To Do It or Not to Do It? How Communally Motivated People Navigate Sexual Interdependence Dilemmas

Personality and Social Psychology Bulletin 2015, Vol. 41(6) 791–804 © 2015 by the Society for Personality and Social Psychology, Inc Reprints and permissions: sagepub.com/journalsPermissions.nav DOI: 10.1177/0146167215580129 pspb.sagepub.com



Lisa C. Day¹, Amy Muise¹, Samantha Joel¹, and Emily A. Impett¹

Abstract

The current research investigates how people make sexual decisions when romantic partners' sexual desires conflict, situations we refer to as *sexual interdependence dilemmas*. Across an experimental study, a retrospective recall study, and a 21-day daily experience study, we found that people who were motivated to meet their partner's sexual needs—those high in *sexual communal strength*—were more willing to engage in sex with their romantic partner, even when their own desire was low, and as a result, both partners reported enhanced relationship and sexual satisfaction. The benefits of sexual communal strength were due to communally oriented people's increased desire to promote their partner's interests and decreased desire to pursue their own interests. This is the first set of studies to investigate how people make decisions in sexual interdependence dilemmas and show that communally motivated individuals navigate these situations in a way that is beneficial for relationships.

Keywords

sexuality, romantic relationships, decision making, interdependence

Received September 8, 2014; revision accepted March 10, 2015

It is an ironic truth that while powerful feelings of sexual attraction are often what motivate people to initiate romantic relationships (Diamond, 2004; Gonzaga, Turner, Keltner, Campos, & Altemus, 2006), these initial feelings of sexual attraction frequently diminish over time such that conflict about sex ultimately tears many couples apart (Sprecher, 2002; Yabiku & Gager, 2009). Indeed, many studies have shown that sexual desire tends to peak in the beginning stages of relationships as intimacy is rapidly developing (Baumeister & Bratslavsky, 1999) and then declines with increased relationship duration (see review by Impett, Muise, & Peragine, 2014). As sexual desire declines or changes over the course of a long-term relationship, people are likely to find themselves in situations in which their own sexual needs and interests are not well aligned with their partner's sexual desires-situations which we refer to as sexual interdependence dilemmas.

In the current investigation, we sought to understand how people make decisions about whether or not to engage in sex in a specific type of sexual interdependence dilemma—situations in which partners report a discrepancy in their levels of sexual desire (Davies, Katz, & Jackson, 1999; Mark, 2012; Mark & Murray, 2012), and in particular, when people experience lower desire than their romantic partner. We build upon a growing body of research on communal relationships (see review by Clark & Mills, 2012) to test the idea that partners who care about and are motivated to be responsive to one another's sexual needs—those who are high in *sexual communal strength* (Muise, Impett, Kogan, & Desmarais, 2013)—will be more willing to engage in sex, even when their own desire is low, and will navigate sexual interdependence dilemmas in a way that contributes to relationship and sexual satisfaction for both members of the couple.

Sexual Interdependence Dilemmas

In romantic relationships, partners will inevitably face situations in which their interests or preferences conflict, termed *interdependence dilemmas* (see review by Rusbult & Van Lange, 2003). Interdependence dilemmas can take place in any domain in which partners are dependent on one another. Perhaps no other specific relationship domain involves more

Corresponding Author:

Lisa C. Day, University of Toronto Mississauga, 3359 Mississauga Road, Mississauga, Ontario, Canada L5L 1C6. Email: I.day@mail.utoronto.ca

¹University of Toronto Mississauga, Ontario, Canada

dependence between partners than the domain of *sexuality*, given that the majority of long-term couples are monogamous (Blanchflower & Oswald, 2004) and therefore cannot get their sexual needs met outside of their relationship. In the current research, we focus specifically on interdependence dilemmas in the domain of sexuality. One particularly common sexual interdependence dilemma that couples face is a discrepancy in partners' levels of sexual desire (Byers & Lewis, 1988; Davies et al., 1999; Impett & Peplau, 2003; O'Sullivan & Byers, 1996). Research has shown that, in the majority of long-term heterosexual relationships, one partner tends to experience chronically lower desire than the other (Davies et al., 1999; Mark, 2012). In the current research, we focus on the consequences of engaging in consensual but undesired sex in the absence of sexual coercion. This distinction is important to this line of work because while engaging in consensual, undesired sex has both positive and negative consequences (O'Sullivan & Allgeier, 1998), the consequences of engaging in sex as a result of sexual coercion are almost uniformly negative (O'Sullivan, Byers, & Finkelman, 1998). In the absence of sexual coercion, when partners experience a desire discrepancy, the low desire partner must decide whether or not to forgo their own self-interest and engage in undesired sex with their partner to meet his or her needs.

Situations in which partners experience conflicting interests provide important information about people's motivation to pursue their own self-interests versus promote the interests of their partner (Kelley et al., 2003; Kelley & Thibaut, 1978; Thibaut & Kelley, 1959). Interdependence theory suggests that when people face situations of conflicting interests, close relationship partners often transform their motivations from focusing on what is personally best for themselves to focusing on what is best for their partner or their relationship more broadly (Rusbult & Van Lange, 2003, 2008). In the current research, we apply these ideas to sexuality and suggest that when people find themselves in situations in which their partner wants to engage in sex but their own personal desire is low, they will be challenged to transform (or at least give less weight to) their own self-focused reasons for not wanting to pursue sex and, instead, act based on broader relationship concerns and motives to promote their partner's interest. We further expected that people who are communally motivated in the domain of sexuality will be the ones who are the most likely to take their partner's needs into account when making decisions about whether or not to engage in sex when they are not in the mood.

A Communal Approach to Sexual Relationships

In communal relationships, individuals vary in the degree to which they are motivated to meet their partner's needs. People who are high in *communal strength* are particularly motivated to meet their partner's needs and do so noncontingently—that

is, without expectations for direct reciprocation (Mills, Clark, Ford, & Johnson, 2004). Recent work has applied theories of communal motivation to the domain of sexuality and, in particular, has examined the personal and relationship consequences of the motivation to respond to a partner's sexual needs, termed sexual communal strength (Muise et al., 2013). Although previous work suggests that people who are motivated to meet their partner's needs in general are also likely to be willing to meet their partner's sexual needs (in one study, the two constructs were correlated at r = .59; see Muise et al., 2013), we assert that the domain of sexuality is unique because in sexually monogamous relationships, individuals cannot (or are not allowed to) get their sexual needs met outside of their current romantic relationship like they might be able to with other needs. As such, partners are more dependent on each other to get their needs met in the domain of sexuality than in other domains.

Recent work on the personal and relational consequences of the motivation to meet a partner's sexual needs has shown that whereas people who are low in sexual communal strength experience declines in sexual desire over the course of time—as is relatively normative in romantic relationships (see review by Impett et al., 2014)-those who are high in sexual communal strength are more likely to sustain passion and desire over time (Muise et al., 2013). This research further suggests that this boost in desire is due to the tendency of people high in communal strength to engage in sex to ensure their partner's pleasure and to promote intimacy in the relationship, rather than out of self-interested concerns. Furthermore, the romantic partners of people high in sexual communal strength are able to detect this increased responsiveness—they report that their partner is more responsive to meeting their sexual needs-and in turn, they feel more satisfied and committed to their relationship (Muise & Impett, 2015).

