

BEHAVIOR

## Sexual and Relationship Satisfaction in Young, Heterosexual Couples: The Role of Sexual Frequency and Sexual Communication



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### ABSTRACT

**Background:** Although their individual contributions to sexual and relational outcomes are well-established, there has been a lack of research on the importance of sexual frequency and sexual communication to sexual and relationship satisfaction.

**Aim:** To examine the contribution of sexual frequency and sexual communication to sexual and relationship satisfaction in the early stages of couple relationships.

**Methods:** A sample of 126 young, heterosexual couples (mean age = 23.3 years, SD = 2.4; average relationship duration = 1.9 years, SD = 0.9) filled out questionnaires about sexual frequency, sexual communication, and sexual and relationship satisfaction. Analyses were guided by the actor-partner interdependence model.

**Outcomes:** Main outcome variables were sexual satisfaction and relationship satisfaction, measured by the Quality of Sex Inventory and the Couple Satisfaction Index, respectively.

**Results:** Analyses revealed a significant actor effect of both sexual communication and sexual frequency for sexual satisfaction. Only sexual communication, not sexual frequency, predicted relationship satisfaction. No significant partner or gender effects were found.

**Clinical Translation:** These findings lend support to the notion that couples could benefit from focusing on non-behavioral processes (eg, sexual communication), rather than sexual behavior per se, when pursuing a fulfilling partnership.

**Strengths & Limitations:** Strengths of the study include the dyadic nature of the data and analyses, allowing for the evaluation of both individual- and couple-level processes. Also, to our knowledge, this is the first study to specifically examine the importance of sexual frequency and sexual communication to both sexual and relationship satisfaction. Limitations include the reliance on self-report measures and a relatively homogeneous sample.

**Conclusion:** Although both sexual frequency and sexual communication were relevant to the prediction of sexual satisfaction, only sexual communication predicted relationship satisfaction in this sample of young, heterosexual couples. **Roels R, Janssen E. Sexual and Relationship Satisfaction in Young, Heterosexual Couples: The Role of Sexual Frequency and Sexual Communication. J Sex Med 2020;17:1643–1652.**

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**Key Words:** Sexual Frequency; Sexual Communication; Sexual Satisfaction; Relationship Satisfaction

### INTRODUCTION

Sexuality is an integral part of most intimate relationships and an important contributor to couples' satisfaction levels.<sup>1,2</sup> In addition, a positively evaluated sex life has been associated with increased well-being and life satisfaction in both partners.<sup>3</sup> Sexual frequency and sexual communication have independently been

shown to contribute to sexual satisfaction,<sup>4</sup> with higher levels of sexual satisfaction being associated with higher frequencies of sex<sup>5</sup> and with greater sexual communication skills, including the ability to express one's sexual needs.<sup>6,7</sup> Similarly, sexual frequency and sexual communication have each, individually, been found to be relevant to the prediction of relationship satisfaction.<sup>7,8</sup> However, most research to date tends to isolate possible predictors, without considering their possible interplay. Also, the few studies that included both sexual frequency and sexual communication as predictors, tested their association with sexual satisfaction, but not with relationship satisfaction.<sup>4</sup> Other studies, while examining the effects on both sexual and relationship satisfaction, only included either sexual frequency or sexual

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communication as a predictor.<sup>9</sup> To our knowledge, this current study is the first to examine the contribution of *both* sexual frequency and sexual communication to *both* sexual and relationship satisfaction in a sample of young, heterosexual couples.

## Sexual Frequency

Research on long-term relationships, including marriage, has consistently found that the frequency of sexual interactions is highest during the first few years of the relationship, after which it tends to show a sharp decline.<sup>10–13</sup> Little is known, however, about the factors and processes that may help explain variability in sexual activity, and its association with sexual and relationship satisfaction, early in such relationships. McNulty et al<sup>13</sup> were among the first to investigate longitudinal associations between sexual frequency and sexual and relationship satisfaction at a dyadic level. In a sample of newlywed couples, they found that sexual and relationship satisfaction as well as sexual frequency decreased over time. More in general, higher sexual frequencies tend to be associated with greater sexual satisfaction in couples, and sexual frequency and satisfaction are positively associated with life satisfaction.<sup>3,14</sup> With sexual frequency being considered an important predictor of sexual satisfaction,<sup>15–17</sup> some studies have found no gender differences in this positive association,<sup>5</sup> while others found sexual frequency to be a significant positive predictor but only in women.<sup>4</sup>

