

Sexual script flexibility and sexual well-being in long-term couples: a dyadic longitudinal study

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Abstract

Background: Couples in long-term relationships often face sexual challenges (eg, sexual response difficulties) that may disrupt their typical sexual routine or sexual script. Individuals with more rigid sexual scripts (eg, sex must include penile-vaginal intercourse) may struggle to navigate their sexual difficulties, potentially resulting in lower sexual well-being for themselves and their partners.

Aim: In a dyadic longitudinal study, we examined whether individuals' greater sexual script flexibility when coping with recent sexual challenges was associated with their own and their partner's greater sexual well-being (ie, dyadic sexual desire, sexual satisfaction, low sexual distress).

Methods: Seventy-four mixed- and same-gender/sex couples in long-term relationships completed online surveys about sexual script flexibility and facets of sexual well-being at baseline and 4 months later. Dyadic data were treated as indistinguishable and analyzed using multilevel modeling guided by the actor-partner interdependence model.

Outcomes: Self-report measures of dyadic sexual desire (Sexual Desire Inventory–2), sexual satisfaction (Global Measure of Sexual Satisfaction), and sexual distress (Sexual Distress Scale–Short Form) were assessed at baseline and follow-up.

Results: Cross-sectional results showed that when individuals reported greater sexual script flexibility in response to recent sexual challenges, they and their partners reported greater sexual satisfaction. Individuals' greater sexual script flexibility was also linked to their own greater dyadic sexual desire and lower sexual distress. Unexpectedly, individuals' greater sexual script flexibility was associated with their partner's lower dyadic sexual desire at baseline and their own lower dyadic sexual desire 4 months later. No other associations were found between sexual script flexibility and sexual outcomes 4 months later and there were no interactions between individuals' gender and sexual script flexibility for the cross-sectional models.

Clinical Implications: The cross-sectional associations between sexual script flexibility and sexual well-being provides some support for the idea that modifying rigid sexual scripts in sex and couple therapy may promote contemporaneous sexual well-being.

Strengths and Limitations: This is the first dyadic study, to our knowledge, to assess the assumed benefits of greater sexual script flexibility for couples' sexual well-being. The relatively small and homogeneous sample of community couples who had largely intact sexual well-being limits generalizability.

Conclusion: Findings provide preliminary evidence of cross-sectional links between sexual script flexibility and sexual well-being for individuals and couples, lending empirical support to the convention of promoting sexual script flexibility to help couples cope with sexual challenges. The mixed findings for the association between sexual script flexibility and dyadic sexual desire warrant additional study and replication.

Keywords: sexual scripts; sexual script flexibility; sexual well-being; sexual challenges.

Introduction

Sexual well-being is a key contributor to the maintenance of long-term romantic relationships, such that greater sexual well-being is linked with better relationship quality and stability.^{1–3} Key facets of sexual well-being among couples include dyadic sexual desire (ie, desire for sexual activity with a partner),⁴ sexual satisfaction (ie, satisfaction with one's sexual relationship),⁵ and low sexual distress (ie, negative emotions about one's sexual relationship).⁶ Unfortunately, disruptions to sexual well-being are common; national samples in Canada, the United Kingdom, and the United States show that a third or more of adults experienced 1 or more sexual problems in the prior 6 to 12 months.^{7–10} For couples, sexual problems may include difficulties with sexual function or communication as well as differences in sexual preferences. Theoretical

and clinical models suggest that couples benefit from adopting a flexible approach to sex in the face of challenges, termed *sexual script flexibility*,^{11,12} though there has been limited investigation of this practice. In the current study, we examined whether having greater sexual script flexibility when coping with recent sexual challenges was associated with an individual's and their partner's greater sexual well-being.

Sexual script theory posits that sexual behavior is socially scripted at cultural, interpersonal, and individual levels.^{12,13} In the context of coupled sexual interactions, sexual scripts provide direction for what sexual behaviors are acceptable or expected in each situation, such as the type and order of sexual activities, and who performs them.^{14,15} By virtue of having 2 or more individuals in a sexual situation, members of a couple must negotiate sexual interactions to form a

dyadic sexual script.^{12,16-18} Although a rigid and gendered traditional sexual script predominates in North American culture (eg, penile-vaginal intercourse is the only option that counts as sex), deviations occur at the interpersonal and individual levels.¹⁹⁻²¹ There are known gender differences (women vs men) for sexual scripts;¹⁵ however, we are not aware of any evidence that *sexual script flexibility* varies by gender.

When sexual challenges arise, couple members' sexual scripts may be disrupted. For example, penetrative sex is a common element of many couples' sexual scripts and may become difficult to maintain in the context of chronic illness or in the presence of sexual dysfunctions such as erectile difficulties or genito-pelvic pain.^{22,23} When couples have more rigid sexual scripts and encounter a sexual problem, they may have fewer routes through which to navigate the sexual challenge. This limited repertoire could provide grounds for sexual well-being to worsen, for example, by increasing couples' sexual distress. Thus, when couples have flexibility in their sexual scripts, they may be better able to maintain sexual well-being in the face of common sexual challenges.