Past research on sexual communal strength has focused on the consequences of being motivated to meet a partner's sexual needs in general, rather than in specific, desire-discrepant situations. It is one thing for communal people and their partners to report that sex is highly satisfying when both partners' passions are running high, but it is quite another to be willing to engage in sex when desire is low and to report benefits as a result. One of the most stringent tests of the potential benefits of sexual communal strength concerns whether communally motivated people will still be willing to meet their partner's needs in situations in which partners' sexual needs and interests differ. We expected that even in sexual interdependence dilemmas in which people report lower sexual desire than their partner, people high in sexual communal strength will be more willing to engage in sex and that they will report *enjoying* these experiences more than less communally motivated people. Based on interdependence theory, we expected that highly communal people would report these benefits due to an increased focus on promoting their partner's interests-such as providing their

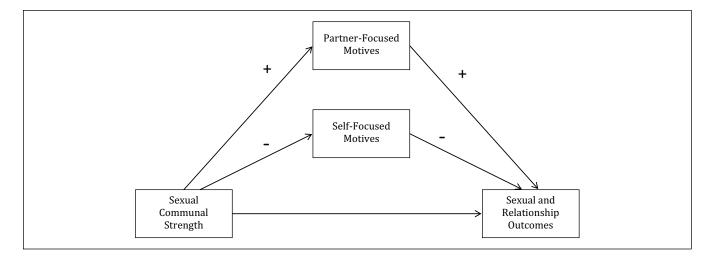


Figure 1. Conceptual model for communal decision making in sexual interdependence dilemmas.

partner with sexual pleasure or enhancing intimacy in the relationship—as well as a decreased motivation to pursue their own personal interests—such as spending time pursuing another activity that they might enjoy. We tested these predictions—which are depicted in a conceptual model in Figure 1—in three studies, including an experimental study designed to demonstrate a causal link between sexual communal strength and key sexual and relationship outcomes (Study 1), as well as a recall study (Study 2) and a dyadic experience sampling study (Study 3) in which we sought to replicate our effects in a naturalistic context and test the proposed mediators of our effects.

Study I

In our first study, we sought to show that participants who are asked to consider the ways in which they strive to meet their partner's sexual needs, relative to those in a control condition, would be more willing to engage in sex in situations when their own personal desire for sex is low, and would also experience greater sexual and relationship satisfaction.

Method

Participants and procedure. We recruited 456 participants (219 males, 235 females, 2 prefer not to disclose) from the United States through Amazon's Mechanical Turk. Participants ranged in age from 18 to 64 years (M = 31.71, SD = 9.54). All of the participants were currently in a romantic relationship ranging from 1 month to 40 years (M = 6 years 2 months, SD = 6 years 6 months). The majority of the participants (75%) were currently living with their romantic partner and 43% were married. Participants comprised a diverse range of ethnic backgrounds: 57% were European, 7% were African American, 6% were Asian, 5% were Latino or

Mexican, 2% were Native American, 1% were Middle Eastern, and 22% were multiethnic or self-identified as "Other."

Procedure and measures. Participants were randomly assigned to either the sexual communal strength condition (n = 205) or a control condition (n = 231). Those who were assigned to the sexual communal strength condition responded to the open-ended item: "Please describe, in as much detail as possible, what you do to meet your partner's sexual needs. Try to think carefully about the different things that you do, this can be before, during, or after sex (i.e., during foreplay, sexual intercourse, or postsex affection)."

Participants in the control condition did not read this prompt and, instead, began with reading a scenario.

The scenario, read by all participants, was the following: "You and your partner just spent the night at home watching a movie. As you are heading to bed, your partner lets you know that they would like to have sex. You know that having sex tonight would really make your partner happy and make them feel loved and desired. You are feeling exhausted—you had a long stressful day at work and are not in the mood to have sex."

After reading this scenario, participants then answered a question to assess their *willingness to engage in sex* ("How willing would you be to engage in sex with your romantic partner?"; 1 = not at all willing to 6 = extremely willing; M = 4.73, SD = 1.00) and a question about *relationship satisfaction* ("How satisfied do you think you would feel with your relationship after making this decision?"; 1 = not at all satisfied to 7 = extremely satisfied; M = 5.73, SD = 1.05). Participants who indicated that they would choose to have sex with their romantic partner answered a question to assess their satisfaction with the sexual experience ("How satisfying do you think that this sexual experience would be?"; 1 = not at all satisfying to 7 = extremely satisfying; M = 5.21, SD = 1.19). Finally, to ensure that participants could personally

relate to the scenario, they answered the question "How easy was it for you to imagine yourself in this situation?" (M = 6.05, SD = 1.18) on a 7-point scale (1 = very difficult to 7 = very easy).

Results

We began our data analysis by reading the open-ended responses from participants in the sexual communal strength condition; the responses that participants wrote served as our manipulation check. We excluded people for several reasons, including leaving the manipulation blank or writing only a few words, explicitly stating that they do not meet their partner's sexual needs, or reporting that they did not engage in sex in their relationship. Under these criteria, 20 of the 225 participants in this condition failed to complete the manipulation; thus, these individuals were excluded from all analyses. Our sample size (N = 436) far exceeds the minimum requirement of 64 participants per condition to detect a medium effect size at $\alpha = .05$ (Cohen, 1992).

Our primary hypotheses were that individuals in the sexual communal strength condition would be more willing to engage in sex and would feel more satisfied with their relationship and with the sexual experience than those in the control condition. Results from independent-samples t tests, conducted in SPSS 20.0 (IBM SPSS, 2011), revealed no significant condition differences in willingness to engage in sex, although the mean level willingness was nonsignificantly higher for those in the sexual communal strength prime condition (M = 4.80, SD = 0.96) than for those in the control condition (M = 4.66, SD = 1.03), t(433) = 1.43, p =.154. We should point out that there was not a lot of variability in the willingness to engage in sex item, as the majority of people (91%) scored at or above the midpoint of the scale, with 22% indicating that they would be "extremely likely" to engage in sex in this situation. Most critical to our argument, however, is the finding that participants in the sexual communal strength condition anticipated that they would feel significantly more satisfied with the sexual experience (M =5.34, SD = 1.15) than those in the control condition (M =5.09, SD = 1.22), t(382) = 2.05, p = .041. They also reported significantly higher relationship satisfaction (M = 5.86, SD =1.00) than those in the control condition (M = 5.61, SD =1.07, t(434) = 2.58 p = .010.

To ensure that participants across conditions did not differ in terms of the relevance of the scenario, we asked participants in both conditions how easy it was to imagine themselves in this situation. As expected, participants in the control condition (M = 6.03, SD = 1.15) did not differ from participants in the sexual communal strength condition (M =6.05, SD = 1.20) on how easy they found it to imagine themselves in this situation, t(433) = 0.26 p = .797. To ensure that our findings are generalizable to both men and women, we tested whether condition interacted with gender to predict any of the outcomes. None of these interactions were significant, suggesting that when men and women think about the ways in which they are motivated to meet their partner's sexual needs, they experience similar increases in sexual satisfaction and relationship satisfaction.

Brief discussion. The data from this experimental study show that when people are induced to feel more motivated to meet their partner's sexual needs, they expect to feel more satisfied with their relationship as a result of engaging in sex—and they expect sex to be more satisfying—even when their own sexual desire is low. In our next two studies, we sought to understand *why* sexual communal strength leads people to have more positive expectations about undesired sex.

Study 2

After having demonstrated evidence for our key predictions in an experimental study, we next sought to provide evidence for the predicted mechanisms of these effects. In particular, we expected that the reasons why people high in sexual communal strength may benefit more from engaging in sex in interdependence dilemmas are because they are more strongly motivated by desires to promote their partner's interests and less motivated to avoid costs to themselves from engaging in sex. To test these hypotheses, we conducted a study where participants recalled a recent sexual interdependence dilemma that had taken place in their current romantic relationship.

Method

Participants and procedure. We recruited 371 participants from the United States through Amazon's Mechanical Turk. We excluded 19 of these participants due to failed attention checks; thus, our final sample included 352 participants (145 males, 198 females, 3 transgender, 6 prefer not to disclose). Participants ranged in age from 18 to 68 years (M = 31, SD = 9.06). All participants were currently in a romantic relationship, which ranged in length from 2 months to 46 years (M = 5.69 years, SD = 6.66 years). All participants were currently living with their romantic partner, 42% of participants were married and 34% had children. Participants comprised a diverse range of ethnic backgrounds: 55% were European, 6% were African American, 7% were Asian, 6% were Latino or Mexican, 2% were Native American, and 24% were multiethnic or self-identified as "Other."