Sexual frequency has also been linked to relationship (and marital) satisfaction. However, the association tends to be indirect<sup>18</sup> and research suggests that, when it comes to being satisfied with one's general relationship, a "warm interpersonal climate" and a satisfying sex life may matter more than high frequencies of sexual intercourse.<sup>5,8,9</sup> However, considering that both sexual frequency and relationship satisfaction tend to be highest during the early stages of romantic relationships,<sup>13</sup> and considering the positive association between sexual frequency and relationship satisfaction found in several studies,<sup>9,10</sup> we should allow for the possibility that the 2 are more strongly connected in young couples.

## Sexual Communication

Whereas sexual frequency constitutes a quantitative indicator of a couple's sexual interactions, sexual communication represents a more qualitative dimension relevant to our understanding of the role of sexuality in romantic relationships.<sup>4,6</sup> While it is believed that, in heterosexual couples, men tend to initiate sexual activity more often than women do, higher satisfaction levels have been associated with more frequent sexual initiation by both partners, and by less frequent negative responses to a partner's initiative.<sup>19,20</sup> Hence, being able to openly express one's sexual desires and addressing sexual concerns with one's partner can be considered advantageous, especially when partners have different preferences and expectations. As a number of studies have pointed at the beneficial effects of communication about sexual aspects of the relationship, studying the effects of both frequency and communication on couples' satisfaction levels seems justified.<sup>21,22</sup>

In both men and women, more frequent and better communication has indeed been associated with higher sexual and relationship satisfaction.<sup>7</sup> However, findings tend to vary depending on whether the focus is on sexual or on non-sexual communication.<sup>23,24</sup> In general, communication between sexual partners has been found to be important to sexual satisfaction.<sup>25</sup> Mutual disclosure is linked to greater sexual satisfaction as it may increase feelings of intimacy and connectedness in the couple<sup>26</sup> and increased communication between 2 partners is associated with higher levels of sexual satisfaction, whether this concerns general or sexual communication.<sup>23</sup> Others, however, have reported the specific importance of communication about sex, in particular sexual needs and desires, for sexual satisfaction.<sup>6,27,28</sup> Conversely, indirectness of communication about sexual intimacy has been associated with lower sexual satisfaction.<sup>29</sup>

Sexual communication has also been found to be predictive of general relationship satisfaction.<sup>9,30,31</sup> In a study exploring the link between sexual and non-sexual communication and marital satisfaction using observational methods,<sup>24</sup> negative behaviors during sexual conversations were more strongly related to (lower) relationship satisfaction than those expressed during non-sexual conversations. Research has also found positive associations between sexual communication and orgasm frequency in women and higher sexual and relationship satisfaction in both men and women.<sup>7</sup>

## Current Study

Although other variables, both intra- and interpersonal ones, may influence sexual and relationship satisfaction, the current study specifically aims to investigate the effects of sexual frequency and sexual communication. The 2 variables have consistently been found to be important but have been explored either in isolation or with a focus on either sexual or relationship satisfaction, and not both. Furthermore, we believe that a focus on these 2 variables is justified and relevant for clinical reasons as well. Considering that some of the most common challenges in sex therapy involve couples not having sex as frequently as one or both partners would like and couples experiencing difficulties communicating about sex, therapy could benefit from addressing both sexual behavior and sexual communication.<sup>32,33</sup> Indeed, for most sex therapists dealing with distressed couples, therapy goals tend to involve some combination of improving sexual communication and increasing sexual intimacy at the behavioral level (eg, through exercises, homework, sensate focus).<sup>7,31,34,35</sup> Yet, we still know relatively little about the importance of these different processes to relationship outcome measures, such as sexual and relationship satisfaction, which are also associated with therapeutic success.<sup>36</sup> The current study aims to address this gap in the literature.