Cognitive behavioral therapies for sexual dysfunctions emphasize approaching sex in a flexible manner and expanding couples' sexual repertoires.²⁴⁻²⁷ These theoretical approaches to clinical practice have received some support from qualitative research indicating that flexibility is associated with sexual satisfaction.²² However, few quantitative studies have been conducted to examine the links between sexual script flexibility and sexual well-being, likely owing to the lack of a validated self-report measure of sexual script flexibility.

Gauvin and Pukall²⁸ developed the first self-report measure of sexual script flexibility, the SexFlex Scale. This 6-item, single-factor scale assesses approach flexibility or a flexible behavioral approach in the face of sexual problems. For example, "I can easily change my approach to sex if necessary because of my sexual problem(s)."²⁸ In a cross-sectional study of women and men in mixed- and same-gender/sex relationships, Gauvin and Pukall found that sexual script flexibility was positively associated with individuals' sexual satisfaction and sexual rewards and negatively associated with individuals' sexual distress. Subsequent cross-sectional studies using the SexFlex Scale found that greater sexual script flexibility was associated with better sexual function among women and men,²⁹ greater sexual satisfaction among individuals diagnosed with prostate cancer,³⁰ and lower sexual distress among individuals experiencing pain during anal sex.³¹ Because these studies only sampled individuals, rather than both members of a couple, it remains unclear if an individual's sexual script flexibility is linked with their partner's sexual well-being. When one person is more flexible in the face of sexual challenges, this could create a more positive interpersonal context for the sexual activity (eg, relieving negative emotions, creating safety and intimacy), which could be linked to their partner feeling more sexually satisfied. In addition to a lack of dyadic studies, the few quantitative studies on individuals' sexual script flexibility have employed cross-sectional designs, which characterize the associations between sexual script flexibility and sexual well-being at one point in time.²⁸⁻³¹ Dyadic longitudinal studies are needed to assess whether sexual script flexibility can predict couples' sexual well-being at a later time point.

The present study

In a longitudinal study of community couples, we examined the associations between sexual script flexibility when coping with recent sexual challenges and couples' sexual well-being, including their dyadic sexual desire, sexual satisfaction, and sexual distress using dyadic analyses. We hypothesized that an individual's greater sexual script flexibility when facing recent sexual challenges would be associated with their own and their partner's greater sexual well-being (ie, greater dyadic sexual desire, greater sexual satisfaction, and lower sexual distress) at baseline and 4 months later (controlling for baseline sexual well-being). We examined the potential interaction between binary gender (woman vs man) and sexual script flexibility for the cross-sectional relationships between sexual script flexibility and sexual well-being in an exploratory manner.

Methods

Participants

A community sample of 143 long-term couples was recruited from Canada and the United States for a larger project on sexual and relational well-being in long-term couples (see Figure 1 for flowchart of participation). A subsample of 74 couples (51.7%) responded to questions about sexual script flexibility and were included in the current analyses. Of those 74 couples included at baseline, 56 couples (75.7%) completed the follow-up 4 months later.

Couples were primarily recruited via online advertisements (eg, Facebook, Twitter, Instagram) as well as via posted advertisements in university and community buildings, word of mouth, and our laboratory website from March to December 2021. Recruitment materials were designed to be inclusive of sexual minority and gender-diverse couples, and some ads were designed to specifically invite Black, Indigenous, and other people of color to participate. Interested participants underwent a telephone eligibility screening call. Eligibility criteria required that both members of the couple were 18 years of age or older, were in a committed relationship of at least 12 months and living together for at least 6 months, were fluent in English, and had access to the Internet for the completion of surveys. Individuals who were pregnant, breastfeeding, or within 1-year postpartum ($n = 32$), as well as individuals who were coping with a self-reported major physical illness (eg, cardiovascular disease, liver disease, or neurological disorder) or untreated and/or unmanaged psychiatric illness (eg, mood or eating disorder), were excluded from the study due to potential impacts on relational and/or sexual well-being ($n = 2$).³²⁻³⁴ This study was inclusive of individuals of any gender, sex, or sexual orientation.