Measures. Prior to the recall portion of the study, participants completed the 6-item measure of *sexual communal strength* on a 7-point scale (1 = *not at all* to 7 = *extremely*; Muise et al., 2013; M = 5.37, SD = 1.03, $\alpha = .81$), the 10-item measure of *communal strength* on a 7-point scale (1 = *not at all* to 7 = *extremely*; Mills et al., 2004; M = 5.60, SD = 0.98, $\alpha = .86$), and the 7-item measure of *relationship commitment* on a 7-point scale (1 = *strongly disagree* to 7 = *strongly agree*;

Rusbult, Martz, & Agnew, 1998; M = 6.14, SD = 1.06, $\alpha = .87$). After completing these measures, participants were asked to recall a recent time when their romantic partner desired to engage in sex, but they were not "in the mood." Specifically, we told participants,

Next, we would like you to carefully think back to the most recent time that your romantic partner was in the mood to have sex, but you were not, try to put yourself back in that situation, and recall how you felt, and how your partner was feeling.

Eighty percent of participants reported that they could recall such a situation in the past month, and 95% reported that they could recall one in the past year. We asked participants about their motivations both to engage in and not to engage in sex in the particular sexual interaction which they recalled, including three items regarding self-focused motives (e.g., "I wouldn't want to be tired tomorrow," M = 4.26, SD = 1.27, five items, α = .65), and five items regarding *partner*focused motives (e.g., "I would want my partner to feel desired/loved/wanted," M = 4.82, SD = 1.06, three items, $\alpha =$.92) which were all rated on a 7-point scale (1 = not at all*important* to 7 = extremely important). Next, we asked participants about their *sexual behavior* by having them indicate whether or not they had engaged in any type of sexual activity with their romantic partner on this occasion. Nearly half (48%) of participants in the sample indicated that they chose to engage in sex in this situation (51% indicated that they did not engage in sex, and 1% preferred not to disclose). Using the same items used in Study 1, participants provided ratings of their relationship satisfaction after making this decision (1 = not at all satisfied to 7 = extremely satisfied; M = 5.19, SD = 1.60), and if they indicated that they had engaged in sex with their partner, they rated their satisfaction with the sexual experience (1 = not at all satisfying to 7 = extremely satisfying; M = 5.19, SD = 1.59). Finally, we also asked people about how difficult versus easy it was for them to recall this situation on a 7-point scale (1 = very difficult to 7 = very*easy;* M = 5.69, SD = 1.33).

Results

Data analytic strategy. We analyzed the data in SPSS 20.0 (IBM SPSS, 2011). We used the INDIRECT macro developed by Preacher and Hayes (2008) to test self-focused motivations and partner-focused motivations as simultaneous mediators of our hypothesized effects. This macro allows for the inclusion of two or more mediators in one statistical model and tests the indirect pathways of each mediator separately. We tested all indirect pathways using bootstrapping analyses and generated a 95% confidence interval (CI) with 5,000 simulated samples (Preacher & Hayes, 2008). When the CI does not include the value of 0, it is significant at p < .05. Intercorrelations among all variables are shown in Table 1. Our sample size (N = 352) far exceeds the minimum

Table 1. Intercorrelations Among All Variables in Study 2.

Т	2	3	4	5	6	7	8	9
I —	.67***	.48***	14**	.27***	.19***	.35***	.29***	.16**
2	_	.62***	05	.19**	.13*	.38***	.29***	.09
3		_	.00	.23**	.05	.41***	.34***	.04
4			—	09	06	.14*	2 9 ***	03
5				_	.21**	.19**	.30**	.16**
6					_	.18**	_	.13*
7						—	.69***	.19***
8							_	.15
9								_

Note. Correlation between expected behavior and sexual satisfaction could not be computed because only participants who indicated that they would engage in sex rated their sexual satisfaction; I = sexual communal strength; 2 = communal strength; 3 = relationship commitment; 4 = self-focused motives; 5 = partnerfocused motives; 6 = actual sexual behavior (0 = did not engage sex and I = engaged in sex); 7 = relationship satisfaction; 8 = sexual satisfaction; 9 = recall ease. *p < .05. **p < .01.

requirement of 85 participants to detect a medium effect size at $\alpha = .05$ (Cohen, 1992).

Retrospective sexual interdependence dilemmas. As expected and shown in Table 2, sexual communal strength was significantly positively associated with willingness to engage in sex. In fact, for every one unit increase in sexual communal strength, participants were 1.47 times more likely to have indicated that they engaged in sex with their partner the most recent time their partner had a high desire for sex but their own personal desire was low. Sexual communal strength was also positively associated with relationship satisfaction, and for the participants who indicated that they had actually engaged in sex with their partner, with greater satisfaction with the sexual experience. Sexual communal strength was positively associated with partner-focused motives to engage in sex, b = .28, t(347) = 5.28, SE = .05, p < .001, and was negatively associated with self-focused motives not to engage in sex, b = -.18, t(347) = 3.14, SE = .07, p = .008. Finally, as shown in Table 2, self- and partner-focused motives mediated the associations between sexual communal strength and all of the sexual and relationship outcomes with two exceptions: motivation to avoid costs to the self did not significantly mediate the association between sexual communal strength and likelihood of engaging in sex or relationship satisfaction.

Ruling out alternative explanations. We conducted additional analyses to rule out potential alternative explanations. We wanted to be sure that our effects were not due to differences in relationship commitment, general communal strength, or ease of imagining oneself in the scenario. In subsequent analyses in which we controlled for each of these factors in separate models, all of the effects reported above, including all of the mediation models, remained significant with two exceptions. First, controlling for general communal strength, the indirect effect from sexual communal strength to sexual

I able 2. I otal, Direct, and Indirect Effects for Models With
Self-Focused Motives and Partner-Focused Motives Mediating the
Association Between Sexual Communal Strength and Relationship
Outcomes in Study 2.

	Relationship outcomes				
	Sexual behavior	Sexual satisfaction	Relationship satisfaction		
Total effect of sexual communal strength	.39*** (.11)	.50*** (.13)	.49*** (.07)		
Direct effect of sexual communal strength	03 (.14)	.29* (.14)	.32**** (.08)		
Indirect effects					
Self-focused motives	[02, .05]	[.01, .16]	[004, .05]		
Partner-focused motives	[.03, .18]	[.02, .21]	[.00, .09]		

Note. Numbers outside parentheses are unstandardized coefficients; numbers inside parentheses are standard errors; numbers inside brackets are upper and lower limits of 95% confidence intervals from MCMAM mediation analyses. MCMAM = Monte Carlo Method of Assessing Mediation.

*p < .05. **p < .01. ***p < .001.

satisfaction via self-focused motivations dropped in magnitude and was no longer significant (95% CI = [-.03, .15]). Second, controlling for relationship commitment, the indirect effect from sexual communal strength to relationship satisfaction via partner-focused motivations dropped to nonsignificance (95% CI = [-.007, .06]).

Finally, consistent with previous research (Muise & Impett, 2015; Muise et al., 2013), men reported higher levels of sexual communal strength (M = 5.54, SD = 0.92) than did women (M = 5.30, SD = 1.05), t(341) = 2.24, p = .026.Furthermore, men also reported being more concerned with partner-focused reasons to engage in sex (M = 4.99, SD =1.06) than did women (M = 4.74, SD = 1.03), t(341) = -2.17, p = .031. However, there were no significant gender differences in the importance of self-focused motives not to engage in sex, or in the ease with which participants were able to recall a situation in which their desire for sex was lower than their partner's desire. Finally, none of our effects were significantly moderated by gender, indicating that while men and women may differ in mean levels of sexual communal strength and motivation to provide benefits to their partner when they had lower desire than their partner, the effects of sexual communal strength on relationship and sexual outcomes did not differ between men and women.

Brief discussion. The results of this study provide additional evidence that sexual interdependence dilemmas are incredibly common in romantic relationships. Eighty percent of participants were able to recall a situation in which their partner had high sexual desire but their own desire was low in the past month, and almost all (95%) had experienced one in the past year. This study also provided initial evidence for our model of communal sexual motivation. People who were highly communal in the sexual domain were more focused on what they could do for their partner and less focused on what they had to personally give up to engage in sex, and in turn, they were more willing to engage in sex when their own desire was low, and they felt more satisfied with their relationship and with the sexual experience as a result.