In this study, we examine the predictors of sexual and relationship satisfaction separately. Throughout the empirical literature, positive correlations between sexual and relationship satisfaction have been reported. At the same time, studies have

found a disconnection, or potential independence, between the 2—with some individuals reporting high relationship satisfaction and low sexual satisfaction, or vice versa<sup>37</sup>—and the strength of this association has been found to vary depending on factors such as attachment style<sup>1,38</sup> and couple communication.<sup>30</sup> Indeed, sexual and relationship satisfaction have been described as both theoretically and empirically distinct constructs, that are linked to (other) sexual and relationship processes in different ways.<sup>39</sup>

Relatedly, some research suggests that the influence of sexuality-related variables on relationship satisfaction is mediated by their impact on sexual satisfaction. However, other studies, especially longitudinal ones, have found that the relationship can be the other way around, or bidirectional.<sup>9,13,26,39–41</sup> Thus, the literature to date remains inconsistent and inconclusive about possible mediational processes. Although the directionality between sexual and relationship satisfaction constitutes a worthy subject of study, in the absence of clear theoretical frameworks on the primacy of either one variable, we believe that it is valuable to study predictors of each outcome variable, without focusing on possible mediation by one of the 2.

Most previous work in this area has focused on individuals<sup>3,42</sup> or on dyads in different, mostly later, stages of their relationship.<sup>1,5,7</sup> In the current study, we focus on young, heterosexual couples while they are in their “earliest and often most dynamic years.”<sup>13</sup> Based on findings from studies that have focused on different components and combinations of variables, we hypothesize that both sexual frequency and sexual communication will contribute to the prediction of sexual satisfaction. In addition, although previous research—mostly conducted in more established relationships—has found less clear-cut effects of sexual frequency on relationship satisfaction, we expected both sexual frequency and sexual communication to contribute to relationship satisfaction in our sample of young, heterosexual couples.

## METHODS

### Participants

The sample consisted of 126 heterosexual couples ( $N = 252$ ; mean age = 23.29 years,  $SD = 2.40$ ). The data are part of an ongoing longitudinal study and were taken from the first wave of data collection. Couples were recruited from the Flemish region of Belgium, including but not limited to the university town of Leuven. The study was advertised using posters and flyers that were distributed at universities, university hospitals, and in local businesses (eg, bars, restaurants, theaters). In addition, advertisements were placed online (eg, Facebook) and in local newspapers. Participants had to meet the following inclusion criteria: (i) aged between 18 and 30 years; (ii) in a committed, heterosexual relationship for at most 3 years; (iii) cohabitating or spending at least 4 nights a week together for no more than 2 years; and (iv) able to speak and read Dutch. Individuals were excluded if they had cohabited with or been married to someone else before and if they had children or were pregnant. Only individuals who considered

themselves as being in general good health were included; they were excluded if they were in treatment for sexual dysfunctions. These criteria were applied to minimize interpretative difficulties common in studies using more heterogeneous samples and to avoid high variability in relationship duration.

## Main Outcome Measures

### Demographics and Sexual History Questionnaire

This questionnaire<sup>43</sup> covers general demographic characteristics (eg, age, income, education), relationship and sexual variables (eg, relationship duration, previous partner), and general physical and mental health. The questionnaire included questions assessing frequency of sexual and intimate activities. As in previous studies,<sup>8,44</sup> participants were asked how often they engaged in such activities during the last 12 months. Response options ranged from “not once” (1), “once a month or less” (2), “several times a month” (3), “once or twice a week” (4), a few times a week (5), once a day (6), to “more than once a day” (7). For the current study, we focused on the following sexual behaviors: genital stimulation, receiving oral sex, giving oral sex, and penile-vaginal intercourse. We created a composite measure of sexual frequency by averaging across these 4 sexual behaviors (Cronbach’s  $\alpha = 0.83$  for women and  $\alpha = 0.84$  for men).

### Dyadic Sexual Communication Scale (DSC)

This questionnaire<sup>45</sup> measures how respondents perceive the discussion of sexual matters with their partners. It includes questions about whether they enjoy talking about sex and about the ease with which they can communicate their sexual preferences to their partner. For our study, we used the 4-item version, as described by Catania.<sup>45</sup> Each item is rated on a 6-point Likert-type scale ranging from 1 (strongly disagree) to 6 (strongly agree). The first 2 items, assessing communication problems, are reverse coded. Sum scores can range from 4 to 24. Higher scores indicate better quality of sexual communication. The DSC has shown adequate psychometric properties, including adequate internal consistency, test-retest reliability, and discriminant validity.<sup>45</sup> The Dutch version of the DSC has been used in several studies<sup>46,47</sup> and internal consistency, which tends to be lower when a scale exists of a relatively small number of items, was acceptable (Cronbach’s  $\alpha = 0.75$  for women and 0.71 for men) in the current sample.