Procedure

This study was approved by the Dalhousie University health sciences research ethics board (#2020-5415). Procedures were conducted in accordance with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. All surveys were completed by couple members independently and distributed online through Qualtrics Research Suite survey software. After providing informed consent online, participants completed a baseline survey and a follow-up

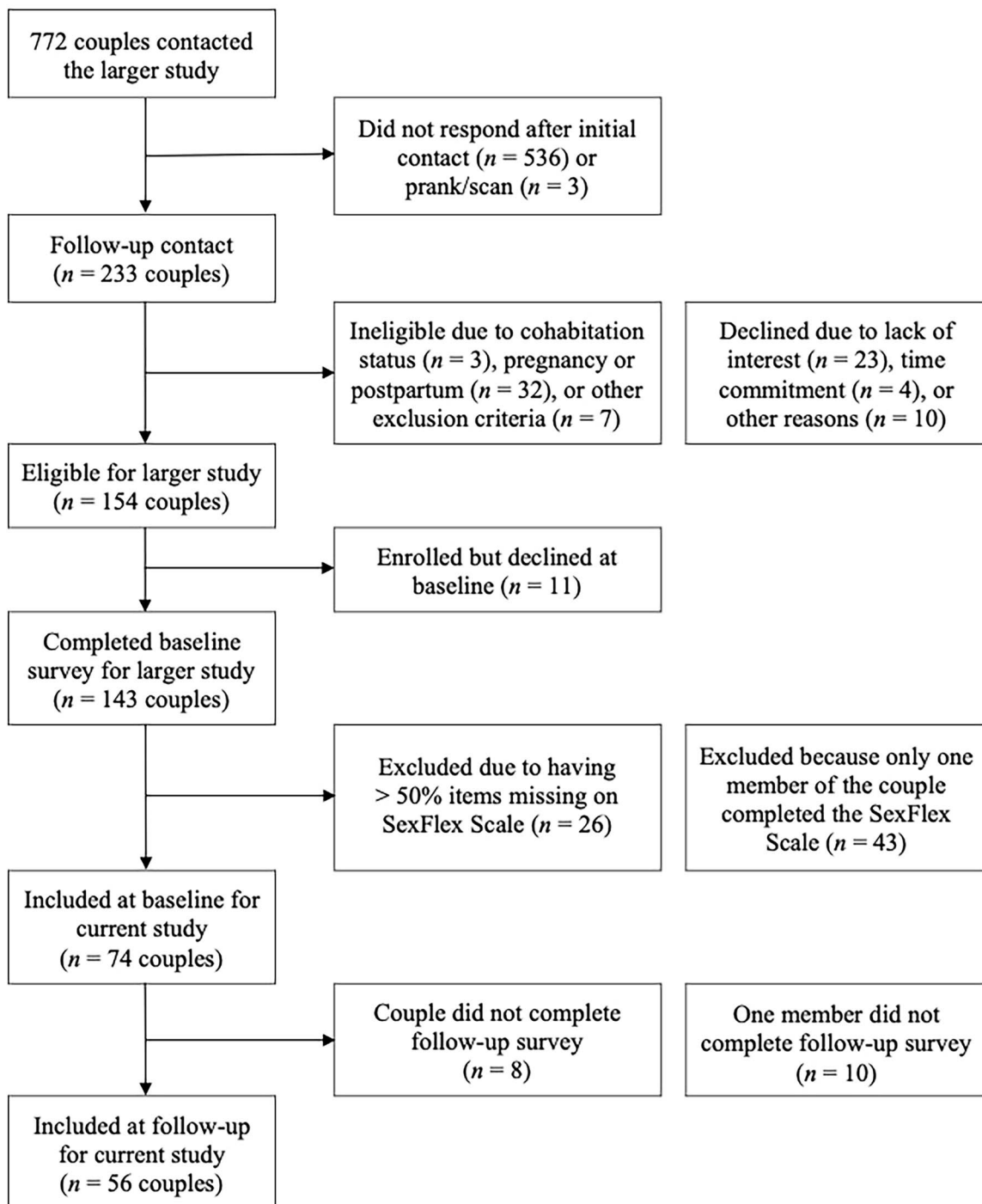


Figure 1. Flowchart of participation.

survey approximately 4 months later. Participants had up to 4 weeks to complete each survey and received reminder emails as needed. They were compensated with a \$9 gift card or e-transfer per individual for each completed survey. Three instructed response items (ie, attention checks) were embedded in the surveys, and both couple members had to respond to at least 2 attention check items correctly to be included in the study; no participants were excluded due to failed attention checks. Participants received a full study debriefing and additional resources about sexuality and relationships at the end of their participation in the study.

Measures

Demographics

Information about participants’ age, culture, ethnicity, sex, gender, sexual orientation, education, employment, and medical history as well as current relationship and parental status, were collected at baseline. Sociodemographic characteristics for the baseline sample of 148 individuals (74 couples) are presented in Table 1.

Sexual script flexibility

Sexual script flexibility was assessed using the 6-item SexFlex Scale,²⁸ which measures the flexibility of an individual’s

Table 1. Sociodemographic characteristics for the sample of 148 individuals (74 couples).