Study 3

In our third study, both members of romantic couples participated in an experience sampling study in which they completed daily surveys each day for 21 consecutive days. Study 3 extends the results of our first two studies in three ways. First, participants in this study completed all key measures on a daily basis, thus minimizing retrospective bias and the possibility that people may have potentially reconstrued their motivations to engage (or not to engage) in sex with their romantic partner. Second, as both partners reported on sexual situations in this study, we can investigate the effects of one partner's sexual communal motivation in shaping the other partner's sexual and relationship satisfaction. This dyadic data will enable us to determine whether people who are high in sexual communal strength are actually successful in their goal of meeting their partner's sexual needs. Third, we sought to reduce socially desirable responding by obtaining an unobtrusive measure of desire-discrepant sexual situations in romantic relationships. In our first two studies, it was possible that people overestimated their willingness to engage in sex when they had low desire to seem like more responsive romantic partners, and this may have been especially likely to be true for highly communal people. In Study 3, both members of the couple provided reports of their sexual desire each day that allowed us to test our key effects both on days when partners reported similar levels of sexual desire and, most critically, on days when they reported discrepant levels of desire.

Method

Participants and procedure. Participants were recruited through online postings and classroom visits at a small Canadian university and through online postings on the websites Kijiji and Craigslist in the Greater Toronto Area. To be eligible to participate, both members of the couple had to agree to take part in the study and be older than 18. Eligible couples had to see their partner several times a week and be sexually active. Interested participants who met the eligibility criteria emailed the researchers for more information about the study. After couples agreed to participate, each partner was emailed a unique link allowing them to access the online surveys.

A total of 101 couples (95 heterosexual, 5 lesbian, and 1 gay couple) ranging in age from 18 to 53 years (M = 26 years, SD = 7 years) participated in the study. Nearly half of the participants were cohabitating (29%), married (17%), or engaged (3%); the remaining participants were in a romantic relationship but not living together. Participants reported being involved in their current relationship between 6 months and 22 years (M = 4.45 years, SD = 3.76 years) and identified as a diverse variety of ethnic backgrounds; 67% were White, 8% were Asian, 7% were Black, 4% were South Asian, 4% were Latin American, 4% were South East Asian, 1% were Arab/West Asian, and 5% identified as multiethnic or "Other."

On the first day of the study, participants completed a 30-min background survey. Then, each day for 21 consecutive days, participants completed a 5- to 10-min daily survey. Participants were asked to begin the study on the same day as their romantic partner and to refrain from discussing their responses with their partner until the completion of the study. Each participant was paid up to Cad\$40 (in gift cards) for completing the background and daily surveys; payment was prorated based on the number of daily diaries completed. Participants completed an average of 18 daily surveys (M = 18.48, SD = 5.06, range = 1-21).

Person-level measures. Participants completed several individual differences measures. As in Study 2, participants completed the 6-item measure of *sexual communal strength* on a 5-point scale (0 = *not at all* to 4 = *extremely*; Muise et al., 2013; M = 2.72, SD = 0.80, $\alpha = .86$), the 10-item measure of *communal strength* on a 5-point scale (0 = *not at all* to 4 = *extremely*; Mills et al., 2004; M = 3.16, SD = 0.86, $\alpha = .85$), and the 7-item Rusbult et al. (1998) measure of *relationship commitment* on a 7-point scale (1 = *strongly disagree* to 7 = *strongly agree;* M = 6.24, SD = 1.04, $\alpha = .89$).

Daily-level measures. We used measures with only a few items or a single item in the diary study to increase efficiency and minimize participant attrition (Bolger, Davis, & Rafaeli, 2003).

Each day, regardless of whether participants engaged in sexual activity with their romantic partner, they rated their motivations to have sex as well as their motivations not to have sex to measure self-focused motives not to engage in sex (M = 3.52, SD = 1.61, five items, $\alpha = .93$) and partnerfocused motives to engage in sex (M = 4.88, SD = 1.87, three items, $\alpha = .96$). The items were the same items used in Study 2 and were all rated on a 7-point scale (1 = not at all to 7 = a)lot). In addition, as in this study we did not specifically set up situations of conflicting interests, we also asked participants to report their self-focused motives for engaging in sex because participants may have also been motivated to engage in sex for their own self-interest. Six items, such as "I wanted to pursue my own sexual pleasure" (M = 3.30, SD = 1.50, six items, $\alpha = .89$), were rated on a 7-point scale (1 = not at all to $7 = a \ lot$).

Participants also indicated whether or not they engaged in sex with their partner each day (yes/no). Participants engaged in sex, on average, 4 times over the course of the 3-week diary study (M = 4.13, SD = 2.83, range = 1-14). On days when participants reported engaging in sex, they answered five questions from the Global Measure of Sexual Satisfaction (GMSEX; Lawrance & Byers, 1995) to measure their sexual satisfaction. Items were rated on 7-point bipolar scales: bad-good, unpleasant-pleasant, negative-positive, unsatisfying-satisfying, worthless-valuable ($M = 6.37 \text{ SD} = 0.89, \alpha = .92$). Relationship satisfaction was assessed with five items from the Investment Model scale (Rusbult et al., 1998) rated on a 7-point scale (1 = strongly disagree to 7 = strongly agree; α = .90, M = 5.67, SD = 1.27). Sexual desire was assessed with one item that we have used in previous daily experience research: "I felt a great deal of sexual desire for my partner today" (Muise et al., 2013) rated on a 7-point scale (1 = strongly disagree to 7 = strongly agree; M = 4.76, SD = 1.94). Although we did not compute formal power analyses given the complexity of determining power in multilevel designs, our sample sizes are aligned with multilevel power recommendations of sampling at least 50 observations at Level 2 to avoid biased estimates of standard errors (current study: 202 observations; Maas & Hox, 2005).

Results

Data analytic strategy. We analyzed the data with multilevel modeling using mixed models in SPSS 20.0 (IBM SPSS, 2011). We tested a two-level cross model with random intercepts where persons are nested within dyads, and person and days are crossed to account for the fact that both partners completed the daily surveys on the same days (Kenny, Kashy, & Cook, 2006). The actor-partner interdependence model (APIM; Kenny et al., 2006) guided our analyses; models included both actor and partner variables entered simultaneously as predictors. To avoid confounding withinand between-person effects, we used techniques appropriate for a multilevel framework, partitioning all the Level 1 predictors (i.e., self-focused and partner-focused motives) into their within- and between-variance components, which were person-mean centered and aggregated, respectively (Raudenbush, Bryk, Cheong, & Congdon, 2004; Zhang, Zyphur, & Preacher, 2009). In our tests of mediation, as our predictor variable (i.e., sexual communal strength) is at Level 2, we focused on the daily aggregates of self-focused and partnerfocused motives, following the guidelines for a multilevel 2-1-1 mediation outlined by Zhang et al. (2009). We used the Monte Carlo Method of Assessing Mediation (MCMAM; Selig & Preacher, 2008) with 20,000 resamples and 95% CIs to test the significance of the indirect effects. In our tests of mediation, both self-focused and partner-focused motives were entered simultaneously. For the dichotomous outcome-whether or not the couple engaged in sex on a given day-we used the GENLINMIXED procedure. Intercorrelations among all variables are shown in Table 3.

	Ι	2	3	4	5	6	7	8	9	10
Ι	_	.35***	.29***	.32***	−.27***	.31***	07	.21***	.21**	.36***
2		_	.5 9 ***	.14	20***	.09	25	.04	.36***	.2 9 ***
3				.17*	14	.10	19	.07	.44***	.23**
4				_	10	.65***	.21	.40****	.53***	.36***
5					_	.09	.46**	07	−.17 *	30***
6						_	.37*	.33***	.42***	.27***
7							_	.09	.17	.03
8								_	.21**	.14
9									_	.49
10										_

Table 3. Intercorrelations Among All Variables in Study 3.