### Quality of Sex Inventory (QSI)

This 24-item<sup>48</sup> scale, which was developed using the Item Response Theory, assesses sexual satisfaction and sexual dissatisfaction. Responses are given on a 6-point Likert-type scale ranging from 1 (not at all true) to 6 (completely true). In this study we only used the sexual satisfaction scale (12 items), for which responses are summed to create a total score, ranging from 0 to 60. Higher scores represent higher levels of sexual satisfaction. The original QSI subscales have demonstrated strong convergent validity with other measures of sexual satisfaction and

excellent construct validity.<sup>48</sup> The QSI was translated for the purposes of this study, with excellent internal consistency (Cronbach's  $\alpha = 0.95$  for both women and men).

**Couple Satisfaction Index (CSI)**

This 32-item<sup>49</sup> scale, also developed using the Item Response Theory, was used to measure relationship satisfaction. Using a 6-point Likert scale (1–6), responses are given to statements (eg, "In general, how satisfied are you with your relationship?") and they are summed to create a total score, ranging from 0 to 161. The original CSI scales demonstrated strong convergent validity with other measures of satisfaction and excellent construct validity.<sup>49</sup> The original CSI was translated for the purposes of the current study and showed excellent internal consistency (Cronbach's  $\alpha = 0.94$  for women and 0.94 for men in this study).

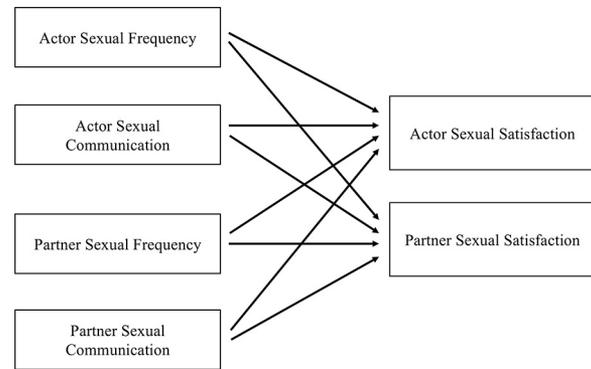
**Procedure**

Interested couples first filled out the online screening questionnaire. Eligible couples were contacted over the phone to schedule the first appointment. After written informed consent was obtained during this initial, introductory session, they were scheduled for a laboratory visit. During this visit the 2 partners completed, in separate rooms, a series of questionnaires, which were presented on a personal computer using Qualtrics (Provo, UT, USA). Following this, the couples engaged in additional tasks, which will be reported on elsewhere. At the end of the session, couples were debriefed and each partner received €40 for their time. All study measures and procedures were reviewed and approved by the university's research ethics board.

**Data Analytic Strategy**

Analyses were conducted using SPSS 25.0 (SPSS Inc, Chicago, IL, USA). Prior to the analysis, we conducted tests of interdependence. With gender being the distinguishing variable in heterosexual couples, Pearson product-moment correlations were calculated using the dyad members' scores. Correlations were +0.38 for sexual satisfaction and +0.49 for relationship satisfaction. As Cohen<sup>50</sup> defines correlations of 0.3 as medium and those of 0.5 as a large effect, the results suggest interdependence of our data, supporting a dyadic approach to data analysis.<sup>51</sup> For the present study, we used a hierarchically structured, multilevel design, with individuals nested within couples. We used mixed-models analyses to account for the interdependence of couple data, which allowed us to assess interactions between factors at different levels.<sup>51</sup>

We incorporated the use of Kashy and Kenny's actor-partner interdependence model (APIM), with couples as the unit of the analysis.<sup>52</sup> In dyadic research, multilevel modeling via APIM is widely implemented for dealing with interdependence between couple members.<sup>22,53</sup> Using the data from both partners, APIM provides estimates for both actor effects (the effect of a participant's predictor variable on his or her own outcome variable) and partner effects (effect of a partner's predictor variable on the