Age, y	34.09 ± 10.33
Education, y	15.81 ± 2.68
Gender	
Woman (cis and trans)	75 (50.7)
Man (cis and trans)	69 (46.6)
Nonbinary	6 (4.1)
Additional genders ^a	2 (1.3)
Relationship duration, y	8.88 ± 7.26
Relationship status	
Committed, lasting relationship	124 (83.8)
Married	76 (51.4)
Engaged	25 (16.9)
Dating	24 (16.2)
Multiple sexual or relationship partners	8 (5.4)
Dyad type	
Mixed gender/sex	124 (83.8)
Same gender/sex	14 (9.5)
Gender diverse	10 (6.8)
Sexual orientation	
Heterosexual	105 (70.9)
Bisexual	24 (16.2)
Lesbian or gay	20 (13.5)
Queer	20 (13.5)
Pansexual	10 (6.8)
Questioning	4 (2.7)
Additional sexual orientations ^b	2 (1.4)
Culture and ethnicity	
English Canadian	105 (70.9)
White	69 (46.6)
American	20 (13.5)
Quebecois or French Canadian	10 (6.8)
South Asian	8 (5.4)
Western European	5 (3.4)
Latin American	4 (2.7)
East Asian	3 (2.0)
Eastern European	3 (2.0)
Biracial or multicultural	3 (2.0)
Black or African American	2 (1.4)
Latino, Latina, or Latinx	2 (1.4)
Additional cultural or racial/ethnic identities ^c	6 (4.1)
Annual household income	
\$0-\$39 999	16 (10.8)
\$40 000-\$79 999	44 (29.7)
\$80 000-\$119 999	48 (32.4)
\$120 000-\$159 999	25 (16.9)
\$160 000-\$199 999	11 (7.4)
>\$200 000	3 (2.0)

Values are mean ± SD or n (%). For gender, culture and ethnicity, relationship status, and sexual orientation, participants could choose more than 1 option; thus, percentages add up to more than 100%. One participant did not report their income. ^aAgender and gender nonconforming. ^bAsexual and heteroflexible. ^cAfrican, Hispanic, Indigenous, Middle Eastern/Central Asian, and Southeast Asian.

approach to sex when faced with a challenge. Participants were prompted to think about how they approached any sexual challenge(s) that they had experienced in the past 4 weeks (eg, differences in sexual preferences, difficulties with sexual communication or function) and respond to items such as “I think of different options for sex when my normal sexual routine is not successful because of my sexual problem(s).” Participants responded on a scale from 1 (seldom or never) to 4 (almost always). Total scores on the SexFlex Scale can range from 0 to 24; higher scores indicate greater sexual script flexibility. Couples in which both members answered at least 50% of the items on the SexFlex Scale were included in the

analyses; 69 of 143 couples recruited for the larger study were excluded due to insufficient data to calculate a total score on the SexFlex Scale or because only 1 member of the couple completed the SexFlex Scale (see Figure 1). Scores on the SexFlex Scale have demonstrated good validity (eg, positive associations with sexual satisfaction and no associations with measures of sleep quality or perceived stressors, as expected theoretically) and good internal consistency.²⁸ In the current study, the SexFlex Scale had good internal consistency at baseline ($\alpha = 0.87$).

Dyadic sexual desire

The dyadic sexual desire for a partner subscale (DSD-P)³⁵ of the Sexual Desire Inventory-2⁴ was used to assess partner-focused sexual desire. This validated subscale includes 2 items about the frequency of partner-focused sexual thoughts (0-7 scale) and 5 items about the strength of sexual desire for sexual activity with a partner (0-8 scale). Total scores can range from 0 to 54; higher scores indicate greater sexual desire for a partner. Scores on the DSD-P have demonstrated good validity via positive correlations with greater sexual satisfaction.³⁵ The DSD-P had good internal consistency at baseline ($\alpha = 0.91$) and follow-up ($\alpha = 0.89$) in this study, which is consistent with other research ($\alpha = 0.80$ - 0.88).³⁵

Sexual satisfaction

The Global Measure of Sexual Satisfaction (GMSEX)⁵ was used to assess sexual satisfaction. This is a single-factor, 5-item measure assessing global aspects of sexual satisfaction, or the general valence, from negative to positive, of an individual's current sexual relationship.⁵ Participants rated their overall sexual relationship in the past 4 weeks using sets of bipolar adjectives such as 1 (very unpleasant) to 7 (very pleasant). Total scores can range from 5 to 35; higher scores indicate greater sexual satisfaction. Scores on the GMSEX have demonstrated good validity via positive correlations with other measures of sexual satisfaction.³⁶ The GMSEX had excellent internal consistency at baseline ($\alpha = 0.95$) and follow-up ($\alpha = 0.96$) in this study and in prior studies.⁵

Sexual distress

The Sexual Distress Scale–Short Form (SDS-SF)³⁷ is a single-factor, 5-item a short form of the 12-item Female Sexual Distress Scale.^{6,38} The SDS-SF asks participants to rate how often they felt or experienced sexually distressing emotions or situations in the past 4 weeks, on a scale from 0 (never) to 4 (always). For example, “How often did you feel distress about your sex life?” Total scores can range from 0 to 20; higher scores indicate greater sexual distress. Scores on the SDS-SF have demonstrated good internal consistency and validity, such that the SDS-SF correlates positively with sexual bother and is weakly correlated with relationship quality, as expected.^{6,37} In the current study, the SDS-SF had good internal consistency at baseline ($\alpha = 0.88$) and follow-up ($\alpha = 0.87$).