Note. All daily items in the diary were aggregated to produce correlations; I = sexual communal strength (background); 2 = communal strength (background); 3 = relationship commitment (background); 4 = sexual desire (daily); 5 = self-focused motives (daily); 6 = partner-focused motives (daily); 7 = self-focused motives for engaging in sex (daily); 8 = sexual behavior (daily; 0 = did not engage sex and I = engaged in sex); 9 = relationship satisfaction (daily); 10 = sexual satisfaction (daily). *p < .05. **p < .01.

In this study, we sought to provide evidence for our model of sexual communal motivation, both on days when partners' sexual desires are aligned and on days when partners experienced a sexual interdependence dilemma, most specifically, on days when a person's own sexual desire was lower than their partner's desire. To do so, we calculated a desire discrepancy score for each couple on each day by subtracting the partner's self-reported sexual desire from the actor's selfreported desire; any value different from 0 was considered a desire discrepancy between partners. The absolute values ranged from 0, indicating that partners' desires were perfectly aligned, to 6, indicating that one partner's desire was a 1 on a 7-point scale, whereas the other partner's was a 7 (M = 1.42, SD = 1.43). It was common for partners to report different levels of daily sexual desire: Across the 21-day diary, couples reported experiencing desire discrepancies on 69% of days.

For each predicted effect, we conducted additional analyses to test whether our effects would be consistent on days when partners' sexual interests are more closely aligned as well as on days when romantic partners report discrepancies in sexual desire. In particular, we considered whether the degree of desire discrepancy between partners moderated any of our effects. Following a bilinear modeling approach (Kenny et al., 2006), we created two separate desire discrepancy variables so that we could model both the magnitude and direction of the desire discrepancy between partners. This approach allowed us to investigate situations in which the actor's desire is higher than the partner's desire and situations in which the partner's desire is higher than the actor's desire separately. This is important because we are particularly interested in situations when a person's own sexual desire is low and their partner's sexual desire is high, and this technique allowed us to distinguish these situations from those where the actor reports higher desire than their partner.

We tested whether each effect was moderated by either of the two desire discrepancy variables. The first variable (partner's desire is higher) was coded as the numerical difference between partners' reported sexual desire when a partner's desire was higher than the actor's; when the actor's desire was higher, we assigned a value of 0 to the variable. A higher score on this variable represents a larger desire discrepancy between partners in situations when the partner's desire is higher than the actor's desire. The second variable (actor's desire is higher) was coded in the opposite manner: The actual difference between partner's reported sexual desire when an actor's desire was higher than their partner's desire, and 0 for when the partner's desire was higher than the actor's desire. A higher score on this variable represents a larger desire discrepancy in situations where the actor's desire is higher than their partner's desire. Even though we are primarily interested in days when a partner's sexual desire is higher than the actor's desire, we entered both desire discrepancy variables into the model to test whether any effects are due to the magnitude of the desire discrepancy between partners or whether the direction of the desire discrepancy is important.

Daily sexual interdependence dilemmas. The results of this study supported all of our predictions. As shown in Table 4, sexual communal strength was positively associated with the likelihood of engaging in sex on any given day in the diary; in fact, for every one unit increase in sexual communal strength, participants were 1.2 times more likely to engage in sex each day. Sexual communal strength was also positively associated with sexual and relationship satisfaction, meaning that people who were more motivated to meet their partner's sexual needs reported higher sexual and relationship satisfaction than those who were lower in sexual communal strength. Finally, the *partners* of people high in sexual communal strength also reported enhanced sexual and relationship satisfaction, which

	Daily outcomes							
	Decision to have sex	Actor's sexual satisfaction	Actor's relationship quality	Partner's sexual satisfaction	Partner's relationship quality			
Total effect of sexual communal strength	.18* (.09)	.37**** (.06)	.20*** (.07)	.16** (.06)	.16* (.07)			
Direct effect of sexual communal strength	.12 (.16)	.21** (.07)	.08 (.07)	.04 (.07)	.09 (.07)			
Indirect effects								
Self-focused motives	[02, .15]	[.03, .11]	[.001, .07]	[.03, .12]	[.001, .06]			
Partner-focused motives	[.12, .35]	[.02, .12]	[.08, .24]	[.02, .12]	[.08, .23]			

Table 4. Total, Direct, and Indirect Effects for Models With Costs to Self and Benefits to Partner Mediating the Association Between Sexual Communal Strength and Daily Outcomes in Study 3.

Note. Numbers outside parentheses are unstandardized coefficients; numbers inside parentheses are standard errors; numbers inside brackets are upper and lower limits of 95% confidence intervals from MCMAM mediation analyses. MCMAM = Monte Carlo Method of Assessing Mediation. $p^* < .05$. **p < .01.

Table 5. Daily Desire Discrepancy Moderations Between Sexual Communal Strength and Daily Outcomes in Study 3.

	Daily outcomes							
	Costs to self	Benefits to partner	Sexual behavior	Actor's sexual satisfaction	Actor's relationship satisfaction	Partner's sexual satisfaction	Partner's relationship satisfaction	
SCS	43*** (.09)	.32** (.10)	.32* (.10)	.27**** (.07)	.25*** (.07)	.44 (.42)	.29**** (.07)	
Desire (sum of partners' scores)	10*** (.01)	.29*** (.01)	.54*** (.02)	.09*** (.02)	.20**** (.02)	.28* (.12)	.21*** (.02)	
Discrepancy I (actor > partner)	07** (.03)	.17*** (.03)	.II [†] (.03)	.05 (.03)	.12** (.03)	−.64 *** (.24)	04 (.03)	
Discrepancy 2 (partner > actor)	.15*** (.03)	30*** (.03)	07 (.03)	09* (.04)	<i>−</i> .22 ^{****} (.04)	.03 (.23)	.05 (.03)	
SCS × Discrepancy I	.02 (.03)	.01 (.03)	04 (.04)	.01 (.03)	05 (.03)	.15 (.28)	.00 (.01)	
SCS × Discrepancy 2	.04 (.03)	01 (.03)	13 (.04)	.11* (.05)	06 (.05)	10 (.31)	.00 (.01)	

Note. Numbers outside parentheses are unstandardized coefficients; numbers inside parentheses are standard errors. The variable "sexual behavior" was coded as 0 = did not engage in sex, 1 = did engage in sex. In these analyses, partner's sexual communal strength is controlled; however, the pattern of results is the same if this variable is not controlled. None of the interactions between partner's sexual communal strength and the desire discrepancy variables are significant, and all the effects remained the same when these were entered into the model; therefore, these variables are not reported here. The analyses for the variable "sexual behavior" was conducted using GENLINMIXED because this is a dichotomous variable; the other analyses depicted were conducted using mixed models. SCS = sexual communal strength.

 $^{\dagger}p < .06. *p < .05. **p < .01. ***p < .001.$

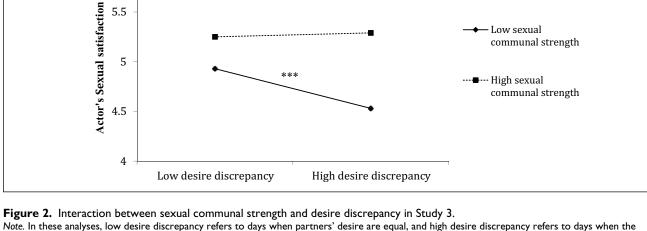
suggests that people who are high in sexual communal strength are actually successful in their goal of meeting their partner's sexual needs.

Importantly, as shown in Table 5, the results revealed that, with one exception, none of these effects were significantly moderated by the degree of discrepancy in partners' sexual desire, except the effect of sexual communal strength on sexual satisfaction (b = .11, SE = .04, t = 2.38, p = .02). More specifically, and as shown in Figure 2, whereas people low (1 *SD* below the mean) in sexual communal strength reported experiencing decreased sexual satisfaction on days when their partner's desire was higher than their own (b = -.19, SE = .05, t = -3.97, p < .001), people high (1 *SD* above the mean) in sexual communal strength were buffered against feeling less satisfied in these situations (b = -.003, SE = .06, t = -0.06, p = .96).