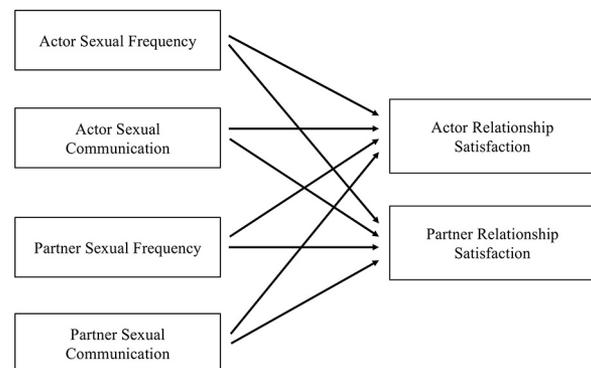
**Figure 1.** Hypothesized model linking sexual communication and sexual frequency to sexual satisfaction.

actor's outcome variable). For example, while women's sexual satisfaction may be associated with their own ratings of sexual communication (actor effect), APIM allows for the test of the impact of their male partner's ratings of sexual communication as well (partner effect). In our study, we tested actor and partner effects of reports of sexual frequency and sexual communication using 2 separate APIM models. The first model (Figure 1) focused on sexual satisfaction; the second model (Figure 2) focused on relationship satisfaction. The 2 predictor variables, sexual communication and sexual frequency, were included in each model.

**RESULTS**

**Sample Characteristics**

The average age of the participants was 23.3 years (SD = 2.4; women: 22.7 years, SD = 2.2; men: 23.9 years, SD = 2.4). The average length of the relationship at the time of participation was 1.9 years (SD = 0.9). A total of 119 (94%) couples lived together and 7 couples spent on average 4.6 nights per week together. The average duration of cohabitation was 0.7 years (SD = 0.5). 1 couple was married. The majority of participants (98% of women and men) were white. 1 woman was Asian, and 1 woman and 2 men identified as African. Of the women, 42 (33%) were students, 37 (29%) had a full-time job, 23 (18%) a



**Figure 2.** Hypothesized model linking sexual communication and sexual frequency to relationship satisfaction.

**Table 1.** Demographics

Variable	Women (N = 126)	Men (N = 126)
Age, years	23 (3)	24 (4)
Race, white	124 (98%)	124 (98%)
Job status		
Full-time job	37 (29%)	58 (46%)
Other (eg, part-time, temporary)	23 (18%)	21 (17%)
Unemployed	24 (19%)	20 (16%)
Student	42 (33%)	27 (21%)

Values are median (interquartile range) or N (%).

part-time or temporary job, and 24 (19%) were unemployed. Of the men, 27 (21%) were students, 58 (46%) had a full-time job, 21 (17%) a part-time or temporary job, and 20 (16%) were unemployed. [Table 1](#) provides an overview of the key demographics and [Tables 2](#) and [3](#) provide the averages, reliability, correlations, and scoring range for the predictor and outcome variables.

## Predicting Sexual and Relationship Satisfaction

### Sexual Satisfaction

The deviance test of distinguishability for the model guiding our first analysis, shown in [Figure 1](#), was significant ( $\chi^2 = 11.37$ , degrees of freedom = 6,  $P = .001$ ). As this significant effect refutes the null hypothesis that the dyad members are indistinguishable, the sample was treated as distinguishable. Both sexual frequency and sexual communication were grand-mean centered prior to the analysis. We found significant actor effects of sexual communication and sexual frequency on sexual satisfaction for both men and women (see [Table 4](#) and [Figure 3](#)). None of the partner effects were significant ( $P > .5$ ). We found a significant difference in mean sexual satisfaction for men and women: men were more sexually satisfied than women. However, we did not find a significant gender effect for the predictor variables on the outcome variable; in other words, there were no significant differences between men and women for actor or partner effects. Combined, the effects of sexual communication and sexual

frequency accounted for approximately 29% of the variance in women and 31% of the variance in men.

### Relationship Satisfaction

For our second model, shown in [Figure 2](#), the deviance test of distinguishability was not significant ( $\chi^2 = 4.32$ , degrees of freedom = 6,  $P = .63$ ). Therefore, we treated the dyads as indistinguishable. Multilevel modeling with restricted maximum likelihood was used to estimate the effects of sexual communication and sexual frequency on relationship satisfaction. Both sexual frequency and sexual communication were grand-mean centered prior to the analysis. We found a significant actor effect for sexual communication only (see [Table 5](#) and [Figure 4](#)). None of the partner or gender effects were significant ( $P > .07$ ). The model accounted for 6% of the variance in relationship satisfaction.