Data analyses

Analyses were conducted using IBM SPSS Statistics (version 28). All deidentified data and syntax can be found on the Open Science Framework (<https://osf.io/m3jtd/>). To address missing items on the SexFlex Scale and sexual outcomes, we calculated individuals' total scores using ipsative mean imputation when $\leq 50\%$ of items were missing (ie, mean of responded items).³⁹

Table 2. Descriptive statistics and correlations among sexual script flexibility and sexual outcomes.

	n	Mean ± SD	Range	1	2	3	4	5	6	7
1. Sexual script flexibility (BL)	148	15.09 ± 4.69	6-24	0.06	0.43 ^a	0.28 ^a	-0.20 ^b	0.19	0.17	-0.03
2. Dyadic sexual desire (BL)	148	34.61 ± 11.62	0-53	-0.03	-0.02	0.33 ^a	-0.27 ^c	0.76 ^a	0.21 ^b	0.002
3. Sexual satisfaction (BL)	148	27.43 ± 7.13	5-35	0.36 ^c	0.18	0.47 ^a	-0.56 ^a	0.35 ^a	0.58 ^a	-0.33 ^a
4. Sexual distress (BL)	148	8.05 ± 4.65	0-19	-0.15	0.11	-0.46 ^a	0.33 ^c	-0.27 ^c	-0.27 ^c	0.57 ^a
5. Dyadic sexual desire (4 M)	112	32.71 ± 10.50	0-51	-0.01	0.07	0.39 ^c	-0.10	0.07	0.29 ^c	-0.07
6. Sexual satisfaction (4 M)	112	26.46 ± 6.82	5-35	0.32 ^b	0.30 ^b	0.47 ^a	-0.20	0.17	0.42 ^a	-0.41 ^a
7. Sexual distress (4 M)	112	6.59 ± 4.32	0-17	-0.03	0.11	-0.16	0.03	0.16	-0.41 ^c	0.06

Correlations above the diagonal are between each of the actor variables (eg, individuals' own sexual script flexibility with their dyadic sexual desire). Correlations along the diagonal are between actors and partners on the same variable (eg, individuals' and partner's sexual script flexibility). Correlations below the diagonal are between actors and partners on different variables (eg, individuals' sexual script flexibility with their partner's dyadic sexual desire). Abbreviations: BL, baseline; 4 M, 4-month follow-up. ^a $P < .001$. ^b $P < .05$. ^c $P < .01$.

We then multiplied the mean value by the number of items for the measure or subscale to convert back to the range for a total score.

Data were analyzed using multilevel modeling guided by the actor-partner interdependence model to account for the interdependence of dyadic data.⁴⁰ Our sample consisted of indistinguishable dyads because all partners could not be systematically differentiated on variables such as gender/sex or clinical diagnosis; couple members were randomly assigned as partner A or partner B for the analyses. We tested 3 two-level mixed models with cross-sectional data in which individuals were nested within dyads⁴⁰; only 1 sexual outcome was included per model due to concerns of low statistical power related to sample size. We grand-mean-centered the predictor in the model (sexual script flexibility) to assess for between-person differences in sexual outcomes. Unstandardized *bs* can be interpreted as the average change in the sexual outcome for every 1-unit increase from the sample mean in sexual script flexibility.⁴¹

We added the interaction between individuals' gender (women = 1, men = -1) and sexual script flexibility into our cross-sectional models. We excluded 5 couples from the interaction analyses because 1 or more members of these couples did not identify with a binary gender (eg, nonbinary, agender) and thus could not be included in the previous binary coding. However, all 74 couples were retained for our main analyses.

Prior to running the longitudinal models, we tested whether individuals' sexual outcomes differed from baseline to 4-month follow-up with paired-samples *t* tests. For those outcomes that showed significant change, we then tested the 3 longitudinal models, which assessed if sexual script flexibility (grand mean centered) was associated with changes in the sexual outcome 4 months later, controlling individuals' grand mean-centered sexual outcome at baseline.

Results

Descriptive statistics

The means, standard deviations, and ranges as well as correlations between the study variables, are presented in Table 2. Correlations showed that sexual script flexibility was significantly positively associated with baseline dyadic sexual desire and sexual satisfaction and negatively associated with sexual distress for individuals; however, couple members' levels of

sexual script flexibility were not significantly correlated at baseline.

Cross-sectional associations between sexual script flexibility and sexual well-being

Actor and partner effects are presented in Table 3. When individuals reported greater flexibility in the face of sexual challenges, they reported greater dyadic sexual desire for a partner, greater sexual satisfaction, and lower sexual distress. Their partner also reported greater sexual satisfaction but lower partner-focused dyadic sexual desire. There was no significant association between individuals' sexual script flexibility and their partner's sexual distress at baseline.