Sexual communal strength was also associated with selfand partner-focused motivations. As expected, sexual communal strength was negatively associated with self-focused motives not to engage in sex (b = -.40, SE = .08, t = -4.72, p < .001) and was positively associated with partner-focused motives to engage in sex (b = .41, SE = .09, t = 4.50, p < .09.001). Most critically and as shown in Table 5, there were no significant moderations by either of the desire discrepancy variables, suggesting that these effects are consistent even on days when romantic partners reported differing levels of sexual desire—most central to our argument, on days when the partner's desire for sex was high, but an actor's own desire for sex was low. Finally, as shown in Table 4, self- and partner-focused motives simultaneously mediated all of the associations between sexual communal strength and sexual and relationship outcomes for both partners with only one

Low sexual communal strength

-- High sexual communal strength



partner's sexual desire is higher than the actor's sexual desire. [†]p < .06. *p < .05. **p < .01. ***p < .001.

exception. When self- and partner-focused motives were entered as simultaneous mediators, self-focused motives were not significantly associated with the likelihood of engaging in sex (b = -.12, p = .11) and therefore did not significantly mediate the association between sexual communal strength and the likelihood of engaging in sex.

6

5.5

5

Ruling out alternative explanations. As in Study 2, we wanted to rule out the possibility that the effects might be driven by individual differences in general communal strength or relationship commitment. As shown in Table 5, sexual communal strength was significantly correlated with general communal strength and relationship commitment. However, after we controlled general communal strength and relationship commitment, all of our effects remained significant. In addition, in this study, we wanted to rule out the possibility that our effects could be accounted for by a person's selffocused motives to engage in sex, such as desires to pursue their own pleasure, because even in situations in which a person's desire is lower than their partner's desire, they may still engage in sex to pursue benefits for the self. All of our effects remained significant after we controlled for self-focused sexual motives.

Finally, consistent with previous research (Muise et al., 2013), men (M = 3.96, SD = 0.82) reported higher sexual communal strength than women (M = 3.45, SD = 0.85), t(191) = 3.38, p = .001. Furthermore, women (M = 3.74, SD) = 1.66) indicated that they were significantly more likely than men (M = 3.28, SD = 1.52) to avoid costs to the self of engaging in sex, t(2419) = -7.06, p < .001. However, gender did not moderate any of our effects, suggesting that the effects of sexual communal strength on sexual and relationship outcomes did not differ for men and women.

Brief discussion. The results of Study 3 suggest that desire discrepancies are incredibly common in long-term romantic relationships. Couples reported differing levels of sexual desire on 69% of days in the sample-equivalent to about 5 days out of 7 per week. On days when partners reported discrepant levels of sexual desire, couples nonetheless engaged in sex on about a quarter (23%) of these days, suggesting that engaging in sex when one is not in the mood is also quite common. Importantly, this study provided the strongest evidence of the three studies for our full model of sexual communal motivation, showing that communal people make daily sexual decisions in desire-discrepant situations in a way that benefits both themselves and their romantic partner.

General Discussion

In three studies using multiple methods, we showed that it was very common for romantic partners to experience situations in which they had conflicting sexual interests and desires in their relationships. In fact, participants were easily able to imagine, recall, or report desire-discrepant situations in their own relationships, suggesting that partners in longterm relationships are highly likely to experience situations of conflicting sexual interests and that this is an important interdependence dilemma that couples face in their daily lives (see review by Impett & Peplau, 2003). Given the high frequency with which couples face this dilemma, it is surprising that close relationships and sexuality scholars have not yet investigated how couples can navigate such situations to maximize sexual and relationship satisfaction.

The results of our studies showed that in sexual interdependence dilemmas in which people had lower desire than

their romantic partner, people who are high in sexual communal strength, or were in an experimental condition that primed sexual communal strength, were not only more willing to engage in sex, but they also experienced higher sexual and relationship satisfaction than people who were less communal. Most strikingly, whereas less communal people experienced less sexual satisfaction on days when they engaged in sex when they were not in the mood than on days when both partners' passions were running high, people high in sexual communal strength experienced equally high levels of sexual satisfaction on days when both partners wanted sex and on days when they were less enthused than their partner. In Studies 2 and 3, we investigated our proposed mediators of these effects. These studies showed that people high in communal strength were more motivated by partner-focused concerns, and less motivated with self-focused concerns, which in turn led to a greater willingness to engage in sex, as well as greater sexual and relationship satisfaction in both studies. Furthermore, the dyadic nature of Study 3 also enabled us to investigate the effect of one partner's sexual communal strength on the other partner's feelings of sexual and relationship satisfaction in desire-discrepant situations. We found that when individuals are more communally motivated in the domain of sexuality, their partner did, in fact, report experiencing higher sexual and relationship satisfaction, indicating that communally motivated people are at least somewhat successful in achieving their desired goal of meeting their partner's sexual needs in situations of conflicting sexual interests.

Theoretical Contributions

The current investigation extends existing work on close relationships and sexuality. The current studies merge two well-established theories in close relationships researchinterdependence theory (Rusbult & Van Lange, 2003, 2008) and theories of communal motivation (Clark & Mills, 1979, 2012; Mills & Clark, 1982)—and are the first studies to do so in the context of established relationships. Interdependence theory posits that in romantic relationships, partners will inevitably encounter situations in which their interests conflict. These situations provide important information about people's motivation to pursue their own self-interests versus promote the interests of their partner (Rusbult & Van Lange, 2003, 2008). Interdependence theory suggests that when people choose to make a sacrifice for their romantic partner, their motivation is transformed from immediately focusing on the consequences for the self of making the sacrifice to focusing on the broader consequences for the partner or the relationship. The current studies suggest that, at least in the domain of sexuality, people who are highly motivated to meet their partner's sexual needs are more willing to forego their own interests to pursue benefits to their partner, which in turn contributes to the better relationship and sexual outcomes experienced by both partners.

An additional novel contribution of this work is that it is the first to combine interdependence theory and theories of communal motivation in the uniquely intimate domain of sexuality. Given that the vast majority of ongoing romantic relationships are sexually monogamous (Blanchflower & Oswald, 2004), romantic partners are highly dependent on each other to meet their sexual needs. In a sexual interdependence dilemma when one partner is interested in sex, but the other partner's desire for sex is low, the higher desire partner is often more dependent on the lower desire partner than vice versa as the high desire partner is relying on their partner to meet their needs (Rusbult & Van Lange, 2003). Therefore, sexual interdependence dilemmas may make people feel particularly vulnerable (Rusbult & Van Lange, 2003) and present ample opportunities for rejection and emotional pain (Metts & Cupach, 1989; Sanford, 2003). Indeed, a pilot study by Rehman et al. (2011) has shown that disagreements in the domain of sexuality are more diagnostic of overall relationship quality than other types of disagreements. In this work, negative behaviors displayed during discussions of a sexual conflict more strongly predicted feelings of relationship dissatisfaction than negative behaviors displayed during discussions of a nonsexual conflict. It seems then that sexual conflicts may be particularly challenging and emotionally charged but that their successful resolution is especially important for the maintenance of satisfying relationships.

Finally, the current investigation includes the first study to experimentally manipulate communal motivation, and in this case, communal motivation in the domain of sexuality. Although previous work includes experimental manipulations of felt value toward a romantic partner (Lemay & Melville, 2014) and the desire for a communal relationship with a stranger (Lemay & Clark, 2008), no research to date has manipulated communal motivation within the context of a romantic relationship. Thus, our findings are the first in this growing literature to provide experimental evidence for the direction of the association between communal motivation and relationship outcomes.

