly associated with the average level of sexual difficulty. On days of sexual activity, men and women's difficulties with subjective sexual arousal were associated with their own lower sexual satisfaction, and with that of their partners' (actor and partner effects). These associations

were mediated by the range of the couple's sexual behaviors, such that lower subjective arousal was associated with a more restricted range of sexual behaviors, which in turn was associated with lower sexual satisfaction. Men and women's physiological arousal difficulties, and women's genito-pelvic pain, were each associated with their own lower sexual satisfaction. No partner effects were observed for these sexual difficulties, and they were not mediated by range of sexual behaviors.

The associations observed in the present study between participants' sexual difficulties and their own lower sexual satisfaction are consistent with reported associations between clinical levels of sexual dysfunction and decreased sexual satisfaction.<sup>7,8,36</sup> The fact that sexual frequency was not significantly associated with the average level of sexual difficulty suggests that, although participants' sexual difficulties affected their sexual satisfaction, they did not lead to avoiding sex altogether.

Results suggest that in the population under study, sexual difficulties are a proximal precursor of lower sexual satisfaction, and that this effect is observable even for lower levels of symptom intensity and at the level of individual sexual activity. Sexual difficulties are salient, negative experiences during sexual interactions with a partner, and this may detract from the ability to attend to more positive physical and emotional cues, resulting in lower sexual satisfaction. The absence of a significant association in this sample between men's reports of genito-pelvic pain and lower sexual satisfaction, contrary to expectations, may be due to their lower incidence and intensity, leading to a “floor effect” in the results.

The significant, positive associations found between respondents' own sexual difficulties and their partner's lower sexual satisfaction are consistent with expectations. It is possible that lower subjective arousal in one partner may lead the other to feel less desirable, thus contributing to his/her lower sexual satisfaction. The lower arousal partner may also be less involved emotionally and be less engaged in the sexual interaction, which may negatively affect the other partner's sexual satisfaction. This interpretation is



**Figure 2.** Sexual difficulties and sexual satisfaction: indirect (mediation) effects. Top: Significant associations between sexual difficulties and the couple's sexual behavior, and between sexual behavior and sexual satisfaction. Bottom: Significant indirect effects (mediation) between difficulties in subjective sexual arousal and sexual satisfaction for men (♂) and women (♀), via the couples' sexual behavior. +/− = Direction of parameter estimates. \* $P < .05$ ; \*\* $P < .01$ . [95% CI].

consistent with the clinical literature that cites difficulties with subjective arousal as central to couples' sexuality,<sup>37,38</sup> and with recent empirical studies that suggest that the relational context—including the partner's mood and behavior—affects men's and women's sexual experience and ultimately, their sexual satisfaction.<sup>8,39–41</sup> The observation that associations between other sexual difficulties (physiological sexual arousal, genito-pelvic pain) and the partner's sexual satisfaction were not significant is also consistent with this interpretation. Low subjective sexual arousal (and more generally, sexual desire) is highly comorbid with other sexual difficulties,<sup>42,43</sup> and thus may dominate the associations with sexual satisfaction in the present results.

That the range of the couples' sexual behaviors mediated all the associations between difficulties with subjective arousal and lower sexual satisfaction is to our knowledge a novel result. The fact that—of the sexual difficulties studied here—low subjective sexual arousal had the only significant association with a more restricted range of sexual activities is consistent with the hypothesis that subjective arousal prompts and facilitates sexual behavior. Frameworks such as the dual control model<sup>44</sup> would posit that aversive cues such as sexual difficulties would have an inhibitory effect on sexual arousal during sexual activity. Arguably, this in turn would lead to a more restricted range of sexual behavior. In support of this hypothesis, a number of authors have reported associations between sexual desire more generally and the range of sexual behavior.<sup>37,38</sup> This finding is also consistent with survey-based studies that link a greater range in sexual behaviors with higher sexual satisfaction.<sup>19,45</sup> Sexual behavior is

shared between partners during sexual activity, which may explain why restrictions in sexual behaviors were associated with lower sexual satisfaction for both partners.

Furthermore, although individuals can and do engage in consensual sexual activity in the absence of sexual desire,<sup>46,47</sup> the clinical literature suggests that individuals experiencing difficulties with subjective arousal or sexual desire tend to “just get on with it,” and engage in less varied sexual behavior.<sup>48,49</sup> Therefore, less varied sexual behavior may also have resulted in lower subjective sexual arousal in this sample. The empirical literature on the subject, though scarce, is consistent with this view. For example, in a daily diary study of young women, sexual interest was a significant predictor of a range of sexual behaviors, including oral sex, and vaginal and anal penetrative sex.<sup>50</sup> Relatedly, engaging in sexual activity for motives of pleasure was associated with a greater range of behaviors.<sup>26</sup>

One of this study's limitations was that it focused on subjective sexual arousal but did not include a more general measure of sexual desire, as experienced during sexual activity. As many authors have observed,<sup>51,52</sup> definitions of sexual desire vary from one study to another, and may refer to different constructs altogether. Using a more multi-factorial measure may have been more reflective of participants' felt experience of low sexual interest. Further, the single-item measure of sexual satisfaction used here focused on participants' sexual satisfaction in relation to their sexual activity on that day, rather than the participants' sexual satisfaction in the relationship—the latter being a more common measure.<sup>53</sup> More generally, single-item measures, although often preferred in daily

diary studies to keep completion times short, may oversimplify complex constructs such as sexual satisfaction, and their reliability and validity are difficult to demonstrate.<sup>54</sup> Finally, the study focused on a relatively small sample of mixed-sex, newly married couples and had not pre-registered its hypotheses; this may limit the generalizability of its results. Future research in this area should seek to replicate this study's results with more representative samples of participants.

## CONCLUSION

Studies of dyadic, event-level sexual phenomena are rare, which is an important gap when one considers the fundamentally relational nature of sexuality. The present findings contribute to filling this gap by highlighting how, for the couples under study, sexual difficulties interfered with same-day sexual satisfaction and how, for subjective arousal, this interference was reflected in the couples' more restricted range of sexual behaviors.

Our results are limited in scope, and must be interpreted with care. Nevertheless, the partner effects observed here add to a growing body of dyadic daily diary studies that highlight the importance of daily partner interactions in couples' sexuality. Clinically, results support the relevance of sex and couple therapy interventions, namely in the treatment of sexual arousal/desire difficulties, and suggest that therapists would benefit from systematically considering the couple's dynamics. Furthermore, the finding showing that sexual behavior (in this case, the range of sexual behavior) plays a mediating role in sexual difficulties underscores the importance of including therapeutic strategies that target the types as well as the range of sexual activities that couples engage in when working with sexual difficulties, specifically, sexual arousal/desire problems.

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### Category 3

#### (a) Final Approval of the Completed Article

Jean-François Jodouin; Sophie Bergeron; Erick Janssen

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