## DISCUSSION

This study is the first to assess the contributions of both sexual communication and sexual frequency to both sexual and relationship satisfaction, in a sample of young, heterosexual couples. Whereas sexual communication has been found to be relevant to sexual and relationship satisfaction,<sup>7</sup> findings for sexual frequency have been more mixed.<sup>5</sup> We found significant actor effects of sexual communication and sexual frequency for sexual satisfaction. These results are consistent with previous studies that included only 1 of the 2 predictor variables.<sup>4,5,7,27,29</sup> Interestingly, we found no differences between men and women, and we found no significant partner effects. Although the absence of partner effects is consistent with previous research,<sup>4</sup> the lack of gender effects contrasts with some previous studies which found gender differences in the association between sexual communication and relational outcomes<sup>5,4</sup> and in the association between sexual frequency and sexual satisfaction.<sup>4</sup> This difference may, in part, be explained by the fact that our sample consisted of young couples in the early stages of their relationship, whereas studies reporting gender differences focused on long-term relationships or included a wider age range or couples in different stages of their relationship.

In our second model, we also found significant actor effects of sexual communication in the prediction of relationship

**Table 2.** Descriptives and Cronbach's  $\alpha$  for predictor and outcome variables

Variable	Gender	Mean ( $\pm$ SD)	Median (IQR)	$\alpha$	Possible range	Actual range
Sexual frequency	F	4.0 ( $\pm$ 0.9)	4 (1.5)	0.83	1–7	2–6
	M	4.0 ( $\pm$ 0.9)	4 (1.3)	0.84		2–6
Sexual communication	F	18.4 ( $\pm$ 4.0)	19 (7)	0.75	4–24	9–24
	M	18.5 ( $\pm$ 3.6)	19 (5)	0.71		8–24
Sexual satisfaction	F	46.1 ( $\pm$ 10.2)	47 (13)	0.95	0–60	13–60
	M	48.8 ( $\pm$ 9.2)	50 (10)	0.95		15–60
Relationship satisfaction	F	137.0 ( $\pm$ 16.0)	141 (18)	0.94	0–161	72–160
	M	134.9 ( $\pm$ 16.1)	140 (19)	0.94		82–159

F = female; IQR = interquartile range; M = male.

**Table 3.** Correlations among predictors and outcomes

Study variables	1	2	3	4
1. Sexual frequency	0.82**	0.38**	0.36**	0.14
2. Sexual communication	0.34**	0.44**	0.51**	0.26**
3. Sexual satisfaction	0.44**	0.46**	0.38**	0.52**
4. Relationship satisfaction	0.04	0.20*	0.54**	0.49**

Correlations for women appear above the diagonal; correlations for men appear below the diagonal. Correlations along the diagonal are between dyad members.  
\* $P \leq .05$ , \*\* $P \leq .01$ .

satisfaction, and again for both women and men. However, we found no significant effect of sexual frequency on relationship satisfaction. Thus, contrary to our hypothesis, which was based on previous studies revealing the importance of sexual frequency early in the relationship,<sup>8,13</sup> we found that only sexual communication was important to the prediction of relationship satisfaction. Consistent with findings from previous research indicating that the frequency of sexual intercourse is less important than other, non-sexual and positive interpersonal processes (eg, a warm interpersonal climate) to relationship satisfaction,<sup>5,9</sup> our results underscore and expand this idea by specifically pointing at the possible positive impact of sexual communication on this interpersonal climate.

Our findings add to the broader field of research on relationships and sexuality, which consistently emphasizes the importance of communication in romantic relationships. A growing number of studies indicate that specifically sexual, as compared to general, communication is important to both sexual and relationship satisfaction.<sup>6,26–28</sup> Our findings are consistent with this and show that sexual communication outweighs sexual frequency in the prediction of relationship satisfaction.