Limitations and Future Directions

In the current research, we found that when people encountered situations in which their romantic partner's desire for sex was higher than their own, people high in sexual communal strength were more willing to forego their own self-interest to promote their partner's interests. One important limitation of this set of studies is that it relied on self-report measures, and thus, participants may have been responding based on social desirability concerns. Importantly, this issue may have affected each part of our theoretical model. Participants may have been particularly motivated to appear more communal than they actually were, more concerned with partner-focused reasons to engage in sex, and less concerned with self-focused motives not to engage in sex, and they may have wanted to appear more satisfied in their relationships than they actually were. We attempted to mitigate these limitations in two ways. First, in Studies 2 and 3, we controlled for general communal strength, a construct that would also likely be vulnerable to socially desirable responding, and our results remained significant. Second, in Study 3, participants were not aware that we were specifically interested in sexual interdependence dilemmas and thus would not have been motivated to make themselves appear more communal than they actually were.

An additional limitation of this work is that we were not able to disentangle two competing explanations for our findings. One possibility is that communally motivated people transform their motivation from focusing on what they would personally have to lose from engaging in sex when their desire is low to focusing on promoting their partner's interests (Rusbult & Van Lange, 2003, 2008). Another possibility, in line with recent research on prosociality, suggests that communally motivated people are instinctually focused on promoting their partner's interests (Righetti, Finkenauer, & Finkel, 2013; Zaki & Mitchell, 2013). That is, their motivation may not be transformed from initially being more self-focused to becoming more partner-focused, but communally oriented people's first inclination might be to act prosocially. One avenue for future research is to try to disentangle these two explanations and determine any benefits that are unique to instinctual prosociality versus transformed prosocial giving in relationships (see review by Day & Impett, in press).

As the current study was centrally focused on demonstrating the relationship and sexual benefits of communal motivation when couples experience sexual interdependence dilemmas, we did not address the factors that promote sexual communal strength in the first place. Research on communal motivation more generally suggests that selfdisclosure is an important aspect of communal relationships (Clark & Mills, 2012) As such, one way to promote sexual communal strength in an ongoing relationship may be for partners to communicate about their sexual preferences. In addition, research suggests that expressing gratitude to a partner promotes communal strength (Lambert, Clark, Durtschi, Fincham, & Graham, 2010), and feelings of gratitude motivate responsiveness and the maintenance of relationships over time (Gordon, Impett, Kogan, Oveis, & Keltner, 2012). As such, it will be interesting for future research to determine whether gratitude might promote sexual communal strength.

The present studies did not consider times in which it might be important for partners to be motivated to meet one another's needs *not* to engage in sex. Thus, a relevant avenue for future research is to consider responsiveness to a partner's sexual needs, when those needs are to not engage in sex. Communally motivated people may be better able to respond to a romantic partner's changing needs over time (Clark, Graham, Williams, & Lemay, 2008), and in the sexual domain, this may mean, at times, being relatively accepting of a partner's desire not to engage in sex. We expect that during times when people are experiencing particularly low sexual desire, such as during times of stress or important life transitions, their partner's motivation to meet their need *not* to engage in sex will be particularly important in shaping how

both partners feel about the relationship. Thus, future research could investigate the role of sexual communal strength including the ability to accept having sex less frequently than is typical for the couple—in shaping how couples manage conflicting sexual interests during important life and relationship transitions, such as the transition to parenthood.

Finally, it will also be important to consider some of the possible boundary conditions of the effects documented in this article. Although we have shown that being motivated to meet a partner's sexual needs is beneficial for both partners, we do not think that being motivated to meet a partner's sexual needs to the exclusion of one's own needs would be beneficial-for either partner in the relationship. Indeed, research on unmitigated communion (see Helgeson & Fritz, 1998) has shown that in situations when interpersonal conflict arises, individuals high in unmitigated communion tend to experience more negative and less positive affect (Nagurney, 2007). Thus, we think it is important that people strike the right balance between being responsive to their partner's needs and asserting their own needs, and this balance will likely change over the course of the relationship and as couples undergo important relationship transitions.

Conclusion

In ongoing romantic relationships, partners will inevitably face situations in which their sexual interests and desires are at odds with one another. The current investigation provides the first evidence that, when partners experience a discrepancy in their sexual desires, communally motivated people have an increased desire to promote their partner's interests and a decreased desire to pursue their own interests and, as a result, are able to navigate sexual interdependence dilemmas in a way that is beneficial for both partners in the relationship.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This work has been supported by a Social Science and Humanities Research Council (SSHRC) Graduate Scholarship awarded to Lisa Day, a SSHRC Canada Graduate Scholarship awarded to Samantha Joel, a SSHRC Banting Postdoctoral Fellowship awarded to Amy Muise, and a SSHRC Insight Grant awarded to Emily Impett.

Supplemental Material

The online supplemental material is available at http://pspb. sagepub.com/supplemental.

References

- Baumeister, R. F., & Bratslavsky, E. (1999). Passion, intimacy, and time: Passionate love as a function of change in intimacy. *Personality and Social Psychology Review*, 3, 49-67. doi:10.1207/s15327957pspr0301 3
- Blanchflower, D. G., & Oswald, A. J. (2004). Money, sex, and happiness: An empirical study. *Scandinavian Journal of Economics*, 106, 393-415. doi:10.1111/j.0347-0520.2004.00369.x
- Bolger, N., Davis, A., & Rafaeli, E. (2003). Diary methods: Capturing life as it is lived. *Annual Review of Psychology*, 54, 579-616. doi:10.1146/annurev.psych.54.101601.145030
- Byers, E. S., & Lewis, K. (1988). Dating couples' disagreements over the desired level of sexual intimacy. *The Journal of Sex Research*, 24, 15-29. doi:10.1080/00224498809551395
- Clark, M. S., Graham, S. M., Williams, E., & Lemay, E. P. (2008). Understanding relational focus of attention may help us understand relational phenomena. In J. P. Forgas & J. Fitness (Eds.), *Social relationships: Cognitive, affective and motivational processes* (pp. 131-146). New York, NY: Taylor & Francis Group.
- Clark, M. S., & Mills, J. R. (1979). Interpersonal attraction in exchange and communal relationships. *Journal of Personality* and Social Psychology, 37, 12-24. doi:10.1037/0022-3514.37.1.12
- Clark, M. S., & Mills, J. R. (2012). A theory of communal (and exchange) relationships. In P. A. M. Van Lange, A. W. Kruglanski, & E. T. Higgins (Eds.), *The handbook of theories of social psychology* (pp. 232-250). Thousand Oaks, CA: SAGE.
- Cohen, J. (1992). A power primer. *Psychological Bulletin*, *112*, 155-159. doi:10.1037/0033-2909.112.1.155
- Davies, S., Katz, J., & Jackson, J. L. (1999). Sexual desire discrepancies: Effects on sexual and relationship satisfaction in heterosexual dating couples. *Archives of Sexual Behavior*, 28, 553-567. doi:10.1023/A:1018721417683
- Day, L., & Impett, E. A. (in press). For it is in giving that we receive: The benefits of sacrifice in romantic relationships. In C. Knee & H. Reis (Eds.), Advances in Personal Relationships, Vol. 1: Positive approaches to optimal relationship development. Cambridge, UK: Cambridge University Press.
- Diamond, L. M. (2004). Emerging perspectives on distinctions between romantic love and sexual desire. *Current Directions in Psychological Science*, 13, 116-119. doi:10.111 1/j.0963-7214.2004.00287
- Gonzaga, G. C., Turner, R. A., Keltner, D., Campos, B., & Altemus, M. (2006). Romantic love and sexual desire in close relationships. *Emotion*, 6, 163-179. doi:10.1037/1528-3542.6.2.163
- Gordon, A. M., Impett, E. A., Kogan, A., Oveis, C., & Keltner, D. (2012). To have and to hold: Gratitude promotes relationship maintenance in intimate bonds. *Journal of Personality and Social Psychology*, *103*, 257-274. doi:10.1037/a0028723
- Helgeson, V. S., & Fritz, H. L. (1998). A theory of unmitigated communion. *Personality and Social Psychology Review*, 2, 173-183. doi:10.1207/s15327957pspr0203_2
- IBM Corp. (2011). IBM SPSS Statistics for Windows, Version 20.0. Armonk, NY: IBM Corp.
- Impett, E. A., Muise, A., & Peragine, D. (2014). Sexuality in the context of relationships. In D. L. Tolman, L. M. Diamond, J. A. Bauermeister, W. H. George, J. G. Pfaus, & L. M. Ward (Eds.), *APA handbook of sexuality and psychology* (Vol. 1, pp. 269-315). Washington, DC: American Psychological Association.