Interaction by gender

We added the interaction between individuals' gender and their sexual script flexibility to each model to test whether actor and partner effects were significantly different for women and men. The interaction effects were nonsignificant in each model, signifying that the associations between sexual script flexibility and sexual well-being outcomes did not differ by individuals' gender (see Table 4).

Longitudinal associations between sexual script flexibility and sexual well-being

We conducted paired-samples *t* tests to assess for changes in sexual outcomes from baseline to follow-up prior to testing the longitudinal models. Only the 56 couples with data at both time points were included in the *t* tests and longitudinal models (see Figure 1), so the baseline descriptive statistics differ from those presented in Table 2. There was a small decrease in dyadic sexual desire for a partner from baseline (mean = 34.60, SD = 11.91) to follow-up (mean = 32.71, SD = 10.50) ($t_{111} = 2.97, P = .004$; 95% CI of mean difference, 0.63-3.16; Cohen's *d* = 0.28; 95% CI, 0.09-0.47). Individuals also reported a small decrease in sexual satisfaction from baseline (mean = 28.06, SD = 7.07) to follow-up (mean = 26.46, SD = 6.82) ($t_{111} = 2.48, P = .02$, 95% CI of mean difference, 0.32-2.89; *d* = 0.24; 95% CI, 0.05-0.42). Finally, participants reported a small decrease in sexual distress from baseline (mean = 7.64, SD = 4.44) to follow-up (mean = 6.59, SD = 4.32) ($t_{111} = 2.81, P = .006$; 95% CI of mean difference, 0.31-1.80; *d* = 0.27; 95% CI, 0.08-0.45).

We therefore assessed the longitudinal associations between sexual script flexibility at baseline and the change in sexual well-being from baseline to follow-up among couples (see

Table 3. Cross-sectional associations between sexual script flexibility and sexual outcomes.

	<i>b</i>	SE	<i>t</i>	<i>P</i>	95% CI	
					Lower	Upper
Actor effects						
Sexual desire	1.19	0.18	6.70	<.001	0.84	1.54
Sexual satisfaction	0.43	0.12	3.65	<.001	0.20	0.66
Sexual distress	-0.20	0.08	-2.44	.02	-0.35	-0.04
Partner effects						
Sexual desire	-0.40	0.18	-2.27	.02	-0.76	-0.05
Sexual satisfaction	0.31	0.12	2.59	.01	0.07	0.54
Sexual distress	-0.08	0.08	-0.95	.35	-0.23	0.08

Each sexual outcome was analyzed in a separate model. Actor effects refer to the association between a person's level of sexual script flexibility and their own sexual outcome; partner effects refer to the association between a person's level of sexual script flexibility and their partner's sexual outcome. Significant associations are bolded.

Table 4. Gender interactions for the associations between sexual script flexibility and sexual outcomes.

	<i>b</i>	SE	<i>t</i>	<i>P</i>	95% CI	
					Lower	Upper
Actor effects						
Dyadic sexual desire	0.31	0.18	1.78	.08	-0.04	0.66
Sexual satisfaction	0.05	0.12	0.42	.67	-0.19	0.29
Sexual distress	0.01	0.08	0.12	.90	-0.15	0.17
Partner effects						
Dyadic sexual desire	-0.07	0.18	-0.42	.68	-0.43	0.28
Sexual satisfaction	-0.07	0.12	-0.59	.56	-0.31	0.17
Sexual distress	-0.01	0.08	-0.08	.94	-0.17	0.15

Each sexual outcome was analyzed in a separate model. Actor effects refer to the association between a person's level of sexual script flexibility and their own sexual outcome; partner effects refer to the association between a person's level of sexual script flexibility and their partner's sexual outcome.

Table 5. Longitudinal associations between sexual script flexibility and sexual outcomes.

	<i>b</i>	SE	<i>t</i>	<i>P</i>	95% CI	
					Lower	Upper
Actor effects						
Dyadic sexual desire	-0.29	0.13	-2.23	.03	-0.55	-0.03
Sexual satisfaction	0.01	0.12	0.11	.91	-0.22	0.25
Sexual distress	0.08	0.07	1.18	.24	-0.06	0.22
Partner effects						
Dyadic sexual desire	-0.03	0.13	-0.26	.80	-0.30	0.23
Sexual satisfaction	-0.07	0.12	-0.60	.55	-0.30	0.16
Sexual distress	0.04	0.07	0.51	.61	-0.10	0.17

Each sexual outcome was analyzed in a separate model. Actor effects refer to the association between a person's level of sexual script flexibility at baseline and their own sexual outcome at follow-up, controlling for the sexual outcome at baseline. Partner effects refer to the association between a person's level of sexual script flexibility at baseline and their partner's sexual outcome at follow-up, controlling for the sexual outcome at baseline. Significant associations are bolded.