By using separate models for sexual and relationship satisfaction, we were able to assess the specific contribution of sexual communication and sexual frequency to both types of satisfaction. The different patterns of results provide further

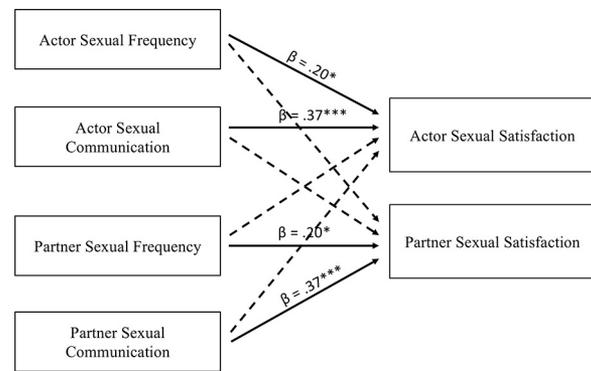
**Table 4.** APIM parameter estimates for sexual satisfaction

Predictor	b	SE	$\beta$	t
Actor sexual frequency	2.15*	0.93	0.20*	2.30
Partner sexual frequency	0.65	0.93	0.03	0.70
Actor sexual communication	0.97***	0.15	0.37***	6.36
Partner sexual communication	0.09	0.15	0.03	0.58

APIM = actor-partner interdependence model; b = unstandardized regression coefficient; df = degrees of freedom; SE = standard error of unstandardized regression coefficient;  $\beta$  = standardized regression coefficient.

df = 163.77 for actor sexual frequency; df = 164.70 for partner sexual frequency; df = 236.75 for actor sexual communication; df = 225.31 for partner sexual communication.

\* $P \leq .05$ , \*\*\* $P \leq .001$ .



**Figure 3.** Standardized actor effects of sexual frequency and sexual communication as predictors of sexual satisfaction. \* $P \leq .05$ , \*\*\* $P \leq .001$ .

support that sexual and relationship satisfaction, albeit often correlated, are linked to other processes—in the case of the current study, sexual frequency and communication—in different ways. The model explaining sexual satisfaction accounted for 29% of the variance in women’s and 31% of the variance in men’s sexual satisfaction. In contrast, the model explaining relationship satisfaction only accounted for 6% of the variance in both women and men. This low percentage of explained variance points at important differences in possible predictors of sexual and relationship satisfaction, leaving more to be discovered about which individual factors and relationship processes contribute more to the prediction of relationship satisfaction. In addition, it is possible that the variables used in this study would account for more variance in relationship satisfaction in different populations (eg, couples with sexual difficulties).

**Clinical Implications**

In couples’ therapy, sexuality-related problems are among the most prevalent presenting issues.<sup>33</sup> Yet, clinicians are often uncertain about how to best address these sexuality-related issues.<sup>55</sup> Couple therapists frequently face the difficult task of integrating sex therapy interventions with couple therapy.<sup>56</sup> For many

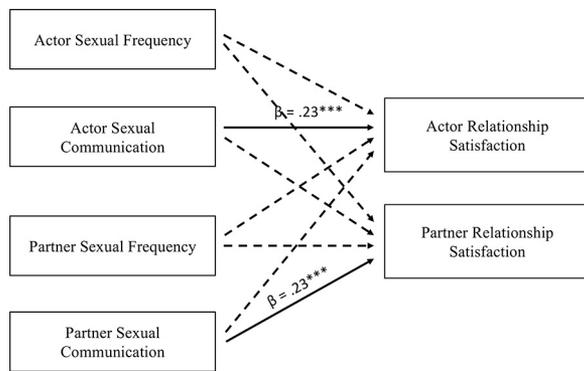
**Table 5.** APIM parameter estimates for relationship satisfaction

Predictor	b	SE	$\beta$	t
Actor sexual frequency	2.48	1.51	0.14	3.63
Partner sexual frequency	−2.75	1.51	−0.15	−0.23
Actor sexual communication	0.99***	0.27	0.23***	1.64
Partner sexual communication	−0.06	0.27	−0.01	−1.82

APIM = actor-partner interdependence model; b = unstandardized regression coefficient; df = degrees of freedom; SE = standard error of unstandardized regression coefficient;  $\beta$  = standardized regression coefficient.

df = 204.31 for sexual frequency and df = 238.98 for sexual communication.

\*\*\* $P \leq .001$ .



**Figure 4.** Standardized actor effects of sexual frequency and sexual communication as predictors of relationship satisfaction. \*\*\* $P \leq .001$ .

professionals dealing with distressed couples, therapy tends to focus on improving communication (eg, facilitating the expression of sexual wishes) and fostering intimacy.<sup>31</sup> Common sex therapy interventions include the use of exercises to enrich sexual experiences and enhance satisfaction.<sup>56</sup> Thus, focusing on either sexual communication or sexual behavior may contribute to more satisfying sexual relationships. Yet, to date, little is known about which components of therapy may have the greatest impact on therapeutic success. Whereas some, more behaviorally oriented clinical approaches may mostly focus on the cultivation and promotion of positive sexual interactions,<sup>57</sup> our findings emphasize the potentially positive impact of focusing on sexual communication and suggest that integrating sexual communication into couple therapy may improve both sexual and relational satisfaction.