- Impett, E. A., & Peplau, L. A. (2003). Sexual compliance: Gender, motivational, and relationship perspectives. *Journal of Sex Research*, 40, 87-100. doi:10.1080/00224490309552169
- Kelley, H. H., Holmes, J. G., Kerr, N. L., Reis, H. T., Rusbult, C. E., & Van Lange, P. A. M. (2003). *An atlas of interpersonal situations*. New York, NY: Cambridge University Press. doi:10.1017/CBO9780511499845
- Kelley, H. H., & Thibaut, J. W. (1978). Interpersonal relations: A theory of interdependence. New York, NY: Wiley.
- Kenny, D. A., Kashy, D. A., & Cook, W. L. (2006). The analysis of dyadic data. New York, NY: Guilford Press.
- Lambert, N. M., Clark, M. S., Durtschi, J., Fincham, F. D., & Graham, S. M. (2010). Benefits of expressing gratitude: Expressing gratitude to a partner changes one's view of the relationship. *Psychological Science*, 21, 574-580. doi:10.1177/0956797610364003
- Lawrance, K. A., & Byers, E. S. (1995). Sexual satisfaction in longterm heterosexual relationships: The interpersonal exchange model of sexual satisfaction. *Personal Relationships*, 2, 267-285. doi:10.1111/j.1475-6811.1995.tb00092.x
- Lemay, E. P., & Clark, M. S. (2008). Walking on eggshells: How expressing relationship insecurities perpetuates them. *Journal of Personality and Social Psychology*, 95, 420-441. doi:10.1037/0022-3514.95.2.420
- Lemay, E. P., & Melville, M. C. (2014). Diminishing self-disclosure to maintain security in partners' care. *Journal of Personality* and Social Psychology, 106, 37-57. doi:10.1037/a0034161
- Maas, C. J. M., & Hox, J. J. (2005). Sufficient sample sizes for multilevel modeling. *Methodology: European Journal of Research Methods for the Behavioral and Social Sciences*, 1, 86-92. doi:10.1027/1614-2241.1.3.86
- Mark, K. P. (2012). The relative impact of individual sexual desire and couple desire discrepancy on satisfaction in heterosexual couples. *Sexual and Relationship Therapy*, 27, 133-146. doi:10 .1080/14681994.2012.678825
- Mark, K. P., & Murray, S. H. (2012). Gender differences in desire discrepancy as a predictor of sexual and relationship satisfaction in a college sample of heterosexual romantic relationships. *Journal of Sex and Marital Therapy*, 38, 198-215. doi: 10.1080/0092623X.2011.606877
- Metts, S., & Cupach, W. R. (1989). *The role of communication in human sexuality*. Westport, CT: Ablex.
- Mills, J., & Clark, M. S. (1982). Exchange and communal relationships. In *Review of personality and social psychology* (Vol. 3, pp. 121-144). Beverly Hills, CA: Sage.
- Mills, J., Clark, M. S., Ford, T. E., & Johnson, M. (2004). Measurement of communal strength. *Personal Relationships*, 11, 213-230. doi:10.1111/j.1475-6811.2004.00079.x
- Muise, A., & Impett, E. A. (2015). Good, giving, and game: The relationship benefits of communal sexual responsiveness. *Social Psychological & Personality Science*, 6, 164-172. doi:10.1177/1948550614553641
- Muise, A., Impett, E. A., Kogan, A., & Desmarais, S. (2013). Keeping the spark alive: Being motivated to meet a partner's sexual needs sustains sexual desire in long-term romantic relationships. *Social Psychological & Personality Science*, 4, 267-273. doi:10.1177/1948550612457185
- Nagurney, A. J. (2007). The effects of relationship stress and unmitigated communion on physical and mental health outcomes. *Stress & Health*, 23, 267-273. doi:10.1002/smi.1146

- O'Sullivan, L. F., & Allgeier, E. R. (1998). Feigning sexual desire: Consenting to unwanted sexual activity in heterosexual dating relationships. *Journal of Sex Research*, 35, 234-243. doi:10.1080/00224499809551938
- O'Sullivan, L. F., & Byers, E. S. (1996). Gender differences in responses to discrepancies in desired level of sexual intimacy. *Journal of Psychology & Human Sexuality*, 8, 49-67. doi:10.1300/J056v08n01 04
- O'Sullivan, L. F., Byers, E. S., & Finkelman, L. (1998). A comparison of male and female college students' experiences of sexual coercion. *Psychology of Women Quarterly*, 22, 177-195. doi:10.1111/j.1471-6402.1998.tb00149.x
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40, 879-891. doi:10.3758/BRM.40.3.879
- Raudenbush, S., Bryk, A., Cheong, Y. F., & Congdon, R. (2004). HLM 6: Hierarchical and Nonlinear Modeling [Computer software]. Lincolnwood, IL: Scientific Software International.
- Rehman, U. S., Janssen, E., Newhouse, S., Heiman, J., Holtzworth-Munroe, A., Fallis, E., & Rafaeli, E. (2011). Marital satisfaction and communication behaviors during sexual and nonsexual conflict discussions in newlywed couples: A pilot study. *Journal of Sex & Marital Therapy*, 37, 94-103 doi:10.10 80/0092623X.2011.547352
- Righetti, F., Finkenauer, C., & Finkel, E. J. (2013). Low selfcontrol promotes the willingness to sacrifice in close relationships. *Psychological Science*, 24, 1533-1540. doi:10.1177/0956797613475457
- Rusbult, C. E., Martz, J. M., & Agnew, C. R. (1998). The Investment Model Scale: Measuring commitment level, satisfaction level, quality of alternatives, and investment size. *Personal*

Relationships, *5*, 357-387. doi:10.1111/j.1475-6811.1998. tb00177.x

- Rusbult, C. E., & Van Lange, P. A. M. (2003). Interdependence, interaction, and relationships. *Annual Review of Psychology*, 54, 351-375. doi:10.1146/annurev.psych.54.101601.145059
- Rusbult, C. E., & Van Lange, P. A. M. (2008). Why we need interdependence theory. *Social & Personality Psychology Compass*, 2, 2049-2070. doi:10.1111/j.1751-9004.2008.00147.x
- Sanford, K. (2003). Problem-solving conversations in marriage: Does it matter what topics couples discuss? *Personal Relationships*, 10, 97-112. doi:10.1111/1475-6811.00038
- Selig, J. P., & Preacher, K. J. (2008). Monte Carlo method for assessing mediation: An interactive tool for creating confidence intervals for indirect effects [Computer software]. Available from http://quantpsy.org/
- Sprecher, S. (2002). Sexual satisfaction in premarital relationships: Associations with satisfaction, love, commitment, and stability. *The Journal of Sex Research*, 39, 190-196. doi:10.1080/00224490209552141
- Thibaut, J. W., & Kelley, H. H. (1959). The social psychology of groups. Piscataway, NJ: Transaction.
- Yabiku, S. T., & Gager, C. T. (2009). Sexual frequency and the stability of marital and cohabiting unions. *Journal of Marriage and Family*, 71, 983-1000. doi:10.1111/j.1741-3737.2009.00648.x
- Zaki, J., & Mitchell, J. P. (2013). Intuitive prosociality. Current Directions in Psychological Science, 22, 466-470. doi:10.1177/0963721413492764
- Zhang, Z., Zyphur, M. J., & Preacher, K. J. (2009). Testing multilevel mediation using hierarchical linear models problems and solutions. *Organizational Research Methods*, 12, 695-719. doi:10.1177/1094428108327450