Table 5). When individuals reported greater flexibility in the face of sexual challenges at baseline, they reported lower dyadic sexual desire 4 months later. No other actor or partner effects were found for the relationship between sexual script flexibility and sexual well-being at follow-up when controlling for baseline sexual outcomes. Due to concerns of low statistical power related to sample size and the lack of significant interaction between individuals' gender and sexual script flexibility in the cross-sectional models, we did not examine interaction by gender in the longitudinal models.

Discussion

Using a dyadic longitudinal design, we examined the associations between long-term community couples' sexual script flexibility when facing recent sexual challenges and their sexual well-being, including dyadic sexual desire for a partner,

sexual satisfaction, and sexual distress. Cross-sectional results supported our hypothesis that greater sexual script flexibility is associated with greater sexual satisfaction for individuals and their partners. Also, individuals' greater sexual script flexibility was linked to their own greater dyadic sexual desire and lower sexual distress. Conversely, individuals' greater sexual script flexibility was associated with their partner's lower dyadic sexual desire at baseline and their own lower dyadic sexual desire 4 months later. We found no other longitudinal associations between sexual script flexibility and sexual outcomes. Furthermore, exploratory analyses showed that there was no significant interaction between individuals' gender and sexual script flexibility in the cross-sectional models. To our knowledge, this is the first study to use dyadic data to test the associations between sexual script flexibility and sexual well-being in long-term couples. The results lend some empirical support for the common clinical convention of modifying

rigid sexual scripts in sex and couple therapy to promote contemporaneous sexual well-being.

Evidence from theoretical models as well as qualitative and quantitative studies of individuals suggests that individuals' greater sexual script flexibility is associated with their greater sexual well-being.^{22,24,27-29} We extended these findings by showing an association between adopting a flexible approach to sex and sexual well-being for both individuals *and* their partners, particularly for sexual satisfaction. Approaching sex in a more flexible manner might involve shifting to different sexual behaviors for a more satisfying experience.^{24,42} For example, in the face of erection difficulties or genito-pelvic pain, a couple might shift to nonpenetrative sex and find their sexual relationship more satisfying as a result. By decentering penetrative sex in the face of challenges, other aspects of their sexual function, such as arousal, responsive desire, and orgasm, may be fostered.⁴³

We also found that individuals' greater sexual script flexibility was associated with their own, but not their partners', lower sexual distress. This result suggests that when individuals use more flexible or alternative approaches to sex when facing challenges, they are less prone to having negative emotions about their sexual relationship, but their partners do not necessarily benefit in the same way. For the individual, greater flexibility could minimize the perceived difficulty or interference of sexual challenges on the relationship,³¹ leading to less worry, guilt, or frustration about the sexual relationship. This finding is consistent with research on individuals' sexual script flexibility and sexual distress.^{28,31} Of note, the SexFlex Scale asks about flexibility in the face of one's *own* sexual problems; it is possible that a more flexible approach to a *partner's* sexual problem could be more strongly associated with a partner's sexual distress.

Paradoxically, individuals' greater sexual script flexibility was cross-sectionally associated with their partner's *lower* dyadic sexual desire and with their own *lower* dyadic sexual desire 4 months later. A similar, counterintuitive relationship has been observed with sexual growth beliefs (ie, believing that a satisfying sex life takes work). Although sexual growth beliefs have generally been associated with greater sexual satisfaction, 2 studies of couples coping with sexual challenges have shown that holding stronger sexual growth beliefs was also associated with lower sexual desire.^{44,45} The authors hypothesized that being focused on working through sexual problems—which is characteristic of both growth beliefs and sexual script flexibility—might inadvertently act as a turn-off for partners by directing attention toward the problems and contradicting the spontaneity narrative that many people believe is important in their sexual relationships.⁴⁴ Our results suggest that greater sexual script flexibility may especially dampen individuals' sexual desire over time. It would be interesting to examine in future research whether sexual growth beliefs predict greater sexual script flexibility, and in turn, lower sexual desire.

Aside from the longitudinal association for individuals' lower dyadic sexual desire, we observed no longitudinal associations between sexual script flexibility and sexual well-being for couples. The lack of association likely stemmed from controlling for sexual well-being at baseline in the longitudinal models, which indicated minimal change in couples' sexual well-being over the short follow-up period, and low statistical power for the longitudinal models. The sample was comprised of community couples, and we would not expect to find a large change in sexual well-being over a short period.

Although declines in sexual satisfaction and dyadic sexual desire are well established as age and relationship duration increases,⁴⁶⁻⁴⁸ this change has typically been documented over a longer period. In contrast, among couples in shorter-term relationships, declines in sexual satisfaction, for example, typically occur between 4 and 6 months.^{48,49} Thus, to examine the longitudinal effects of sexual script flexibility, future research might follow couples for a longer period or examine these effects among newly established couples. Our preliminary findings suggest that there is a contemporaneous relationship between sexual script flexibility and sexual well-being for individuals and couples that may not persist over time—possibly except for one's own sexual desire. However, given the limitations of the short follow-up period and small sample size, replication is needed to characterize the relationship between sexual script flexibility and sexual well-being over time.