### Limitations and Future Directions

We used a composite measure for sexual frequency, averaging across different types of sexual interactions. Although internal consistency was high, focusing on more specific sexual behaviors (eg, only penile-vaginal intercourse) could possibly have provided different results.<sup>57</sup> Brody and Costa, for example, found that sexual and relationship satisfaction were associated with greater frequency of, in particular, penile-vaginal intercourse.<sup>58</sup> Future studies could explore the contribution of sexual communication and the frequencies of more specific sexual behaviors, and could expand this work by comparing partnered with solitary sexual activities. Also, in this study we asked each individual partner to estimate the frequency of sex, and we used these estimates as a mixed variable in our APIM model. Although sexual frequency could have been included as a between-dyad variable (eg, by averaging the partners' answers), previous studies have found that men and women may report sexual frequency differently.<sup>33</sup> In the current study we found a relatively high ( $r = +0.82$ ) correlation between men and women's reports of sexual frequency. Yet, as this correlation explains approximately 70% of the shared variance, we considered individual, subjective interpretations of sexual frequency to be a more appropriate companion to the

equally subjective assessment of one's sexual communication. Future studies could use measures that are less dependent on recall (eg, daily diaries). Also, future studies could compare actual frequencies with preferred or desired frequencies of sex, as desired sexual frequency has been highlighted as a major factor in both sexual and relationship satisfaction.<sup>17</sup>

Similar to sexual frequency, sexual communication was assessed using self-report measures. Although self-reports can be informative for understanding how a person perceives his or her communication, a number of factors and processes, including those related to social desirability, personality, and the capacity for introspection, could influence such reports.<sup>59</sup> Future research could benefit from the inclusion of other approaches, such as the observation and coding of couple conversations.<sup>24,60</sup> Also, the translated versions of the questionnaires we used for the assessment of sexual and relationship satisfaction, although well-validated in their original form, could benefit from additional validation in future studies.

Our sample consisted of couples who were in good health and who were not undergoing treatment for sexual disorders or relationship problems. We know very little about improving sexual communication or trying to change the frequency of various sexual behaviors from the perspective of clinical intervention, and since our data are cross-sectional, future research could explore the impact of therapeutic interventions using longitudinal analyses to examine if focusing on sexual communication would also outweigh behavioral interventions in the treatment of sexual or relational dissatisfaction.

We believe that the approach we used, exploring the relevance of predictor variables separately for both satisfaction types, can improve our understanding of their specific qualities and determinants. Future studies could test theoretically derived predictions on the interplay of different variables, and focus on possible mediation and moderation effects. Furthermore, longitudinal studies could help elucidate the direction of our effects, as some of the described associations could be bidirectional, with relationship satisfaction also predicting sexual frequency<sup>10</sup> and possibly leading to better sexual communication. Similar observations could be made about the directionality between our predictors and sexual satisfaction,<sup>9,61</sup> and between sexual and relationship satisfaction.

Another consideration involves the homogeneity of our sample, which consisted of heterosexual and mostly white men and women. Future studies could include a more diverse sample, in terms of ethnicity, education, and sexual orientation. Since our sample scored high on sexual frequency and sexual satisfaction, a final limitation concerns self-selection and ascertainment bias. Although the significant effect of sexual frequency on sexual satisfaction indicates that there was enough variability in sexual behavior, future studies could explore whether the association between sexual frequency and relationship satisfaction might be different in couples who, on average, have sex less frequently.

## CONCLUSION

This study is the first to examine the contribution of *both* sexual frequency and sexual communication to *both* sexual and relationship satisfaction, in young, heterosexual couples. Sexual communication and sexual frequency both predicted sexual satisfaction, but only sexual communication predicted relationship satisfaction. Thus, while our study confirms the previously found connection between sexual frequency and sexual satisfaction, it shows that, when both are included in a single analysis, sexual communication outweighs the frequency of sex in the prediction of relationship satisfaction, even in a sample of young, heterosexual couples.

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