Strengths, limitations, and future research

Interest in sexual script flexibility assessed via the SexFlex Scale is growing,²⁸⁻³¹ yet studies have only sampled individuals. A key strength of this study is that we used a dyadic design to assess the assumed benefits of greater sexual script flexibility for sexual well-being among couples. The couple perspective is important because sex and sexual problems tend to occur in interpersonal contexts, and it is important to identify modifiable factors that can be targeted in sex and couple therapy. This study is also inclusive of mixed- and same-gender/sex couples and individuals of all genders and sexual orientations.

An important limitation of this study relates to the application of the SexFlex Scale to dyadic research. The items on the SexFlex Scale are framed in terms of an individual's approach to sex when facing *their own* sexual problem (eg, "I easily changed my approach to sex because of *my* sexual problem[s]"). Thus, this measure does not allow participants to report on flexibility in their approach to sex when *their partner* is facing sexual challenges. In the present study, we included 74 couples in the analyses of a possible 143 couples from a larger study, in which both members completed the SexFlex Scale about recent sexual challenges that they themselves experienced. In other words, our sample only included couples where both members reported recent sexual challenges. However, an additional 44 (30.8%) of 143 couples had only 1 member who completed the SexFlex Scale. For future dyadic research, we recommend first asking participants if they or their partner recently experienced sexual challenges (yes/no), then administering the SexFlex Scale accordingly. We also advise amending the wording of the individual items to capture sexual script flexibility in the face of an individual's own and/or their partner's sexual problems. Although the instructions for the SexFlex Scale contain a broad definition of sexual challenges with examples, it may also be helpful to include a prompt about the high prevalence of sexual problems to further prompt people that these issues are common and not restricted to sexual function, with a view toward minimizing missing data. Such revisions to the SexFlex Scale would, of course, require additional studies to support the psychometrics of the adapted measure.

Another limitation is the relatively small and homogeneous sample of community couples, limiting generalizability. Although the sample was relatively diverse for its size in terms

of gender/sex, sexual orientation, dyad type, and race/ethnicity, most participants identified as heterosexual (70.9%) and cisgender (91.2%), and were in mixed-gender/sex dyads (83.8%). One unpublished study found that sexual script flexibility varied by dyad type, such that female participants with female partners scored higher on sexual script flexibility than female participants with male partners; however, no differences emerged in sexual script flexibility for the gender/sex of partners for male participants.⁵⁰ Because the sample of couples who endorsed recent sexual challenges and completed the SexFlex Scale was smaller than expected, we were unable to explore the potential interaction between dyad type (mixed gender/sex, same gender/sex) and sexual script flexibility. We did test for interactions between gender and sexual script flexibility for the cross-sectional models and found no significant interaction effects. The SexFlex Scale remains a relatively new measure and research with more diverse samples is needed to examine whether the relationship between sexual script flexibility and sexual well-being differs by sociodemographic factors, such as gender, dyad type, or race. Assessing for group differences in sexual script flexibility could identify potentially vulnerable groups as well as inform clinical practice, if there are group differences. Additionally, more longitudinal research is needed over a longer follow-up period to assess the stability and directionality of associations, if any, between sexual script flexibility and sexual well-being over time.

Conclusion

This study established cross-sectional associations between sexual script flexibility and sexual well-being among long-term community couples who reported recent sexual challenges in their relationship. We found that greater sexual script flexibility was concurrently, but not longitudinally, associated with greater sexual satisfaction for both members of the couple, as well as with an individual's greater dyadic sexual desire and lower sexual distress. Results for dyadic sexual desire were mixed, such that individuals' greater sexual script flexibility was also associated with their partner's lower dyadic sexual desire at baseline and their own lower dyadic sexual desire 4 months later. As such, the association between sexual script flexibility and dyadic sexual desire warrant additional study and replication. Our findings provide empirical support for couple-based sex therapy interventions that target rigid sexual scripts to foster concurrent sexual well-being, particularly for couples' sexual satisfaction.

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Author Contributions

Katrina N. Bouchard (Conceptualization-Equal, Formal analysis-Lead, Supervision-Supporting, Validation-Lead, Visualization-Lead, Writing - original draft-Lead); Marcus Cormier (Formal analysis-Supporting,

Investigation-Supporting, Validation-Supporting, Visualization-Supporting, Writing - review & editing-Supporting); Jackie S. Huberman (Conceptualization-Equal, Formal analysis-Supporting, Funding acquisition-Lead, Investigation-Lead, Methodology-Equal, Project administration-Equal, Writing - review & editing-Supporting); Natalie O. Rosen (Conceptualization-Equal, Funding acquisition-Lead, Methodology-Equal, Project administration-Equal, Resources-Lead, Supervision-Lead, Validation-Supporting, Writing - review & editing-Lead).

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